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Abstract

The University of Manchester
Fatma H Al Maqbali

Title: Navigating antenatal care in Oman: A grounded theory of women’s and healthcare professionals’ experiences.

Background: In Oman, 33.3% of women attended late for publicly funded antenatal care in 2015 and 24% did not attend for the recommended 4-6 visits during their pregnancy. This low attendance suggests a need to explore attendance for antenatal care for low-risk pregnant women in Oman.

Methodology: An exploratory qualitative design informed by constructivist grounded theory methodology was used in this research.

Methods: In-depth semi-structured interviews were conducted with an initial purposive sample of nine pregnant women. The initial analysis enabled theoretical sampling of thirteen non-participant observations during women’s appointments, interviews with ten care providers, and six women who booked late after 12 weeks of gestation. A constructivist grounded theory analytical framework of initial, focused and theoretical coding was followed to analyse all the data collected.

Findings: The core category consists of five interrelated sub-categories: perceived benefits and value of antenatal care; timing of the first antenatal visit; woman-carer interactions during antenatal care; experiences with antenatal care delivery; and supplementary use of private healthcare. The integral categories explain the social processes and issues surrounding antenatal care. The emergent core category, ‘Navigating antenatal care’, reflects the views of the women and their care providers. The women were unhappy with the organisation and physical environment of care but attended their appointments to ensure optimal pregnancy outcome and to alleviate their fears of developing complications. Thus, they used both private and public healthcare and sourced online information in response to their feelings of obligation to protect their fetus.

Conclusion: The women appeared disempowered and to lack control over the care they received. Thus, they accepted conditions such as long waiting times in an uncomfortable environment and the disrespect they encountered during their visits. There was a discrepancy between what the women expected and needed from their antenatal care and the actual care and information they received, which did not satisfy their needs. This could be due to a lack of woman-centred care and limited involvement in the plan of care. Thus, women sought further reassurance by accessing private clinics, using online information, and networking with others, which also resulted in a late booking for public antenatal care.
Declaration Statement

No portion of the work referred to in this thesis has been submitted in support of an application for another degree or qualification of this or any other university or other institute of learning.

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Acknowledgement

In the name of Allah, the Most Gracious and the Most Merciful Alhamdulillah, all praises to Allah for the strengths and His blessing in providing me with the strength, health, and resilience without which, I would not be able to complete this thesis.

Special thanks and appreciation goes to my main supervisor Dr Tracey Mills and co-supervisor Dr Christine Furber for their supervision, constant support and providing valuable constructive comments and suggestions throughout my PhD journey that contributed to the success of this research.

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To all who directly and indirectly contributed to this research: your kindness made this journey successful and meant a lot to me. Thank you so much.
Dedication

I dedicate this thesis to my beloved father who is no longer in this world and left a void never to be filled in my life. His support and love accompany me even after his death. His memories and values of hardworking and kindness continue to inspire my life. May he find peace and happiness in Paradise! May Allah bless his soul.

It is also dedicated to my beloved husband, sons and daughter, and my mother for their exceptional love, support and caring: May Almighty Allah bless you all.
Author

I am a registered nurse with a particular interest in women’s health and maternal health nursing in Oman. I currently work as a Lecturer in Nursing Science in the Suhar Nursing Institute, governed by the Ministry of Health in Oman. I had the opportunity to work in the antenatal ward at Suhar Hospital for four months before my enrolment on a Bachelor of Nursing Science at Villanova University. I had my theoretical and clinical practicum in Maternal Health Nursing during my Bachelor programme, for which I was assigned to the labour room, postnatal wards and neonatal unit at Jefferson Hospital in Philadelphia in the USA. During my Master of Nursing Science, I had my clinical and teaching practicum across many departments of maternal health nursing in Lankenau Medical Centre and Bryn Mawr Hospital in Philadelphia, USA. I taught theory and supervised nursing students in the clinical area of maternal health nursing in the antenatal clinics, labour room and postnatal ward in health centres and a regional hospital in Oman. These personal, theoretical, and clinical experiences helped me in developing the research question and gaining an understanding of the research topic. Furthermore, being a woman who had experienced pregnancy and the antenatal care process within the same culture as the women in my study helped me to develop an insight associated with antenatal care within the social context. Therefore, I was able to view the experiences of antenatal care with the eye of a woman, a professional, and a researcher.

Furthermore, I had the opportunity to attend two days conference of constructivist grounded theory workshop that was presented by Kathy Charmaz on July 2\textsuperscript{nd} and 3\textsuperscript{rd} 2018 in Lancaster University, which increased my confidence of the approach undertaken in this study.
Outline of the Thesis

This thesis is presented in eleven chapters.

Chapter One provides an overview of the contexts of the study setting and outlines the nature and rationale for the study.

Chapter two summarises existing global literature on perceptions surrounding antenatal care for women with low-risk pregnancies.

Chapter three details the research design and methodology that guided the development of this study proposal.

Chapter four provides an explicit discussion of the methods and process for accessing and recruiting the participants of the study. It also details the methods of data generation and analysis.

Chapters five to ten describe the emergent five categories that compose the core category.

Chapter eleven presents a critical discussion and synthesis of the main findings in themes. It also details the originality, resonance, usefulness of the findings, strength and limitations of the study and recommendations for practice, policy, education and future research.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Term</th>
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<tbody>
<tr>
<td>ANC</td>
<td>Antenatal Care</td>
</tr>
<tr>
<td>CASP</td>
<td>Critical Appraisal Skills Program</td>
</tr>
<tr>
<td>ENT</td>
<td>Ears, Nose and Throat</td>
</tr>
<tr>
<td>GCC</td>
<td>Gulf Cooperation Council</td>
</tr>
<tr>
<td>GP</td>
<td>General Practitioner</td>
</tr>
<tr>
<td>HCP</td>
<td>Healthcare Providers/Professionals</td>
</tr>
<tr>
<td>MDGs</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>MoH</td>
<td>Ministry of Health (Oman)</td>
</tr>
<tr>
<td>NCSI</td>
<td>The National Centre for Statistics &amp; Information (Oman)</td>
</tr>
<tr>
<td>OPD</td>
<td>Out Patient Department</td>
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<tr>
<td>RCTs</td>
<td>Randomised Controlled Trials</td>
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<td>UAE</td>
<td>United Arab Emirates</td>
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<td>WHO</td>
<td>World Health Organization</td>
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Chapter one:
Study Background
Chapter 1: Study Background

1.1. Overview

This chapter provides information regarding the research context in Oman, with emphasis on the organisation of healthcare, pregnancy and antenatal care in that society. Access to healthcare, women’s roles and the justification of the study are also illustrated. Important national statistics about maternal health status and indicators in Oman are also included to provide evidence of the importance of exploring the various perspectives surrounding antenatal care in Oman.

1.2. Research Context: The Sultanate of Oman

The Sultanate of Oman is a Muslim, Arabic Gulf country and is located in the southeastern Arabian Peninsula with Saudi Arabia, the United Arab Emirates (UAE) and the Republic of Yemen on its borders (National Centre for Statistics & Information (NCSI), 2016) (Figure 1.1). The coastline extends approximately 3,165 kilometres from the border with Yemen in the south, to the Strait of Hormuz in the north. The total area of Oman is approximately 309.5 thousand square kilometres (NCSI, 2017). Oman is divided administratively into eleven governorates, with sixty-one wilayats (provinces), and Muscat is the capital city (Figure 1.1). Nearly half the population live in Muscat and Al-Batinah governorates (NCSI, 2014). The oil sector is the main source of income in Oman. The climate is characterised by hot and humid summers and warm winters (Ministry of Health (MoH), 2013). Oman is classified as a high-income country (World Bank data, 2018). During the last forty years, Oman evolved to be a modern country, with rapid socioeconomic development coupled with demographic trends (e.g. the population is getting younger) (Al Riyami et al., 2012). However, the government of Oman has consistently taken measures to ensure that Omani people retain their identity, by appreciating the Omani social structure in general and the family in particular. This was achieved by considering the most influential elements of Islamic/Arab heritage (Al-Barwani and Albeely, 2007).

The Omani population in 2016 was 4,414,051 (2,886,083 men and 1,527,968 women). Of these, 2,427,825 are Omanis (1,225,390 males and 1,202,435 females) and 1,986,226 are expatriates, most of whom are from India, Bangladesh and Pakistan (1,660,693 males and 325,533 females) (NCSI, 2017). The male population as a whole is higher than the female, due to the increased numbers of expatriate workers in private companies, but the Omani male-to-female ratio is almost equal (NCSI, 2017). This growth in the number of expatriate
workers increased the annual population growth rate to 2.4% in 2010, compared with 1.5% between the first two censuses 1993-2003 (MoH, 2014). Recent statistics show that half the population is aged under 20 years, and only 3.7% are of the age of 60 and over (NCSI, 2016). Approximately 27% of the Omani population is female in the age group 15-49 years and, currently, married women represent about 43% of women in that age group. Children under five years of age constitute approximately 14% of the population. Thus, approximately 45% of the total Omani population are women of childbearing age, children under five, and the elderly; these are potentially high-risk groups, and this demands the availability of specific services to meet their healthcare needs (MoH, 2014).

![Map of Oman](image)

**Figure 1.1: Map of Oman**

1.2.1. Health, Pregnancy and Healthcare in Islam

Islam is the official religion of Oman, and the Holy Qur’an and the Hadith are used as the constitution and the basis for Sharia law (Alhejji, 2018). The family is regarded as the unit of reproduction and is authorised only through marriage (Abdulhadi et al., 2007). Marriage among cousins is permitted in Islam, and consanguinity is prevalent in many Muslim communities, which is more a cultural than a religious feature (Hathout, 1997). Islam considers faith and health as the greatest blessings of Allah upon a human being. Therefore, Muslims should take every opportunity to safeguard and maintain their health.
Muslims believe that illness and wellness are planned by Allah and death is the ultimate end of life’s journey. Disease is not considered a punishment but as a test for Muslims, who are expected to confront it with humility and acceptance (Nigenda et al., 2003). However, Islamic teachings encourage Muslims to seek medical treatment for any ailment (Yosef, 2008), because of the belief in the existence of a remedy for any disease, except for ageing (Husain, 2000).

Islam also teaches parents to take care of their children and that couples are responsible for each other, laying more emphasis on a man’s duty to look after his wife (Alkhayat, 1997). The prophet Muhammed *Peace Be Upon Him* explains the concept of mutual responsibility within the family as follows. The man is the guardian of his family and he is responsible for them; a woman is responsible for providing care to her husband, children, and the home. Neglecting duties regarding parents, wife or children, not taking good care of their health, and not taking the necessary measures to prevent their exposure to illness are forbidden in Islam (Alkhayat, 1997).

Similarly, pregnancy in Islam is viewed as a gift and direct blessing from Allah. The Qur’an states that not all parents will conceive a child and not all conceptions will result in the ultimate birth of a baby (Husain, 2000). The responsibility of pregnant women in Islam is to create the best possible environment for the development of the fetus (Tsianakas and Liamputtong, 2001). At the same time, Muslims believe that everything in the world occurs with Allah’s knowledge, will and control over their creation (Yosef, 2008). However, this belief is an empowering concept for Muslims and does not render them powerless and passive or exempt them from being responsible for maintaining their health and seeking medical advice and treatments as required (Hag Hamed, 2014).

The status of the mother is honoured over the status of the father and all kinds of relationships in Islam due to the pain and burden that women experience in pregnancy, childbirth, and breastfeeding. The pain and suffering during different stages of motherhood are acknowledged in the Holy Qur’an (Husain, 2000). There is great respect for the developing embryo in Islam, which increases with developmental stages. Thus, termination of pregnancy is only indicated if the mother’s health is seriously affected by the continuation of gestation (Husain, 2000). Muslims believe that only Allah decides and knows the sex of the fetus, based on the Qur’anic statement: “No one knows what is in the womb but God” (Qur’an 31:34). Therefore, even if women seek ultrasound assessments to identify the sex of the fetus, they do not consider the result definite until they give birth to
their child. Some women with a strong religious background would prefer not to know the sex of the fetus during pregnancy (Kridli, 2002).

1.2.2. Omani Families and Pregnancy Care in a Social Context

The Omani population is divided into tribes of varying sizes and cohesiveness, which serves as a basis for regulating social, economic and political relationships with others and shaping people’s behaviours and attitudes. Therefore, all members of a tribe have obligations to each other and they are led by a leader (a Sheikh) who is expected to mediate disputes within the tribe and negotiate when conflicts with outsiders occur (Al-Barwani and Albeely, 2007). Sociocultural life in Oman is structured around the family as the basic function of society and the main social security system for its members, which is linked to traditional and religious teaching. The Omani family is characterised by dependent collectivism, whereby people are, from birth, integrated into strong and cohesive extended families (uncles, aunts and grandparents) (Abdulhadi et al., 2007). Thus, decision making and responsibilities are shared among family members. Parents are responsible for providing care to their children and preparing them for adult life, and children are also expected to take care of their ageing parents with great pride (Islam, 2012).

Pregnancy is considered to be healthy and natural but women are expected to eat well and avoid spicy and strong-tasting foods because of the belief that the fetus experiences the same discomfort as the mother. Pregnant women’s bodies are viewed as potentially vulnerable and the women are expected to take care of their cleanliness and nutrition and to avoid activities resulting in adverse outcomes (Kilshaw et al., 2016). Women are expected to follow certain social rules of pregnancy to ensure optimal health, a safe conception, and the birth of a healthy child by taking adequate rest and avoiding strenuous activities, anxiety and stress (Kridli, 2002; Kilshaw et al., 2016). However, avoiding stress and exhaustion might not be possible, particularly with education and employment demands. Family members are expected to take care of the women and assist in housekeeping activities, particularly in the third trimester (Kridli, 2002).

Fear relating to superstition is common in Omani culture and considered one of the risks in pregnancy. Some people believe that jealous individuals might envy other people their animals and possessions, which could cause harm such as illness and death (Berger, 2012). This kind of belief has existed for thousands of years across many cultures and religions, including Arab and Muslim countries (Berger, 2012). For example, many people believe
that the victims of superstition are commonly beautiful babies or young children, pregnant women, brides or anyone with special attributes, e.g., different eye colours. Many Muslims believe in superstition, which is also acknowledged in Islam as a potential cause of ill health, but this does not mean that they do not seek medical care and treatment (Krawietz, 2002). Some people explain illness as due to ‘unknown reasons’ caused by a curse placed by others who might be jealous, envious or simply wicked, both intentionally and unintentionally (Panter-Brick, 1991). Protection of the most vulnerable is considered foremost for infants, children, and pregnant and lactating women (Berger, 2012). Some families refer to a religious advocate for the treatment of superstitions by reading specific verses from the Holy Qur’an or other forms of traditional remedies (Panter-Brick, 1991).

1.2.3. Women’s Role

In the past, the main role of women in Arab society was to bear and raise children. This perception is still prevalent in Arab society but is gradually losing ground due to modernisation and the empowerment of women (Abdulhadi et al., 2007). The emphasis on women’s roles as mother and housewife places pressure upon women to produce children soon after they marry. Childbearing and creating large families are supported by the Islamic religion and Arabic culture (Kilshaw et al., 2016). Couples might be under family pressure to have more children, especially boys, to preserve the family name and support them, so women might continue getting pregnant until giving birth to one or more sons (Kridli, 2002). However, some women who give birth to boys might also continue getting pregnant until they give birth to one or more daughters. The preference for a son is changing slowly, as most couples are more educated today (Kridli et al., 2013).

Young and educated women are more likely to work outside the home, which changes women’s traditional roles in the household and society. In turn, this has had an impact in the form of later marriage and declining fertility rates (Islam et al., 2013). Women constitute 55% of the total employees in Oman and contribute significantly to the fields of education, health, media, banking and other business sectors (Belwal and Belwal, 2014). However, pregnant working women may experience conflicting forces of childbearing concurrently with social and economic role expectations (Kilshaw et al., 2016). These women have to find a balance between their social roles of being a mother and housewife in the family with being an employee. There is a lack of clearly written policies for childcare at work, such as for breastfeeding and nursery care in Oman (Metcalfe, 2007). Pregnant women are allowed paid time off for antenatal care based on an internal
arrangement with their direct managers. However, there is no written law to regulate time off for antenatal visits, so the obstetrician decides if a woman is eligible for a day off or time off only for appointments. Furthermore, an employed woman is entitled to fifty days of maternity leave with full payment covering the period before and after birth for five times during her employment period. The woman is also entitled to a full year of childcare leave, but without pay, if she requests it (Ministry of Civil Service, 2010). Therefore, healthcare systems, resources, social and religious knowledge and beliefs are some of the forces that might influence the decision-making process during pregnancy.

1.2.4. Healthcare Organisation in Oman

The MoH in Oman is the principal provider of preventive, promotive, curative and rehabilitative services. It develops policies and plans that are implemented in coordination with all constituents of the health sector (MoH, 2015b). It also runs educational institutes for nursing and allied health sciences and coordinates with Sultan Qaboos University and the Oman Medical Specialised Board for medical education (MoH, 2015b). Omani citizens and expatriates working in the public sector are entitled to free healthcare services (Alshishtawy, 2010). The MoH current expenditure is 4.6% of total government expenditure and has been stable since 2004. However, Oman’s per capita health spending and its health expenditure-to-gross domestic product (GDP) ratio (total and public) are much lower than many countries with similar income levels (World Health Organization (WHO), 2010).

Healthcare is delivered through primary, secondary and tertiary (hospitals) care facilities, which include health centres, polyclinics, and local, wilayat and governorate hospitals. Primary healthcare institutions are the first entry to the health services, which are distributed among governorates based on population needs and act as a link between the community and higher care level (MoH, 2015b). Health centres (some with short-stay inpatient facilities) and extended health centres (polyclinics) offer primary healthcare services. Each health centre serves approximately 10-15 thousand head of population, and the team consists of doctors, nurses and support staff, with diagnostic facilities and pharmacies, including basic antenatal care, postnatal care and family planning services. However, the current physical structure of the health centres is unsuitable for the number of population served because each centre has only five to six small consultation rooms. Furthermore, there are insufficient diagnostic facilities and basic up-to-date equipment for initial assessments (MoH, 2015b). Thus, women in a health centre that does not have an
obstetrician are referred to polyclinics for anomaly ultrasound scans and for second opinions if complications are suspected.

A polyclinic provides outpatient access to basic specialists, e.g., in maternal child health, ophthalmology, and Ear, Nose and Throat (ENT) and family medicine (MoH, 2015b). Women with complications that need further assessment are referred from a polyclinic to a hospital for further obstetric care and admission. A referral system (Figure 1.2) between levels of care controls and rationalises the use of high-cost services in hospitals to improve healthcare at all levels (MoH, 2014).

Governorate hospitals provide secondary and tertiary care to their residents and are also referral hospitals for severe cases from other healthcare institutions. A wilayat hospital provides secondary care to residents in order to support the governorate hospital. Local hospitals have a smaller number of beds and provide primary healthcare services and basic inpatient care if needed (MoH, 2015b).

![Levels of Healthcare in Oman](image)

**Figure 1.2: Levels of healthcare and referral process in Oman**

In 2016, there were seventy-four hospitals and 266 public healthcare facilities in Oman. Furthermore, the numbers of private clinics and diagnostic health centres reached 1,105,
and there were 672 private pharmacies (NCSI, 2017). All private hospitals and clinics are licensed by the MoH through the Directorate of Private Health Establishment and supervised by the regional directorates. They play a major role in providing healthcare services in Oman but are profit-oriented institutions, so people without health insurance must pay to receive healthcare services (WHO, 2006a). The private hospitals and clinics that are licensed by the MoH are mostly available in the major cities to provide primary and some aspects of speciality care, including antenatal care (MoH, 2015b).

1.2.5. Transition in the Healthcare System in Oman

In 1970, there were scarce and limited healthcare services in Oman. There were only two hospitals with twelve beds and only a few doctors and limited numbers of nurses and nursing aides were available. People had to travel for up to four days to a hospital, where hundreds of patients were waiting to meet a few non-Omani doctors (Smith, 1988). The First Five-Year Plan in 1976 included a health development strategy that aimed to develop a basic health infrastructure for the whole population. Oman now has a modern national healthcare system that offers all citizens universally accessible health services free of charge (Hill et al., 2000).

During the 1980s, many programmes targeting the most vulnerable in the population were launched, such as immunisation, maternal child health, school health, and breastfeeding promotion (Hill et al., 2000). The MoH also adopted a comprehensive programme for all stages of reproduction, starting from pregnancy, childbirth, postnatal and birth spacing, to provide better services to mothers (NCSI, 2016). Oman progressed successfully towards achieving the United Nations’ Millennium Development Goals (MDGs) in universal education for men and women. For instance, the girl-to-boy ratio in primary and secondary education in 2014 was 96% to 95%, compared with 89% to 83%, respectively, in 1990 (NCSI, 2016). The overall adult literacy rate in Oman in 2010 was approximately 86% (MoH, 2014). Oman also achieved MDGs in lowering the child and maternal mortality rate, reducing the prevalence of malaria and tuberculosis, and ensuring access to necessary medicine and antiretroviral drugs for HIV/AIDS (WHO, 2010).

A report by the WHO (2000) rated the Oman healthcare system first among 191 national health systems for its efficiency in improving health over a short period and at reasonable financial cost (Hill et al., 2000). A WHO report by Van Lerberghe (2008) acknowledged Oman as an exclusive example of success in investing consistently in national health services over time. This remarkable achievement in improving the health status in Oman
within a short period is comparable with other high-income countries. This is attributed to improvements in income, education, transport, and women’s empowerment and access to information (WHO, 2010).

1.2.6. Important Challenges in Oman

1.2.6.1. Epidemiological Changes

Oman faces significant challenges of morbidity due to the present epidemiological changes and unhealthy lifestyles that contribute to obesity, cardiovascular disease, diabetes, cancers, stroke and ageing. Half the Omani population is younger than twenty years of age (MoH, 2011-2015), which leads to the prevalence of youth-related issues, including road traffic accidents, injuries, sexually transmitted diseases, mental health problems, and addiction. Malnutrition, genetic diseases, congenital anomalies, newborn health concerns, and some communicable diseases, such as respiratory infections and viral hepatitis, are common in Oman (MoH, 2011-2015). Some of these health problems need expensive treatment for extended periods, sometimes lifelong.

It has been estimated that the causes of death in Oman are as follows: non-communicable diseases (68%), communicable, maternal, perinatal and nutritional conditions (17%), and injuries (15%) (WHO, 2014a). A review of epidemiological studies from 1990 to 2005 by Al-Lawati et al. (2008) revealed that approximately 12% of the Omani population had diabetes, 30% were overweight (with a body mass index (BMI) of 25 to 29.9 kg/m²) and 20% were obese (BMI ≥ 30 kg/m²). Moreover, 41% had high cholesterol levels and 21% had metabolic syndrome, with statistics increasing year by year (Al-Lawati et al., 2008). Tobacco use among adults was relatively low (4.6%), e.g. in 2008, the prevalence was higher in men (9.7%) than women (0.1%), which remained consistent since 2000 (Al-Lawati et al., 2017). However, the Global Youth Tobacco Survey (2007) revealed a high level of tobacco use among adolescents aged 13-15 in Oman, including cigarettes, shisha and chewing tobacco (17.8% of boys and 11.3% of girls) (WHO, 2010). Hence, preventive and health promotion services and the adoption of effective strategies to help in decreasing the consequences of these health problems are needed in Oman. For instance, health education on the importance of physical activity, a healthy diet, and the consequences of smoking and substance use should be delivered frequently, targeting individuals, families and communities. These prevalent health conditions might complicate pregnancy if they remain undetected, particularly for women commencing their antenatal care late (Baker and Rajasingam, 2012). Furthermore, maternal healthcare providers could contribute to
positive health messages delivered during women’s consultations about health promotion in pregnancy and the importance of adopting healthy behaviours (Baker and Rajasingam, 2012).

1.2.6.2. Access to Healthcare Services
The MoH gave priority to the construction of a basic health infrastructure that should be universally accessible by the whole population of Oman through local health services. Mobile teams provide healthcare services to people living in isolated areas (MoH, 2014). Access to healthcare services might not be only determined by the availability of health centres, but also by the state of the transport and road infrastructure (MoH, 2015b). However, there is a lack of public transport in Oman, except in Muscat, the capital city. Therefore, people in other governorates either use their own private cars or taxis that might be shared. There is no restriction on women owning or driving a car in Oman, particularly employed women, but some barriers are evident from family and social pressure. Thus, many women depend on their relatives to take them to healthcare facilities. The number of women holding a driving licence has increased in Oman, e.g., in 2016, 28,554 driving licences were issued to Omani women (NCSI, 2017). Women often do not find public transportation convenient and favour personal cars for their own safety and privacy (Belwal and Belwal, 2010). Furthermore, the use of public transport by women may not be accepted in some families unless they are accompanied by a close male relative. Thus, access to transport services, proximity to health institutions, and the quality of the road infrastructure might facilitate or impede the utilisation of healthcare services (Babinard and Roberts, 2006).

1.3. History and Transition of Antenatal Care
Antenatal care is the care that women receive during pregnancy from a health professional (AbouZahr and Wardlaw, 2003). The notion was introduced in 1902 by J. W. Ballantyne, a Scottish physician in Edinburgh (Ballantyne and Browne, 1922; Moos, 2006). Ballantyne observed that intrapartum care was inadequate to reduce morbidity and mortality from congenital anomalies, multiple births and fetal abnormalities (Moos, 2006). Ballantyne commenced initiatives to lessen the effect of alcohol, nicotine, lead and infection on pregnancy outcomes (Reiss, 1999). Ballantyne’s initial ideas were then quickly adopted by other countries, such as the USA (Moos, 2006). After World War II, other concerns of infant mortality, premature births and low birthweight were also integrated into women’s antenatal care. Early access to antenatal care was encouraged to reduce maternal and
perinatal complications and for improved pregnancy outcomes (Moos, 2006). The basic antenatal care framework aimed to reduce maternal mortality due to eclampsia and was introduced in 1929 to include the first visit by 16 weeks, subsequent visits at 24 weeks, biweekly visits from 28 weeks, and weekly visits from 36 weeks (Moos, 2006). The number of visits in the traditional model increase gradually as the pregnancy advances (Villar and Bergsjg, 1997).

The exact components and numbers of visits to optimise pregnancy outcome have been difficult to estimate for universal use due to differences in resources, which has led to the adoption of practices that are inconsistent between countries (WHO, 2006b). Traditionally, women in settings with different resources were allocated a substantial number of visits (up to 16 visits), with limited distinction between women with high- and low-risk pregnancies (Villar and Bergsjg, 1997). Moreover, there was limited attention to context-specific conditions, which resulted in poor implementation of the programme in low-resource settings (Villar and Bergsjo, 2002). Many of the interventions that evolved into practices without scientific evidence of their benefits are still under debate, such as the frequency and timing of ultrasound examinations (Villar et al., 2001a; Moos, 2006; Vogel et al., 2013). According to Carroli et al. (2001a), the number of visits, the timing and content of antenatal care are more ritualistic than evidence-based. Thus, a new evidence-based antenatal model for women with uncomplicated pregnancies was developed in the 1990s (WHO, 2018), recommended by researchers and evaluated by a WHO trial group in 2001 to address this scarcity of information (Carroli et al., 2001b; Villar et al., 2001a). The WHO implemented a multicentre randomised controlled trial (RCT) to compare the traditional model of antenatal care with a new evidence-based, four goal-oriented visits model. The clinical interventions in the new model were limited to those proven by research to improve pregnancy outcomes, such as the measurement of blood pressure, testing urine for bacteria and albumin, and blood tests to detect anaemia and syphilis (Villar and Bergsjo, 2002). The WHO trials found that the new model was as effective as the traditional antenatal care model and would reduce the cost to women and healthcare services (Vogel et al., 2013). Table 1.1 illustrates the two models of antenatal care.
Table 1.1: Models of antenatal care

<table>
<thead>
<tr>
<th>Traditional Antenatal Care model</th>
<th>New Antenatal Care Model</th>
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<tr>
<td>A monthly visit for 28 weeks</td>
<td>At least four goal-oriented visits per pregnancy with initial visit commenced before 12 weeks and subsequent visits at 26, 32 and between 36-38 weeks gestation</td>
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<tr>
<td>Biweekly visit until 36 weeks</td>
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<tr>
<td>A weekly visit until birth</td>
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<td>12-14 visits if women booked early in pregnancy</td>
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Based on the four goal-oriented visits antenatal care model, women should commence their care before 12 weeks of gestation. The booking visit may take around 30-40 minutes, compared with approximately 20 minutes in subsequent appointments at 26 and 32 and between 36-38 weeks of gestation. Risk-scoring assessments should be performed every visit using pre-set criteria, and women should be grouped either to receive routine or special antenatal care based on identified risk factors (Villar and Bergsjo, 2002). Figure 1.3 illustrates the process of risk scoring.

![Booking visit process](image)

**Figure 1.3: The process of risk scoring during antenatal care**

1.3.1. **WHO Recommendations on Antenatal Care**

The debate on the appropriate number of visits per pregnancy is ongoing. However, research evidence indicate that settings with limited resources and a reduced number of antenatal visits were associated with higher perinatal mortality (Dowswell et al., 2010; 2015). A reduced number of visits was also associated with less satisfaction from women
and increased fetal deaths at 32-36 weeks (Vogel et al., 2013). Therefore, the revised recommendations of the WHO (2016) are to increase the number of contacts to eight visits during pregnancy to reduce perinatal mortality and improve women’s experience of antenatal care. Accordingly, all pregnant women should have their first contact during the first 12 weeks of gestation and subsequent visits at 20, 26, 30, 34, 36, and 40 weeks of gestation (Tunçalp et al., 2017). Context-specific recommendations with additional remarks were highlighted to ensure that they were understood and correctly applied in practice (WHO, 2016; 2018).

1.4. Benefits of Antenatal Care

Adverse outcomes cannot be predicted in early pregnancy but can be associated with obesity, smoking, diabetes, hypertension, and substance misuse or abuse (WHO, 2006b). Antenatal care is important for the identification of risks and the prevention and management of complications such as pre-eclampsia, HIV and syphilis (Singh et al., 2014; Abalos et al., 2016; Tunçalp et al., 2017). It also allows close follow-up treatment of existing medical illnesses and the referral of women to high-risk care when needed, without delay (Villar et al., 2001a; Moos, 2006). For example, routine assessment of blood pressure and urinalysis allows early detection of pre-eclampsia and the implementation of evidence-based interventions to improve pregnancy outcome (Tunçalp et al., 2017). Importantly, antenatal care provides an opportunity to exchange information on self-care and a healthy lifestyle during pregnancy and offers support to women and their families (Tunçalp et al., 2017). It is also essential to promote the physical and psychological well-being of women and their families, prepare them for birth and transition to motherhood, and enhance utilisation of needed healthcare (Gottfredsdottir et al., 2016). Antenatal care involves the provision of iron and folate supplements and tetanus injections, as recommended to prevent maternal anaemia, puerperal sepsis, low birthweight, and preterm birth (Villar and Bergsjo, 2002; WHO, 2006b).

1.5. Maternal Health Status in Oman

Maternal and Child Health Programmes were started in Oman in 1987 (MoH, 2013) and the new antenatal care model was introduced in 2008. Antenatal coverage for at least one visit during pregnancy reached more than 99%, with 98% of births being supervised by medical professionals (MoH, 2013). However, the proportion of women attending for four visits in pregnancy in Oman was 80.4% (MoH, 2014).
The total fertility rate of Omani women to the end of childbearing years (15-49) was 3.9 in 2013 and 4 in 2016, which was very similar to the total fertility rate for the last three years (MoH, 2013; NCSI, 2017). The total fertility rate is considered low compared with six to eight children per woman in the previous generation but high when compared with the world average of 2.7 (Fargues, 2005). The birth rate among adolescents (15-19) shows a substantial decline among women in this age group, from 61.8 per 1,000 women in 1993 to 11 in 2014 (NCSI, 2016). This substantial decline in birth rate among adolescents has resulted from gender equality in education, and Omani women’s empowerment to pursue their higher education and make important decisions in their lives (Al-Barwani and Albeely, 2007).

The WHO defines maternal mortality ratio as “the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes” (WHO, 2014b, p. 4). The maternal mortality rate in Oman has shown some fluctuation, as it decreased from 27.2 cases per 100,000 live births in 1991 to 12.3 cases in 2012 and increased to 17 in 2015 (WHO, 2015a). The reduction in maternal mortality rate might indicate the development in healthcare in the country. However, this rate is still higher than many neighbouring countries, such as Kuwait and the UAE, where the maternal mortality rate was 4 and 6 per 100,000 live births, respectively, in the same year (WHO, 2015a). A maternal mortality rate of 17 per 100,000 in 2015 in Oman was also higher than in Sweden and Australia, where the maternal mortality rate was 5 and 6 per 100,000 live births, respectively, in the same year (WHO, 2015a). The leading causes of maternal mortality in Oman are similar to those in other countries, and include postpartum haemorrhage, eclampsia and sepsis (WHO, 2015c).

Stillbirth is defined as a baby born dead at or after 28 weeks of gestation (WHO, 2011). The stillbirth rate in Oman was 7.3 per 1,000 births in 2015 compared with 13.3 in 1990 (MoH, 2015a) and the neonatal mortality rate was 5.3 per 1,000 live births (WHO, 2017). The perinatal mortality rate (stillbirth or early neonatal death) reduced from 15 per 1,000 births in 2007 to 13 per 1,000 births in 2015 (MoH, 2016). This rate was high compared with 5.61 per 1,000 total births in the UK in 2015. The rate in the UK was due to a reduction in stillbirths to 3.87 per 1,000 live births and neonatal mortality rate to 1.74 per 1,000 live births (National Perinatal Epidemiology Unit, 2017). Congenital anomalies in Oman are the most common cause of stillbirth (18.82%) and neonatal death (53.50%). This
increase in congenital anomalies is potentially associated with consanguineous marriage, as approximately 50% of marriages are consanguineous, and half of those are first-degree consanguinity (MoH, 2014). Maternal high-risk factors also contribute to stillbirths, such as diabetes mellitus (21.4%) and pregnancy-induced hypertension (12.3%) (MoH, 2015a). Perinatal deaths can be prevented by early intervention, high-quality antenatal care, prevention of preterm labour, intensive care for low birthweight babies, and timely intrapartum care (Santosh et al., 2013).

1.6. Antenatal Care in Oman

Antenatal care is offered in the primary healthcare institutions in Oman (health centres and polyclinics), whereas childbirth and immediate postnatal care are managed in hospitals. Article 15 (d) of the Child Law that published in the official gazette indicates that all women in Oman are entitled to free healthcare in pregnancy, childbirth and the postnatal period (Al-Jarida Al-Rasmiya, 2014). A new antenatal care model of at least six visits for women with low-risk pregnancies was introduced in Oman in 2008 to allow additional time for assessments by professionals (MoH, 2010). The design was based on guidance from the WHO’s most recent recommendations, and the National Institute for Health and Care Excellence and the Royal College of Obstetricians and Gynaecology in the UK (MoH, 2010; 2016). Standardised guidelines were developed to ensure implementation of unified protocols in managing care in pregnancy and childbirth in all healthcare institutions. According to these guidelines, each woman registers her pregnancy in a health institution located in the area in which she lives and should receive care from the same team of care providers to enhance continuity (MoH, 2010). Each pregnant woman receives a handheld ‘Maternal Health Record’ during the first visit for easy access to information at any time and to facilitate continuity, quality of care and improve the pregnancy experience (WHO, 2018). All women are advised that they should register their pregnancy by healthcare professionals and obtain their Maternal Health Records (Figure 1.4) from the nearest health centre even if they are planning to use private antenatal care. The handheld record is used to track health history during pregnancy, vaccinations and other preventive health measures performed during the women’s appointments (Turner and Fuller, 2011). The women should carry their Maternal Health Record with them to every appointment and when accessing emergency care in labour room to record all assessments and medical interventions they received. It is also used to record information throughout intranatal and postnatal periods (MoH, 2010; 2016).
Women receiving care at a health centre that does not have an obstetrician available are referred to a polyclinic for further assessment, including anomaly ultrasound scans at 22-24 weeks of gestation and when needed. Women with high-risk pregnancies are referred for specialised antenatal care as per the national guidelines (MoH, 2010; 2016).

Antenatal care is provided by registered midwives, trained nurses and general practitioners (GPs) (MoH, 2012). Omani midwives are trained to provide comprehensive care and counselling for women during pregnancy, labour and the postnatal period, both independently and in collaboration with other healthcare professionals (MoH, 2012). However, not all antenatal clinics in Oman have midwifery-led antenatal care due to a shortage of midwives. According to Renfrew et al. (2014), midwifery care provided by educated, trained, and licensed midwives within the scope of practice can improve more than fifty short- to long-term outcomes. It can reduce maternal and fetal complications, avoid unnecessary interventions, and improve psychosocial and public health outcomes. Midwives are most effective when providing teamwork and referral mechanisms while utilising the available resources competently (Renfrew et al., 2014).
1.7. Rationale for the Study

Women may die from complications during and after pregnancy and childbirth. Furthermore, some complications may pre-exist but worsen during pregnancy. The leading causes of maternal mortality in Oman are similar to those in other countries and include postpartum haemorrhage, eclampsia and sepsis (WHO, 2015c). Women who receive antenatal care have a greater chance of birthing their babies in healthcare settings with skilled and trained professionals, such as doctors, nurses and midwives, who are able to manage normal births and identify complications (United Nation Population Fund (UNPF), 2015). Effective and early professional care in the first trimester is essential to improve pregnancy outcomes, the early detection and management of complications, and to prepare women for childbirth, the postnatal period and motherhood (UNPF, 2015).

Although antenatal care attendance for at least one visit during pregnancy in Oman reached more than 99% in 2014 and 2015, only 66.7% of women registered for publicly funded clinics during the first trimester in 2015 (MoH, 2013; 2015a). This low attendance has been approximately consistent in the past ten years, e.g., in 2005, approximately 35% of registered pregnant women attended publicly funded clinics after the first trimester, compared with approximately 33% in 2015. Of women giving birth in public healthcare during 2015, approximately 24% did not attend antenatal care in the last four weeks of pregnancy, which is slightly lower compared with approximately 26% in 2005. Furthermore, 76.5% of women giving birth during 2015 had four visits or more during their pregnancy, which was lower compared with approximately 86% in 2005 (MoH, 2013; 2015a). This means that low attendance in the third trimester might be associated with the implementation of the new model of antenatal care. The lowest attendance of four visits or more during pregnancy in 2015 was reported in Muscat (35.60%) and North Batinah (76.80%) governorates (MoH, 2015a). However, only 26% of the registered women visited an antenatal clinic during the last 4 weeks of gestation in North Batinah Governorate compared with 32.40% in Muscat Governorate. This low number of attendance in the last four weeks of pregnancy could be attributed to the scheduled timing of the sixth visit at 36-38 weeks of gestation. During this visit, women are advised to attend the clinic on the expected date of birth for assessment by an obstetrician if they have not given birth. However, those women who had their sixth visit at 36 weeks of gestation might not have appointments until 40 weeks of gestation or might give birth without being assessed in the last four weeks of their pregnancy (MoH, 2010; 2016).
According to the MoH (2015a), 6.4% of women who experienced fetal deaths had not visited an antenatal clinic during the last four weeks of gestation. The national statistics show a high rate of anaemia (25%) and other morbidities in pregnancy, including diabetes (11.3%), which are predominantly gestational in origin, and hypertensive disease (1.7%) in 2015 (MoH, 2015a). Therefore, the irregular uptake of antenatal care and late booking might increase maternal and fetal complications for these women if such complications are not detected and managed appropriately. These figures raise many concerns. There is a need to explore the perspectives surrounding the current antenatal care services and identify the reasons why almost 33% and 35% of women registered their pregnancies late after the first trimester in 2013 and 2015, respectively. Furthermore, the reasons why almost 24% of women did not attend the recommended four visits need to be explored. This study aims to explore the context and experiences of antenatal care for women with low-risk pregnancies in Oman. The high rate of late booking/non-attendance in some areas suggests possible issues with current antenatal care provision. These issues are likely to affect all women, not just those who do not attend or do so with late booking, so ascertaining a broad sample of women’s and healthcare providers’ views and experiences is important to explore this topic. Understanding women’s views, experiences and perspectives on antenatal care is vital for shaping and enhancing the effectiveness of services. Recognising factors influencing women’s perceptions of care is essential, in order to consider them, plan the strategies required to improve services, and enhance the uptake of antenatal care (Shabila et al., 2014). Women’s views and perspectives should contribute to shaping care and be part of the health programme evaluation and management to enable delivery of culturally sensitive and evidence-based antenatal care that meets their needs and expectations (Ghobashi and Khandekar, 2008).

No current, in-depth qualitative research has explored women’s and healthcare providers’ experiences and views of antenatal care in Oman. There is a general lack of research in the area of maternal health in Oman and in Arabic countries. One Oman-based survey by Ghobashi and Khandekar (2008) concentrated on the overall satisfaction of women with antenatal care. However, since then, many changes have occurred that have included alterations to the models of antenatal care delivered and the pregnant population. El Aty et al. (2014) conducted a secondary analysis exploring the influence of sociodemographic and health services factors on the overall adequacy of antenatal care utilisation of Omani married women. The findings indicated the need to pay more attention to the early use of
antenatal care and counselling for the signs and symptoms of pregnancy complications (El Aty et al., 2014).

The Annual Health Report that is issued by the MoH may reflect the available services, the percentage of antenatal coverage and the number of visits. However, these reports do not provide information on the factors that contribute to high or low attendance, or if the women are satisfied with the available services or not. This study aims to explore women’s and healthcare providers’ experiences and views of antenatal care in Oman. It is hoped that the findings of this study will be considered for incorporation into the future planning of maternal healthcare to improve women’s experiences.

1.8. Summary

The available national statistics indicate an issue of delayed attendance for antenatal care visits in the first trimester and inadequate uptake of healthcare in Oman. This low attendance and inadequate uptake of antenatal care suggests the need to explore the various perspectives surrounding antenatal care to identify reasons for late booking in Oman. There is limited research exploring antenatal care in Oman and none of it has evaluated reasons for late booking in publicly funded antenatal clinics.
Chapter Two:
Narrative Review of the Literature
Chapter 2: Narrative Review of the Literature

2.1. Approach to the Literature Review

A preliminary review of the literature is essential to identify published evidence relevant to the research question, situate the work within the current body of knowledge and identify gaps. It is also important to justify the need for the particular study, provide background data of the problem and avoid duplicating existing research (McCann and Clark, 2004). This review involves a systematic search of the literature and a narrative presentation of research relevant to the study question. There are fourteen types of review (Grant and Booth, 2009), which can be broadly divided into narrative, scoping, rapid evidence assessment, and systematic (Smith and Noble, 2015). The debate on the strengths and limitations of different types of review is ongoing but a review of the literature and the resources available is a key factor in determining the type of approach taken (Smith and Noble, 2015). A narrative review was considered appropriate for an in-depth understanding of the available primary research studies exploring perceptions and experiences surrounding antenatal care for women with low-risk pregnancies. Narrative reviews summarise and interpret evidence on a specific topic. However, they are considered less systematic and explicit with regard to their exclusion or inclusion criteria for studies, which might result in a biased selection of evidence when compared with other types of review (Mays et al., 2005; Garg et al., 2008). However, the flexibility of a narrative review allows broader coverage of relevant quantitative and qualitative evidence (Mays et al., 2005). Following and reporting search strategies explicitly enhances the strengths of a narrative review (Collins and Fauser, 2005).

2.2. Search Strategy

The search targeted all empirical research studies and reviews of empirical research relevant to the study topic. Searching the literature commenced in September 2014 and was updated in April 2018. Formulating a well-written research question is the first step in identifying resources and searching for relevant literature (Sbardt et al., 2007). Thus, the acronym PICO (Population, Intervention, Comparison and Outcomes) was used in this review as a framework for facilitating a literature search by listing the key terms by the main concepts contained in the question (Sbardt et al., 2007; Methley et al., 2014). Using PICO as a framework resulted in a wider range of relevant literature (Methley et al., 2014). The research question was formulated as follows: What are the experiences, views, perceptions and issues surrounding antenatal care for women with low-risk pregnancies?
PICO was used in the following way: Population (pregnant women, their family members, and healthcare providers), Intervention (antenatal care for women with low-risk pregnancies), Comparison (relevant literature) and Outcomes (experiences, perceptions, satisfaction, attitudes, knowledge, opinions and views) (Methley et al., 2014). The key concepts and search terms used are illustrated in Table 2.1. The keywords were used alone and in combination with the use of Boolean operators ‘AND/OR/NOT’ to expand and refine the search. The search was also refined with the use of MeSh (Medical Subject Headings; suggested subject terms) in the database by considering alternative keywords that have the same meaning to map out additional search terms (see Appendix 3). Truncation was also used by adding * to the word stem to include different spellings and acronyms for the search terms, e.g., pregnan* (O’Connor et al., 2014), as illustrated in Table 2.1.

Inclusion criteria were applied to narrow the search and identify the most relevant papers. The search targeted studies published in English and Arabic (as I speak Arabic) that focused on perceptions, views, experiences, attitudes, satisfaction and opinions surrounding antenatal care for women with low-risk pregnancies, their family members, and healthcare providers. Studies focusing on high-risk pregnancies and published in other languages were excluded if no translation was available. Initially, I performed a scoping search to map the existing literature in the area, which resulted in a large number of empirical studies (7,147). However, the search was then directed to articles published since 2001, which was the time the new antenatal care model was widely implemented and evaluated for effectiveness in many countries, to obtain the most up-to-date literature (Villar et al., 2001a; Villar et al., 2001b; Villar and Bergsjo, 2002; Vogel et al., 2013). In Oman, a new antenatal care model with six visits was introduced in 2008 (MoH, 2010).
Table 2.1: Key concepts in the review question and the search terms used

<table>
<thead>
<tr>
<th>Key concepts</th>
<th>Antenatal care</th>
<th>Low-risk pregnancy</th>
<th>Perceptions</th>
<th>Participants</th>
<th>Research Design</th>
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<tr>
<td>Search terms</td>
<td>Prenatal care</td>
<td>Normal pregnancy</td>
<td>Experiences</td>
<td>Pregnant</td>
<td>Qualitative</td>
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<td></td>
<td>Antepartum care</td>
<td>Healthy pregnancy</td>
<td>Views</td>
<td>women</td>
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<td></td>
<td>Boolean operators combining search terms AND/OR/NOT/ and Truncation*</td>
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The electronic databases used were as follows: Medline Ovid, Applied Social Science Index and Abstract (ASSIA), Web of Science, Maternity and Infant Care, PubMed, Cumulative Index of Nursing and Allied Health Science (CINAHL), Allied and Complementary Medicine Database (AMED), the British Nursing Index, PsycINFO, and the Cochrane Database. The search also included grey literature on the British Library, Scopus and Google Scholar platforms. Furthermore, ProQuest Dissertations & Theses Global (PQDT Global) was searched for electronic theses. The reference and citation lists of identified articles were also hand searched.

In total, 7,147 papers were accessed through databases, and forty-five were identified through assessment of reference lists and citation links to specific articles. Limiting the search to articles published from 2001 resulted in the exclusion of 6,202 articles. The remaining 990 articles were screened for duplicates, which eliminated 213 articles. The remaining 777 studies were screened for eligibility through their titles and abstracts, which resulted in the further exclusion of 577 studies. The remaining 200 articles were read in full for relevance to the research question, which resulted in the exclusion of 137 studies. These studies were excluded because six of them did not include pregnant women; thirteen focused on high-risk pregnancies; and ninety-five did not explore perceptions, experiences or views. Furthermore, nineteen were opinion pieces, editorials and guidelines and four were published in languages other than Arabic and English. A flowchart of the systematic literature search is shown in Figure 2.1.
Sixty-three research studies were included in this review, including thirty-four quantitative and twenty-two qualitative studies, and one using Q methodology. Q methodology is appropriate for extracting the subjective opinion of participants by sorting a set of statements representing a broad diversity of perspectives on a specific topic (Cross, 2005; Shinebourne and Adams, 2007). The review also included four meta-analyses, one meta-synthesis and one integrative review. Four studies were WHO trials and systematic reviews. Two WHO studies were conducted in settings with different healthcare resources and sociocultural backgrounds in high- to upper-middle-income countries, including Saudi Arabia, Cuba, Argentina and Thailand. Thirty-one studies were from high-income countries, and one study was conducted across three European countries: Switzerland, Scotland and the Netherlands. Five studies were from upper-middle-income countries, nine from lower-middle-income countries, and eleven from low-income countries. Although the studies from low-resource settings might not be comparable with the Oman social context, they were included because they were relevant to the review questions and provided important data that were not reported in studies from high-to-middle-resource settings.
Two studies were cluster RCTs, two were secondary analyses of national surveys, one analysed trials of antenatal care, and one was an observational cohort study. The remaining quantitative studies were surveys conducted through self-report and face-to-face structured questionnaires. The sample size of these surveys varied from eighty-three to 136,373 participants. Twenty-two qualitative studies were included, but only six reported the overall approach or methodology undertaken. In-depth semi-structured and unstructured individual interviews were the main methods of data collection. Three studies used a combination of interviews and observations and six combined individual interviews and focus group discussion. The sample size varied from fourteen to 827 participants. The participants of these studies were all women who were pregnant or had recently given birth, healthcare providers, traditional birth attendants, and male partners. The settings of antenatal care varied across countries to include hospitals, health centres, and community services.

2.3. Quality Assessment

Critical appraisal enables the researcher to assess the trustworthiness, relevance and results of published papers to make judgements on their quality and usefulness (CASP-UK, 2015). A quality assessment of evidence is crucial to determine whether the results can be trusted and applied to a particular context (Kuper et al., 2008). A critical appraisal was undertaken in this study using the Critical Appraisal Skills Programme (CASP) checklist for systematic reviews, qualitative studies, RCTs and cohort studies (CASP-UK, 2015). A tool adapted from the Center for Evidence-Based Management (CEBMa) (see Appendix 2) that contains questions similar to those in the CASP checklist was used in a critical appraisal of cross-sectional surveys (Center for Evidence Based-Management, 2014). A checklist following Hawker et al. (2002) was used to appraise a Q methodology and secondary analysis of WHO trials, as these types of studies are not included in the CASP and CEBMa tools. The studies included in this review ranged from high, middle and low quality. The quality analysis of the evidence was amalgamated with the synthesis of the themes considered in this review. See Appendices 1 and 2 for a table of critical appraisal findings and a summary of the evidence.

2.4. Synthesis of the Narrative Review Findings

Evidence synthesis was conducted with a full-text reading of each study and the extraction of key findings relevant to the review question and objectives. Then, similar data were
merged into themes, which were reviewed and refined and, finally, synthesised into four emerging themes as follows:

- Delayed access to antenatal care;
- Traditional versus new antenatal care models and perinatal outcomes;
- Women’s and healthcare providers’ perceptions of antenatal care; and
- Factors affecting women’s perceptions and utilisation of antenatal care.

2.4.1. Delayed Access to Antenatal Care

Early booking in the first trimester is considered essential to monitor the health of the women and their fetus and detect and manage complications because significant development of the fetus takes place during this period (Haddrill et al., 2014). It also provides women with the opportunity to exchange information about their pregnancies and prepares them for childbirth and the transition to motherhood (Donkor and Obed, 2012). Late booking after completing the first trimester has been associated with adverse pregnancy outcomes, such as increased maternal and fetal morbidity and mortality (Raatikainen et al., 2007; Donkor and Obed, 2012; Haddrill et al., 2014). Many studies from high- to low-resource settings have explored the reasons for late booking after completing the first trimester of pregnancy (later than 12 completed weeks of gestation). These studies might share some similarities with factors contributing to a late booking in Oman. Haddrill et al. (2014) examined the reasons for delayed access to antenatal care by interviewing twenty-seven women with a late booking after 19 weeks of gestation in the UK. This study generated rich data about factors that contributed to late booking, which included absence or misinterpretation of symptoms of pregnancy, fear of stigma due to teenage pregnancy, and initial plans to terminate the pregnancy. Erci (2003) in Turkey and Hatherall et al. (2016) in the UK also reported that women were reluctant to commence their antenatal care visits because they needed time to decide whether to continue an unplanned pregnancy or terminate it before initiating their antenatal care.

Chewe et al. (2016) surveyed 305 women in The Gambia and identified a delay in pregnancy diagnosis as a reason for late booking. This was consistent with Ayoola et al.’s. (2010) secondary analysis of a population-based survey in the USA of the relationship between the time of pregnancy recognition and the timing of initial visits. The study found that early pregnancy recognition improved the timing and number of antenatal care visits and lowered the odds of having fewer than the recommended number of visits. However,
early engagement with antenatal care could also be attributed to women’s previous experiences and motivation to initiate care in the first trimester (Ayoola et al., 2010).

In Oman, El Aty et al. (2014) found that the overall adequacy of antenatal care use was associated with women aged less than 25 who were primigravida. However, the reasons for the association between the age of the women, being primigravida and adequate use of antenatal care were not reported in this study. This could be attributed to the limitation of secondary analysis, in which the findings are restricted to the variables explored in the original survey (Finlayson et al., 1999). This finding was inconsistent with Chew et al. (2016), who identified that older women (25-44 years) were less likely to book late compared with teenagers (15-19 years), who may have increased risk of unplanned pregnancy, lack of knowledge and fear of social responses. This inconsistency might be due to sociocultural differences between the two settings and the way in which the surveys were conducted.

Lack of knowledge and misperceptions about antenatal care in early pregnancy were reported to influence the timing of the initial visit in many studies (Ndidi and Oseremen, 2010; Kisuule et al., 2013; Hatherall et al., 2016). Hatherall et al. (2016) reported that late booking in the UK resulted from women’s misperception that antenatal care was designed only for viable and continuing pregnancies. These women perceived early booking as non-urgent in uncomplicated pregnancies because they had other priorities in their lives to address before commencing their visits. Ndidi and Oseremen (2010) surveyed 372 Nigerian women who booked after 14 weeks of gestation and reported that having an uncomplicated pregnancy, misconceptions and lack of knowledge of the purpose and timing of the first visit delayed their access to healthcare. However, the majority of the women were of low socioeconomic status with a low level of education. Therefore, financial constraints, distance to a healthcare facility and lack of health-seeking behaviours resulted in delayed access to healthcare, particularly when care did not meet the women’s expectations (Ndidi and Oseremen, 2010). This concurs with Kisuule et al. (2013), who surveyed 400 women in Uganda and identified lack of knowledge of the appropriate timing of the booking visit as the main reason for delaying access to antenatal care. However, the participants of this survey were only recruited after 20 weeks of gestation from a referral hospital that provided no information about the women’s initial access to health centres in early pregnancy (Kisuule et al., 2013).
Similarly, confusion about the appropriate time to commence antenatal care visits due to inadequate dissemination of information by care providers was identified by Tanzanian women as a reason for late booking (Callaghan-Koru et al., 2016). Ndidi and Oseremen (2010), Kisuule et al. (2013) and Callaghan-Koru et al. (2016) found that lack of knowledge of the value and timing of antenatal care was associated with women’s low socioeconomic status and low levels of education. This concurs with findings by Parsa et al. (2018), who surveyed 165 Iranian women 1-15 days postpartum using a self-report questionnaire and found that women’s knowledge of care and the recommended number of visits were an effective factor in the timely use of care. However, this survey excluded women with unwanted or unplanned pregnancies, which is a significant factor in determining the time of access to antenatal care. This study used self-report questionnaires, which tend to generate superficial data because they lack prompt probing for clarification and the enabling of an in-depth understanding of phenomena (McLafferty, 2003; Polit and Beck, 2010).

Women from low-to-middle-income countries identified finance, the cost of transport, clinic booking procedures, delays in pregnancy diagnosis, difficulty accessing clinics, long queuing times, and family commitments as barriers to early booking. Being a primigravida who was unfamiliar with the appropriate time to initiate antenatal care was also identified as a contributing factor (Erci, 2003; Kisuule et al., 2013; Solarin and Black, 2013; Nisar et al., 2016). However, these studies were surveys, which have the potential to generate superficial data about factors contributing to late booking due to the limitation of surveys in general in ascertaining in-depth understanding (Kelley et al., 2003). Although these surveys were conducted in low-resource settings, they might have some similar issues to Oman due to the recent rapid development in the country (Al Riyami et al., 2012).

Hierarchical decision making in the family was among the factors that prevented women from accessing professional care early in many studies that were conducted in low- and middle-income countries (Ndidi and Oseremen, 2010; Montasser et al., 2012; Finlayson and Downe, 2013; Rahmani and Brekke, 2013; Chew et al., 2016; Nisar et al., 2016). For instance, some studies reported that women’s access to care was restricted by tribal elders, husbands or mothers-in-law or other senior family members (Finlayson, 2015; Nisar et al., 2016). Rahmani and Brekke (2013) reported that access to medical care in Afghanistan might be restricted by a husband or mother-in-law, even if complications were suspected. These studies revealed, therefore, that some women booked their pregnancy late because they lacked control over their decisions.
Cultural beliefs that referenced witchcraft and superstitions surrounding pregnant women and their fetus were other factors that appeared to be relatively common in studies from low- and middle-income countries (Mathole et al., 2004; Ndidi and Oseremen, 2010; Finlayson and Downe, 2013; Chewe et al., 2016). Some women also felt ashamed to disclose their pregnancy, as it was obviously associated with sexual activity (Finlayson and Downe, 2013; Rahmani and Brekke, 2013). Finlayson and Downe (2013) reported that a belief that pregnancy disclosure could result in unwanted religious or spiritual complications led to a reluctance to engage with antenatal care, as it was perceived as a public declaration of pregnancy. However, these studies provided limited details on the types of interpretations of superstitions and the harm anticipated.

It is evident from the above-mentioned research that late booking was common in high-, middle- and low-income countries. The studies identified misconceptions about the value of antenatal care and a lack of knowledge of the appropriate time to initiate care, the time of pregnancy diagnosis, age, marital status and parity as important determinants of access to care during pregnancy in all settings. However, financial issues, distance, cost of transportation, family commitments, cultural beliefs in the form of superstitions, and hierarchical decision making were determinant factors in low-to-middle-income countries.

2.4.2. Traditional versus New Antenatal Care Models and Perinatal Outcomes

In 2001, the WHO proposed that antenatal care for uncomplicated pregnancies should be reduced to four goal-oriented visits that focus on evidence-based screening, interventions and education (Vogel et al., 2013). The WHO sponsored trials in response to the lack of evidence regarding the effectiveness of the content, frequency, and timing of visits in the traditional model of antenatal care. Observational studies have consistently found that women receiving more antenatal visits have lower maternal and fetal mortality and morbidity than those having fewer visits. However, RCTs comparing models with different numbers of antenatal visits suggested that a model with fewer visits was as effective as the traditional model (Carroli et al., 2001b). According to Villar et al. (2001b), setting fewer goal-oriented visits has a clinical outcome comparable with the traditional model of antenatal care and costs less for the service users and providers with regard to the time devoted to care for each woman, money and resources. Thus, reducing cost and resources was part of the rationale for recommending a reduced visits model (Dowswell et al., 2015).

Many studies indicate convincing findings regarding the effectiveness of the new antenatal care model in perinatal outcomes (Carroli et al., 2001b; Villar et al., 2001a; Majoko et al.,
However, the data indicate that a reduced number of visits decreases the opportunity to detect risks and complications and delays their management. Villar et al. (2001a) conducted a large multi-centre cluster RCT of 23,526 women in four high-to-upper-middle-income countries to assess the effectiveness of a new model of antenatal care in improving pregnancy outcomes compared with the traditional model. The findings revealed that more referrals were made to hospitals in the new model than in the traditional model, particularly in the first and second trimesters. Women in the new model were less likely to be referred with pre-eclampsia, severe anaemia, urinary tract infection and gestational diabetes but were more likely to be referred with vaginal bleeding or rhesus isoimmunisation. The findings indicated that fewer visits and longer spacing between them might have led to more cases of undetected pre-eclampsia, infection and gestational diabetes than the traditional model (Villar et al., 2001a). The women in the traditional model of antenatal care had more frequent visits and opportunities to be assessed by professionals, which increased the chance of detecting risks and allowed timely management to prevent complications (Villar et al., 2001a).

Women in both antenatal care models had similar rates of low birthweight, postpartum anaemia and urinary tract infection. This concurs with a systematic review by Carroli et al. (2001b) that examined the effectiveness of interventions in antenatal care in preventing maternal mortality and severe morbidity. The review reported no clinical differences in reduced visits for pre-eclampsia/eclampsia, urinary tract infection, postpartum anaemia, maternal mortality or low birthweight babies. These findings were inconsistent with Majoko et al.’s (2007) cluster RCT with a large sample of 13,517 women in Zimbabwe. This study found fewer intrapartum transfers due to home birth, lack of access to care, and some women reported more frequently to clinics than others if they developed complications. However, no differences were noticed between antepartum or postpartum transfers and rates of preterm delivery or low birthweight births, which was consistent with Carroli et al. (2001b) and Villar et al. (2001a). The perinatal mortality rate was higher for women receiving care in the new model of antenatal care, i.e., 28 per 1,000 births (95% confidence interval (CI): -2.9-8.5) compared with 25 per 1,000 births in the traditional model (95% CI: 0.89-1.39) (Majoko et al., 2007). Although the increase in perinatal mortality between the two models was borderline for statistical significance, this indicated a link between the decreased number of visits and increased perinatal mortality. This increase in perinatal mortality might be due to the failure of healthcare providers to detect
asymptomatic conditions earlier to allow timely intervention with minimum contact with the women (Hofmeyr and Hodnett, 2013).

The implementation of a reduced number of visits varied between high- and low-resource settings, which also resulted in a spectrum of risks and complications. A meta-analysis of seven trials from high-to-low-income countries by Dowswell et al. (2015) indicated that perinatal mortality was relatively low, from five to seven (5-7) deaths per 1,000 births in high-resource settings, compared with fourteen to twenty-five (14-25) deaths per 1,000 births in low-resource settings with a reduced number of visits. Although the increase in perinatal mortality with a decreased number of visits was a matter of concern, it was borderline for statistical significance. There were no clear differences in maternal deaths, hypertensive disorders of pregnancy, preterm births and low birthweight babies between the two models of antenatal care. The results of the review suggest the importance of rigorous evaluation of substantive changes in antenatal care models before they are introduced and implemented. Some countries with limited resources have already implemented a reduced number of antenatal visits, which should not be lowered further without close monitoring of maternal, fetal and neonatal outcome (Vogel et al., 2013; Dowswell et al., 2015). The differences in outcomes of the trials included and the meta-analysis could be attributed to variation in the sites of the trials, the method of implementing the intervention, and the number of visits received (Dowswell et al., 2015). However, most of the trials included in this review were published between 1995 and 2007, indicating that a limited number were conducted during this time period, suggesting the need for further exploration. Similarly, a cohort study of 23,614 pregnancies in Finland reported a significant increase in low birthweight babies and fetal and neonatal death in low and non-attenders of antenatal care, even when the birth took place in a hospital (Raatikainen et al., 2007). However, these adverse pregnancy outcomes might not only be associated with the inadequate uptake of antenatal care for these women, but could also be caused by, for example, pre-existing medical conditions (Raatikainen et al., 2007).

The results also suggested an increase in fetal deaths due to failure to detect risks during fewer visits and prolonged spacing between them, leading to minimum contact with professionals (Vogel et al., 2013; Dowswell et al., 2015). Vogel et al. (2013) conducted a secondary analysis of the WHO antenatal care trials to assess the effects of baseline risks and the timing of perinatal death with a reduced number of visits model. The results indicated a statistically significant increase in the relative risk (RR) of fetal deaths (161) in the reduced visits model compared with 119 deaths in the traditional model between 32
and 36 weeks of gestation (adjusted RR 2.24; 95% CI: 1.42-3.53). Therefore, a lower number of visits decreased the possibility of the identification of risk of fetal death between 32 and 36 weeks due to prolonged spacing between visits. This could also indicate heterogeneity in study populations, healthcare settings or issues with the quality of care implemented, the timing of visits or the ways in which the trials were conducted (Vogel et al., 2013). This concurs with a meta-analysis by Dowswell et al. (2015) that suggested that an increase in fetal deaths in the third trimester might be due to the inability of health professionals to detect complications that took place over time due to minimum antenatal contact. However, the link between the number of visits and perinatal mortality and fetal deaths reported in this secondary analysis was plausible, so they could be used cautiously (Hofmeyr and Hodnett, 2013).

Although perinatal mortality and fetal deaths increased for women in the reduced number of visits model, the WHO trial team concluded that the new model of antenatal care seemed not to affect maternal and perinatal outcomes (Hofmeyr and Hodnett, 2013; Vogel et al., 2013; Dowswell et al., 2015). Empirical research studies examining the effectiveness of the WHO antenatal care model are scarce. Thus, all systematic reviews and secondary analyses that were conducted used the same trials to make inferences about the effectiveness of the new model of care. The increase in perinatal and fetal complications with reduced numbers of antenatal visits indicates this should be considered in future research.

2.4.3. Women’s and Healthcare Providers’ Perceptions of Antenatal Care

Understanding women’s and staff perceptions of care is critical to identify issues and concerns with the delivery of care and the resources available, in order to address their needs and expectations and improve healthcare services (Shabila et al., 2014). The findings from the literature that explored women’s and care providers’ perceptions surrounding antenatal care can be summarised into four subthemes: the number of antenatal visits, care providers and settings of antenatal care, continuity of carer, and essential aspects of antenatal care.

2.4.3.1. Numbers of Antenatal Visits

The number of antenatal care visits has been widely reduced in the last two decades in response to WHO recommendations. However, the evidence indicates that this reduction in the number of visits was not universally accepted by women and their care providers. Some women were satisfied with a reduced number of visits but were concerned about the
adequacy of these visits and the long intervals between them (Nigenda et al., 2003). A meta-analysis by Villar et al. (2001b) revealed that women in high-income countries were less satisfied with the reduced number of visits and felt that their expectations were not being met; however, they reported that they would choose this model in future pregnancies. This might mean that women’s dissatisfaction was associated with a change in the norm and that they anticipated acceptance of the new model with time (Dowswell et al., 2015). Carroli et al. (2001b) reported that women in low-to-middle-income countries in both the traditional and new antenatal models were equally satisfied. However, women assigned to the new antenatal care model were unhappy with the frequency of the visits, which were widely spaced. This was also consistent with the findings of Dowswell et al. (2015), who reported that women in all settings were not satisfied with the reduced number of visits and the long spaces between them. This finding could suggest that the women were more comfortable with the traditional model of antenatal care, which provided them with more opportunities for assessments and the detection of risks and to exchange information with their care providers (Dowswell et al., 2015). However, in some healthcare settings, the model of the reduced number of visits was associated with decreased costs to healthcare services per visit and out-of-pocket payment where healthcare is not free to women (Carroli et al., 2001b; Villar et al., 2001a; Dowswell et al., 2015). However, the costs to women linked with absence from work, travel and childcare that might be associated with a decreased number of visits were not included in the analysis (Carroli et al., 2001b). Aniebue and Aniebue (2010) surveyed 409 Nigerian women to examine their perceptions of focused antenatal care. Approximately 80% of the women were unconvinced that the number of visits was adequate. However, these women accepted the new model as it was more convenient and cheaper for them (Aniebue and Aniebue, 2010). Thus, the financial implications for attending visits in low-income countries were the main reason for women desiring fewer visits.

It was evident that women perceived the new model with fewer visits differently within different social contexts. In the WHO trial, Langer et al. (2002) assessed the satisfaction of 1,600 women and their care providers in four countries (Cuba, Argentina, Saudi Arabia and Thailand) with the new evidence-based antenatal care model. The countries involved in this study were high-to-middle income, antenatal care was provided by different professionals, including GPs, family physicians and midwives, and in different settings, which involved health centres and hospitals. The women in both models were almost equally satisfied with the number and spacing of visits and the length of waiting time.
However, the women assigned to the new model of care were more satisfied with the time spent with their healthcare providers because of improvements in the relationship between them. Similarly, the healthcare providers were satisfied with the number of visits and the time spent with each woman but had some concerns regarding the longer spacing between visits. This was inconsistent with the findings of Nigenda et al. (2003), who interviewed 164 women in focus group discussions in the same four countries in order for them to describe their opinions of the new model of antenatal care within the same trial. The findings revealed that all the women preferred more frequent visits during pregnancy, irrespective of differences in the available resources and sociocultural values. For example, Saudi women preferred a total of 10-12 visits; Argentinian women preferred 9-11 visits; Cuban women 18 visits; and Thai women 7-8 visits (Nigenda et al., 2003). It is noteworthy that both studies were part of the WHO trial and provided almost contradictory findings of women’s high satisfaction with the number of visits and their actual preferences. This inconsistency in the level of satisfaction might be due to the potential advantage of group interactions to accentuate the similarities and differences of women’s range of perspectives and experiences compared with a satisfaction survey (Lambert and Loiselle, 2008). The findings of Langer et al. (2002) were inconsistent with 244 Saudi women surveyed by Kamil and Khorshid (2013), who reported significantly higher levels of satisfaction with four antenatal visits. However, the women who participated in the study conducted by Kamil and Khorshid (2013) wanted higher-quality care with more focus on information provision, as they reported receiving inadequate information about pregnancy care, labour, breastfeeding and contraception. These women received 12-14 visits, but they intentionally missed some appointments because they did not want frequent attendance. These data demonstrated that the women valued the exchange of information during their appointments more than attending for more frequent visits. Langer et al. (2002) conducted a multi-centre study that involved countries with different resources and a large sample to minimise the non-response bias and increase the representativeness of the findings, whereas the survey by Kamil and Khorshid (2013) had a small sample size (Polit and Beck, 2012). However, the findings indicated that the women’s perceptions and preferences regarding care changed over time, along with changes in technology, societies and healthcare systems.

For instance, Hildingsson et al. (2002) explored Swedish women’s expectations of care, preferences for the number of visits and attitudes to the continuity of midwife caregivers after introducing the new antenatal care model with a smaller number of visits (from 13-16
visits to 6-9 visits). In this cohort, approximately 70% of the women preferred the traditional schedule of visits (13-16) and 23% wanted more visits. Ten years later, Hildingsson et al. (2014) conducted a follow-up study to compare women’s expectations of antenatal care for two cohorts: 2009-2010 and 1999-2000. The findings revealed that there were statistically significantly fewer women who preferred more visits (OR 0.7; 95% CI: 0.2-0.8; \( P = 0.019 \)) in 2009-2010 compared with women in the national cohort for 1999-2000. Being aged less than 25, having had a previous miscarriage and stillbirth, past negative experiences, and assisted conception were associated with the desire for more visits. Being aged more than 35, an unplanned timing of a pregnancy, and having more than two children were factors associated with multipara preferences for fewer visits (Hildingsson et al., 2002). However, both studies used self-report questionnaires to collect data, which might lack depth and detail in the responses (Kelley et al., 2003).

Similarly, Mathole et al. (2004) interviewed forty-four women and twenty-four partners in Zimbabwe and reported different opinions between younger (under 35 years) and older (above 35 years) women. The younger women preferred more frequent visits to ensure that the fetus was developing and in an optimal position for birth, as they feared undetected complications with long spacing between visits. Older multiparous women, although considered to be higher risk, did not prefer more frequent visits because they felt that they could manage without professional help and perceived antenatal care as a matter of “going for weight measurements only” (Mathole et al., 2004, p. 128). These findings contradicted Hildingsson and Thomas (2007), in which Swedish multiparous women preferred to have more visits during the first trimester, whereas primigravidae wanted to have their first visits earlier in pregnancy. The quality of antenatal care the women received and the available resources may have led to the differences in perceptions of care between the Zimbabwean and Swedish women. Furthermore, the Zimbabwean study provided an in-depth exploration of antenatal care from multiple perspectives and methods, which provided richness and in-depth understanding and enhanced the credibility of the study (Lambert and Loiselle, 2008).

A reduced number of visits was intended to increase the time the women spent with their care providers receiving physical care, exchanging information and obtaining support and reassurance (Carroli et al., 2001b; Villar et al., 2001b). However, Hildingsson and Rädestad (2005) survey of 2,746 Swedish women reported that even with fewer visits, the content was focused mainly on the medical aspects of care. These women were unsatisfied with a reduced number of visits, especially in early pregnancy, as this limited their chances.
to clarify their doubts about the changes occurring to them and they were unable to develop relationships with their care providers. However, these results should be cautiously considered because they were self-reported and based on women’s understanding of the questions and their ability to remember experiences and events that occurred to them, particularly in early pregnancy (Kelley et al., 2003).

Therefore, it can be seen that some women in different settings were not satisfied with the reduced number of visits because they had a fear of developing complications that would remain undetected due to the prolonged spacing between visits. The women preferred more frequent visits to enable them to understand and cope with the changes occurring to them during pregnancy and to alleviate their fears of abnormalities undetected as a result of widely spaced appointments. Having previous experience and knowledge might, therefore, affect women’s preferences for the number of visits.

2.4.3.2. Care Providers and Settings for Antenatal Care

Antenatal care was provided by different care professionals, including midwives, GPs, or obstetricians, based on the local healthcare system available and the adequacy of staff. The settings of antenatal care varied, to include community health services, health centres, and hospitals with different resources (Davey et al., 2005). Villar et al. (2001b) reported that midwife/GP-managed antenatal care for women with low-risk pregnancies had similar clinical effectiveness to obstetrician-led care for caesarean section, anaemia, urinary tract infections and postpartum haemorrhage. Women’s satisfaction with midwife/GP-managed care was similar to or higher than the satisfaction of women receiving obstetrician/gynaecologist-led care. There was no effect of the cadre of caregiver on perinatal outcomes, reflecting similar clinical efficacy, but midwife/GP-led care contributed to improved perceptions of care (Villar et al., 2001b). Kenyan women surveyed who had received midwife/GP-managed care were more satisfied with the exchange of relevant information and individualised care (Brown et al., 2014). However, this study had a low response rate of 52%, indicating some difference between respondents and non-respondents (non-response bias), so the sample is potentially not representative of the target population (Draugalis and Plaza, 2009).

Sword et al. (2012) conducted a qualitative study in Canada, interviewing forty women and forty care providers to explore their perspectives on quality of prenatal care. Women preferred receiving care from midwives because their care was less medically oriented than physician-led care. Midwives also emphasised the importance of not treating pregnancy as
a medical condition or disease but rather as a physiological event (Sword et al., 2012). The
researchers collected data in this study from multiple perspectives of women and professionals for in-depth understanding and to enhance the quality of the findings (Gillham, 2000). However, a snowballing technique to sample healthcare providers was used to identify new participants with similar characteristics, which may restrict the participants to a rather small network of contacts. The quality of sampling might be influenced by gatekeeper bias, social network limitations and the willingness of participants to cooperate with the researcher (Cohen and Arieli, 2011).

Women who participated in a global study by Nigenda et al. (2003) expressed different opinions of where and who should provide care to them during pregnancy. Within this study, the women mainly received their care from doctors, except in Thailand, where midwives were involved, but the settings of care were not explicitly reported. Cuban, Argentinian and Thai women had a strong preference for hospital care because they perceived it as safer due to the availability of all necessary equipment and being better prepared to respond to emergency situations (Nigenda et al., 2003). However, the preferred setting of care for Saudi women was not reported. Cuban women preferred to receive care from a specialist doctor because they believed that such practitioners have enough information and are better prepared to respond to their queries. Saudi women preferred family practitioners, whereas Argentinian and Thai women had no preference between GP and specialist care. However, Thai women set a high value on traditional midwives (Nigenda et al., 2003). Saudi and Thai women preferred female care providers due to sociocultural factors, as they felt more comfortable with female providers during physical examinations and when exchanging information. Some Saudi women accepted male doctors in the presence of a female nurse during their consultations. Argentinian and Cuban women had no gender preference with regard to care provider (Nigenda et al., 2003). Similarly, a survey by Kamil and Khorshid (2013) conducted in Saudi Arabia reported that the majority (67%) of the women who participated preferred a female physician, while 27.2% had no gender preference, and 4.15% preferred to be seen by a male physician. These findings may illustrate that even women with similar religious and sociocultural beliefs may have different views and opinions regarding providers of antenatal care. Thus, it is essential that any changes in clinical care should be sensitive to women’s needs in order to move in the anticipated direction (Nigenda et al., 2003).
2.4.3.3. Continuity of Carer

Continuity of carer refers to consistency in the midwife and clinical team providing care to a woman during the pregnancy, birth and early parenting period to enable the development of a trust relationship between them and fulfill their needs (Sandall et al., 2016). Women receiving care from a single midwife or GP they know and with whom they feel comfortable, and providers being sensitive to women’s needs and changes occurring to them over time, may increase the women’s satisfaction and encourage them to attend antenatal visits (Mathibe-Neke, 2008; Novick, 2009; Sword et al., 2012; Jenkins et al., 2014). This was consistent with a self-report survey of 329 women in the UK, in which just over half (56.5%) viewed continuity of carer as important (Soltani and Dickinson, 2005). However, this study had low response rates, which may limit the generalisability of the findings to those who replied (Coughlan et al., 2007). Women’s satisfaction was high with continuity of carer with one or two midwives, as this enhanced the development of a relationship and the provision of emotional support (Hildingsson and Rådestad, 2005). Women in New South Wales, Australia, Iraq and South Africa valued the development of a rapport with one or two staff members and were fearful that lack of continuity might lead to conflicting opinions and practices (Mathibe-Neke, 2008; Jenkins et al., 2014; Shabila et al., 2014).

Continuity of carer was also important for a smooth transition between care providers and timely and efficient exchanges of information with women (Sword et al., 2012). A comparative study of two cohorts of Swedish-speaking women reported that 70% of women rated follow-up with the same midwife at all visits as very important, while 27% rated it as essential for the cohort group 2009-2010. Only 3% of women in the cohort group for 1999-2000 rated continuity with a midwife as less or not important (Hildingsson et al., 2002), whereas the percentage increased to 95% in the 2009-2010 cohort group (Hildingsson et al., 2014). This was inconsistent with the responses of women in Sweden who participated in a survey by Hildingsson and Thomas (2007) and considered the relationship and time spent talking with a midwife and receiving individualised care and quality interaction as more important than continuity of carer alone. This inconsistency might be because antenatal care midwives in Sweden serve a specific area, so continuity with the same midwife was typical and taken for granted (Hildingsson and Thomas, 2007). A similar finding was reported in a postal survey by Davey et al. (2005) of 1,616 Australian postpartum women, just over three quarters (77%) of whom had continuity of carer at each visit. These women were more likely to describe their care as very good if
they received it from a known midwife. Thus, the woman-carer relationship had a positive impact on women’s perceptions and regular uptake of care. However, the vast majority of the women in the study by Davey et al. (2005) who thought their caregivers remembered them and responded positively received their care in private clinics. However, the sample significantly underrepresented young, single and non-native English-speaking women, as well as those admitted to public hospitals, which limits the generalisability of the findings (Davey et al., 2005). The self-report questionnaire was distributed five months after childbirth to avoid objective responses to questions based on the women’s intrapartum experiences. However, the women may have difficulty remembering details about their earliest antenatal experiences, which increases the chance of recall bias (Davey et al., 2005).

Women in different contexts highlighted the importance of continuity of carer or at least receiving care from a small group of health professionals with whom a relationship could be developed and emotional support offered (Hildingsson and Rådestad, 2005; Mathibe-Neke, 2008; Sword et al., 2012; Hildingsson et al., 2014; Jenkins et al., 2014). However, continuity of carer alone might not be effective if women do not receive individualised care and information tailored to their needs.

2.4.3.4. Essential Aspects of Antenatal Care

There is no evidence of interventions that are deemed necessary to optimise maternal and fetal health and pregnancy outcomes (Dowswell et al., 2015). Few interventions have been formally evaluated, with little evidence supporting their relative merits, hazards and costs. However, the key issue is that antenatal care should only include effective and safe evidence-based activities (Dowswell et al., 2015). Women have expressed different opinions about important aspects of antenatal care; these differences were due to many factors, such as sociocultural aspects, past experiences with care, age, education and the resources available to them. Women had high expectations regarding information given to them by professionals and considered antenatal care important for continuous monitoring of their health and that of the fetus. They considered respectful care and treatment and active involvement of their partners and family members as the most important aspects of care (Bondas, 2002; Hildingsson et al., 2002; Hildingsson et al., 2014).

Women in the new antenatal model were significantly satisfied with the information provided on normal birth, breastfeeding, family planning, pregnancy complications, and action to be taken in an emergency (Langer et al., 2002). Similarly, Swedish women
identified time spent with the midwife to exchange information about normal physical and mental changes in pregnancy, possible complications and their fears, as important aspects of antenatal care (Hildingsson and Thomas, 2007). This was consistent with a survey by Davey et al. (2005), in which Australian women reported that they were always kept informed (61%), caregivers were always sensitive and understanding (52%), and that their worries and concerns were always taken seriously (62%). Furthermore, the women reported that doctors (42%) and midwives (55%) spent enough time with them, they were always happy with the medical care (67%), and rarely or never waited for more than 30 minutes during visits (41%). However, forty primigravidae in a phenomenological study in Finland reported that their care focused mainly on physical health, whereas individual and family needs were not adequately considered (Bondas, 2002). These women wanted to share their stories within a trusted relationship in a peaceful atmosphere and receive evidence-based assessments from a competent professional. This indicated that the women valued their appointments as they enabled them to receive medical aspects of care and obtain information and reassurance from competent professionals. Bondas (2002) collected data by interviewing women and observing their care in order to produce thick descriptions of the essential structure of their lived antenatal care experiences in the real world, as described by them, and to validate and deepen understanding (Fitzpatrick and Boulton, 1996).

It was evident in the included literature that the majority of the women considered ultrasound assessment important to reassure them that everything was normal. Although women desired ultrasound many times during pregnancy, this was impossible due to financial constraints (Nigenda et al., 2003; Hildingsson and Thomas, 2007; Sapountzi-Kreapia et al., 2011). For instance, when asked, Swedish women considered ultrasound assessment important to confirm and ensure normal pregnancy and feel connected to the fetus (Hildingsson and Thomas, 2007). Women in high-resource settings perceived having ultrasound examinations as the highest standard of care. However, the use of ultrasound has not demonstrated a sufficient capacity to assess the development of a pregnancy to make it a priority universal procedure similar to other examinations. It is also not always possible to carry out ultrasound scans, especially in low-resource healthcare settings (Nigenda et al., 2003). These data demonstrate the importance of orienting women about physical and clinical assessments, and support and reassurance during their antenatal care visits.
The literature indicated that holistic antenatal care was not delivered because care was focused on physical aspects, whereas psychological and emotional aspects were undermined. For instance, most of the studies reported that the exchange of information during women’s appointments was scarce due to limited resources and busy contextual environments, which also limited women’s ability to share their concerns and have their fears alleviated. The implementation of antenatal care was inconsistent across different settings, which resulted in a spectrum of perspectives based on the number of visits and interventions the women received.

2.4.4. Factors Affecting Women’s Perceptions and Utilisation of Antenatal Care

Twenty-four studies reported factors that may affect women’s perceptions of antenatal care and at the same time demonstrated impact on access and regular attendance to healthcare in pregnancy. These factors are the interpersonal dimensions of care, resources and organisation of the clinic, and sociocultural and financial factors.

2.4.4.1. Interpersonal Dimensions of Antenatal Care

Interpersonal relationships, the exchange of information and involvement in decision making are important factors in shaping women’s perceptions of and satisfaction with care (Finney Rutten et al., 2006). Some women were seen to view antenatal care as respectful and individualised due to the attitude of the professionals. However, others described their care as mechanistic and a matter of routine for the healthcare providers, focusing mainly on medical needs and ignoring psychological support (Novick, 2009). Many studies revealed that the attitudes of healthcare providers affected women’s perceptions of antenatal care, either positively or negatively (Hildingsson and Thomas, 2007; Ghibashi and Khandekar, 2008; Raine et al., 2010; Gobena-Tricas et al., 2011; Sapountzi-Krepia et al., 2011; Boerleider et al., 2013; Emelumadu et al., 2014; Shabila et al., 2014). Women in high- and low-resource settings reported similar kinds of perceptions towards the manner in which their healthcare providers treated them. In a survey involving eighty-three women in Oman to assess their satisfaction, 81% were happy with the care they received, mainly due to the positive attitude of the staff and doctors (Ghibashi and Khandekar, 2008). The findings reflected the importance of the interpersonal dimension of care and interaction with care providers in a friendly manner to enhance women’s perceptions of the care they received. However, this survey has a potential limitation as healthcare professionals collected the data, which might have led to the reported high level of satisfaction with staff attitudes due to the power differential (Urden, 2002). A sequential sampling method was
used to select every fifth woman attending the clinic on a specific day, and not all women who attended had a chance to participate in the survey. Furthermore, the study had a small sample size, so generalisability should be considered with caution (Kelley et al., 2003).

It was also evident that communication was a key feature in enhancing women’s perceptions of care. A qualitative study of thirty women in England by Raine et al. (2010) reported that adequate time to exchange information with care providers improved attendance and reduced women’s anxieties (Raine et al., 2010). However, some women were unhappy, as they did not receive adequate information about the purpose of assessments and possible problems in pregnancy. Women’s responses varied: some felt assertive enough to meet their needs in their own way, while others disengaged themselves from interacting with their care providers (Raine et al., 2010). The study used individual interviews and focus group discussions, which enhanced the description of the structure and characteristics of the phenomenon and enabled rich understanding of the antenatal care provided for the women (Lambert and Loiselle, 2008). Sapountzi-Krepia et al. (2011) surveyed 607 women in Greece who used a self-report questionnaire to explain their experiences during pregnancy. Some women recognised good collaboration with healthcare providers and receiving support, guidance and individualised care from them as the most important positive experiences. Some women were disappointed with professionals’ behaviours, indifference and lack of support and described their care as humiliating. The sample in this study was limited only to women who were fluent in Greek and had given birth within the previous year, which might limit the representativeness of the findings and increase bias in sample characteristics (Sapountzi-Krepia et al., 2011).

Ineffective communication could frustrate and hinder women’s abilities to participate in a relationship of shared decision making with their care providers. Duarte et al. (2011) claimed that the reasons for lack of adherence to antenatal care for Brazilian women were the doctors’ attitudes and ineffective communication with them. This caused the women to lose trust in themselves and others and to fear harming themselves and the fetus and being punished during labour. The women considered attentiveness and thoughtfulness shown by care providers as a major factor in enhancing adherence to antenatal care, whereas the absence of psychological support and interaction was detrimental. Sword et al. (2012) identified interpersonal care processes among the key dimensions of quality care that enhanced women’s involvement in care and shared decision making. Women valued respectful care, emotional support, the exchange of information, adequate time for consultations and a meaningful relationship with their care providers. Similarly, women in
a study by Jenkins et al. (2014) wanted to be involved in decision making through an understanding of the purpose and plan of care. Malawian women also perceived the respect and politeness of care providers as part of good care, whereas being examined with minimal communication and feedback and feeling discriminated against were unsatisfactory (Kumbani et al., 2012). This was consistent with women in Papua New Guinea, who were dissatisfied with the negative manners of professionals because of unannounced closures and their absence from the clinic without prior notification (Larsen et al., 2004).

Disrespect for women’s commitments and time was among the rationale given for lack of interest in attendance to antenatal care. A survey of 502 women in The Gambia found that 80% were satisfied with public care compared with 98% with private care due to poor communication with professionals in public clinics (Jallow et al., 2012). Some women in a focus group discussion with Goberna-Tricas et al. (2011) in Spain distinguished between the technical and interpersonal aspects of skills and relationships and considered these aspects as complementary to each other. These women were satisfied with their healthcare but not with the personal treatment of their care providers, but identified the safety and technical skill of the professionals as essential. At the same time, they wanted their care providers to respect their autonomy and values, which they considered essential to foster the development of a therapeutic relationship (Goberna-Tricas et al., 2011). Women expected their midwives to be competent in addressing their psychological and emotional needs and those of their partners in a friendly, respectful, and supportive manner (Hildingsson and Thomas, 2007; Gheibizadeh et al., 2016). Luyben and Fleming (2005) conducted a grounded theory study of twenty-three women from three European countries, who considered feeling confident and acting responsibly towards pregnancy and the fetus as main reasons to attend antenatal care. Some women in South Africa anticipated having the freedom to choose their healthcare providers, to agree or disagree with the recommended interventions and to be involved in care that was tailored to their individual needs (Mathibe-Neke, 2008).

The majority of studies from low-resource settings reported issues of unfriendly and disrespectful communication and some women encountering physical abuse, such as hair-pulling, due to staff shortages and limited resources. For instance, women in Papua New Guinea in the study by Larsen et al. (2004) identified unfriendly behaviours by care providers as the main significant concern because staff often did not smile or maintain eye contact with them while exchanging information. However, the study reported that the
Clinic served a large number of women daily and had limited resources, which increased the workload and frustrated the care providers. Similarly, Nigerian women identified unfriendly attitudes of staff at each service point as a reason for the underuse of antenatal care (Ekott et al., 2013). Another study in Papua New Guinea by Vallely et al. (2013) reported abusive communication, including ‘scolding’ of women if they forgot details or items, which resulted in women being afraid to attend the clinics. However, this study explored women’s perceptions of pregnancy and childbirth and it was sometimes difficult to distinguish if the perceptions were associated with antenatal or intranatal care. A meta-synthesis of low- and middle-income countries reported consistent findings of abusive and disrespectful communication involving insensitivity, rudeness, neglect, humiliation and physical violence by staff (Finlayson and Downe, 2013). This concurs with findings of a qualitative study of twelve women and fifteen care providers in Afghanistan by Rahmani and Brekke (2013), in which women reported forms of disrespectful care and verbal and physical abuse from care providers during their visits. Poor communication was identified by Tanzanian women as a barrier to completing four antenatal visits (Callaghan-Koru et al., 2016) and as a primary reason for accessing private healthcare in Iraq (Shabila et al., 2014).

The analysis of the above studies indicated that the issue of disrespectful care was universal, but physical abuse seems to be common in low-to-middle-income countries. According to the WHO’s statement of respectful care, “every woman has the right to the highest attainable standard of health, which includes the right to dignified, respectful healthcare” (WHO, 2015b, p. 1). Thus, disrespect and physical abuse in healthcare are considered a violation of human rights with regard to respectful care and threaten women’s rights to life, health, body integrity, and freedom from discrimination. It also violates the trust that should exist between women and their care providers and acts as a barrier to the access and use of maternal healthcare services (WHO, 2015b). This situation requires immediate consideration and further in-depth exploration.

2.4.4.2. Resources and Organisation of Clinics

Many studies reported long waiting times before consultations, limited resources and lack of privacy among reasons for dissatisfaction with public antenatal care (Larsen et al., 2004; Ghobashi and Khandekar, 2008; Kumbani et al., 2012; Montasser et al., 2012; Ekott et al., 2013; Finlayson and Downe, 2013; Emelumadu et al., 2014; Shabila et al., 2014). Long waiting times and unavailability of laboratory services contributed to women's dissatisfaction in Oman and Iraq (Ghobashi and Khandekar, 2008; Shabila et al., 2014).
Lack of convenient waiting facilities, ultrasound investigation, and time during visits increased women’s preferences for private healthcare in Iraq (Shabila et al., 2014). Similarly, inadequate privacy, limited waiting areas, uncomfortable seats and broken equipment were issues that were discussed across many settings with different resources (Larsen et al., 2004; Donkor and Obed, 2012; Jallow et al., 2012; Ejigu et al., 2013). Respecting women’s time and maintaining their privacy during their visits were perceived by Iranian women as equitable care (Gheibizadeh et al., 2016). Women and care providers in Canada identified cleanliness, aesthetics, privacy, and the right type of seating in the waiting area as important features of quality care because women often have back pain (Sword et al., 2012). However, available facilities, resources, type of care and environment were identified by Australian women as important but not as key features in maternity care (Jenkins et al., 2014). Conversely, Pakistani women identified the availability of medical equipment and laboratory services as facilitating factors for accessing antenatal care (Nisar et al., 2016). This inconsistency between the responses of Australian and Pakistani women might be attributable to the differences in the available healthcare resources and socioeconomic statuses of the women (Dowswell et al., 2015). The only study found to report high satisfaction with the environment of care, including privacy and accessibility of resources, was conducted in Egypt (Montasser et al., 2012). The women in this study were interviewed by a care provider, which might be the reason for highly positive responses due to lack of anonymity and fear of the impact of negative responses on their future healthcare (Urden, 2002).

Waiting for an extended time was a major issue that had a negative impact on women’s perceptions of care. Only one survey specifically investigated the issue of extended waiting times, their causes and impact on women’s perceptions, and included 316 women in Ghana (Donkor and Obed, 2012). The women in this survey spent 6-8 hours at antenatal clinics, most of that time involved waiting to see a doctor; 68% of them rated their waiting as very long, which was the main reason for the dissatisfaction of half of them. The reasons for long waiting times were: staff shortages, a crowded schedule, a first-come-first-served clinic and lack of appointment protocol (Donkor and Obed, 2012). Similarly, women surveyed in Nigeria reported waiting for a long time, with an average of 6 hours per visit (Ekott et al., 2013). Waiting for extended times for consultations demotivated women in low- and middle-income countries from attending their visits, especially if they had a long and difficult journey to make to get there (Finlayson and Downe, 2013). However, the reported waiting time in a study by Ekott et al. (2013) was based on women’s ability to
remember the events in previous visits, which may be subject to recall bias (Kelley et al., 2003).

Women also reported spending most of their time waiting for consultations that only lasted a few minutes. For instance, 70% of women surveyed in The Gambia reported waiting for a long time for consultations that only lasted 3 minutes or less. Thus, their need for information on danger signs of pregnancy, childbirth, family planning, baby care and nutrition were disregarded (Anya et al., 2008). Conversely, Egyptian women surveyed reported spending less than 30 minutes waiting for their consultations and the results of investigations (Montasser et al., 2012). These women were interviewed by their care providers, indicating response bias to avoid a negative impact of answers on future care (Creswell, 2014).

The evidence above demonstrated that the issues of limited resources, extended waiting times, lack of privacy and inconvenient environments of care were common in many contexts but were more noticeable in studies in low-resource settings. Staff shortages, lack of a convenient waiting area and the absence of timed appointments were found to be the main causes of long waiting times. However, most of the studies were surveys, which potentially lack in-depth exploration of the issues and their impact on perceptions of care (Kelley et al., 2003).

2.4.4.3. Sociocultural and Financial Factors
Physical and environmental factors, such as travelling distance, availability of public transport, financial status and education, may play a major role in enhancing access or preventing women’s attendance to healthcare services. Financial and transport problems were the leading factors for underuse of antenatal services in low- and middle-income countries (Finlayson and Downe, 2013; Rahmani and Brekke, 2013; Solarin and Black, 2013; Nisar et al., 2016; Adeyinka et al., 2017; Wilunda et al., 2017). Women in Papua New Guinea in studies by Larsen et al. (2004) and Vallely et al. (2013) identified the availability of healthcare services within a short distance from home or the presence of good public transportation as being important for regular attendance to antenatal care. Women in American Samoa recognised the distance between their homes and the clinic and time off from their employment to attend their appointments among the key determinants of satisfaction (Adeyinka et al., 2017). Wilunda et al. (2017) conducted fourteen focus group discussions with 169 women, forty-five men and twelve key informants in South Sudan. These participants perceived travelling to a healthcare facility
as unsafe and dangerous due to flooding, poor roads, distance and lack of transport. Women in Southeast Nigeria had a high preference for private hospital services, as they were more accessible to them compared with public clinics (Emelumadu et al., 2014). Thus, limited access to safe transport in low-resource settings negatively affected the uptake of healthcare.

Even in countries with free antenatal care services, unexpected payments for additional medicines, tests and medical cards placed further strain on families with limited financial resources, which inhibited access to antenatal care (Finlayson and Downe, 2013). For example, women in South Sudan felt discouraged about using professional care because staff could unexpectedly ask them to pay for free antenatal care services (Wilunda et al., 2017). Although women in Southeast Nigeria were least satisfied with the cost of services, they did not consider it a barrier to accessing healthcare. However, women with higher educational status were more satisfied with the cost of antenatal care because they were more socioeconomically empowered and had greater access to health information. They also valued time and money spent on accessing quality care and taking measures to improve their health status (Emelumadu et al., 2014).

Women who had family and domestic support were more motivated to obtain pregnancy care than women who did not have this type of assistance (Larsen et al., 2004). Women in Afghanistan reported a lack of family support among the reasons for the underuse of antenatal care (Rahmani and Brekke, 2013). The social roles of women within different cultures (such as being a mother of other children, a housewife and a wife) were reported as causes for lack of adherence to antenatal care, indicating competing commitments (Duarte et al., 2011). However, all studies that explored sociocultural and financial factors and their influences on the use of antenatal care were conducted in low-to-middle-income countries, indicating that geographical boundaries, flooding, and dangerous travelling, for example, were context-specific barriers.

2.5. Summary and Limitations of the Review

This narrative review included sixty-three studies: thirty-four were quantitative, twenty-two were qualitative, six were reviews, and one involved Q methodology, and were conducted in high-, middle- and low-income countries. Some of the studies used rigorous and comprehensive strategies in their literature review, data collection and analysis, as well as in the final interpretation and write-up of the data. For some of the studies, the methodology and sampling processes were not reported, which made it difficult to identify
the suitability of the data collection and analysis techniques. Reporting methodology is essential to justify the appropriateness of the data collection and analysis methods (Meyrick, 2006; Carter and Little, 2007). Not explicitly reporting the sampling process makes a decision regarding its suitability difficult and affects the transferability of findings to similar contexts (Shenton, 2004). The majority of the studies focused on exploring perceptions surrounding antenatal care involved only women, and only a few included care providers. Involvement of care providers is important to clarify and obtain in-depth understanding of issues raised by the women who took part. The majority of the studies used self-reporting and face-to-face interviews, except for nine qualitative studies that collected data by combining interviews with either focus group discussion or observation. Using both techniques allows researchers an opportunity to validate participants’ statements by directly observing what they actually do in the natural environment and enhances the credibility of the findings (Walshe et al., 2012). None of the studies included that explored antenatal care in languages other than English reported the transcription and translation processes, which are important for the transferability of the findings of a study.

Only one RCT was found to have been conducted post-2001; this trial compared the effectiveness of the traditional and the new antenatal care models in terms of perinatal outcomes and cost-effectiveness. Even in the most recent systematic review, which was conducted by the WHO, RCTs used the same published literature as the most recent trial performed in 2007 in Zimbabwe. There is a limited amount of literature that explores women’s preferences and priorities in antenatal care and the usefulness of implementing woman-centred care. The impact of family influence and sociocultural beliefs on the timing of commencing antenatal care was only explored in studies from low-to-middle-income countries.

Attendance for antenatal care with skilled professionals is important for optimal maternal and fetal outcomes, and it is preferable for women to initiate the first antenatal visit early in the first trimester (Haddrill et al., 2014). The data indicated that the timing of initial access to antenatal care was a global issue that is determined by a spectrum of factors and decision-making processes (Haddrill et al., 2014). Factors that may enhance or prevent utilisation of antenatal services were highlighted by most of the studies that explored women’s perceptions and satisfaction. However, strategies to improve utilisation and overcome the reasons for dissatisfaction were not adequately addressed. There is a limited amount of literature that provides in-depth exploration of factors associated with early booking as the majority of studies examined rationales behind delayed access to antenatal
care. Exploring factors contributing to early booking is important in order to address and enhance them in the working environment. Furthermore, in the present time, the majority of women are employed (Belwal and Belwal, 2014), which might be a rationale for delayed access to antenatal care but this has been underresearched globally.

It is clear that exploratory studies on various aspects of antenatal care across a wide range of settings and populations are needed (Novick, 2009), particularly in Arabic countries. A limited number of studies explored how to achieve successful continuity of carer in settings with limited resources. Few studies explored alternative sources of antenatal care for women if they were dissatisfied with public antenatal care. A few studies also compared publicly and privately delivered antenatal care and reasons for accessing private healthcare. However, these studies did not specify if women received care from one type of service provider or used both. These studies did not clarify if women used private healthcare to complement public healthcare or used the two systems independently. Furthermore, most of the studies that explored late booking did not verify if women received any healthcare before their booking visits. The meaning and value of antenatal care in different social contexts were inadequately explored because most of the existing evidence focused on the physical aspects, opinions of the adequacy of visits and the social process of antenatal care. However, the value of antenatal care to women might motivate them to take up professional care or might impede their attendance for healthcare, particularly those who are not confident of the real benefits of using healthcare in pregnancy, which demands further exploration.

Understanding women’s perspectives on antenatal care and addressing their needs and expectations are vital for enhancing the effectiveness of the services and making them more responsive to them (Shabila et al., 2014). Identifying factors influencing perceptions of care is essential to allow the policymakers and clinicians planning strategies to improve services and enhance access to antenatal care. This may enable delivery of culturally sensitive care within the evidence-based practice (Shabila et al., 2014).

There is also limited literature from Gulf countries on antenatal care and maternal health services in general. There was one survey from Saudi Arabia, which was conducted to assess the overall satisfaction of women with the traditional antenatal care model (Kamil and Khorshid, 2013). One survey was conducted in Oman in 2005 by Ghobashi and Khandekar (2008) and concentrated on the overall satisfaction of women with antenatal care but provided limited data on women’s perceptions of care. No information was
included in the study about late and early booking and if those women who were dissatisfied with care used alternative services. Furthermore, since 2005, many developments have occurred, which include the implementation of the new model of antenatal care, as well as changes in society and the pregnant population. Women’s perceptions of the new antenatal care model and their needs and expectations of their care have not yet been explored in Oman. A second study from Oman was a secondary analysis of national reproductive health survey data (El Aty et al., 2014). This study provided data about the adequate use of antenatal care for at least four visits, early attendance and skilled care providers. Another survey was conducted in Egypt to assess women’s satisfaction with antenatal care and reported a high level of satisfaction (Montasser et al., 2012). However, these surveys provided limited data on the perceptions of women of antenatal care and did not include professionals’ viewpoint to confirm the findings. A Q methodology study was conducted in Iraq to explore women’s views, experiences and areas of satisfaction and dissatisfaction with private and public antenatal care. No information from Oman and Arabic countries was available to explore in-depth the perceptions surrounding antenatal care and the reasons for late booking after completing the first trimester/after 12 weeks of gestation. It was unknown if women in Oman had similar issues, needs and expectations to other women in the world.

2.6. Aim and Objectives

This study aims to explore the experiences and perceptions surrounding antenatal care for women with low-risk pregnancies in Oman, which will be met through the following specific objectives:

• To explore the knowledge, views and experiences of women and their healthcare professionals regarding antenatal care.
• To identify the issues, concerns and needs of women and their healthcare providers.
• To gain in-depth understanding of the rationale behind late access to public antenatal care.
• To generate a grounded theory that explains the data.
Chapter Three:
Methodology
Chapter 3: Methodology

3.1. Overview

This chapter presents a detailed discussion of the theoretical approach employed in this research, including the underpinning philosophy and paradigm. The justifications for using an exploratory qualitative design and adopting a constructivist grounded theory methodology, along with symbolic interactionism, are also provided.

3.2. Philosophical Underpinning of Research

The main features characterising qualitative and quantitative research can be described in reference to their philosophical foundations, methodological assumptions and research methods (Gelo et al., 2008). The philosophy underpinning all research reflects the beliefs, values and assumptions a person has of the nature of human beings, the environment, and the interaction between them (Munhall, 1989). Three interconnected philosophical assumptions underpin all research: ontology, epistemology, and methodology (Guba and Lincoln, 1994). Ontological assumptions focus on beliefs and meanings of reality. Ontological assumptions highlight the importance of understanding the researcher’s perceptions, views of reality, how things really are, and how they work (Scotland, 2012). Whilst epistemological assumptions focus on the nature of the relationship between the researcher and the types of knowledge that can be obtained (Guba and Lincoln, 1994; Houghton et al., 2012; Markey et al., 2014), methodological assumptions are concerned with the methods used to gain knowledge (Guba and Lincoln, 1994). Moreover, methodological assumptions are also concerned with the purpose of a study, the data to be identified, place, time, and the methods employed for data collection and analysis (Scotland, 2012).

The choice of philosophical stance and methodology directs the researcher to employ specific research methods (Gelo et al., 2008). Methodology is influenced by the theoretical perspectives adopted and, in turn, the epistemological position of the researcher (Gray, 2013). Consideration of these perspectives is important to refine and specify the types of evidence required and to link these to the aims of the research and the methods adopted to accomplish its aims (Houghton et al., 2012; Markey et al., 2014). Thus, the criteria for evaluating qualitative research must fit within the philosophical and epistemological assumptions, purposes, and goals of the paradigm selected for the research study (Drisko, 1997).
3.3. Study Paradigm

Using an appropriate paradigm is beneficial to ensuring philosophical and ontological congruity in a study. Researchers should also ensure that the purpose, paradigm, and methods are ontologically and epistemologically consistent (Houghton et al., 2012). Four paradigms have been identified that serve as the foundation for all research: positivism, post-positivism, critical theory, and interpretivism or constructivism (Guba and Lincoln, 1994).

Positivists acknowledge reality as a true state that can be discovered by research (naïve realism) (Guba and Lincoln, 1994), which considers reality as both ‘real’ and ‘apprehendable’ (Cupchik, 2001). Naïve realists believe that the concepts being explored are measurable and are concerned with a single reality based on scientific facts and experiments (Markey et al., 2014). Positivists believe that reality is ordered and predictable and that a true reality exists independent of human interactions influencing it or being influenced by it (Guba and Lincoln, 1994). Positivists argue that reality must be investigated through scientific inquiry by prediction and controlled studies (Gray, 2013). Therefore, the methodology of choice in this paradigm is quantitative (Guba and Lincoln, 1994; Annells, 1996). Here, data and their analysis are value-free and do not change during observation (Healy and Perry, 2000). Possible confounding factors must be carefully controlled or manipulated to prevent improper influence of the outcome (Guba and Lincoln, 1994). Post-positivism emerged from positivism and has similar ontological and epistemological beliefs but differs in certain respects (Scotland, 2012). Post-positivists assume a critical realism ontology, considering that objective reality exists but is never fully understood or completely explained (Guba and Lincoln, 1994). Post-positivists challenge the belief in an absolute truth, particularly when studying human behaviour in social science (Wahyuni, 2012). Post-positivists argue that data must be critically examined through experimentation and correlational studies (Scotland, 2012), in which prediction and control are used to achieve theoretical aims (Annells, 1996). Post-positivists may gather quantitative data but include qualitative methods (Denzin and Lincoln, 2005).

Both positivism and post-positivism view social reality as external and objective (Wahyuni, 2012). However, these two paradigms were not appropriate for the current research study because the aim is to explore the social process of care and the real-life experiences of the participants. Positivism and post-positivism are more applicable for
quantitative research and are limited in describing experiences and social processes in depth (Healy and Perry, 2000).

Ontologically critical theorists assume historical realism and view reality as being able to be understood. Reality for them is shaped by many values that have an effect over time, which can be understood only for practical purposes (Guba and Lincoln, 1994). In historical realism, reality is shaped by social, political, cultural, and economic factors, as well as ethnicity and gender. Critical epistemology is subjective and based on real-world phenomena and linked with a societal belief that knowledge is socially constructed and constantly influenced from and within society (Scotland, 2012).

In contrast, constructivists (ontological relativists) believe in the presence of multiple realities that differ for everyone and that reality is specific and locally constructed. This paradigm shifts from ontological realism to relativism (Guba and Lincoln, 1994). Constructivists acknowledge a subjectivist epistemology in which researchers should be aware of the impact of their own perceptions on the interpretation and construction of data (Houghton et al., 2012). Constructivists question how members of a group construct their experiences by going into the field, collecting multiple views and experiences of it, and identifying similarities and limitations. Constructivists engage in interactions and relationships with participants to provide a reconstructive understanding (Guba and Lincoln, 1994). Markey et al. (2014) argued that interpreting data from the researcher’s perspective in a constructivist approach may affect the credibility (the quality of being trusted and believable) of theory. However, collecting data using multiple perspectives, spending adequate time in the field, and providing thick and rich description can increase the trustworthiness and authenticity (truthfulness) of data (Creswell and Miller, 2000; Houghton et al., 2012).

3.4. **Selection of a Paradigm**

My awareness of possible paradigms influenced the design and conduct of this study and the interpretation of the findings (Guba and Lincoln, 1994). From an ontological perspective, I believe that reality is part of social life and that reality depends on the individual having knowledge and the researcher interpreting it (Guba and Lincoln, 1994). From an epistemological perspective, I acknowledge subjectivity and believe that research data are created from interactions between the researcher and the participants (Guba and Lincoln, 1994). Constructivists advocate gaining an insider’s view of the research problem, setting, and participants. This is essential for generating in-depth data about research
participants’ lives through interaction, rather than limited interviews or visits. Gathering in-depth data is the first step towards making research credible (Charmaz and Bryant, 2010). I also value the sense of reciprocity between the participants and the researcher. This is necessary for generating in-depth data, constructing meaning and theory grounded in the experiences of the participants and the researcher, and balancing the power relationships between them (Mills et al., 2006). However, I was also aware of the effect of my presence on the research setting and participants, and how my assumptions and biases might have an impact on all aspects of the research. Therefore, maintaining a reflective journal and being honest in acknowledging my assumptions, beliefs, and preconceptions was helpful to avoid imposing my preconceived ideas on the data (Houghton et al., 2012). Reflexivity represents honesty and truthfulness with self, the research, and the audience (Tracy, 2010). The data generated in this research are the results of the interactions of the experiences of women, healthcare professionals, and the knowledge and experiences of the researcher. Therefore, based on my ontological and epistemological perspectives, the constructivist/interpretivist paradigm was appropriate for this study. This study aimed to reconstruct theory from data collected from pregnant women and their healthcare providers through the use of semi-structured interviews and non-participant observations (Guba and Lincoln, 1994).

3.5. Research Design

Qualitative research is often criticised for being dependent on the researcher’s skills, influenced by the researcher’s personal bias and preconceptions, and is claimed to result in anecdotal findings that are lacking in rigour (Anderson, 2010). However, if qualitative research is carried out systematically and acquired by rigorous research methods, it can result in a detailed, in-depth understanding of the issues under study (Maxwell, 2008). The data generated in well-conducted qualitative research provide in-depth understanding of human experiences (Maxwell, 2008). Qualitative research allows the researcher to understand the inner experiences of the participants and human behaviour in a social world (Ritchie and Lewis, 2003). It also helps the researcher to determine how meanings and concepts are formed of specific phenomena from the perspective of the participants (Corbin and Strauss, 2008). Data are usually generated from a small sample, so the findings cannot be generalised to a larger population but may be transferable to another setting (Anderson, 2010).
The rationale for selecting qualitative research emerged from the research question, which dictated the methodological approach to conducting this study. According to Maxwell (2008), the research question and the aim of the study are the central reasons for selecting a research design.

The study used an exploratory qualitative research design that aims to explore what is happening, particularly when not enough is known about the research topic (Gray, 2013). The researcher aimed to explore and understand the meanings and concepts the participants had about antenatal care for women with low-risk pregnancies (Creswell, 2014). Thus, I followed an exploratory design to examine the participants’ perceptions, experiences and knowledge of antenatal care. It was also helpful to explore how this knowledge and understanding affects the initiation and regular attendance of antenatal care (Britten, 1995).

3.6. Qualitative Methodologies

Ethnography, phenomenology, and grounded theory are the most common qualitative methodologies. Ethnography focuses on studying a small group of people in their local contexts to understand and describe the meaning of specific phenomena in their culture and community from the insiders’ perspectives (Fetterman, 2010). Ethnography acknowledges a culture or community as composed of individuals who have their own subjective experiences (Fossey et al., 2002). Therefore, ethnography is used to discover the relationship between culture and behaviour (Gray, 2013).

Phenomenology is a philosophy and a methodology adopted to understand complex issues (Goulding, 2005). Phenomenology includes a description of the essential structure of a particular, lived experience in the real world or a phenomenon as described by the participants (Thorne, 2000; Creswell, 2014). It produces thick descriptions of people’s experiences and perspectives within their natural settings (Gray, 2013).

However, this study aims to gain an in-depth understanding of the social interaction and processes involved in antenatal care attendance to enable the generation of a theory from the data that explains ‘what is going on’. This study does not aim to focus on the essential structure of the phenomenon or lived experience of being pregnant. Furthermore, the study is not intended to discover the relationship between the uptake of antenatal care and a specific culture or group of communities in Oman or a particular interpretation of culture. This study focuses on the social process and interaction taking place during women’s
antenatal care appointments and rationales for late booking. Thus, ethnography and phenomenology are not appropriate for this study’s research question and purpose.

Following a grounded theory methodology enabled the researcher to generate data and gain an in-depth understanding of the social process of care and the behaviours taking place during the women’s appointments. Grounded theory is a flexible and systematic method involving a concurrent and iterative process of data gathering and analysis to construct an explanatory theory of human behaviour inductively from the data collected (Charmaz, 2014). Furthermore, it enabled exploration of participants’ self-definition, shared meaning of antenatal care, and the consequences of interactions between participants in the study and contextual factors for the uptake of healthcare in pregnancy (Aldiabat and Le Navenec, 2011).

Moreover, grounded theory is based on the philosophy of symbolic interactionism, which is appropriate when the phenomenon to be studied involves social interaction (Smith and Biley, 1997). It is also appropriate when the objective is to explain the participants’ perceptions of their social world (Charmaz, 2014). Social interaction is fundamental to healthcare because it provides explanations of the social processes of care as they occur in their interactional contexts (McCann and Clark, 2004). Employing a grounded theory methodology enabled a theory to be generated that conceptually explains the basic psychosocial process of care and the concerns of the people involved (Aldiabat and Le Navenec, 2011). This conceptualisation was achieved by following certain phases of grounded theory, starting with identifying the topic of interest, to data generation and analysis, and ending with the theoretical categories that emerged from the data (Achora and Matua, 2016).

Grounded theory is used when the researcher does not know what is ‘going on’ with participants regarding a specific area, where there is a gap in the available knowledge or when a new perspective is required (Glaser and Strauss, 1967). Hence, grounded theory is appropriate because of the limited research conducted in Oman on antenatal care. Therefore, using a grounded theory methodology is helpful for generating a theory that explains different perceptions and experiences of antenatal care (Birks and Mills, 2015).

3.7. History of Grounded Theory

Grounded theory methodology emerged with the collaboration of two sociologists, Glaser and Strauss, in their book The Discovery of Grounded Theory, published in 1967 (Charmaz
Their goal was to develop a technique to generate theory from the meanings and experiences of people within the context of a relationship. The original grounded theory reflected Glaser’s positivistic approach and Strauss’s pragmatic philosophy and symbolic interaction background (Marcellus, 2005). The defining characteristics of their approach are concurrent data collection and analysis, constant comparative methods, analytic coding, and grounded theory development from the data during data gathering and analysis. They considered memo-writing, theoretical sampling and conducting literature reviews after completing analysis (Charmaz, 2006). The ongoing debate between the Glaser and Strauss models started when Strauss and Corbin (1990) released their book on grounded theory, which Glaser (1990) argued was not grounded theory but a conceptual description. Later, Charmaz, a student of Glaser and Strauss, emerged as the leading constructivist in grounded theory in response to the limitations of the original methodology (Meyrick, 2006; Walker and Myrick, 2006).

Glaser emphasised objective external reality and considered the researcher an external examiner who collects data objectively by assuming a neutral role during data collection and analysis (Annells, 1996). The flexibility and simplicity of the procedures in Glaser’s approach are considered a strength (Markey et al., 2014). In contrast, the Corbin and Strauss (1990) approach is considered to be subjective, particularly when discussing the steps of open, axial and selective coding. They emphasised that the researcher guides the direction of the data, rather than allowing the theory to emerge from the data, which may force the development of a theory (Walker and Myrick, 2006; Markey et al., 2014).

Charmaz (2006) argues that the world is socially constructed through active interaction between the researcher and the participants during data collection. According to Charmaz (2008), the influence the researcher brings to a research study should be part of the research process and product and should be explicitly explained. Research is the emergent product of particular times, social conditions and interactional situations (Charmaz, 2008). This contrasts with the view of classic grounded theorists that the researcher should avoid preconceiving interpretation and be a neutral observer (Charmaz, 2001). Charmaz (2006) explicitly argued that any theoretical category offers interpretive construction, and the participants’ views and perspectives are advanced through interpretive analysis to construct reality.
3.8. Symbolic Interactionism and Grounded Theory

The epistemological assumptions of grounded theory are derived from symbolic interactionism, which explores the process of the interaction between the social roles of people and their behaviours (McCann and Clark, 2004). Symbolic interactionism is “a dynamic theoretical perspective that views human actions as constructing self, situation, and society. It assumes that the language and symbols play a crucial role in informing and sharing our meanings and actions. It views interpretation and action as reciprocal process affecting each other” (Charmaz, 2014, p. 262). The philosophical assumptions of grounded theory are that people make sense of their social world even if it makes no sense to the outsider or is not understood by themselves or others. Individuals share similar circumstances and experience similar perceptions, thoughts, and behaviours, which is the essence of grounded theory (McCann and Clark, 2004). Symbolic interactionism encourages researchers to learn about people, places, times, troubles, actions, and accomplishments in the way that members of that world understand them. Individuals are considered as active and engaged in the practical activities of their world, which produces an understanding of the actions and events of those people (Charmaz, 2014). Society and collective life are considered as the conditions in which action and the interpretation of interaction occur (Charmaz, 2014).

3.9. Reviewing Literature in Grounded Theory Research

In grounded theory research, the place of the literature review has long been debated (Charmaz, 2006; McGhee et al., 2007). Glaser recommended delaying extensive literature review until the emergence of the core category (Glaser and Holton, 2007). This facilitates the generation of data without prior theoretical assumptions and enables a core category to emerge from the data without biased interpretation (Charmaz, 2006; Glaser and Holton, 2007). However, a preliminary review of the literature is helpful to justify the need for the study, develop sensitising concepts, provide background data of the problem, and avoid ethical issues of duplicating existing research (McCann and Clark, 2004). Further, researchers might already be theoretically sensitised to the study area through their clinical experiences, which should be identified through reflexivity to decrease their impact on the interpretation of the data (McGhee et al., 2007). A review of the literature was conducted in this study before the data collection to fulfil the requirements of the PhD programme, identify gaps in the existing literature, and meet requirements for research governance approval (McGhee et al., 2007; Dunne, 2011).
3.10. Grounded Theory Construction

Coding, memo-writing and theoretical sampling are the major strategies of grounded theory analysis, move the work towards theoretical category development, and distinguish it from other kinds of qualitative research (Charmaz, 2001).

The constructivist grounded theory analytical framework consists of initial, focused and theoretical coding (Charmaz, 2006). Initial coding includes word-by-word, line-by-line or paragraph-by-paragraph analysis that results in giving open and precise names or labels to segments of data (GetanehAlemu et al., 2015). Then, focused coding facilitates clustering and organising codes and concepts into higher-level analytical categories through an approach of constant comparison (Charmaz, 2014; GetanehAlemu et al., 2015). However, initial and focused coding can progress simultaneously. Theoretical coding enables data saturation of the core categories that emerged during focused coding (Charmaz, 2014).

Data are broken down into manageable pieces and compared for similarities and differences by constant comparison processes and then merged under the same concept to form a category. Each category is defined by its properties and dimensions and will be integrated with others to facilitate the emergence of the core category that is the major theme of the study (Corbin and Strauss, 2015). The grounded theory approach is an inductive, comparative, and interactive process that needs the researcher to interact continuously with the data to move the analysis onto the theoretical level (Charmaz, 2008).

Memo-writing is a pivotal step that should start with the data collection and continue until writing a draft of the paper (Charmaz, 2014), or should begin with analysis and continue throughout the research process (Corbin and Strauss, 2015). Charmaz (2014) emphasised the need to write analytical memos in a way that is comfortable to the researcher; they can be written in informal and unofficial language for the researcher’s personal use. These memos should be written frequently and should become progressively more analytical. Many researchers use various types of diagrams, including maps, charts, and figures, to look for relationships during the analytical process (Charmaz, 2014). Corbin and Strauss (2015) considered writing memos and making diagrams as part of the analysis and that they are as important as data gathering.
3.11. Sampling Process in Grounded Theory

3.11.1. Purposive Sampling

Purposive sampling refers to a strategy of intentionally selecting settings, events and participants that are appropriate for a study (Maxwell, 2008; Ellis, 2016). Initial sampling aims to maximise variations in experiences and descriptions by using participants with different backgrounds (Hallberg, 2006). According to Creswell (2014), qualitative researchers purposefully select participants or sites based on predetermined criteria to help in understanding a problem and to answer the research question. This study aims to explore the views and perceptions of antenatal care for women with low-risk pregnancies in Oman, involving five public clinics in the North Batinah Governorate. The participants were initially selected by purposeful sampling based on predetermined inclusion criteria derived from the aim and objectives of the study (Chiovitti and Piran, 2003). Women with different educational backgrounds and social contexts, tribes, and areas in the governorate were recruited to increase the variation in the sample and enhance transferability of the findings to the population of the study.

3.11.2. Theoretical Sampling

Identifying a set of categories (Charmaz and Bryant, 2010) or at least one category is an important criterion for starting theoretical sampling (Charmaz, 2012). Theoretical sampling is a “process of generating theory whereby the analyst jointly collects, codes and analyses, the data and decides what data to collect next and where to find them, in order to develop the theory as it emerges” (Glaser and Holton, 2007, p. 59). The emerging concepts direct the researcher to collect data from different sources and by various methods. This is helpful to maximise the emergence of concepts, categories, and their properties and to understand the relationships between them (Corbin and Strauss, 2015). Concurrent data collection and analysis directed the theoretical sampling in this study to where and how the data required should be collected. Collecting data based on theoretical sampling is important to answer the research question and to collect data that are clear and complete (Glaser and Holton, 2007). This directed me to add some important questions to the interview guides depending on the participant’s responses and the theoretical purposes. It also suggested collecting data by observing the wider context of care in its natural environment during the women’s appointments. Furthermore, it directed me to interview healthcare professionals to explore and verify some of the issues expressed by the women who participated. Moreover, it suggested the need to interview additional women to
explore a broader context of care to saturate and enrich the properties of the theoretical category (Marshall, 1996; Draucker et al., 2007). Theoretical sampling was performed based on theoretical purpose and relevance during concurrent data collection and a constant comparison analysis approach. It was helpful to generate a theory and saturate the properties of the core categories (Glaser and Holton, 2007) and to develop and refine the predetermined theoretical categories (Charmaz, 2012). The use of theoretical sampling in this research was helpful to explore certain issues, such as access to private healthcare in pregnancy, late access to public antenatal care, and the frequency of ultrasound assessments in pregnancy.

3.11.3. **Sample Size**

Data collection in this study continued with the aim of achieving data saturation. Theoretical saturation is achieved when the properties of theoretical categories are saturated with data and the collection of new data does not indicate new theoretical insights or produce new properties for the core categories (Charmaz, 2006; 2014). Furthermore, saturation is also achieved when the relationships between categories and the range of variation between them are adequately explained, but is not a repetition of the same data or stories or events (Charmaz, 2014). Theoretical saturation of the core categories and their properties determined the number of participants in this study. Thus, data collection and sampling were continued concurrently until all the properties of the emerging categories were saturated and collecting new data did not add any further insights into a category (Birks and Miller, 2014). Creswell (2014) suggested that sample size in grounded theory studies may range from twenty to thirty participants. Typical grounded theory studies involve up to fifty participants for both interviews and observations of all participants (Mason, 2010).

3.12. **Rigour in Grounded Theory Research**

Rigour in qualitative research advocates a research process undertaken in a systematic but flexible approach that is fully and transparently explained to the reader of the study (Ellis, 2016). Qualitative research has gained increasing recognition for its significant contribution to nursing knowledge and for its differences from quantitative research (Houghton et al., 2012). However, the value of qualitative research remains under scrutiny, mainly by quantitative researchers. Qualitative research is criticised for lacking scientific rigour, for collecting unreliable data consisting of anecdotes and personal impressions, and is strongly subject to researcher bias (Bowen, 2009). Furthermore, it is also argued that
qualitative research lacks reproducibility, so, if the same study were to be completed by another researcher, the same conclusion would not be guaranteed (Mays and Pope, 1995). It is also criticised for lacking generalisability, as large amounts of detailed data are generated from a small number of participants and settings (Mays and Pope, 1995).

There is considerable debate on the nature of knowledge produced by qualitative inquiry and how it should be evaluated for quality and true value (Mays and Pope, 2000). However, qualitative and quantitative research approaches complement each other. Qualitative research is important to explore the characteristics of phenomena, whereas quantitative research is crucial for controlling phenomena and predicting outcomes of nursing interventions. Lincoln and Guba (1989) suggested criteria that, if met, would maintain the trustworthiness of qualitative research and include notions of credibility, transferability, confirmability and dependability. Charmaz (2014) also argued that evaluation criteria should be appropriate to the purpose and context of the particular research study. Charmaz (2014) suggested that credibility, originality, resonance and usefulness are important in evaluating grounded theory, which is the framework used to ensure the rigour of this study. Originality, resonance and usefulness are included in the discussion chapter in section 11.8. Reflexivity, theoretical sensitivity and power relations are considered critical for evaluating the rigour of constructivist grounded theory, so are considered together with credibility in chapter 4, section 4.7.

3.13. Summary

This study explores the perceptions surrounding antenatal care for women with low-risk pregnancies in Oman from diverse perspectives and follows a constructivist grounded theory methodology. The aim and objectives of the study and the researcher’s knowledge of theoretical perspectives and different paradigms were helpful in determining an appropriate methodology for data collection and analysis. Constructivist grounded theory was the appropriate approach to this study because it allowed theory to emerge from the data through the participants’ perspectives and the knowledge of the researcher, without any preconceptions. The specific features of grounded theory utilised here were concurrent data collection and analysis, constant comparison, the construction of analytical memos, theoretical sampling and sensitivity, and reflexive journal-keeping. The next chapter highlights how grounded theory methodology was employed as a framework to collect and analyse data and enhance the quality of this research.
Chapter Four:
Methods
Chapter 4: Methods

4.1. Overview

This chapter describes the procedures and processes undertaken to generate, analyse and interpret data exploring perceptions of antenatal care for women with low-risk pregnancies in Oman. Data were collected using face-to-face semi-structured interviews with women and professionals and non-participant observations in the antenatal clinics as directed by the initial data analysis. The chapter also outlines the access and recruitment process, the sampling of the participants and the site of the research, the procedures followed to conduct the interviews and observations and to undertake data analysis using the grounded theory framework. Measures taken to increase the credibility and quality of the study and ethical considerations are also explicitly described.

4.2. Data Collection Settings

There are twenty-nine primary healthcare institutions in the North Batinah Governorate (NCSI, 2014), of which five, across three wilayats, were involved in this research. The sites and participants were accessed after obtaining ethical approval from the Ethics Committee of the University of Manchester (04/11/2015, Ref: ethics/230915) and the MoH in Oman (28/10/2015, Ref: MH/DGP/R&S/PROPOSAL_APPROVED/36/2015) (see Appendix 4).

The study was conducted in two polyclinics and three health centres across three wilayats (provinces): Suher, Saham, and Liwa. Women receiving care in a health centre are referred to a polyclinic for their anomaly ultrasound scans and further specialist opinion. Therefore, these women experienced care in different settings, which resulted in a spectrum of issues and concerns that might not be raised by those receiving care in only one environment. Gaining access to a sample with the maximum variation of participants was important to ensure rigour and enhance credibility and transferability of the findings to the specific population under study (Higginbottom, 2004). More than 24% of women in North Batinah Governorate attend public clinics after 12 weeks of gestation (MoH, 2015a). Furthermore, approximately 23% of these women did not attend for the recommended four or more antenatal care visits during their pregnancies (MoH, 2015a).

4.3. Access and Recruitment Process

Before starting data collection, the Director of Nursing at the Directorate General of Health Services in North Batinah Governorate was contacted so that the researcher could explain
the study and the plan for data collection. An official letter (Appendix 5) was sent to the five health centres to invite the gatekeepers, who are the nursing managers and midwives from each health centre, to attend a workshop. Contacting the gatekeepers was important to gain access and maintain the integrity and credibility of the research (Myers and Newman, 2007).

Three nurse managers, five midwives and two staff members in the Directorate General attended the workshop. A presentation that included an introduction, aim and objectives, the prospective participants and the inclusion and exclusion criteria was given. I also explained the role of the gatekeepers in facilitating access to eligible participants and the expected level of disruption to the workflow of the clinic during data collection (Myers and Newman, 2007). I also highlighted the anticipated changes in sampling based on the concurrent data analysis and theoretical sampling processes. For more information on the workshop overview, see Appendix 28. Five posters (Appendix 27) containing a brief explanation of the study were given to each midwife to display in the clinics to promote the recruitment of participants. Copies of the consent forms and participant information sheets were distributed (Appendices 6-19), and all the midwives were advised to provide a copy of these forms to women who agreed to share their contact details.

Following the workshop, I visited each health centre to ensure that posters were displayed in the clinics and I provided further explanation of the recruitment process for each midwife. These visits were helpful in promoting the access and recruitment process. Without these regular visits and calls, the recruitment of participants would have been more difficult. One of the challenges I encountered was that those who attended the workshop did not disseminate the information about the study to other midwives and nurses in their health centres. Thus, regular visits were helpful to explain to those healthcare providers who did not attend the workshop.

4.3.1. Recruitment of Pregnant Women for Interview/Observation

Following the workshop, the healthcare providers approached women initially to introduce the research and then to ask their permission to share their contact details. Women who agreed to share their contact details were given a copy of the Participant Information Sheet and a consent form (Appendices 6, 7, 10, 12, 14, and 16). I then sent a text message via SMS/WhatsApp asking the women to respond to the message if they agreed to be contacted by me. Only women who responded with agreement via telephone were contacted and further explanations surrounding participation in the study and an
opportunity to ask questions were provided. Participants were given at least 24 hours to consider whether or not to take part in the study and encouraged to discuss it with their care providers and family members. I contacted each woman again and, if she agreed to participate, an appointment with a date, time and place for an interview was arranged. The same process was followed for observations but I explained to the women that all observations would be conducted during their next appointments in the antenatal clinic.

On the day of the interviews/observations, further verbal explanation was provided to the women and they were given time to clarify any questions. The participants were informed that involvement in the study was voluntary and that they could withdraw at any time after signing the consent, with no impact on their healthcare. The women who agreed to participate in an interview/observation were invited to sign a consent form.

4.3.2. Recruitment of Healthcare Professionals for Interview/Observation

Healthcare professionals who provided antenatal care in the five health centres were approached, as directed by the data analysis for the theoretical sampling. Healthcare professionals were approached through posters displayed in clinics and the initial workshop. I informed them in the workshop of the expectation of involving healthcare professionals if directed by the initial analysis and encouraged them to disseminate this to other healthcare providers. Those interested in participating were invited to contact me or to share their contact numbers with me so that I could communicate with them. Some of the gatekeepers were interested in participating and helped in recruiting other professionals to the study. I only contacted the healthcare professionals who were interested and I explained the nature of the study to them. They were allowed at least 24 hours to consider whether to participate and, if they agreed to do so, an appointment for an interview was arranged at a convenient time and place.

For the observations, once I confirmed the women’s participation and attendance at the clinic, I discussed with the midwives in the clinic my attending for observation and gained their verbal consent. I explained to the healthcare professionals that observations would be conducted during the women’s next appointments at the antenatal clinic. None of the healthcare providers refused participation in the observations.

Consent forms were completed on the same day after confirming their willingness to participate and before starting the interview/observation. For examples of Participant Information Sheets and consent forms for interviews/observations with healthcare
providers, refer to Appendices 8-9, 11, 13, 15, 17, and 19. For a flowchart illustrating the recruitment processes for the participants, refer to Appendix 24.

4.3.3. Principal Inclusion Criteria

The study aims to explore the context and experiences of antenatal care for women with low-risk pregnancies in Oman. The high rate of late booking/non-attendance in some areas suggests possible issues with current antenatal care provision. These issues are likely to affect all women, not only those who do not attend or those with late booking, so ascertaining a sample of women’s views and experiences was important. Table 4.1 details the inclusion criteria that were derived from the research questions and objectives.

Table 4.1: Inclusion and exclusion criteria

<table>
<thead>
<tr>
<th>Inclusion criteria for women</th>
<th>Exclusion criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Women with uncomplicated pregnancies in the second and third trimesters and receiving antenatal care in the five health centres.</td>
<td></td>
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<tr>
<td>• At least two attendances of antenatal care.</td>
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<tr>
<td>• Aged 18-40 years.</td>
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<tr>
<td>• Different educational levels (primary, secondary, higher education) and different nationalities, tribes, and villages.</td>
<td></td>
</tr>
<tr>
<td>• Speaking Arabic or English.</td>
<td></td>
</tr>
<tr>
<td>• Not known personally to the researcher.</td>
<td>• History of medical conditions (e.g., diabetes, hypertension) or fetal abnormalities, previous pregnancy complications, as they would be referred to specialised antenatal care.</td>
</tr>
<tr>
<td></td>
<td>• Unable to consent or to understand information about the study or unwilling to consent.</td>
</tr>
<tr>
<td></td>
<td>• Non-Arabic or non-English speaker due to the cost of translation, lack of interpreters, and collecting data in another language affecting the quality of the data.</td>
</tr>
<tr>
<td>Inclusion criteria for care providers</td>
<td>Exclusion criteria</td>
</tr>
<tr>
<td>• Healthcare professionals providing antenatal care: midwives, nurses, obstetricians, obstetric sonographers and dieticians, nurse managers.</td>
<td></td>
</tr>
<tr>
<td>• Current experience in the antenatal care and at least six months post-registration experience, including antenatal clinic settings.</td>
<td>• Unwilling to participate.</td>
</tr>
<tr>
<td></td>
<td>• Post-registration experience of less than six months to avoid interviewing new healthcare providers with little experience and contact with pregnant women.</td>
</tr>
</tbody>
</table>

4.4. Ethical Considerations

Potential ethical issues in the study were considered to reduce any risk of harm from participating in the research, to maintain the privacy, anonymity, and confidentiality of all participants, and to obtain informed consent (DiCicco-Bloom and Crabtree, 2006).
4.4.1. Informed Consent and Autonomy

Informed consent means that participants can exercise their right to accept or refuse their involvement in a study after receiving a full explanation of the nature of the participation required of them (Orb et al., 2001). I prepared Arabic and English versions of the Participant Information Sheets and consent forms for the interviews/observations and gave them to each participant (see Appendices 6-19). I then discussed this with each participant via a telephone call to ensure that they were involved in the study without threat or coercion. I explained to every participant that their involvement was voluntary and, even if they signed the consent form, they remained free to withdraw at any time. I provided further explanations on the day of the interview/observation before they signed the consent form to ensure that each participant understood the written and verbal information given to them. All participants were mentally competent to give consent and I tried to be sensitive to the change in their emotional and physical status during interviews/observations (Hewitt, 2007). In Omani culture, women will discuss such matters with family members, particularly their husband, because the decision is usually based on the agreement of both of them. For instance, one woman provided verbal permission for me to use an audio-recorder but, on the day of the interview, she refused to participate if it was used because her husband was unhappy about it. I apologised to the woman and told her that the audio-recording of the interview was important to avoid losing any important data, which might negatively affect the quality of the findings. Furthermore, I informed her that her identity would not be mentioned while recording and no one else would hear the recording except me. She was given an opportunity to withdraw from the study but she preferred to participate and provided her permission to use the audio-recorder. However, I was in a dilemma because I knew that this might cause a problem, so I advised her to negotiate with her husband to decide. After she had negotiated with her husband, I was later able to conduct the interview.

4.4.2. Confidentiality and Anonymity

Confidentiality of the participants was maintained throughout the progress of the study (Hewitt, 2007). This study involved conducting interviews in the participants’ home environment, which might cause intrusion into their personal space. This was apparent in two interviews with women in their homes. One mother brought her three young daughters to the interview; the girls were quiet and sat in one corner of the room. After the interview, I advised women in the forthcoming interviews to select a time when their children were at
school or when they had somebody at home for childcare. The anonymity of the participants was maintained by assigning pseudonyms to the field notes, transcripts and the audio-recorded materials (Hewitt, 2007).

The small sample size involved in this study might have compromised anonymity by allowing identification of participants, particularly if direct quotations were used (Flick, 2006). However, the design of the study, with recruitment across five health centres over an extended period and a gap between data collection and publication, reduced the risk of revealing the identity of the participants. Direct quotations were used to illustrate points without including any information that might lead to the identification of a participant’s identity. All quotations were considered individually by the research team and paraphrased if they contained any material likely to identify individuals or locations.

4.4.3. Data Protection Policy

The data were stored securely in compliance with the University of Manchester Data Protection Policy and research governance guidance (The University of Manchester, 2015). All research data collected from the participants were anonymised with pseudonyms. Any hard copies, such as consent forms and demographic data, were stored separately in a locked cabinet in my home office and the key was only kept by me. The audio-recorded materials were transcribed by me using headphones and in a private room to maintain confidentiality and prevent others from hearing the recording. All electronic data stored on an encrypted audio-recorder were transferred to the university password-protected P: drive as soon as possible. All computerised data, including audio and transcript files, field notes, memos and the study protocol, were encrypted with a password that was known only by me to secure access. I explained to all participants that I would share these data only with my supervisory team but without including any personal data. Audio recordings would be destroyed after analysis had been completed and transcripts had been checked. After analysing the data, raw data could be kept for a reasonable period (ten years) and then should be properly discarded to avoid falling into the hands of another researcher who might misuse them. I was aware of the risk of storing data in the cloud, Dropbox, and similar online storage areas, so I did not use them.

4.4.4. Potential Distress for Participants Talking about their Experiences

Participation in qualitative interviews and discussions of pregnancy care may lead to the recollection of difficult memories and experiences (Nunkoosing, 2005). I tried to be
sensitive to the participants’ feelings during interviews to avoid causing anxiety, distress, and damage to their self-esteem (Hewitt, 2007). A distress policy was formulated before starting the data collection (Draucker et al., 2009) (see Appendix 25). I am also a healthcare worker with the skills and experience to deal with such situations. However, I did not face any distress during the interviews or observations, except for one woman who expressed her happiness with tears at being pregnant with a boy. This woman was offered space to relax and then immediately continued the interview. The participants were informed that they had the right to withdraw from the research if they no longer wished to proceed. It was planned to refer any participants who experienced emotional distress and needed further counselling to the immediate healthcare provider, such as a midwife or GP (Orb et al., 2001).

4.4.5. Lone Worker Policy

To reduce the associated risks of working alone, the principles of the lone worker policy of the University of Manchester (Appendix 26) were followed at all times. No adverse incidents that required reporting occurred during travel or data collection to either the researcher or the participants.

4.5. Data Collection Methods

4.5.1. Semi-Structured Interviews

Semi-structured face-to-face interviews with a topic guide were used as a primary data collection method due to their flexibility (Fitzpatrick and Boulton, 1994). Semi-structured interviews are appropriate for in-depth exploration of participants’ experiences, to ensure sensitivity to their languages and knowledge, and to know them better, as well as for immediate probing of questions (Charmaz, 2006; DiCicco-Bloom and Crabtree, 2006; Ayres, 2007). Initial samples of nine women were interviewed: once in a face-to-face semi-structured interview in Arabic and one interview with an expatriate woman was conducted in English. Demographic data, such as age, parity, gestation, education and profession, were collected in a separate questionnaire before starting each interview (see Appendix 23).

The interview topic guide (Appendices 20-22) was developed after reviewing the relevant literature and included a few broad, open-ended questions appropriate to the purposes of the study to encourage discussion and to keep the interview progressing (Charmaz, 2006). Probing questions were asked to elicit deeper information from participants. However, the
questions were modified based on each participant’s language and situation, the theoretical sampling, and probing questions needed (Charmaz, 2014; Birks and Mills, 2015). The topic guide included statements such as the meaning and importance of antenatal care, available services, interactions with professionals, and factors affecting the perceptions of care (Shabila et al., 2014). I interacted with participants sensitively during each interview by asking, listening, observing and showing interest and respect in what they said and asked prompting questions when needed. These strategies motivated the participants to do most of the talking and have control over the flow of the interview (Charmaz, 2006; Creswell, 2014).

The interviews were conducted in health centres and the participants’ homes in a separate quiet room to encourage them to express their views and opinions, obtain audible transcripts, and maintain confidentiality (Creswell, 2007). The participants selected the most convenient time and place for their interview to encourage the development of a rapport and a sense of mutuality and control. However, this was challenging when at the participant’s home or in the health centres. Many interruptions were encountered during the interviews, either by family members, telephone calls or by other healthcare professionals. In subsequent interviews, I tried to avoid interruptions by advising participants to select a time for the interview when they were less busy; children were in school or when somebody would be available for childcare. The length of the interviews ranged from 38-90 minutes, depending on how much each participant wanted to tell me and on my skill during the interviews in drawing out responses.

I explained to all participants the importance of audio-recording each interview to avoid losing important details (Britten, 1995; Charmaz, 2006). Writing field notes on important points was done carefully to avoid distracting the participants; this was also explained to them before starting the interviews (Charmaz, 2006). Allowing the participants to determine a convenient time and place for their interview was an attempt to help them feel comfortable, empowered, and to facilitate the development of a rapport and a sense of mutuality. A sense of mutual trust is helpful to encourage participants to talk freely and share a sense of control during the interview (Karnieli-Miller et al., 2009).

One to two interviews were conducted per week, which allowed time for transcription and translation before conducting the next interview. This allowed sufficient time to read an interview, looking for gaps and ideas for further probing questions to be added to the next interview, and the initiation of simultaneous initial analysis. All interviews were
transcribed verbatim into Arabic and then translated into English to start the initial analysis. Some interviews from the initial sample of women were shared with the supervisory team to obtain suggestions from experienced researchers on a direction for theoretical sampling (Sbaraini et al., 2011). I kept a reflexive journal and field notes were also written during and after each interview and during transcriptions.

The data from the interviews directed the theoretical sampling to explore a wider context of care by interviewing ten healthcare professionals: five midwives, two sonographers and three nursing managers. These interviews were conducted to gain further information on the issues raised by the women in the initial interviews, with the aim of achieving theoretical saturation of data. As I progressed with the theoretical sampling, I asked focused questions to refine categories further and allow theory to emerge from the data (Birks et al., 2008; Charmaz, 2012).

All interviews with healthcare professionals were conducted in English. Most of the women in the initial sample stated that they used both private and public antenatal care. Many women preferred more ultrasound scans during pregnancy and some attended late for antenatal visits. Thus, the data from the initial interviews directed theoretical sampling to collect further data from women with regard to the rationale for using private antenatal care and late booking. Furthermore, initial analysis directed theoretical sampling to collect data about the rationale for requesting more ultrasound scans during pregnancy. Six women who had both presented late and had accessed private antenatal care were interviewed for further data collection based on the emerging themes. Interviewing further women based on the theoretical sampling processes was done to refine some of the emerging themes to achieve data saturation. In total, I conducted fifteen interviews with women and ten with healthcare professionals.

4.5.2. Transcription

Transcription is the process during which a researcher converts a spoken interaction into written text (Wellard and McKenna, 2001). Verbatim transcription and notation are an excellent record of interactions that should be done directly after the interview to familiarise the researcher with the content and facilitate data analysis (Seale and Silverman, 1997; Halcomb and Davidson, 2006). All interviews were audio-recorded and then transcribed verbatim in either Arabic or English by me (Halcomb and Davidson, 2006). It was beneficial for me as a researcher who had first-hand knowledge of conducting interviews, experience in the subject matter, and the advantage of interacting
with the participants to transcribe the interviews myself (Halcomb and Davidson, 2006). According to Rintala et al. (2014), verbatim transcription is not always necessary in grounded theory research. However, I undertook verbatim transcription of the interviews to avoid missing any important data and to ensure a return to the original data in later stages of the research (Rintala et al., 2014). I spent 8-12 hours transcribing each interview and listening to them again to ensure clarity of transcription. One hour of an interview can take 6-7 hours to transcribe (Britten, 1995). I encountered some difficulties during transcriptions of interviews that were due to either technical issues with the audio-recorder or the way participants talked that affected the clarity of the playback of the interview (Oliver et al., 2005).

All the interviews with healthcare professionals were conducted and transcribed in English text. However, conducting interviews with non-native English speakers was also problematic, as these might not be understood by native English speakers. Oliver et al. (2005) argued that pronunciation, non-verbal elements and grammatical errors are part of speech, which can offer important insights and add richness to a participant’s life that would otherwise be lost. Some participants who were interviewed in English used some Arabic words repetitively during the interview. For example, the Arabic word (ٝؼْٜ, which means ‘I mean’, was used repeatedly by most of the healthcare professionals during the interviews. The use of this word is common in our local Arabic language. I transcribed these words verbatim and I wrote their meanings beside them in brackets. However, grounded theorists are more focused on the meanings contained in transcriptions (Oliver et al., 2005). Some of the participants talked at speed, which made it hard to identify exact spoken words. Nevertheless, repeated listening to the audio-recording helped in clarifying the exact words (Oliver et al., 2005).

4.5.3. Translation

Transcription, translation and back-translation are time-consuming and may cause many challenges, particularly to the inexperienced researcher. There is a debate on who should undertake the translation of research materials, as well as the lack of transparency in issues and problems encountered by a cross-cultural researcher (Al-Amer et al., 2015). However, having the same researcher conduct interviews and undertake the transcription and translation when that individual is familiar with the language(s) and culture can help that researcher become immersed in the data and contextualise the narrations (Al-Amer et al., 2015). This notion was also supported by Twinn (1997), who emphasised the importance
of having only one person translate all the interviews in a study to maximise the credibility of the data sets.

Furthermore, there are three forms of Arabic (Attia, 2008):

- Classical Arabic: this is the formal language of the Qur’an.
- Modern spoken Arabic: the language of modern writing and of news, which is universally understood by Arabic speakers.
- Colloquial Arabic: the various languages spoken in different parts of the Arab world.

Fourteen interviews were conducted with women using the informal local colloquial Arabic language, and one was conducted in English. All the interviews that were conducted in Arabic were transcribed verbatim initially in Arabic and then translated into English to preserve meaning, avoid losing important data during translation, and to enhance the trustworthiness of the data. However, researchers should be aware that the translation process can have a major impact on the trustworthiness of qualitative data (Al-Amer et al., 2016). I also believe that all researchers should be transparent in acknowledging this challenge and address this explicitly in the research methodology.

Translation is defined as “an interpretive process and not merely a direct message transfer from a source language to a target language, translators need to systematically and accurately capture the full meaning of the spoken language” (Al-Amer et al., 2016, p. 150). Esposito (2001) emphasised that translation should be intelligible, sound right, and appropriate vocabulary and grammar should be used to produce transcripts that are accurate, clear, and sound as natural as possible. Some issues and limitations resulted from the translation of the interviews from Arabic into English. The translation was performed by the researcher, who speaks both languages and is familiar with the cultural context of the study. However, specific words that were stated in Arabic have no equivalent meaning in English. To deal with this, I gave the closest meaning to that word. In the beginning, I translated the interviews verbatim, but this resulted in sentences that had no meaning or made no sense in English. I therefore revised the translated interviews to translate them based on the meaning each statement revealed. Examples of the translated interviews were shared with the supervisory team, who suggested that revision should be made to some of the statements to make them clearer to an English-speaking reader.

Esposito (2001) argued that it is impossible to develop a translation that represents the exact meanings of a conversation. However, the researcher should provide an accurate translation as close to reality as possible. Some words in the local Arabic Omani language
have no clear meaning in English, which made it difficult to translate the exact meanings, but were translated based on the meaning of what they stated. Nevertheless, I tried to use a thesaurus, online translation and Arabic-English dictionaries to find similar words in English that would provide the same meaning. Unfortunately, some of the local spoken Omani language or words could not be identified, either in online dictionaries or general dictionaries, because they are colloquial or forms of slang. For example, one colloquial word (مافيني بارض) has no equivalent meaning in an English dictionary but means “I do not have the desire or interest to do something”. Some women talked about many issues at a time and moved from one topic to another within the same statement, which were also difficult to translate word-wise, but were translated based on the meaning of the statement.

There are standardised guidelines for the translation of research surveys from one language into another (Al-Amer et al., 2016). However, translation of qualitative research involves translating participants’ narrative data, which contain colloquially sourced language and nuances, into a professional style in different languages. This may impose difficulties for the researcher trying to reduce the gap between different languages (Al-Amer et al., 2015). Importantly, when translating a metaphor, the differences in the social context, cultural beliefs, and linguistic discourse among Arabic-speaking communities are essential because human experience may be classified differently among cultures (Al-Amer et al., 2016). The authors recommended that the researcher stay as close to the data as possible. They also recommended maintaining records to reflect and provide rich descriptions of what was observed and felt during the interview process to reduce the potential loss of Arabic narrative data during translation into the target language (Al-Amer et al., 2016). The researcher should transfer the meaning of the words, rather than re-writing them (Al-Amer et al., 2015). I adopted this approach during the translation of the transcripts. Table 4.2 summarises the differences between verbatim and meaning-based translation.

**Table 4.2: Examples of verbatim translation and meaning-based translation**

<table>
<thead>
<tr>
<th>Arabic transcription</th>
<th>Verbatim translation</th>
<th>Translation based on the meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>“لاي شو هنأ، بس آمي ماكان عندي ثقة فيهم والحين نفس الشيء بس آمي أتتبع من باب الاحتياط أذا فيه حاجة كرتي” [PW5: Khlood]</td>
<td>“Here I opened a card in case that anything happened but I had no trust in them, and until now I do not trust them but I follow up in case that anything happened.” [PW5: Khlood]</td>
<td>“I have booked my card in the health centre just in case something goes wrong, but I did not trust them, and I still have no trust in them. I go for follow up with them just in case something goes wrong, so I have my card with me.” [PW5: Khlood]</td>
</tr>
</tbody>
</table>

I also back-translated some transcripts from English into Arabic. Back-translation is highly recommended to ensure equivalency of meaning in both languages (Chen and Boore,
2010) and avoid loss of meaning that may reduce the credibility of qualitative research (Van Nes et al., 2010). I used direct quotations from participants to support my interpretations of findings. These specific statements were carefully selected and revised for their equivalency in meaning in both languages (Al-Amer et al., 2015). Direct quotations were selected carefully and discussed with the supervisory team for clarity of translation. Table 4.3 summarises the process of back-translation for a sample of an actual quotation that resulted in an almost similar meaning.

Table 4.3: Example of back-translation

<table>
<thead>
<tr>
<th>Translation</th>
<th>Back translation</th>
<th>Verbatim quotation</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;But, in case that I have problems during pregnancy, I will need more visits. I feel that 4-6 visits during pregnancy are adequate because if the number of visits increased this will put more pressure on the nurses particularly for those women who do not need to come more frequently to the clinic.” [PW1: Soad]</td>
<td>&quot;بِسَ فِي حَالَةِ أَنَّى كَانَ عِنْدِي مُشَاَكِلٌ صَحيَّةٌ أَثْنَاءَ الْحَمْلِ، سَوْفَ أُحْتَاجُ إِلَى 4-6 زِيَارَاتٍ أَكْثَرَ. أُحْسِنِ أَنَّى 4-6 زِيَارَاتُ حَلَالَ الْحَمْلِ كَافِيَةٌ لَا لَوْ أُزِيدَتُ الْزِيَارَاتُ بِبَزْيَةٍ ضَغْطٍ عَلَى الْمَرْضَىَاتِ رَحَّامَةَ لِلْبُسُوعِيَّةِ الْمَرْضَىَاتِ، عَلَى الْمَرْضَىَاتِ مَا يُحْتَاجُ إِلَى الْمَرْضَىَاتِ المُتَكَرِّرَةَ التَّحْكِيمِ للعِيَادَةَ,” [PW1: Soad]</td>
<td>&quot;بِسَ فِي حَالَةِ أَنَّى وضَعِي الصحي مَطْبَعِيٌّ فِي الْحَمْلِ فيحْتَاجُ زِيَارَاتٍ أَكْثَرُ. أُحْسِنِ أَنَّى 4-6 زِيَارَاتُ حَلَالَ الْحَمْلِ كَافِيَةٌ لَا لَوْ أُزِيدَتُ الْزِيَارَاتُ بِبَزْيَةٍ ضَغْطٍ عَلَى الْمَرْضَىَاتِ رَحَّامَةَ لِلْبُسُوعِيَّةِ الْمَرْضَىَاتِ مَا يُحْتَاجُ إِلَى الْمَرْضَىَاتِ المُتَكَرِّرَةَ التَّحْكِيمِ للعِيَادَةَ,” [PW1: Soad]</td>
</tr>
</tbody>
</table>

4.5.4. Non-Participant Observation

Initial data analysis suggested further data collection to explore the wider context/ environment of care was required. The non-participant observations were conducted to further explore and extend understanding of issues expressed by the women during the initial interviews. For instance, the women identified environmental and communication issues including overcrowding of the antenatal clinics, long waiting times in uncomfortable environment, lack of privacy, disrespectful communication and limited exchange of relevant information. Thus using non-participant observation as an additional method for data collection added richness and depth to data. This increases confidence in the findings, enhances the completeness of the data, and helps in understanding what was happening (Thurmond, 2001). Observation is an important method in research that is used to improve understanding of different aspects of social interaction (Caldwell and Atwal, 2005) and gain better understanding of the environment of care (Cooper et al., 2004). It can reveal and explain important life events in a healthcare environment that cannot be identified by other research methods (Pope and Mays, 2006). It afforded me the opportunity to record and analyse behaviours, actions, experiences, and interactions between women and their care providers through my own eyes. It was useful in this study to explore the process that took place during the women’s appointments and observe woman-carer interactions, including non-verbal communications (Ritchie and Lewis, 2003).
According to Green and Thorogood (2014), observation is the gold standard if research aims to understand phenomena and to gain direct access to what people do and what they say they do. This research used non-participant observation to validate what women and healthcare professionals discussed in the interviews, and to enrich the data by observing care in a natural environment (Fitzpatrick and Boulton, 1996). During the observations, I acted as an external observer, who only watched what was happening during the women’s appointments without interfering or taking part in the proceedings (Casey, 2006).

Data were collected using an observation template (Appendix 29) that was developed following three unstructured observations to focus the data on the emergent concepts and theories (Cohen and Crabtree, 2006). During these three observation periods, I tried to capture as many details as possible, which were considered carefully in designing a focused template for the forthcoming observations. According to Cohen and Crabtree (2006), a template to guide observation can be useful for the inexperienced observer to collect a focused observation. Using the template helped to focus my observations on specific events and record field notes as they occurred in the natural environment (Pretzlik, 1994). It was also helpful to minimise subjectivity and bias by focusing on what was happening in a natural environment without including any personal interpretations. I also maintained a reflective diary of my interpretation and reflection of important events and incidents that occurred during observations (Fitzpatrick and Boulton, 1996). However, in the initial set of observations, I faced difficulty in separating what was observed from my interpretations, but using the template helped to minimise this (Pope and Mays, 2006).

Thirteen non-participant observations were conducted during antenatal appointments and field notes were written to capture social activity, the care provided and communication styles (Creswell, 2014). I wrote brief field notes immediately during the observations to capture any important interactions or events. Detailed field notes were completed on the observation template immediately after observations (Atkinson et al., 2002). I observed each woman from the time of her arrival until leaving the clinic. I followed each woman, observing the initial greeting with staff, sitting with her in the waiting area, and observing reactions to the waiting time. I also observed activities during that period and the environment. Spending time with each woman in the waiting area provided me with an opportunity to feel how these women felt while they waited for a long time. I then followed each woman during her consultation in the clinic to observe the social interaction with the care providers. I recorded the length of time of each consultation, the degree of privacy and any interruptions of care by other women and professionals. I had the
opportunity to observe some women during an anomaly ultrasound with ultrasonographers and obstetricians to notice how ultrasound during pregnancy was completed. This also provided the opportunity to see the social interaction between them, listen to the exchange of information with each woman, and to record the time spent in performing an ultrasound assessment for different women (Casey, 2006).

Using observation as a research method may also have some issues that need to be considered and addressed before and during data collection. An example of a limitation of observation is the presence of a researcher, which may alter participants’ behaviour (Casey, 2006). I encountered this during data collection, when a midwife called the woman participating in the observation for her consultation before other women who had arrived before her. I asked the midwife about this and she stated that she did not want me to wait for a long time. Thus, I told the midwife that they had to carry out their daily activities and care as if I were not present in the clinic doing observation. I explained again to the midwife that the observation aimed to explore the context of care in everyday practice as it occurred. Another midwife told her colleague that everything for the woman participating in the observation should be done in an ‘ideal way’ because of my presence. This happened despite time spent explaining the aim of conducting the observations with them. Furthermore, including five different clinics with participants of different backgrounds and experiences helped in recognising normal and ‘changed’ behaviours that occurred due to the presence of the researcher in the clinic (Caldwell and Atwal, 2005). Moreover, collecting data until no new data emerged and having consistent findings from the interviews and observations helped in gaining a clear and complete picture of the different experiences of antenatal care (Casey, 2006). Maintaining written reflexive journaling of the researcher’s own biases and preconceptions was a helpful way to reduce the impact of the researcher’s influence on the research settings (Kawulich, 2005).

The quality of observation depends on the ability of the researcher to provide adequate details of what is observed. It requires astute observation skills, an accurate memory, and clear, detailed and systematic recording of events (Fitzpatrick and Boulton, 1996; Pope and Mays, 2006). I found it challenging to observe, remember and record everything occurring in the setting mainly during the initial three unstructured observations. However, I tried to capture and record sufficient data carefully, while at the same time being aware of my perceptions and assumptions that might influence what I observed (Pope and Mays, 2006). Data from the initial interviews with women and observations directed theoretical
sampling to interview more women and care providers for further clarification of the observed events and issues raised by the women (Coiera and Tombs, 1998).

4.5.5. Memo-Writing and Diagramming

I constructed memos to record emerging thoughts, ideas, and feelings that I experienced about the research project to help in developing the properties of the emerging categories. Memo-writing directed me to become more analytical and reflective and enabled the development of theoretical codes (Jeon, 2004; Glaser and Holton, 2007; Birks and Mills, 2015). Memo-writing is essential in the promotion of quality in grounded theory research, to map the researcher’s activities during analysis, and to define changes in a coding direction supported by the rationale for the changes (Birks and Mills, 2015). At the beginning of the coding, I included one column in the table of analysis in which to write the emerging memos. However, I then felt that using the same table limited my thoughts and ability to elaborate and write extensive memos. Therefore, I decided to write memos in a separate document based on the emerging codes and sub-codes. I wrote memos as exemplified in Box 4.1 to help in exploring the codes and categories and to examine, explain and conceptualise data that were used during the constant comparative process (Charmaz, 2014). I drew diagrams and concept maps during the research process, which offered a visual representation of codes and categories and assisted me in finding connections and links between them to identify relationships. An example of a concept map used is attached in Appendix 30.

Both the women and healthcare providers thought that the exchange of pregnancy-related information was limited. It appeared that the focus of the visit in an overcrowded environment was to complete the care of all women within the clinic working hours. However, it was apparent that this inadequate exchange of information during consultations was not only due to overcrowding of the clinic. During observation I noticed that even when the clinic was not overcrowded, midwives focused on completing physical care during visits and they shared with women information based on tasks carried out. Furthermore, some women did not ask questions during their consultations. The exchange of information focused on taking iron supplements and diet to prevent anaemia. This raised the questions of why the midwives did not allocate time to exchange information with women even when the clinic was not crowded. I do not think that overcrowding alone was a factor but this could be something to do with following guidelines, the women were not interested in ask questions or to hear repeatedly the same information. This might be due to lack of continuity of care, which impedes the development of women-carer relationship that is important for exchange of information.

Box 4.1: Memo interpreting data of exchange of information and overcrowding
4.6. Data Analysis in Constructivist Grounded Theory

I followed constructivist grounded theory analytical framework principles to analyse all the data in this study, including the interview transcripts and field notes of the observations. Data collection and analysis procedures were conducted iteratively to permit theoretical sampling (GetanehAlemu et al., 2015). Concurrent data collection and analysis helped me identify gaps and ask prompting questions that moved the analysis further and deeper into the research problem, allowing time for categories to emerge (Charmaz, 2014). Coding is the process of breaking down data into smaller parts and giving them names or labels (Sbaraini et al., 2011) that categorise and summarise each segment of data (Charmaz, 2014). It is the first analytic journey in grounded theory and requires the researcher to stop and ask analytical questions of the data (Charmaz, 2014). The constructivist grounded theory analytical framework consists of initial, focused and theoretical coding (Charmaz, 2006). The use of memos and constant comparison during coding is important to move analysis from the more descriptive to conceptualisation (GetanehAlemu et al., 2015). The research aim and objectives should be used to guide the process of analysis (Wahyuni, 2012).

4.6.1. Initial Coding

Initial coding aims to explain the data, define them, and understand what they mean (Charmaz, 2014). I performed word-by-word, line-by-line, paragraph-by-paragraph and incident-by-incident analysis. This was done to break down the interview texts and field notes from observations of the settings, scenes and participants into words, lines, and segments to identify important meanings and statements (Charmaz, 2006). I used a computer-assisted qualitative data analysis software program (NVivo 11) during the initial coding to organise and manage the data (John and Johnson, 2000). Using NVivo was helpful in dealing with large amounts of data, reducing the amount of time needed for manual coding, and retrieving data quickly and easily (Saldaña, 2009). NVivo was also helpful for grouping all similar statements within a given code/node. However, it was difficult to continue the process of coding in hidden files and folders and not being able to visualise codes with their supporting statements. I also found that trying to learn the basics of the coding process and complex instructions of NVivo with multiple functions simultaneously overwhelming. Therefore, I transferred all codes with their supporting data to Microsoft Word documents using a table format that included the supporting data, the participants’ code numbers and the initial codes with emerging themes. This enhanced my
ability to visualise the data and to follow an iterative and interactive constant comparison process with the data. For initial coding with NVivo 11, see Appendix 31.

Each interview statement was read and reread line by line and labelled or coded based on the meaning of that statement, or using in vivo codes (Charmaz, 2014). In vivo codes are participants’ special or direct statements that may provide a useful analytical point, preserve participants’ meanings, and help see actions in the coding itself (Charmaz, 2008; 2014). Some of the participants expressed different issues in one statement, so I labelled them using different codes based on their meanings or patterns. Reading and rereading the data were repeated from the time the interviews were conducted and moving to the transcription and translation of the interviews. This was important to understand and be immersed in the data and to generate as many ideas as possible inductively from the initial coding (Charmaz, 2014).

Charmaz (2006) emphasised that, during the initial coding, the researcher should remain open to all possible theoretical directions indicated by reading the data. I focused on actions and behaviours and kept these codes simple, precise, active, and as similar to the data as possible (Charmaz, 2006; 2014). This enabled me to move quickly but carefully while coding the data. Nevertheless, coding data too quickly can lead to the risk of missing important concepts that might only be identified after prolonged and intense engagement with the data in initial coding (Glaser, 1978a; Birks and Mills, 2015).

AccCording to Charmaz (2014), it is important to analyse data from the participants’ perspectives. As an inexperienced researcher, I felt that coding was confusing and chaotic because of the need to deal with a large amount of data. I found it difficult to make short and precise codes. I used a gerund in the initial coding by using the noun form of the verb, such as perceiving, feeling or questioning, to bring the researcher into the data (Charmaz, 2006; 2008; 2014). Using a gerund was helpful for interacting with the data, focusing on meanings and actions in the data, and keeping coding active and emergent (Charmaz, 2008; 2014), and suggests an emergent link between the process in the data (Glaser, 1978b; Charmaz, 2006; 2014). Charmaz encouraged the researcher to look at data critically by interacting with them to identify actions and processes. The researcher should ask her or himself the following questions: “What process (es) is at issue here? How can I define it? How does this process develop? How does the research participant(s) act while involved in this process? What does the research participant(s) profess to think and feel while involved in this process? What might his or her observed behaviour indicate? When, why, and how
does the process change? What are the consequences of the process?” (Charmaz, 2014, p. 127). I found that asking these questions while coding was helpful to look at the data from different angles and not to take any data or assumptions for granted. Asking analytical questions enabled me to minimise the likelihood of forcing the data into preconceptions and to focus coding in theoretical directions (Charmaz, 2014).

I analysed the initial nine interviews with the aim of supporting theoretical sampling and identifying further questions to ask in the next interviews. This process indicated the need to collect data by non-participant observation and to interview more women. Data analysis also suggested sampling healthcare professionals involved in the provision of care to women, including midwives, sonographers and administrative professionals. Theoretical sampling directed me to interview further women based on the issues identified from the initial interviews and observations. For instance, to explore reasons for late attendance to public antenatal care and accessing private healthcare in pregnancy. I did not return to the previously interviewed women to avoid burdening them with being repeatedly interviewed. I recruited new participants to illuminate the process and to refine further codes as directed by the data (Charmaz, 2014). The transcriptions of the women’s interviews were coded in a different document from the healthcare providers to examine the significant codes in each set of data and identify the prominent issues or codes addressed by each group of participants. I also coded the data from observation field notes in a separate document initially, and then compiled them together based on their similarities in coding and sub-coding (Rintala et al., 2014).

It is recommended in grounded theory methodology to use alternative data sources and to start analysis immediately with data collection, but there is no recommendation for when to start combining different data sets (Rintala et al., 2014). After initial coding of all interviews/observations, I used constant comparison methods to look for differences and similarities in the data. I grouped all codes that were similar in content together (Rintala et al., 2014). I did this by comparing statements and incidents within each interview/observation and comparing statements and incidents in different interviews/observations. I also compared data from the earlier interviews with data in later sessions and compared observations of events at different times and places (Charmaz, 2014). One of the advantages of initial coding is that it allows the researcher to fulfil two criteria of grounded theory analysis: fit and relevance (Charmaz, 2006; 2014). Initial coding continued until categories began to merge and, ultimately, initial coding became redundant as the
researcher gained a sense of conceptual control over the data (Charmaz, 2014). Table 4.4 provides examples of the initial coding process.

Table 4.4: Example of the initial coding

<table>
<thead>
<tr>
<th>Supporting data</th>
<th>Initial codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>“The most important benefit of going to these visits is to ensure that I have a normal pregnancy and a normally growing baby.” [PW1: Soad]</td>
<td>Ensuring a healthy pregnancy and a healthy fetus</td>
</tr>
<tr>
<td>“Healthcare in pregnancy is important to avoid risks... to know if the woman has high sugar or high blood pressure because these conditions may cause many problems to the baby.” [PW5: Khlood]</td>
<td>Identifying risks Preventing complications to the baby</td>
</tr>
<tr>
<td>“If anything happened to the unborn baby... the nurses will be familiar with that, and the mother will be free of responsibility because she is going to the visits. Therefore, the healthcare providers are responsible for seeing if the baby is OK or not.” [PW10: Warda]</td>
<td>Fulfilling social expectations Being responsible mother Avoid feeling guilty if unexpected outcome occurs</td>
</tr>
</tbody>
</table>

4.6.2. Focused Coding

The transition between initial and focused coding can happen simultaneously (Charmaz, 2014). After establishing analytical directions through initial coding, I began to synthesise, analyse and conceptualise larger segments of data (Charmaz, 2014). In focused coding, I concentrated on the most useful, recurrent and significant initial codes (Charmaz, 2008; 2014). I then tested them against extensive data for similarities and differences to help in synthesising and explaining larger segments of data (categories) to determine the adequacy and significance of the initial codes (Charmaz, 2006; 2014). Using constant comparison of data, I explored and determined codes that best defined what was happening in the data and conceptualised these data into theoretical categories, which sometimes involved coding the initial codes (Charmaz, 2008; 2014).

Focused coding should advance the theoretical direction of analysis into more conceptual rather than many initial codes (Flick, 2013; Charmaz, 2014). In focused coding, I compared initial codes with the available data, determined codes with greater analytical power, and compared codes with codes. I returned to the written analytical memos and considered codes that were promising. The significance of focused coding was to link together or integrate categories using the constant comparison of data, categories and their sub-categories. Charmaz suggested that the researcher should ask the following questions to be able to identify the relationship between codes and concepts and determine the significant codes: “what do constant comparisons of initial codes with data reveal? Which of these codes account for the data? How can I raise these codes to focused codes? Do my
focused codes reveal gaps in the data?” (Charmaz, 2014, p. 140-141). I conducted more comparative work through constructing diagrams and concept mapping to verify which codes served as focused codes and to make informed choices about rejecting excess or irrelevant initial codes. Completing comparative analysis increased my confidence in the analysis (Charmaz, 2014).

I generated and refined the categories, sub-categories, and their properties by making many constant comparisons, which included comparing and grouping codes and comparing them with the emerging categories and comparing data in different interviews and observations. Furthermore, I compared data from the same or similar incidents, actions or processes in different situations and contexts (Charmaz and Smith, 2003; Charmaz, 2006; 2014). I also compared statements with different participants (their beliefs, situations, actions, accounts or experiences), and compared data from the same individual at different points of an interview/observation. I also compared specific data if they fitted the designated criteria for a category and compared categories in the analysis with each other (Charmaz and Smith, 2003). Focused coding facilitates the organisation of the codes and concepts established during the early stages of analysis into higher-level categories (GetanehAlemu et al., 2015). See Appendix 32 for a summary of the initial and focused coding conducted in this research. Table 4.5 illustrates an example of the initial and focused coding processes.

Table 4.5: Examples of focused coding

<table>
<thead>
<tr>
<th>Supporting data of women’s interviews</th>
<th>Initial coding</th>
<th>Focused coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>“The most important benefit of going to these visits is to ensure that I have a normal pregnancy and a normally growing baby.” [PW1: Soad]</td>
<td>Ensuring a healthy pregnancy and a healthy fetus</td>
<td>Perceived benefits and value of antenatal care</td>
</tr>
<tr>
<td>“Healthcare in pregnancy is important to avoid risks...to know if the woman has high sugar or high blood pressure because these conditions may cause many problems to the baby as well.” [PW5: Khlood]</td>
<td>Identifying risks Preventing complications to the baby</td>
<td></td>
</tr>
<tr>
<td>“If anything happened to the unborn baby or anything so the nurses will be familiar with that and the mother will be free of responsibility because she is going to the visits. Therefore, the healthcare providers are responsible for seeing if the baby is healthy or not.” [PW10: Warda]</td>
<td>Fulfilling social role expectations of pregnant women Being a responsible mother Avoiding feeling guilty if adverse outcome occurs</td>
<td></td>
</tr>
</tbody>
</table>

4.6.3. Theoretical Coding

The purpose of theoretical coding is to help theorise the data and focus on codes that may help the researcher to tell a coherent analytical story (Charmaz, 2014). Theoretical coding
helps to conceptualise the relationships between categories that developed in focused coding, which helps in synthesising and moving the analytical story in a theoretical direction (Charmaz, 2006; 2014). Theoretical coding was completed in this research with the aim of determining the core category and its link with others. The core category must be abstract, occur most frequently in the data, be significant, logical and consistent with the data (Rintala et al., 2014). Birks and Mills (2015) emphasised that even during theoretical coding, the researcher may need to return to the theoretical sampling and coding activities at many points to ensure that the theory is grounded in the data. I felt that the ambiguity and confusion increased as I progressed with the analysis towards the emergence of the theory. However, I tried to stay focused and precise during this stage of coding to direct my thoughts towards identification of a core category and its properties (Charmaz, 2014; Birks and Mills, 2015).

It was also helpful to write down ideas and assumptions and analytical questions using memos and concept mapping to move the analysis into more analytical directions. Furthermore, reading related empirical research and theories, such as the maternal task and intensive motherhood, was important to enhance the analytical thinking towards the core category (Marshall and Rossman, 1999). Theoretical coding is the last stage of coding and enables saturation of the core categories identified during focused coding. The use of memos written about concepts and categories and constant comparison between focused codes are important to reach the theoretical coding stage. In theoretical coding, the analysis moves from mere description to conceptualisation (Getaneh Alemu et al., 2015). The theory must fit and have relevance to the data, it must work, and this must be confirmed by a process of constant comparison. It should explain the process and events, and predict and interpret actions that are connected with an incident (Backman and Kyngäs, 1999).

4.7. Rigour in Grounded Theory Research

4.7.1. Credibility

According to Tracy (2010), credibility reflects the trustworthiness of research findings and deals with the accuracy of the data collected to take into account observed social events (Wahyuni, 2012). It also refers to the extent to which a piece of qualitative research is authentic (Ellis, 2016) and is one of the criteria measures of how vivid and faithful the description of phenomena in qualitative research may be (Beck, 1993). I followed a grounded theory methodology that is appropriate to exploring behaviours and elements of interaction between women and healthcare providers (Goulding, 2005). Using grounded
theory methodology in this research allowed me to engage in daily clinical practice to be able to construct a meaningful interpretation of currently implemented antenatal care (Lazenbatt and Elliott, 2005). Furthermore, grounded theory methodology is most appropriate to this study due to the lack of literature on antenatal care in Oman, and is anticipated to generate a new theory from the collected data (Birks and Mills, 2015). The decision to follow grounded theory was also made after prolonged and frequent discussions with the supervisory team (Meyrick, 2006). This careful selection of methodology and methods of data collection and analysis that were aligned with the research study aim and objectives is considered as the first step towards credibility (Wahyuni, 2012).

I followed the constructivist grounded theory methodology flexibly and systematically. This included an iterative process of back-and-forth movements between data collection and analysis, a constant comparative approach, theoretical sampling, and constructing memos (Lazenbatt and Elliott, 2005). The use of a constant comparison approach and theoretical sampling provided an integrated research approach to data collection, analysis and assessment of the quality of the findings (Lazenbatt and Elliott, 2005). The continuous cycle of data collection and analysis, constant comparative approach, and theoretical sampling enabled me to generate findings that accurately represent the topic under study. These techniques also allowed a new theory to emerge from the data that was theoretically complete and fully developed (Lazenbatt and Elliott, 2005). A theoretical sampling of an area that needed further elaboration and questioning was followed in the next interviews. The preliminary analysis of the data of initial samples of women suggested a need to explore a wider context of care to validate areas highlighted by non-participant observation. The initial data analysis also suggested interviewing healthcare providers and more women for further data collection and understanding (Meyrick, 2006).

I did not use member checking as a measure of credibility in this research because grounded theory aims to produce an abstract representation that explains situations rather than describing them (Cooney, 2011). Theoretical sampling and constant comparison suggested involving new women and different groups of healthcare professionals to validate issues expressed by other women and confirmed consistency in the findings. Furthermore, member checking may have led to the production of a new layer of data that needed to be analysed (Lazenbatt and Elliott, 2005).

The interviews were conducted at the participants’ homes and health centres based on their convenience, which might have fostered a sense of power, mutuality, or the building of a
A sense of mutual trust was helpful to encourage the participants to talk freely and to have a sense of control during the interviews (Karnieli-Miller et al., 2009). Failure to establish a sense of mutuality and rapport with participants could make interviewees unwilling to share data openly (Hall and Callery, 2001). This can also limit in-depth data generation with the participants, which, in turn, may affect the rigour of the research (Charmaz, 2006). I conducted non-participant observations in five health centres. During the observations, I followed women from the time of arrival until leaving the clinic, which involved approximately 2-4 hours spent in each antenatal clinic per observation (Bitsch, 2005). Spending adequate time at the sites interviewing, observing and taking field notes helped me to gain a full understanding of healthcare in pregnancy and to see the phenomenon from different angles in an attempt to enhance the credibility of my research (Houghton et al., 2013).

I have provided a detailed description of the five settings and the context of data collection, the types of participants in the study, and the emerging themes (Creswell and Miller, 2000). Providing detailed descriptions of the study process is important to enhance the transferability and trustworthiness of a study (Graneheim and Lundman, 2004). However, transferability can be determined by the readers’ decision if the findings are meaningful to them and transferable to another context or not (Graneheim and Lundman, 2004).

I collected data from multiple perspectives using semi-structured interviews and non-participant observations, as suggested by the initial data analysis for theoretical sampling. I compared the data collected from different sources and methods to verify and ensure comprehensiveness and completeness of the data (Gillham, 2000; Mays and Pope, 2000). Data were collected from different sites and from diverse participants, including women and healthcare professionals with different backgrounds and experiences, which contributed to a richer variation in the data generated (Graneheim and Lundman, 2004; Bitsch, 2005).

Peer debriefing was done through regular meetings with the supervisory team before and during data collection and analysis. Before starting data collection, an action plan was developed that was used as a clear map to guide data collection and analysis. I shared some interview transcripts through emails and the suggestions provided were taken into consideration. During data collection and analysis, a continuous review of the process with the supervisory team was performed by sharing interview transcripts, field notes of observations, reflections, coding templates, memos and concept mapping, and the feedback
given was considered during further steps in the research study. I shared many drafts of coding templates with the supervisory team that were frequently discussed until we agreed the appropriate representation of themes and codes for the data (Graneheim and Lundman, 2004). I followed a constructivist grounded theory research approach that is based on multiple realities and subjective interpretations of co-construction and no two researchers will have similar interpretations. However, as a novice researcher, I valued the importance of discussion and sharing categories and codes with expert co-researchers (supervisors) to confirm the appropriateness of labels/codes to the supporting data as a step to enhance the credibility of my research (Graneheim and Lundman, 2004).

The integration of purposive and theoretical sampling to maximise the range of information generated in this research and the provision of a detailed description of the research process adds to the transferability and fittingness of the data (Guba, 1981). In this research, data were collected using different methods and sources by interviewing women and their care providers and observing their social interaction during appointments in natural settings. Furthermore, data were analysed using both a manual method and NVivo 11, which was helpful to ensure confirmability and completeness of the data (Guba, 1981; Houghton et al., 2012).

4.7.2. Reflexivity

Reflexivity is honesty and authenticity with self, research, and audience (Tracy, 2010). Reflexivity helps one to acknowledge one’s biases and motivations and contributes to examining the impact of the researcher on settings and participants (Tracy, 2010). I am aware that all researchers have perspectives, biases, and assumptions that they bring with them to the research process and can have an impact on all aspects of research. However, these assumptions and perspectives may not be detrimental in all aspects, particularly in choosing the research problem and setting the research question (Corbin and Strauss, 2015). Nevertheless, I am aware that these prior assumptions and perspectives may have a great impact on coding and categorising the data. This impact may be seen in the meaning and concept given to a set of data, the questions asked and comparisons that are made during analysis (Corbin and Strauss, 2015). Through reflexivity, I acknowledged the possible effects of my background, clinical experience and preconceptions as a nurse and a supervisor of nursing students in an antenatal clinic on the control, assumptions, and interpretation of the findings (Kolb, 2012). Furthermore, I also acknowledged the possible impact of being a woman and a mother with past experience of pregnancy and antenatal
care in the same culture on generating, analysing and interpreting the data. However, Corbin and Strauss (2015) consider this as natural when a nurse approaches analysis from this perspective to keep the findings within the discipline.

The conscious acknowledgement of self in the process of research allowed my personal interest as a woman with past experience of antenatal care and as a researcher with an interest in this topic to be visible. It also guided me to understand and respect the experiences of the participants (Farnsworth, 1997). Being reflexive helped me to become more conscious of my own experiences as a woman and a researcher of positive and negative experiences in antenatal care. I tried to listen with care and respect and show interest in the participants while conducting interviews and observations (Farnsworth, 1997). The participants’ perspectives, views, and opinions encouraged me to explore, reflect on my own experience, and to respect the different views and perspectives expressed by participants (Farnsworth, 1997). Using an exploratory qualitative methodology supported my attention and interest in antenatal care and helped to make the words and various experiences expressed by participants more visible in this study (Farnsworth, 1997). Conducting this research as a woman and a professional with past clinical experience in antenatal wards and clinics helped me to determine my knowledge and experience and to connect them meaningfully with the participants (Farnsworth, 1997).

I viewed myself at the beginning as an outsider who works in an academic institution that operates under the MoH in Oman, although I knew some of the healthcare professionals at the data collection site. However, conducting a priori meetings with gatekeepers who were midwives and nurse managers was helpful to introduce myself to them and to familiarise myself with those I did not know (Burns et al., 2012; Green and Thorogood, 2014). The meeting was also helpful to announce and orient the healthcare professionals to the research study, as they would play important roles in facilitating my gaining easier access to participants (Burns et al., 2012). Nevertheless, I also viewed myself as an insider to the settings of the study due to my personal experiences with pregnancy care and being a woman from the same culture. Moreover, I viewed myself as an insider because of my clinical experiences of teaching and supervising nursing students in the field of study. These prior experiences and knowledge shaped my interest in answering my research question regarding antenatal care and to assess the feasibility of answering the research question in this clinical area (Green and Thorogood, 2014). Being an insider researcher allowed me rapid acceptance in healthcare settings by women and their healthcare professionals. This helped the process of mutual understanding between the participants.
and me, which led to a greater depth to the generated data (Dwyer and Buckle, 2009). The outsider researcher may view this acceptance and understanding as a source of a high level of subjectivity that might be detrimental to the process of data collection and analysis (Dwyer and Buckle, 2009).

Having this research conducted by a female researcher from the same culture and speaking the same language facilitated acceptance, mutual trust, and openness of the participants. This facilitated interaction with participants who felt that I understood what they said. These participants might not feel open to talk with an outsider researcher from a different culture or even a different sex (Burns et al., 2012). However, being an insider researcher also imposed some limitations that had the potential to influence the progress of the research negatively. For instance, some participants felt that I understood what they were trying to say, which made them fail to explain their personal experiences. However, I asked prompting questions to gain a clear understanding of what they said to avoid taking anything for granted. Sometimes, I also faced difficulty separating my perceptions as a woman and a practitioner from those of the participants. This might have resulted in interviews that were shaped and guided by my own experiences and not those of the participants (Dwyer and Buckle, 2009). Being an academic working in the MoH was revealed to all participants before starting the interviews, which made them think that I was a liaison person between them and the ministry. Therefore, some participants from both groups requested that I convey some verbal messages or requirements to policymakers and programme managers.

However, being an outsider might not eliminate the influence of personal perspective (Dwyer and Buckle, 2009). As a constructivist, I believe that bias could not be entirely eliminated (Breen, 2007). I maintained a reflexive accounting of my preconceptions and assumptions to be aware of the impact that I might bring to the research. This might be helpful in reducing the potential issues of being an insider researcher. The important point in qualitative research is not having insider or outsider status, but the researcher’s ability to be open, honest, and transparent and committed to an accurate representation of the participants’ experiences and voices in the findings (Dwyer and Buckle, 2009).

I tried asking questions in a neutral way to avoid provoking my own preconceptions in the participants’ responses but, at the same time, I acknowledged that it was difficult to avoid asking leading questions. Before starting any interview, I explained to the participant that the researcher was not a care provider in order to avoid any impact this might have on the
responses they shared. However, as an employee of the MoH, this might have caused some participants to be careful in answering the interview questions in order to represent themselves positively and present an affirmative image (Polit and Beck, 2010). Through interviews and analysis, I felt the participants differed with the social context that they inhabited, and the experiences that they had with previous pregnancies and the current pregnancy care. Throughout the data collection, I wrote reflections of what went well and the reactions that developed to the responses of the participants for each interview and observation. I also recorded if any bias was felt. However, it was noted that the researcher’s own biases and preconceptions can be identified through the process of focused coding and constant comparison and during the writing of the study findings (Charmaz, 2014).

4.7.3. Theoretical Sensitivity

Hall and Callery (2001) highlighted the important contribution of theoretical sensitivity and reflexivity to enhancing the rigour associated with grounded theory research. Theoretical sensitivity emphasises the reflexive use of self in the processes of developing research questions and carrying out analysis (Charmaz, 2014). Theoretical sensitivity is the ability of the researcher “to generate concepts from data and to relate them according to normal models of theory in general, and theory development in sociology in particular” (Glaser and Holton, 2007, p. 56). I taught theory and supervised nursing students in the clinical area of maternal health nursing in antenatal clinics and wards in health centres and a regional hospital. This past experience helped in developing the research question and having an understanding of the research topic. Furthermore, being a woman who had experienced the pregnancy and antenatal care process and being part of Omani culture helped me to develop insight associated with antenatal care provided to women in my local area. Therefore, I was able to view the experiences of antenatal care from the ‘eye of a woman’ and as a researcher. Having knowledge and experience in this topic enhanced my understanding of meanings grounded in the data, and helped me to construct analytic codes that were close to the data (Charmaz, 2014). Furthermore, working with a supervisory team with experience in the area of maternal health and qualitative research facilitated moving the coding process into a theoretical direction. According to Charmaz (2014), theoretical sensitivity increases the analytic power of codes, and the engagement of the researcher in coding stimulates the development of theoretical sensitivity.
4.7.4. Power Relations

During any study, power shifts between the researcher and the participants. For example, before data collection, the researcher had more knowledge of the research to share with the participants, which indicated that the researcher had more power. However, once the participants received the information and data collection started, the power shifted to the participants who had the knowledge (Karnieli-Miller et al., 2009). Power imbalances occur when a researcher is unable to establish a sense of mutuality and rapport with participants, who may be unwilling to share data openly and this affects the rigour of the research (Hall and Callery, 2001). Ignoring rapport and a sense of mutuality may weaken the chance of obtaining in-depth data from participants and dehumanises both the participants and the researcher (Charmaz, 2006).

I gained access to all the participants through healthcare professionals who were involved in providing care to the women. I also explained to all the participants that their involvement was voluntary and that they had the right to withdraw at any time from the research, which might have been helpful in balancing the sense of power between both parties. I provided detailed explanations of the study and allowed each participant to determine a convenient time and place for the interview to foster building a rapport and a sense of mutuality with them. A sense of mutual trust was helpful in encouraging the participants to talk freely and to share a sense of control during the interview (Karnieli-Miller et al., 2009).

4.8. Summary

This chapter illustrated the practical aspects of this research study, including the access and recruitment process, ethical considerations, data collection and analysis, and steps that were employed to ensure the rigour and quality of the research. A full detailed description of the processes of data collection, including face-to-face semi-structured interviews, transcription, analysis, and non-participant observation with the use of a template, was provided. Examples of initial and focused coding, as well as translation from Arabic into English and the back-translation process, were also included to ensure transparency in reporting the practical aspects of this research, which should be congruent with the grounded theory methodology. The following chapters (5 to 10) will present the findings of the study, composed of five categories and explanations of the core theoretical category.
Chapter Five:
Overview of the Study Findings
Chapter 5: Overview of the Study Findings

5.1. Overview

This chapter provides an overview of the sample demographic characteristics, the emergent categories, and the core category, ‘Navigating antenatal care’, with an explanation of its development.

5.2. Sample Demographic Characteristics

This study was conducted between November 2015 and August 2016 and involved forty-nine pregnant women and care providers across three health centres and two polyclinics in the North Batinah Governorate of Oman. Individual face-to-face semi-structured interviews were conducted with fifteen women and ten professionals. Thirteen women and eleven healthcare providers participated in observations during antenatal care appointments.

Of the total number of women who participated in the study, six were primigravid and twenty-two were multigravid. The age of the women ranged from 19 to 38 years and weeks of gestation from 13 to 35, of which eighteen were in the second trimester and ten were in the third trimester at the time of participation. Eighteen women were unemployed, nine were employed (six teachers, two nurses, and a computer programmer), and one was a university student. Fourteen women had completed secondary school; thirteen of them were college graduates; and one had received primary school education. Thirteen women completed three visits, nine completed two visits, four completed four visits, and only two completed five visits. Fourteen women started their visits late in the second trimester. Only ten women drove a car, and the remaining depended on family members to take them to the clinics. Twenty-six women were Omani and two were expatriates (see Appendix 30).

Twenty-one healthcare providers participated in the study: twelve midwives, three nursing managers, two sonographers, two nurses, an obstetrician, and a dietician. Ten took part in face-to-face semi-structured interviews and eleven participated in observations during the women’s appointments. Three healthcare providers participated in both interviews and observations (see Appendix 33).

5.3. Emergent Core Category ‘Navigating antenatal care’

Many factors influenced the women’s perceptions of their antenatal care, including personal, family, social, and healthcare aspects. These factors influenced decisions made about the timing of accessing healthcare and regular attendance to publicly funded
antenatal care and contributed to the duplicate use of private healthcare. All women who participated in this study perceived antenatal care in the first trimester as important. However, half the women (fourteen out of twenty-eight) commenced their antenatal care in a public clinic after completing the twelfth week of gestation. The women who participated in the interviews appeared unhappy with some aspects of antenatal care. However, they felt that they should visit the antenatal clinic and be examined by health professionals to ensure that their pregnancies were healthy and their fetuses were developing normally.

It was evident from the data that family influence, peer networks and other sociocultural dimensions contributed to the women’s decision to access and use antenatal care. Attending publicly funded antenatal clinics late, after the first trimester, did not mean that the women did not receive any antenatal care. The women commenced their antenatal care and assessments in private clinics, where their pregnancies were confirmed and it was ascertained that everything was normal. Thus, these women attended publicly provided antenatal care at later stages in their pregnancies. These women perceived private healthcare as more convenient and accessible to them than that available in public institutions. Thus, they preferred to commence their antenatal care in private clinics in early pregnancy or if they developed complications or had any doubts. Many women also viewed attending private clinics as part of the social role of a mother during pregnancy, as they were anticipated and encouraged to do so by their families. Therefore, additional use of private healthcare was a means of alleviating social pressure.

Women considered early attendance for antenatal care essential to alleviate social and cultural pressure and to avoid any blame from others if anything unexpected happened to the fetus. These women felt that there were social pressures whereby they were expected to be responsible for their pregnancy by taking care of themselves and their fetus through the uptake of antenatal care. Thus, they agreed to wait for a long time in overcrowded settings with uncomfortable chairs, with the primary focus on protecting the fetus. However, although all the women considered an engagement with antenatal care in the first trimester important, they did not feel it to be urgent in an uncomplicated pregnancy. Some women felt more comfortable attending publicly funded antenatal care, as this was the main care provider and monitoring body, but preferred to access private clinics. For instance, the opening times of the private clinics were more convenient to the women, their wait was shorter, their privacy was maintained, and they were assessed with modern ultrasound equipment. Women accessed private healthcare to fulfil their obligations and have their initial assessments as an alternative to publicly funded care, particularly in early
pregnancy. However, even if the women decided to have their antenatal care in private clinics, they were advised to register their pregnancies in the public health centre where they lived to obtain their handheld Maternal Health Record. The importance of the handheld record is discussed in chapter 1, section 1.6. The women considered their handheld record as a means to facilitate their access to antenatal care, as they thought that they would not be accepted for treatment in publicly funded clinics without it. For instance, they need the record to access emergency antenatal care in the labour room if they have any complications outside clinic working hours.

Some women who were late for their booking visit expressed concerns and worries that public healthcare providers might interact negatively with them for late attendance. They also expressed their doubts and concerns for the health of their fetus, which was one of the reasons women attended antenatal care, whether this was in public or private clinics. Even when these women booked their pregnancy late, they wanted to protect their fetus from risks they believed may be present because of their cultural beliefs in the form of superstition. Therefore, the core category that emerged from the data analysis was ‘Navigating antenatal care’. It appeared that women in this study were unhappy with the provision of publicly funded antenatal care and the unsatisfactory experiences they had when attending. All the women, however, perceived that attendance at antenatal visits was necessary for ensuring optimal pregnancy outcome, identifying risks, preventing complications, and fulfilling their social role expectations as pregnant women. Therefore, these women were trying to demonstrate their commitment and be responsible in attending for professional antenatal care.

However, these women had conflicting commitments and priorities that contributed to late access to public antenatal care, which included family obligations and employment demands. Furthermore, the care these women received did not fulfil their needs, as the focus was on completing physical care. The women feeling an obligation to protect the fetus and to book their pregnancy in publicly funded clinics contributed to the use of antenatal care from both types of service provider. The women moved back and forth between public and private antenatal care to relieve their worries and doubts, fulfil their expectations, and obtain additional care when needed.

Figure 5.1 illustrates the five main categories that emerged from analysis of the data contained in the core category:

- Perceived benefits and value of antenatal care
- Timing of the first antenatal visit
- Woman-carer interactions during antenatal care
- Experiences with antenatal care delivery
- Supplementary use of private healthcare

Figure 5.1: Emergent core category
5.3.1. Perceived Benefits and Value of Antenatal Care

The women considered attendance for antenatal visits essential to ensure a healthy pregnancy, confirm normal fetal development, identify risks and prevent complications. Furthermore, they considered the use of antenatal care important to fulfil their obligations as mothers and avoid blame from others for not attending their appointments if any complications arose for them or their fetus. One of the reasons for initiating antenatal visits and continuing attendance was fear of risks developing and leading to complications for the fetus. Attending an antenatal clinic during pregnancy was considered an important responsibility of these women. They felt ‘obliged’ to use free antenatal care services based on their perceptions that, if they were not important, they would not be available free of charge.

5.3.2. Timing of the First Antenatal Visit

Based on the national guidelines in Oman, women should commence their antenatal care during the first trimester once the pregnancy is confirmed and not later than 12 weeks of gestation (MoH, 2010; 2016). All women involved in this study considered antenatal care important for a healthy pregnancy and fetus but half of them booked their pregnancy late in the second trimester. These women considered early booking essential but not urgent for them, as they had healthy pregnancies, but they considered it necessary for women with high-risk factors. Attending public antenatal care could present problems due to accessibility issues. For example, the antenatal clinic might be open in the morning when women were not often able to attend due to limited access to transport, as some of them did not personally drive a car. Some employed women preferred to access private clinics in the evening, as appointments were offered later in the day due to employment demands. Thus, those women booked their pregnancy late in a public clinic to avoid taking time off during working hours, as they were expected to return to work after completing their visits.

Some women stated that family members influenced their decision to initiate antenatal visits and others preferred to conceal their pregnancy to ‘avoid bad fortune’ to themselves and their fetus. They also wished to bypass having to make frequent visits with long waiting times. Furthermore, some women decided to delay their booking visits because their friends and colleagues usually attended late and they had not experienced any problems. Consequently, these women perceived antenatal care as necessary but, due to personal, family, social and healthcare system factors, they delayed their engagement with
public antenatal care. However, these women received some aspects of antenatal care from private clinics before commencing their booking visits in the public healthcare system.

5.3.3. Woman-Carer Interactions during Antenatal Care

Some women were unhappy with the way their care professionals treated them, as the care providers would be busy writing case records and with data entry, did not respond to their questions, and had minimum interactions with them during their antenatal care appointments. These women reported leaving clinics with doubts and without having received answers to their queries. For instance, some women had their ultrasound scans performed at speed, resulting in incorrect information being provided to them that increased their stress and doubts. Furthermore, the majority of the women reported receiving limited pregnancy-related information, which was also confirmed by the healthcare providers, because of overcrowded clinics and a shortage of staff. Some women and care providers perceived continuity of carer important to provide woman-centred care, enhance the relationship between them, and facilitate the exchange of relevant information.

Many women reported that midwives were ‘stressed’ and curt with them, particularly if they asked questions when the clinic was overcrowded or attended late to their appointments. They reported that their healthcare providers sometimes used a ‘harsh tone’ of voice or did not maintain eye contact during the consultations. Thus, antenatal care was an unfulfilling experience for these women due to inappropriate woman-carer interactions. Conversely, some women stated that they were happy with the interactions with care providers, who were supportive, treated them alike, exchanged relevant information with them, and were professionally competent. These women valued the care providers with whom they had a good relationship and preferred continuity of carer if possible.

5.3.4. Experiences of Antenatal Care Delivery

This category provides an in-depth review of diverse perspectives of antenatal care delivery in the North Batinah Governorate of Oman. It is composed of two major sub-categories centred on the physical environment and the organisation of antenatal care. Within the environment of antenatal care, the primary focus of the women’s responses was on the overcrowding of the clinics, the negative effects of this on women’s experiences of care and woman-carer interactions, and, in turn, the uptake of public healthcare. The participants stated that overcrowding was caused by deploying midwives into different clinical areas and shifts, thus leaving the clinical area short of staff to deal with the number
of women attending per day, and limited physical space. Women and healthcare providers also identified the referral of women from health centres to polyclinics for further assessment and the management of complications as a contributing factor to overcrowding. Furthermore, providing a number of services, such as antenatal and postnatal care and family planning counselling in the same clinic by the same staff in some health centres, resulted in overcrowding in the clinics. Thus, the care providers focused predominantly on completing elements of physical care, such as assessing blood pressure, monitoring pregnancy weight, testing urine, abdominal assessment and the provision of supplements.

Confusion over the exact time attendance was expected during the clinic also contributed to overcrowding because women received appointments with a date but the time that they would be seen by the clinic staff was not specified. Consequently, midwives asked them to arrive at the clinic early in the day so that they could finish their visits within a short time. The participants also stated that overcrowding and lengthy waiting times were exacerbated as some women did not attend on the given date. At the same time, healthcare providers accepted women who had been unable to attend their visits when they arrived on a day other than the one specified because they reflected on the personal and domestic arrangements these women made to attend. However, these women were informed that they would be seen only after providing care to all the women who had appointments on that day. Hence, the women’s day was longer than anticipated and their waiting contributed to overcrowding. Moreover, the women who had birthed their babies would come to the same clinic for their postnatal care at two and six weeks after labour without appointments, which further contributed to overcrowding and affected the overall organisation of care. However, the perceptions of a ‘long wait’ varied: some women considered waiting for half an hour as lengthy, whereas for some of them it meant waiting more than three to four hours before their consultations. These women were dissatisfied with inadequate facilities in the waiting area, such as limited access to refreshments, uncomfortable seating, and a lack of modern health education materials.

Furthermore, the interviews and observations indicated that the lack of privacy during consultations caused problems because two to three women received care at the same time in the same room and the door of the clinic was left open. Therefore, other women waiting outside could hear the consultation conversations and see what was happening in the clinic with other women. Many women reported their consultations being interrupted by other women and professionals, which distracted the overall coherence of their care and their interactions with the healthcare provider. Furthermore, waiting areas were not segregated.
Men were often visible in the clinic waiting area, as they might be visiting the health centre to receive treatment or to accompany relatives. The women felt uncomfortable waiting in the vicinity of men, so those covering their faces stayed covered throughout their wait.

Women had their own variable opinions on the frequency of antenatal care and the number of ultrasound assessments per pregnancy that were required. Some women reported that the current six antenatal visits were adequate because the focus of these sessions was mainly on their physical care. However, others suggested having a monthly visit to obtain more reassurance on the progress of their pregnancies, whereas those participants with morning employment commitments stated that a visit once every three months would be sufficient. The women and their healthcare providers agreed that at least three ultrasound assessments in pregnancy would be reassuring.

5.3.5. Supplementary Use of Private Healthcare

All the women who participated in the study accessed private antenatal care in addition to public healthcare. Some women wanted more antenatal visits and additional clinical assessments that were outside the national antenatal guidelines. It was evident from the data that there was a fear of developing risks and of having fewer visits with longer intervals between them. These concerns contributed to the use of private healthcare during pregnancy. These women feared their fetus being diagnosed with congenital abnormalities or unexpected events occurring during pregnancy. They were aware that ultrasound scans could not prevent or treat defects but they wanted more reassurance of the well-being of their fetus. Some women reported receiving better care in a private clinic because obstetricians would see them on a monthly basis and ultrasound scans and blood tests were frequently available and at the women’s request. Thus, the women described private care as more accessible and agreeable to them, particularly as the timing of appointments was more convenient for them and they could access ultrasound assessments with modern machines on demand. For instance, some women accessed private care to confirm the findings of an anomaly ultrasound that was conducted in the public healthcare system, particularly if something was unclear. They would go directly to a private clinic to endorse the information given to them because they could not wait for their next appointment at a public clinic. Some women accessed private clinics to meet family expectations and alleviate the social pressure they undergo. These women used both public and private healthcare during the same pregnancy.
5.4. Summary

It was evident through the emergent categories in this study that women felt obliged to use professional antenatal care, either in public or private clinics. The decision the women made regarding when and from where to receive care was shaped by their sociocultural perceptions and the healthcare systems available to them. It was evident that utilising the professional care available during pregnancy was socially and culturally expected, so attendance for antenatal care was a means for women to fulfil their expectations. The responses of the women and the healthcare providers indicated that the primary focus of antenatal care was on the benefits to the fetus and the women were secondary to that. Thus, antenatal care focused predominantly on physical care, with limited attention to support and reassurance. The women in this study were ‘Navigating antenatal care’.
Chapter Six:
Perceived benefits and Value of Antenatal Care
Chapter 6: Perceived Benefits and Value of Antenatal Care

6.1. Overview

All the women in the study identified antenatal care as important, had some knowledge of the benefits and value of antenatal care in pregnancy, and understood its basic meaning, irrespective of their education level, parity, and employment. Women described the value of antenatal care based on their relationships with their fetus, family, local culture and societal environment, health professionals and the healthcare system. These relationships played a key role in shaping the women’s personal experiences, decisions to attend professional care in pregnancy, and the transition to motherhood (Thachuk, 2007). This category is composed of three sub-categories: ‘Ensuring a healthy pregnancy and a healthy fetus’; ‘Identifying risks and preventing complications’; and ‘Fulfilling social role expectations of pregnant women’. The three sub-categories are discussed below.

6.2. Ensuring a Healthy Pregnancy and a Healthy Fetus

Achieving a healthy pregnancy was the desired outcome of attending antenatal care for the women in this study. Regular attendance and being cared for by professionals was perceived to be essential for the health of these women and their fetus. The women reported feeling happy and motivated to attend their visits to know that the fetus was healthy and developing well throughout the clinical and professional assessments. They considered antenatal visits as an opportunity to obtain reassurance by ‘observing’ the fetus through ultrasound scans and listening to fetal heart sounds. These assessments helped women feel that the pregnancy was ‘real’, as Soad illustrated:

The most important benefit of... these visits are to ensure that I have a normal pregnancy and a normally growing baby. Knowing that the baby is healthy makes me feel happy about my pregnancy, and encourages me to continue my visits to the clinic regularly so that I can see my baby in the scan and hear his heart sound. [PW1: Soad]

Some women perceived antenatal care as being important for their health and that of the fetus and accepted it without questioning its specific benefits. Thus, they were not able to articulate the value of these visits because they had not thought too deeply about them. Therefore, the women attended their appointments to safeguard their health as part of developing the mother role without being aware of their real value. Zainab and Maryam’s narratives illustrate this:
Healthcare in pregnancy is important for the health of my baby... It is important for my health and the health of my baby, what to say.... [Paused, and thinking for a while] ... I attend the clinic only to ensure that I am healthy and so on. [PW4: Zainab]

There are many benefits for these visits. [Paused] ... I cannot remember the other benefits. I feel that these visits were essential to ensure that my baby is healthy, and to know also about my health during pregnancy. [PW9: Maryam]

The women in this study had different expectations of their antenatal care that they hoped to fulfil through their visits. They perceived antenatal physical assessment and obtaining information about pregnancy care and screening for high-risk conditions such as gestational diabetes mellitus as important, as Khlood explained:

Pregnancy care is important to ensure the safety of the mother and the baby and also to implement some preventive procedure such as measuring blood glucose level, receiving important information... To make sure that you have a healthy and safe pregnancy you should go for follow-up visits in the clinic instead of doing nothing. [PW5: Khlood]

Some women perceived antenatal care as an opportunity to understand what was happening to the fetus and learn about pregnancy-specific issues, such as things to do and avoid. It was also evident that a religious dimension had contributed to the way the women formed their perceptions of the value of the clinical assessments in the estimation of the well-being of the fetus. Warda indicated that Allah had a higher power of control in everything and the plan that Allah made for the pregnancy and the fetus could not be changed with the uptake of antenatal care:

Healthcare in pregnancy is important to learn about the things that are appropriate and do not harm the baby, I mean they regularly monitor the health of the woman and her baby... I feel that it is essential, so the women can be assured and listen to what they will say if anything wrong occurred, no one knows Glory be to Allah and everything is in Allah’s hand. [PW10: Warda]

Similarly, some women viewed antenatal care as an opportunity to receive information and support through the various stages of pregnancy. Women viewed their pregnancy as a time of great change, which contributed to the fear and stresses that they experienced during this period. It was also apparent that these women attended antenatal care appointments to cope with the changes of pregnancy and alleviate their fears and worries. Therefore, the women perceived physical aspects of antenatal care reassuring because they were a means of finding out about the progress of the pregnancy. Hajer explained this idea as follows:
Healthcare in pregnancy is important for providing information to the mother in everything that she goes through during pregnancy, whether these were difficulties or pregnancy vaccination... and to ensure that the pregnancy does not affect the health of women. The women attend the clinic to ensure that they are healthy, and to monitor blood pressure and blood sugar level regularly. [PW11: Hajer]

The responses of the women also demonstrated an emphasis on physical assessment because the focus of many visits was on completing physical care, rather than exchanging information. See Aza’s explanation for an illustration of this:

*I had a visit to the pregnancy clinic to measure my weight, blood pressure and the heartbeat of the baby... For example; some women do not feel the movement of their babies in some days, so this increases their worries. Therefore, during their visits to the pregnancy clinic, they can ensure if their babies are healthy by doing scans for the babies’ heart, lung and so on.* [PW14: Aza]

6.3. Identifying Risks and Preventing Complications

Most women in the study perceived antenatal care as important because they felt vulnerable to risks and they valued alleviation of their fears. The responses of some women indicated that they were aware that there was always a possibility of developing complications at any time during pregnancy. These women understood that they were at risk of developing complications as they proceeded through the series of clinical assessments they had during their appointments, such as screening tests for anaemia and gestational diabetes. Consequently, these women constructed their perceptions of risks based on their interactions with the healthcare system and the physical care they received during their appointments. It appeared that knowing somebody with a high-risk condition and hearing their stories contributed to the women’s perceptions of risks and complications, e.g., diabetes and hypertension, as Khlood illustrated:

*Healthcare in pregnancy is important to avoid risks... to know if the woman has high sugar or high blood pressure because these conditions may cause many problems for the baby as well. Women may have the problem of blood clotting that may lead to the death of their baby. I know some cases, and they are my friends or our neighbours who have such cases with no causes identified.* [PW5: Khlood]

Almost all the women considered antenatal care as essential for them during pregnancy, but a few of them considered it more important for women with high-risk factors. This indicated that these women understood that those women were more vulnerable to developing complications (Hatherall et al., 2016). The women also considered the MoH, as the overall healthcare initiator and monitoring body, as being more knowledgeable about their needs and possible risks and complications during pregnancy than they are. Hence, these women rationalised that antenatal care was offered free of charge to encourage uptake. Consequently, these women surmised that, if antenatal care was not important, it
would not be offered free of charge, so they accepted it without thinking of its real benefits. Free healthcare in pregnancy is offered to enhance attendance and improve pregnancy outcomes, but some women perceived it as another obligation, as Jameela illustrated:

*I might not have high blood pressure or any other problems, but there are other women for sure they have problems and should attend care early in pregnancy. I mean if there are no problems or needs for the pregnancy care, they will not make it available for free. They do not charge us any money, so certainly, they know that this is important.* [PW13: Jameela]

Other women expressed their views that each pregnancy could bring different experiences. This indicated that they were aware of the possibility of developing complications at any time during pregnancy, even if they did not have any history of such conditions. The women considered making decisions during their current pregnancy based on previous experiences to be unrealistic, as each pregnancy might be different. For example, Zahra had a low-risk pregnancy and her previous pregnancy resulted in a healthy child, but her fear of being diagnosed with gestational diabetes was evident throughout the interview:

*After the sugar test, if there is any abnormality, they usually call us the next day, but if everything is all right, they will not contact us. They ask a woman with high blood sugar to revisit the health centre to follow-up visits to monitor and regulate her blood sugar level until the end of her pregnancy. We should not judge our care of the current pregnancy based on our previous experiences.* [PW2: Zahra]

Some women (such as Soad below) considered history taking during the booking visit important to identify any risks and initiate a plan of care for future visits. For example, many women had a fear of developing gestational diabetes mellitus and understood the purpose of the oral glucose test in screening for it and the timing to have it done. The previous antenatal guidelines recommended screening women with no risk of gestational diabetes at 22-24 weeks of gestation (MoH, 2010). However, the new screening guidelines for gestational diabetes recommend screening all women at the booking visit. If the result indicates a low risk of diabetes mellitus, women should repeat the test at 22-24 weeks of gestation (MoH, 2016). To illustrate this,

*The nurse at the clinic asked me many questions about my health history and family history of any diseases. Therefore, if I have any previous medical history, they could plan what should be done for me. For example, I have no family history of diabetes, so my appointment for an oral glucose test was made later in pregnancy, and the nurses told me that if I had a family history of diabetes, the test would have been done as soon as possible.* [PW1: Soad]

Many women were worried about fetal abnormalities and attended an antenatal care clinic to receive answers to their questions and alleviate their worries. The women identified receiving information about the well-being of the fetus and listening to the fetal heart
sounds as reassuring and contributed to alleviating the fears they had. See Omaima’s comment:

_...I am especially worried about the baby, I do not know how he appears, how his health is...if he has normal weight or not, if he is healthy or not, if he has abnormalities or not...so they reassure us...The important thing is the baby...he is inside and I do not know what he has and what he has not. So I would like to know about his health, weight, heartbeat, and presentation._ [PW12: Omaima]

Receiving free iron and folic acid supplements to prevent maternal anaemia was seen as another reason to attend antenatal appointments and the supplements were accepted without question. It was also indicated that offering the supplements free of charge encouraged utilisation of antenatal care, such as for Sara below:

_The visits to the pregnancy clinic are important to get supplements to prevent anaemia. They are also important for the nurses to assess us, so it is better to go._ [PW15: Sara]

### 6.4. Fulfilling Social Role Expectations

Regular attendance for antenatal visits was recognised by the women in the study as part of an expectant mother’s obligations to protect and care for the fetus. It was evident that these women were trying to be responsible towards themselves and their fetus. The women perceived regular attendance at the clinic as taking care of themselves and the fetus, so, when they received care, the fetus also received it. Attending the clinic as recommended, listening to the advice of professionals, and receiving physical care was considered part of the women’s obligations in pregnancy, as Thuryia explained:

_The babies are precious to us. They need better care from us because we can offer only education and health for them as a parent, so the future generations need good care, and I need good care because I do not know what is happening inside. Thus, we have to go, and we have to see what nurses are telling to us so that we have to follow, we have to see the doctors, we have to go for follow-up visits for the scan, and we have to check our weight, blood pressure._ [PW3: Thuryia]

Some women described the fear of developing risks and complications associated with non-attendance to the appointments as another reason for visiting the clinic. Consequently, feeling guilty when a problem occurred would be avoided by attending the antenatal care. Thus, the women perceived attendance at antenatal care important to stay healthy, prevent risks and complications, and avoid feeling guilty for not being responsible. Zainab explains this idea below:

_Not attending to my visits during pregnancy will affect me negatively and if I ignore these visits, they will have more negative effects on my baby and me... moreover, I will not feel good if anything happens to the baby...If I do not come to the visits and I ignore them, I might have for example a high blood sugar level, and I do not know..._
that, but by coming to the clinic, I will know if my blood sugar normal or not.

[PW4: Zainab]

The women perceived regular attendance as a social and cultural expectation, as healthcare providers would identify any risks to them and their fetus. These women viewed regular attendance for antenatal care as a means of alleviating the social and cultural pressures they experienced. Therefore, the women could not be held responsible if anything unexpected happened to the fetus. The women were expected to be responsible for the safety of the pregnancy by taking care of themselves and their fetus. Thus, they might otherwise be blamed for not being responsible for attending healthcare by family and society, as illustrated by Warda:

*I feel it is essential...I mean no one knows Glory be to Allah if anything happened to the unborn baby or anything so the nurses will be familiar with that and the mother will be free of responsibility because she is going to the visits. Therefore, the healthcare providers are responsible for seeing if the baby is OK or not.*

[PW10: Warda]

6.5. Summary

This chapter explored the perceived benefits and values of antenatal care and demonstrated that women felt obliged to attend antenatal care as a way of demonstrating their responsibilities as pregnant women. It was evident that the women constructed their perceptions of the value of antenatal care based on individual, social and cultural factors. Ensuring optimal pregnancy outcome was the primary value of regular attendance for antenatal care. The women perceived antenatal care visits as important to alleviate the fear of developing risks and complications and to fulfil the social role expectations of a pregnant woman. The women considered physical care by professionals and hearing that the progress of the pregnancy and the fetus was normal as a source of reassurance. Pregnancy is a time of great changes, which was another source of fear and stress to some women, as these changes were confused with high risks and complications. This confusion resulted from a lack of exchange of information with women about the anticipated physiological and psychological changes in pregnancy. The women attended antenatal care appointments to cope with the changes of pregnancy and to alleviate their fears and worries.
Chapter Seven:
Timing of the First Antenatal Visit
Chapter 7: Timing of the First Antenatal Visit

7.1. Overview

This chapter explores the views of women and healthcare providers and their perceptions of the importance of early engagement with antenatal care in the first trimester and the rationale for late booking. It also provides information on strategies adopted by healthcare providers to manage late booking after the first trimester of a pregnancy.

7.2. Perceptions of the Value of Early Booking for Antenatal Care

Some of the women participating in this study considered commencement of visits in the first trimester or as soon as pregnancy was confirmed, important for timely identification and prompt management of risk factors. Therefore, they attended early in the first trimester because they believed that preventing complications was easier if these were detected at the beginning of their pregnancy. However, they considered early booking more important for women with high-risk factors, as they could access prompt management of complications if necessary. Early booking was perceived as important but not urgent for women with low-risk pregnancies, as Zahra illustrates:

*I supposed to start my follow-up visits from the beginning of the pregnancy...in the second or third month to avoid problems such as congenital malformation and diseases. If a woman attends late with many problems such as high blood pressure or high blood sugar during pregnancy or low-lying placenta, then she may need surgery. A woman with high-risk pregnancy should start visiting the clinic...as soon as she can, because each pregnancy is different.* [PW2: Zahra]

The responses of the women indicated that early attendance was important for the management of minor disorders, such as nausea and vomiting. As Warda explained:

*Once the woman knows that she is pregnant she should visit the clinic to book her pregnancy...Because she has to know the important things, for example, to see the baby, even I mean nausea and vomiting cause tiredness and discomfort to the woman, so they can give her tablets to alleviate that. She can find out her haemoglobin and blood sugar level.* [PW10: Warda]

Although women perceived early booking as important, almost half of them commenced their first antenatal care visit late.

7.3. Perceptions of Late Attendance for Public Antenatal Care

Both women and healthcare providers described many contributing factors to a late booking after 12 weeks of gestation. Personal, sociocultural and healthcare system factors contributed to women’s decisions regarding when to commence their first antenatal care visit. All the healthcare providers perceived late booking as an issue, e.g., Zwaina...
considered that educated women did not attend early as they knew about the pregnancy and what to expect:

*My views are that attendance is late especially for educated people, not illiterate people or less educated, the educated people are coming later to the clinic...Even medical professionals are coming very late for the booking visit; they are attending later than other women because they feel that they know.* [HCP3: Zwaina]

During observations in a health centre, one woman, who was a nurse and was known to the attending midwife, entered the clinic asking for an appointment for booking. She then said: “*Please do not say anything, I know you will be angry because I am coming late*”. The midwife asked her about the first day of the last menstrual period and calculated the estimated day of delivery, then looked at her and said: “*You are now 26 weeks and four days, if a nurse was coming late for the booking visit, what about the other women who were not in the medical field?*”. The woman stated that she was planning to access a private hospital for follow-up visits in a neighbouring country, where she planned to give birth. [Field note 10]

It was evident that the woman in the above example attended the clinic only to obtain a handheld Maternal Health Record, as she might need it if she developed complications. Maternal Health Records are issued in the public antenatal clinic where the women live and should be carried at all visits to record assessments and treatments offered. The women perceived that if they did not book their pregnancy and obtain their handheld record, they would not be accepted for treatment if they developed complications. Thus, the record was considered a means to access medical care when needed across publicly funded healthcare.

Some midwives considered late booking to be more common in some areas than others, as Ahoud explained:

*Late booking in this area is common, and it is not a new thing. I came to know about this since I was in the labour room, so at that time I do not know about late booking and if women are coming late or early but we face the situation really.* [HCP5: Ahoud]

One nurse manager of a health centre expressed her concerns about increasing numbers of women booking late and considered it a challenging issue to manage, although she was implementing strategies to minimise it. For example, referring women with late booking to managers for counselling about early attendance to antenatal care was one of the strategies described by Fayiza:
Most women are coming at the second trimester...then each mother with late booking should be sent to me, and the MOIC [Medical Officer in Charge] to talk. This is not punishment, but...we explain to her that it is important to come to the clinic... do an investigation, see how many weeks, and send her for the scan. The early scan is important not only to give the expected day of delivery but...to see the uterus and to see the fetus....so we can follow up if she has any problems...Sometimes mothers will come late booking at 20-22 weeks...we will talk to her, and we will spend at least 30 minutes with her. [HCP9: Fayiza]

Referral to the nurse manager or the MOIC was perceived differently by staff and the women. For instance, Sara received care in the same health centre in which Fayiza worked as a nurse manager and commented on the way that the midwife reacted angrily and blamed her for late attendance to antenatal care. She perceived this reaction to late booking as a way for healthcare professionals to protect themselves from being responsible for the increased number of women with late bookings. Sara considered the referral to the nurse manager ineffective because she had already made the decision to attend for the booking visit late:

*When I went to the clinic for the first visit, the nurse scolded me because I was late, but that is fine for me, I do not care, she said that she will be responsible about that and that her direct manager will blame her when I start my visit late. She was angry with me only for that reason, otherwise, I do not think that she cares about my health. She told me that she would refer me to the manager, but I do not care because I do not like to go to the clinic.* [PW15: Sara]

Even those women who decided to access private antenatal care felt obliged to obtain their Maternal Health Record and antenatal care number from the public clinics near their homes. These women would be asked initially to book their pregnancies in a public clinic and then they can choose to continue their follow-up visits in a private clinic. Therefore, the women initially accessed private clinics and delayed their booking visits in the public healthcare centres. This indicated that women used some aspect of care before booking their pregnancies in a public clinic, as illustrated in Maha’s response:

*The issue is that some women are going for their follow-up visits in private hospitals, so we instructed the private institutions that whenever having any women with positive pregnancy testing to send her to the health centre for booking and she can go for follow-up visits wherever she wants in private or governmental institutions. If she does not want to book in the governmental institutions, she has the right to go and book in private, but the antenatal number should be taken from the parental health centre.* [HCP10: Maha]
7.4. Factors Contributing to Late Booking

7.4.1. Personal Factors

7.4.1.1. Awareness and Acceptance of Pregnancy

Some primigravidae were unable to confirm their pregnancy because they had confusing symptoms, such as vaginal bleeding. The women considered the absence of pregnancy symptoms and delayed diagnosis contributed to late booking. However, some women, despite knowing they were pregnant, delayed their engagement with antenatal care until the second trimester. The responses of some women indicated that they linked late booking with feeling healthy and, as such, they did not need to access healthcare early in the first trimester. Warda explained this idea:

I had bleeding, and I thought that it was a monthly period; I did not know that I was pregnant. However, I know a group of women, they are late because they do not want to come to visits in the early pregnancy...they feel it is not needed in early pregnancy and it is fine not to attend...I did not expect to be pregnant because of bleeding. When she did the scan, she found that I am pregnant and not having a sac...Sometimes the women do not know that they are pregnant and they unintentionally do things that might harm the baby, which may lead to miscarriage. [PW10: Warda]

It was also evident that even multigravidae were confused with regard to recognising their pregnancy, particularly with the absence of symptoms or irregular menstruation. Therefore, seeking antenatal care was inevitably late due to the inability to confirm the pregnancy. However, Omaima confirmed her pregnancy at approximately 9 weeks but attended the clinic for the first visit at 14 weeks of gestation, suggesting the presence of other factors contributing to late booking:

I went for treatment of late and irregular monthly period to one hospital where they did for me tests, which did not confirm my pregnancy although I was pregnant...Then I did a pregnancy test at home approximately at the beginning of the third month of pregnancy, and it showed that I was pregnant...I did not feel anything indicating that I was pregnant and I did not have any symptoms. [PW12: Omaima]

In addition to unplanned pregnancy, women identified unhappiness at being pregnant as another factor for late booking. These women needed time to think about and accept their pregnancy and make the decision of when to commence antenatal care. Some women were in a state of denial and lost interest in everything; hence, they delayed their first visit until the second trimester. As Zainab suggested:
I was shocked and surprised to know that I am pregnant; I did not know that I am pregnant from the first month. I was upset at the beginning; I did not have the desire to come to the clinic or for anything. I started my first visit at five months...I felt sad and upset because I have some health problems; I have a haemorrhoid that is making me very tired and sick. Thus, I feel that this pregnancy is different...we did not plan for it, but now I accepted my pregnancy. [PW4: Zainab]

Some women reported unplanned pregnancies shortly after the birth of the previous child as a contributing factor to late booking. This meant that these women needed time to cope with the stress of a repeated pregnancy. For example, Maryam described feeling upset and unhappy at becoming pregnant unexpectedly, as she had another infant who was only eight months old; she commenced her first antenatal visit late at 17 weeks of gestation:

*I attended the pregnancy clinic late because I felt unhappy when I knew that I was pregnant as my daughter was still young. She was eight months old only when I knew that I was pregnant... so I was upset.* [PW9: Maryam]

Wafa was hesitant about discussing the matter of late booking and stated that she did not have any reason for attending late to the antenatal clinic. However, with further probing, she stated that her pregnancy was unplanned and that she felt upset in the beginning. This also indicated that not all women were ready to discuss the rationale for late booking, particularly if they did not feel comfortable with talking about it as this was more personal. For example,

*My period was about a month late, and then I did the pregnancy test at home in the second month to confirm that I was pregnant; it showed two lines, thus I knew that I was pregnant...I did not plan to get pregnant [laughed]. Thus, at the beginning, I was upset, but then I felt fine to be pregnant...however, the unplanned pregnancy was not the reason.* [PW8: Wafa]

Midwives also highlighted unhappiness due to an unplanned pregnancy as a contributing factor to late booking. For example, Ebtihal described the impact of an unplanned pregnancy on a woman’s psychological status, which could contribute to a lack of interest in early attendance for antenatal care:

*Some women do not come early to the clinic [initiate their visits] because they did not plan for the pregnancy, and they do not want to see anybody because they are unhappy about that and they feel sad.* [HCP2: Ebtihal]

7.4.2. Influence of Family and Friends

7.4.2.1. Networking with Other Women

Women heard many stories from other pregnant women that influenced their decisions regarding the timing for commencing their antenatal care. Subsequently, some women valued antenatal care but their families and friends had less confidence in it. For example, some women had a misperception that early attendance to an antenatal clinic had no value
for a ‘tiny’ fetus that did not require any care. Therefore, they advised other women to wait until completing the third month to ensure the viability of the pregnancy and that everything was normal before commencing their visits. Thus, women delayed their engagements with public antenatal care because their social contexts did not value early access to healthcare in pregnancy. This reflected other women in their families having misunderstandings and lack of knowledge of the value of antenatal care in early pregnancy. Furthermore, the responses of some women indicated that attending late for the first antenatal visit would help them bypass unnecessary visits and long waiting times. Warda explained this idea as follows:

Some women say we cannot attend the clinic in early pregnancy as this means that they will have many visits. Some of them say you do not need to go in early pregnancy because the baby is still small and wait until you complete the third month and then go. You know when you listen to others’ opinion. Some of them they have previous experiences with old pregnancy care where there were many visits, so they tell us do not go from now, no benefits for these visits in early pregnancy [laughing]...you will go for more visits if you start early, I hear this from my relatives, so I expect that these are some of the reasons. [PW10: Warda]

Similarly, having families and friends who did not strongly value early professional care contributed to the recurrence of late booking. Some women reported that their friends and colleagues commenced their antenatal visits late and did not have any problems in their pregnancies, so they decided to do the same. Aza’s and Jameela’s quotations explain this idea:

I usually start my first visit at the beginning or in the middle of the fourth month in the past…but for me, my husband’s family telling me that there is no benefit of early visits, and advised me not to go early to register my pregnancy as this will result in attending more appointments, the clinic is overcrowded so better to do shortcut and go from fourth or fifth month. [PW14: Aza]

Even my colleagues at work they do not go from the beginning, and they did not have any problems, so I thought it was all right to go later in pregnancy. [PW13: Jameela]

7.4.2.2. Keeping Pregnancy Secret

Health professionals reported (see below) that some women registered late because they wished to delay making the pregnancy public and avoid colleagues at work gossiping about them. There was an assumption that women delayed their booking visits because they felt shy and attempted to avoid criticism for becoming pregnant within a short time after birth. Employed women presumed that they would place more pressure on their colleagues at work because of the arrangements and the distribution of commitments to have time off to visit the antenatal clinic. Therefore, they preferred to keep their
pregnancies secret and to commence their antenatal care late in the public clinics. This did not mean that the women did not receive any care during the first trimester, however, because they accessed private clinics initially as appointments were available in the evening to avoid asking for time off work. For example as a midwife Ebtihal illustrated:

_Sometimes the healthcare worker women _[women working in healthcare_] do not come in early pregnancy to the clinic because they feel shy to come if they did not have appropriate spacing between pregnancies... because they are afraid of their colleagues...they will start talking about them, so they prefer to go private. They will come by the second trimester as everyone will know that they are pregnant and cannot hide due to the prominent abdomen._ [HCP2: Ebtihal]

According to these midwives, women wanted to conceal their pregnancies from other female relatives, neighbours and co-workers. Therefore, women would be living in the same house or employed in the same place but their pregnancies were kept secret from others. Ahoud’s responses indicated that sociocultural beliefs contributed to late booking:

*I was completing the booking for a teacher, then her manager came [the headmaster of the same school] and said “Are you pregnant?” The woman said “Yes, I am now eight months”...She is her school manager but does not know if her school teachers are pregnant or not, and the manager was also pregnant...Also, maybe they [women] will be neighbours...so she will come [to the clinic]and see her neighbour who will know that the woman is pregnant... the woman [attends the clinic] only to confirm that she is pregnant, then she will not come, we give appointment...This area like this...they will come 24-25 weeks._ [HCP5: Ahoud]

Some families preferred to conceal a pregnancy until the fetus was more viable because they believed that women are more vulnerable to curses caused by ‘evil eye’ superstitions of other women. It was apparent that exposure to the ‘evil eye’ was considered one of the risks in pregnancy and was believed to be caused by jealous or envious people in the family, society or at work (Kilshaw et al., 2016). It is believed, therefore, that to prevent bringing misfortune to the pregnancy and the fetus, women should avoid making the pregnancy public by delaying their engagement with antenatal care. Subsequently, family and social beliefs in the possibility of the ‘evil eye’, particularly in disclosing news in early pregnancy, harming the fetus contributed to a late booking, as Maha’s excerpt suggests:

_There is an issue with the community where the grandmothers and mothers believed in evil eyes...you know our community...they will say do not go to do booking because they [people] will know that you are pregnant... no, you have to be quiet for first months and then when the pregnancy is confirmed, then you go. You know the staff in the health centre, the midwife could be from the same community...it is there in our community this is something that we cannot neglect._ [HCP10: Maha]
7.4.3. Social Factors

7.4.3.1. Employment Demands

Employment demands appeared to contribute to delayed access to antenatal care in early pregnancy, especially for women employed in neighbouring governorates, who wanted to attend for visits in the public health centres near their home. Some women reported that their work commitments contributed to their late booking because of issues with taking time off. However, those women working some distance away from their local health centres were allowed to access antenatal care at the health centre nearest their workplace. Nonetheless, these women preferred to have a day off from work to attend their antenatal care appointments in the health centre near to their home, as Omaima explained:

*The work commitments did not allow me to come here during the working hours so I accessed the clinic at the beginning of the school holiday on second of June, and I had my booking visit here in the polyclinic... I work in Al Dakhilia Governorate, but I prefer to come for follow-up visits in this polyclinic, I should take a day off to come to this health centre for follow-up visits.* [PW12: Omaima]

Some employed woman expressed their frustration with the complicated time-off process required to attend the clinic, which contributed to delaying their engagement with antenatal care. The women indicated that if their workplace was near a health centre, they would only be eligible for time off to attend their visits and were expected to return to work after their appointments. These women preferred to have a day off so that, once they had finished their visits, they could go home rather than returning to work. It was apparent that the women carefully considered the advantages and disadvantages of antenatal care in terms of their personal and employment commitments to determine the most convenient time to commence the first visit. As Jameela illustrated:

*We have a duty, and the sick leave system became complicated. I work in another city, so if I come here for an appointment, it would be hard to return to the school so I must have sick leave on that day. Sometimes the doctor does not write sick leave and will only give attendance form, so I must return to school. Thus, I did not commence my visits early in the first three months during this pregnancy... I attend late due to work pressure.* [PW13: Jameela]

Many midwives commented on the inconsistency that employed women reported regarding time or days off to attend their appointments. They confirmed that employed women working away from the health centre where they lived would be entitled to one day off, whereas women working near a health centre would only be permitted time off for the duration of the appointment. However, eligibility for time off or a day off would be determined by the obstetrician. The responses of some midwives indicated that women’s motivation for an early booking of pregnancy was low because, if they perceived early
attendance to antenatal care as important, they would attend early. This was explained by Zwaina, one of the midwives:

*When we ask the women, they say they will not get [time/day] off from duty...we tell them that we will give an attendance sheet when they come for their visits...those working in another governorate, the doctors are giving sick leave for them on the day of their visits. There is an issue here because they come late although we give attendance sheets and doctors are providing sick leave...so if the woman wanted to come, surely she would come.* [HCP3: Zwaina]

**7.4.3.2. Limited Access to a Car**

Some women did not drive and depended on relatives to take them to the health centres for appointments. It was evident that the limited access to transport in the morning for women who did not drive contributed to late attendances and missing appointments. These women attended their appointments based on the time convenient to their relatives, as Warda illustrates:

*There is a problem with transportation, who is going to take me and bring me back. Those having a driving licence, they do not have a problem, but those not having a licence have a problem. Today, I was late because my husband came late. Thus, I did not come exactly at 07:30.* [PW10: Warda]

The midwives confirmed that the unavailability of transport for women who did not drive contributed to late booking. Women found it difficult to attend their appointments due to a lack of public transport:

*Most of them said that they come late because they are from different areas and they do not have a car. Here no public transportation, so they have to approach husband or brothers to bring them to the health centre who are having duty [their relatives are employed in the morning] so their plan should be according to their plan.* [HCP3: Zwaina]

**7.4.4. Healthcare System Factors**

**7.4.4.1. Poor Experiences of Care in a Previous Pregnancy**

Women who had poor experiences in previous pregnancies were ambivalent about early access to healthcare in subsequent pregnancies. The women reported losing motivation and interest in early attendance because their previous antenatal care did not fulfil their needs or expectations. For example, Khlood identified her previous experiences with antenatal care as unsatisfactory, which contributed to late booking in the current pregnancy, even in the presence of a supportive family:

*I started my first visit in the fifth month, approximately 22-24 weeks because my husband pushed me to go. He told me you do not know what will happen, go to the clinic and get the Green Card [case notes]. If my husband did not insist, I was not planning to attend from the beginning of my pregnancy because during my previous pregnancy I did not receive good care.* [PW5: Khlood]
Several women reported that they commenced their antenatal care late because they felt frustrated with the long waiting times, disrespectful care, and poor communication they encountered in their previous pregnancies. The following example from Sara explains this:

> It is due to long waiting; I hate hospitals, you cannot imagine how I feel when I get up in the morning, and I know that I will go and wait for hours, but I have to go so that they can follow up with my health status and write in my card...When somebody mentions hospital I feel sick due to waiting for a long time...I told the nurses that the reasons for going late are bad communication by the healthcare providers and waiting for a long time. [PW15: Sara]

The issue of late booking as a consequence of previous negative experiences with long waiting times was also confirmed during the observations conducted in this study. According to her Maternal Health Record, Badryia commenced her antenatal care late in the second trimester at 17 weeks of gestation. I asked her permission to look at the timing of the first visit and she stated that she also booked late in previous pregnancies because she was unhappy with waiting for a long time at the clinic. This woman booked her pregnancy late, at the end of the sixth month in her previous pregnancy, as she was dissatisfied with long waits. [Field note 8]

### 7.4.4.2. Receiving Initial Care in a Private Clinic

Some women accessed private healthcare early in pregnancy because it was more convenient and accessible to them. Therefore, they attended late to public healthcare. These women believed in antenatal care but, to avoid delays in care and long waiting times, they preferred to commence their care in a private clinic. Therefore, these women were considered as a ‘late booking’ in the public clinics, although they had their initial assessments in private clinics. The supplementary use of private healthcare is discussed in depth in [chapter 10](#).

### 7.5. Summary

Many interrelated factors were found to contribute to a late booking visit. It was evident from interviewing women and healthcare providers that the women valued antenatal care, even in early pregnancy. However, they booked late for their pregnancy due to personal, family, social, and healthcare system factors. It appeared that employment demands and complicated time-off processes contributed to late booking. Furthermore, it appeared from the data that family, friends and social network systems influenced the decision the women made about the appropriate time to commence antenatal care. Some women booked their pregnancy late because they wanted to keep it a secret until it was more viable and evident to the public. Limited access to transport was another reason that led to a late booking, as
some women did not drive. Thus, women preferred to commence their initial visits to private healthcare centres because it was easier and more convenient for them than visiting publicly funded clinics.
Chapter Eight:
Woman-Carer Interactions during Antenatal Care
Chapter 8: Woman-Carer Interactions during Antenatal Care

8.1. Overview

The women who participated in this study shared examples and situations that reflected their positive and negative experiences of interactions with healthcare professionals. The women received antenatal care from different healthcare providers, so reported feeling more comfortable with some of them but not with others. Furthermore, women who were referred to another health centre felt unhappy receiving care in a new environment and from unknown professionals.

8.2. Respect during the Women’s Appointments

Receiving similar treatment to other women during antenatal care had a positive impact on the women’s experiences. The same treatment was described here by women as receiving care that was consistent with other women attending the clinic. Some women identified feeling welcomed, receiving information and the same treatment as other women as facilitating factors for regular attendance for future appointments, as suggested by Soad:

*I liked the way the nurses welcomed me...They completed the booking of my pregnancy, provided me with the handheld card with the registration number, collected a blood sample for investigations, gave me a tetanus injection, and informed me about my next appointment. They do not discriminate among women, and treat us fairly, which motivates us to attend the follow-up visits.* [PW1: Soad]

For some women, the same treatment meant receiving medical care based on their arrival times because waiting for a long time was an issue for them. Therefore, women would not feel respected if their consultations were delayed because of prioritising other women who had arrived later than they had for their session. The women considered that to be unequal and unfair treatment, as reported by Zahra:

*You are treated equally like other women but the problem with numbers of women attending the clinic. Each woman is waiting for her turn; the nurses cannot ask one woman to go before those coming earlier than her; the other women will not feel happy about it if this happened.* [PW2: Zahra]

During all the observations at the five public health centres, the staff called the women for their consultations based on their arrival times, to avoid upsetting the other women. The women entered the clinic, submitted their handheld records to the staff and then waited for their consultations, without any assessment of their condition. The midwives explained to the women attending for glucose tests that they would have priority to complete the test because they were fasting. It was apparent that women waiting for their antenatal care were familiar with this kind of arrangement and did not complain about it.
Some women described their healthcare providers as diligent, honest and responsible in dealing with them when they spent adequate time to address their worries, explained the findings of clinical assessments to them, and showed an interest in supporting them, as Khlood illustrates:

_The doctor explained to me everything about my baby... I have a cyst on my ovary, and I did not tell the doctor, but she checked everything through the scan, and assessed the cyst and its size...I felt that she was sincere in her work. She spent about half an hour to do the scan to confirm my pregnancy, and see the baby as she was honest, asked me questions...she was responsible. [PW5: Khlood]_

However, waiting for a long time resulted in stress for both the women and the healthcare providers and often contributed to disrespectful communication from both sides. Women felt tired due to long waiting periods, while staff were working at speed and continuously without breaks to attend to all the women within the allotted time, as reported by Sara:

_We women waited for hours, and all are complaining from sitting. At the same time, the nurse is shouting if we knock on the door. We tell her to finish because we are waiting from the morning. She shouted at us and said: I am also distressed because of the big number...They shout so much at the mothers and deal with women inappropriately. For example, they shout and say go out you disturb us and do not knock the door every time, let us finish our work. [PW15: Sara]_

Some midwives stated that they were busy completing the physical care, rather than talking with the women and providing them with needed support and information due to the overcrowded clinic. Many midwives confirmed that some women refused referral to the polyclinic due to overcrowding and disrespectful communication. As Asma stated:

_The women do not want to go to the polyclinic because they are comfortable with the care they received at the health centre. Although they know the people in the polyclinic, they say that they are not talking to them nicely; the staff sometimes are angry which affect the women’s feelings. The women say why these staff are angry and not talking and not explaining to me. Because the polyclinic is busy, so this may happen sometimes. They are not talking; they will be writing on the card, and then they say you can go. [HCP1: Asma]_

Some midwives also expressed their frustration with the organisation and environment of care, which they believed had negative impacts on their communication with the women. Jana reported feeling overwhelmed by a busy clinic and frequent interruptions from other women and considered this a major factor in disrespectful verbal communication:

_We want really to give the women what they want, but we do not have all that facilities, we communicate in a good way with them...but sometimes due to stress and interruption in the clinic...the communication will not be that much. So, if we are not tired and we are comfortable, we will give better. [HCP8: Jana]_

It was evident that some women felt disrespected when their healthcare providers performed their physical care and assessment quickly without explaining to them and did
not show an interest in providing care. Some women considered communication as disrespectful if the healthcare provider failed to maintain eye contact and did not answer the questions they asked. It was obvious that having an anomaly ultrasound scan was stressful for the women. Therefore, these women wanted to have a chance to observe the screen while receiving explanations of what they observed and needed time to ask questions and receive answers. Khlood questioned the reasons for being ignored and not respected during her consultation. This indicated that the doctor focused on completing the tasks more than the needs of the women, which undermined their self-esteem. Therefore, Khlood preferred to keep quiet and lost interest in asking questions:

The doctor was...talking slowly and did not look at my face and continued writing. I felt like I was sick, I do not know why? Maybe it was early morning. Then she said: lie down on the bed with a low voice, I told myself she is saying something on the bed. I waited to hear again from her. Then she yelled at me and said: lie down on the bed, loudly; I lay down on the bed. She completed the scan within two or three minutes. Even the screen was in the opposite direction to me, and I did not see the screen. She said we are done, and everything is normal. When I talked to her, I did not hear her reply. Thus, I was not interested in asking her any questions. [PW5: Khlood]

Some women did not blame the healthcare providers because they knew that the clinic was overcrowded and the staff were working under pressure. The responses of some women indicated that some healthcare providers did not demonstrate professional behaviour during their appointments; they became angry and shouted at the women if they asked questions. Thus, the women avoided asking questions and tried to behave in a way to please the healthcare provider. The women avoided asking questions of the healthcare providers because they felt that the environment was not conducive to respectful care and communication, as Saleima explained:

Sometimes, when the clinic is overcrowded, the nurses work under pressure and they get angry at the women entering the room, so if we ask questions they will be angry...I know how to deal with the nurses in the clinic, for example, we should not go late, and we should only enter the clinic when they call us...They deal with me in the way that I deal with them...I do not blame them because the clinic is busy, they have so much work, and are forced to talk loudly. [PW6: Saleima]

Hearing the midwives raising their voice and shouting distanced the women from them. Therefore, women developed avoidance behaviour to evade creating problems and hearing unpleasant statements and often left the clinic with unanswered questions and unmet needs, as Warda’s account demonstrates:

One time I was referred to the polyclinic for the anomaly scan. I am new, and I do not know these things, once I entered the area, the nurse came yelling at those coming late so what is my fault. When I entered the waiting area, I found lots of women waiting. If they deal with us in a good way, it is all right, we will wait but
shout at women, so naturally, you will say I will not go and ask that nurse to avoid hearing any bad words. [PW10: Warda]

Some care providers acknowledged that disrespectful communication was caused by a lack of firm rules to regulate the flow of the clinic and limited explanations about the appointment system. They considered women who were unable to attend their visits and arrived on other days without appointments as a cause of disrespectful communication. Some women insisted on completing their visits without appointments and, if they were not accepted, they would start raising their voice and shouting at the midwives and then reported to the administration in writing. Ashwaq’s excerpt explains this.

*Communication may still be having a problem; I do not know where the problem is? From the public or our healthcare providers….we have one or two issues written by husbands of pregnant ladies…related to the communication and the problem was from the women because they came and missed their appointment and they start to talk with a midwife in a bad way, so there was a misunderstanding between both of them.* [HCP7: Ashwaq]

While conducting observations in the five health centres, I did not observe any disrespectful treatment, even when the clinics were overcrowded. This might be due to different staff being available in the clinic during the observations or the observations taking place on good days. Moreover, the staff may have avoided raising their voices and being angry at women due to my presence in the clinic. Furthermore, the women might have been oversensitive and misunderstood the staff or the care providers used to talk loudly in a crowd clinic so that all the women could hear the message. The observations took place on different days of the week, at different times during the clinic working hours, and included many healthcare providers. [Observation field notes]

8.3. **Support and Attention to Women’s Needs**

The responses of some women demonstrated the importance of receiving care from helpful and kind staff in motivating them to attend. The women expressed feeling comfortable receiving care from a healthcare provider who was helpful to them, as Thuryia illustrates:

*I am so comfortable with the care and the staff; they are so cooperative and supportive...The way the staff in the health centre deal with me, makes me motivated to attend regularly to the visits.* [PW3: Thuryia]

Several women interpreted caring and support during their appointments through the way in which their healthcare providers communicated with them during their appointments. It was apparent that women who booked late needed more attention and time for support. For instance, the support Zainab received during her booking visit increased her trust in the midwives and she then considered them as advocates:
I came late for the booking visit, but the nurses booked my pregnancy on the same day...and did not tell me to come on another day for the booking visit...I was upset, sad and crying, they asked me why am I coming late, and I told them the reason, and they did their best to help me. [PW4: Zainab]

Primigravidae often heard stories from other women in their families and communities about antenatal care and the behaviour of the healthcare providers. Therefore, they attended the clinic with preconceptions and expectations of the care and treatment they would receive. However, having a positive experience during the appointments helped the women to change their negative preconceptions. The sense of caring and the attention the women experienced during their visits also encouraged them to attend regularly for subsequent antenatal visits, as Huda stated:

I did not expect the first visit that way; I heard from others that the nurses are tough and strict, but when I came they were different than what I heard. I felt that they care and support us...which makes us responsible for regular attendance to the clinic. [PW7: Huda]

Providing guidance and direction on a plan of care positively influenced women’s experiences during their appointments. The women identified obtaining detailed explanations as essential in managing many issues. Welcoming women in a friendly manner and understanding the plan of care helped them to express issues and concerns during their appointments, as illustrated by Warda:

They do not make you feel like a patient who burdens them, they welcome us and say: hi, how do you feel today, do you have any problems? This woman will come first, and you will be next, it might be crowded but wait. We feel supported when the nurses deal with us in a good way...guide us step by step. [PW10: Warda]

Having adequate time for consultation was also important to encourage the expression of issues and for the women to ask questions they had about their pregnancies and antenatal care. However, women reported that healthcare providers varied in ensuring them adequate time to ask questions and clarify their doubts. According to Omaima,

Not all the nurses, some of the nurses have patience and work with peace of mind so whatever question I ask, they will answer it. [PW12: Omaima]

Some midwives in this study identified support and reassurance during women’s appointments as important. Many midwives had personal experiences of pregnancy and antenatal care. Therefore, the midwives were familiar with some of the situations the women had undergone to attend their antenatal visits. For example, some women had family commitments, young children at home who needed care, employment demands, and did not have access to a car in the morning. Considering the women’s circumstances helped in the development of the woman-carer relationship and motivated women to attend
regularly for future visits. Zwaina, a midwife, expressed her views on the importance of appreciating the efforts the women made to attend their visits. The midwives considered making a reminder phone call to women and their husbands to inquire about reasons for not attending their appointments as a mean to convey a message that the healthcare providers care about them.

*I went to a private hospital, and they told we could not accept you today, I told them I have duty today, and I left children alone at home. The women will have the same feeling when we do not accept them...We really want to accept them but...we cannot because we are maybe too busy...We encourage women...we tell them this is nice you are a good mother and planning to provide them with a simple gift...to make them feel that we are happy because of their regular attendance...We call those who are not coming for their appointments...They feel happy because we support them and we care for them.* [HCP3: Zwaina]

Another healthcare provider considered showing empathy and being considerate to the women’s circumstances essential for fulfilling the psychological and emotional needs of the women. Considering women’s fears and worries and providing them with the needed support and care conveyed a meaningful message to them: that their care providers were caring for them. Amani stated:

*Some women will come worried that somebody in another private [hospital] told them that the baby has abnormalities so if they need the second opinion I feel bad not to accept them on the same day.* [HCP6: Amani]

Conversely, some women reported feeling less motivated in attending their appointments because the healthcare providers were inconsiderate and inconsistent in dealing with them, as Soad explained:

*Doctors are not always treating us in the same way. It is different from one doctor to another. When I was referred to the doctor, I felt that some of them are moody and they have different ideas. Sometimes I avoid going to doctors.* [PW1: Soad]

Sometimes, women made judgements based on what they observed and heard of the interactions between other women and healthcare providers, even if they were not directly involved. Saleima’s excerpt reflects this:

*This happened in front of me. A woman wanted to enter before the other woman because she had some circumstances, and we told the nurse that this was fine with us, but the nurse refused. I feel that the nurse should consider the women’s circumstances and accept them if they have a reasonable excuse. The nurse told the woman that she should wait for her turn or she can go for treatment in another place.* [PW6: Saleima]

Sometimes, women generalised their opinions from one situation they encountered from a healthcare provider who failed to fulfil their need for support. For example, Hajer was worried about fetal growth and the midwife did not answer her questions, so Hajer left the
clinic with doubts. Thus, she attempted to find an answer to her doubts by trying to see an obstetrician, who refused to accept her without an appointment. Subsequently, Hajer became angry because she felt that the obstetrician was inconsiderate to her need for support. Thus, providing adequate explanations and answering women’s questions about the progress of their pregnancy before leaving the clinic would prevent exposing women to such situations.

I wanted to ensure that the weight of the baby is normal and the nurse did not refer me...she said that we could confirm the baby’s weight by the ninth month. I went to the doctor and she refused to see me. She was sitting and talking with another doctor in the waiting area so what is she going to lose if in five minutes she saw the baby’s weight?...the pregnant woman sometimes goes to the doctor because she is worried...so their cooperation is important...I returned home upset. [PW1: Hajer]

8.4. Relationship and Rapport

Many women in this study considered continuity of carer and good relationships with their healthcare providers important for them to attend regularly to antenatal care appointments. It was evident that feeling welcomed and known to the healthcare providers enhanced women’s perceptions of care because of the relationship they had together. Thuryia’s comment illustrates this:

If today I am going one sister will be in the booking room maybe the same sister the second day will be checking glucose but they know us even from the first visit, and they are saying: Hi sister, how are you? Also, they are handing you to another sister, so I feel this is comfortable. [PW3: Thuryia]

Those women who had optimal relationships with their care providers felt motivated to attend their subsequent visits to meet them and express their issues and concerns to them. Being known to the healthcare providers increased women’s self-esteem and confidence to talk and ask questions, as Hajer stated:

I feel psychologically comfortable...especially with the pregnancy follow-up visits; I like to go to the clinic to meet that nurse and talk with her because she is like my sister, and she is excellent. [PW11: Hajer]

Some healthcare providers considered a positive relationship with women important to enhance the trust between them, encourage cooperation, and accept care. Furthermore, in the presence of trust and rapport, the women considered each healthcare provider as a focal person to refer to when they had any problems or concerns, as Asma illustrates:

When the women come to the clinic, and they do not see any of us, they asked where your colleague is and why she is not coming. When they know the staff, they feel more comfortable...they depend on us, and they want our opinion on many things during their pregnancies, or if they have any problems, they will ask us. [HCP1: Asma]
Some healthcare providers considered establishing a good relationship with women essential to facilitate discussion of sensitive personal issues. They also highlighted the importance of receiving care from the same midwives throughout a pregnancy to strengthen the woman-carer relationship. However, the healthcare providers identified lack of continuity of carer as a contributing factor that hindered the exchange of personal information between women and midwives, as shown by Fayiza’s account:

*The trust…it will be developed, maybe some of the mothers they have some secret, not all mothers are open, and they can tell everything for the midwife, you know some of the mothers are waiting for this appointment to come to meet with the midwife and to explain what she is having. So, if she will not be with one midwife she will not be comfortable, and she will not express her feeling and her problems, she will not give trust for.* [HCP9: Fayiza]

A nurse manager recognised a trusting relationship as a tool to enhance the sense of mutuality between the women and their care providers. This mutuality would enable women to share their concerns with their healthcare providers and obtain reassurance based on the individual needs of each woman. Thus, receiving care from the same midwife in all antenatal visits would facilitate the exchange of information, sensitivity to women’s needs and the ability to offer the support and reassurance required:

*The midwives are friendly with the women…building a trust relationship from the beginning, the midwife just asking the women to be free with her to relieve her issues because I will be the one who is taking care of you until the end of the delivery and even in postnatal time.* [HCP10: Maha]

### 8.5. Communication and Explanation of Assessments and the Plan of Care

Some women described positive experiences with antenatal care due to the information they received during their visits. It was evident that women’s satisfaction increased when their care professionals spent time assessing, explaining the findings, and answering their queries in order to fulfil their needs and expectations of care and offer the needed support and reassurance. This is illustrated in Zahra’s narrative:

*The doctor in the private hospital told me that the baby’s nose might be small, but the specialist in the health centre assured me that this would not cause any problem to the baby. She said that this might be hereditary and the important thing to see if the nasal bone was present but the size may not cause any problem.* [PW2: Zahra]

It was evident that the women approached the clinic to understand the progress of their pregnancy through clinical assessments and the process of information exchange. It appeared that women were willing to cooperate and come for more visits if needed when they received clear explanations of the purpose of the visits, as Khlood illustrated:
The doctor was excellent because she explained everything that she does and what she was looking for and why...I feel that as a pregnant woman we need to know what they do for us and why they do a scan...This time the nurse spent a long time explaining to me...that she will not be able to do these investigations because I was not fasting on that day and that they will be done on the next visits. [PW5: Khlood]

Some women appreciated the midwives who used a jovial manner with them during the physical assessments, which they considered important to alleviate their anxieties. Some women verbalised feeling more confident in expressing their concerns to a midwife who was attentive to their needs and showed concern for their feelings. This demonstrated the value of a good woman-carer relationship to facilitate the exchange of information and express concerns, as Huda indicated:

Sometimes the nurses talk and laugh with us while providing care. For instance, the nurse was not able to find the site to check the baby's heartbeat, she spent a long time searching and then she told me: “I did not like your baby” [laughed loudly]...She did not say I did not get it and that’s it...They listen to us, we listen to them too, and we can tell them what problem we have. [PW7: Huda]

During one observation [1], the midwife used a cheerful manner while performing a physical assessment of a woman, using a simple local Arabic language with a low tone of voice. She provided explanations while performing assessments and told the woman to ask questions. However, the woman paused for a few seconds and said that she did not have any questions. Then, after a while, the woman told the midwife that she had vaginal discharges for a few days. The midwife provided information about managing urinary tract infections and referred the woman to a GP. While I was waiting with the woman after the oral glucose test, she stated: “I felt comfortable receiving care from this nurse because she listened to me and talked with me in a good way and provided information while completing my care”. [Field note 1]

Some care providers acknowledged the significance of explaining assessments to the women before implementing them. However, most women in the study reported having deficient knowledge of the purposes of tests and assessments during their visits due to lack of explanation. It was apparent that the healthcare providers explained to the women what they thought was important, rather than what the women needed. Asma’s narrative illustrates this:

If I will give a tetanus injection; I will explain that now I will give a tetanus injection...Before giving an influenza vaccine, we tell the woman that now I will give an influenza injection....When we assess the fetal heart rate, we tell the women that this is the fetal heart rate. So, we tell everything...Even the women say that before no one explains to us like this. We tell the woman that this blood investigation is for blood group, sickling, VDRL, HIV. [HCP1: Asma]
Providing information to women about important assessments was crucial to supporting them to make an informed decision. For example, many women refused to have an oral glucose test for gestational diabetes due to its unpleasant taste and their lack of knowledge of the importance of this test. Therefore, spending time with women explaining the purpose of the test and the maternal and fetal effects of undiagnosed gestational diabetes enabled women to make their own decision to uptake the tests, as described by Zwaina:

Yesterday, one woman refused to do the oral glucose tolerance test, so I tried to explain to her nicely about the importance of that, and then she said, OK sister, I will come because you convinced me to come...So our approach to the patient will affect them. [HCP3: Zwaina]

The sonographers considered communication with women helpful to providing clear explanations of the findings of the clinical assessments and in preventing a request for additional assessments and ultrasound scans:

The satisfaction with outcome...depends on the communication. They [women] will blame you for everything even if you did...everything to the patient; they would not take it into account because you have bad communication with them and even whatever you do, the communication will cross everything you did...They should have a proper explanation about the anomaly scan because if they are satisfied with it, they will not come again unless they have something very important. [HCP6: Amani]

Women attended antenatal clinics from different beliefs, backgrounds and experiences, which needed to be considered by their healthcare providers to enable delivery of individualised care. One nurse manager, Ashwaq, considered that the main reason for miscommunication was an inability to understand the needs of each woman, which resulted in conflicts between them. This might also indicate that lack of continuity of carer hindered the mutual understanding between women and their carer because they were not familiar with each other:

The healthcare provider has to be patient with a patient; we have to concentrate on our emotion and feelings because we do not know the environment that the people are coming from and we do not know their attitudes, so we are in a situation to keep ourselves calm and safe. [HCP7: Ashwaq]

Furthermore, it was evident that poor communication of the purposes of clinical assessments and their findings led to a lack of understanding of the importance of these assessments in pregnancy. Some women were not aware of the types and findings of clinical assessments, and they considered a lack of exchange of information a significant barrier to regular attendance. The responses of some women indicated that knowing only that the fetus was normal was inadequate and they hoped for more reassurance and detailed information on the progress of their pregnancy. Soad shared an example of this:
Some doctors do not provide explanations, they only scan the abdomen and then they say that’s it, and you can go. Out of three doctors, only one explains. This is a problem that can cause a barrier to attending to the antenatal care. [PW1: Soad]

Women hoped to hear from professionals that their pregnancy was progressing as expected according to the number of weeks of gestation. However, some women felt frustrated and lost trust in healthcare providers who did not exchange information and performed an assessment rapidly without considering their needs. Khlood, below, felt uncomfortable due to the ignorance and disrespect she experienced from one obstetrician, who was more concerned with accomplishing the ultrasound scan than talking to her. Thus, due to the attitude Khlood encountered during the visits, she avoided seeking an explanation or asking questions; she felt that her assessment was incomplete and lost confidence in the finding of the ultrasound scan:

The doctor did not explain anything to me during the anomaly scan. I feel that the name itself is scary. I asked her, is this an anomaly scan? She said yes, and everything is normal...I took my card; she did not even include the report on the card. I do not know if she wrote anything on the card. She was hiding the screen purposefully so that I would not see it. She gave me the tissue without even looking at me. I lost interest in any discussion with her...I felt strange; even I did not have the desire to ask her anything. She is supposed to provide at least a brief explanation to support me...It is our rights to have things explained to us. It is not only for them to see and write. [PW5: Khlood]

Similarly, a lack of reassurance and explanation during ultrasound scans made women feel more worried. Asking women to repeat ultrasound scans done by other experts without providing clear explanations increased women’s fears and worries, especially when the appointments given were far in the future. As Saleima stated:

Sometimes during the scan, they do not assure us on the health of the baby, they say you have this, and this and you need to be referred to the hospital. [PW6: Saleima]

Providing inaccurate explanations or information beyond the women’s understanding led to additional fear and anxiety. For example, Huda appeared anxious because the specialist told her that the fetus might have a congenital malformation. Huda left the clinic in doubt, with many questions that were inadequately answered. Huda was seeking explanations for the causes of fetal anomaly and felt guilty, as if she had caused an abnormality by doing something wrong. She was also questioning if she could do anything to improve the accuracy of the ultrasounds and decided not to repeat it to avoid further fear and anxiety:

The doctor told me that the baby’s brain was not well developed...I was worried and thinking that this is my first pregnancy, and my baby might have congenital abnormalities. This caused me lots of fear and worries...I think that the scan was not accurate...She gave me another appointment to repeat the scan, but I am planning not to go. She did not allow adequate time for the baby to move. I need to know things that may help in changing the baby’s position...She asked me if I have
any family history of hereditary diseases or any consanguinity with my husband. I told her that my husband is not my relative and all children in the family were healthy, but she did not say the causes of this abnormality, or it might be due to hormones, but she did not say which hormones, she did not tell me what mistakes that I did. I was not convinced with her answers. [PW7: Huda]

It was clear that women needed to know what was happening with the fetus and the progress of their pregnancy through the explanations given to them during their assessments. For example, during one observation [7] of an anomaly ultrasound, the sonographer told the woman she had had less amniotic fluid in the last ultrasound scan. The woman appeared nervous (suddenly opening her eyes widely and staring at the sonographer with a flushed face) and said: “I did not know that”. The sonographer stated: “We will see today how it is”. She informed the woman that the anomaly ultrasound scan could reveal only physical abnormalities but not genetic or chromosomal irregularities. Then, while visualising the fetus, she explained to the woman that the fetus looked healthy, no gross abnormalities were seen, and the fluid level was normal. She directed the screen towards the woman and allowed her time to observe the fetus while providing explanations. The women verbalised feeling happy and comfortable with the result of the ultrasound assessment. [Field note 7]

Some women also reported asking questions of care providers who were not able to answer their queries, which resulted in a loss of confidence in their professional competency. Omaima, however, also stated that she did not like to ask some midwives questions because their communications were inappropriate:

The problem in the pregnancy clinic is that I do not feel comfortable asking the doctors questions about anything, I feel that they do not provide me with an answer that I need...I met some of the nurses, and their ways of talking do not encourage me to ask them any question. [PW12: Omaima]

8.6. Limited Pregnancy Information during Appointments

Information giving and education in this study meant the informal exchange of pregnancy-related information during the women’s appointments. All the women and their healthcare providers considered written and verbal health education important to learn about pregnancy-related topics. Furthermore, the women considered receiving information as important to alleviate fear, to feel empowered, to be motivated to attend for care, and to enable decision making. This indicated that the women were seeking information and reassurance through their contact with their healthcare providers, as Warda stated:

Healthcare in pregnancy is important to learn about the things that are appropriate and do not harm the baby...I feel that it is essential, so the women can be assured and listen to what the nurse will say. [PW10: Warda]
Similarly, some women reported attending their antenatal appointments to understand and cope with the changes that they experienced during pregnancy and to alleviate their fears and worries. Hajer’s comments explain this idea:

*Healthcare in pregnancy is important for providing information to the mother in everything that she goes through during pregnancy, whether these were difficulties or pregnancy vaccination...and to ensure that the pregnancy does not affect the health of women.* [PW11: Hajer]

Some women were happy with the information they received during their appointments. These women considered themselves responsible for undertaking their own reading from other resources, such as the internet, and they did not depend solely on receiving information from care professionals. This indicated that the women wanted to shift from a passive to a more active role and be responsible for their pregnancy. This would enhance their participation and involvement in the plan of care and the decision-making process. Warda’s excerpt explains this idea:

*I am satisfied with health education, but at the end, the woman should read by herself. When I return home, and I have something uncommon like last time they told me that my abdomen is smaller than expected, so I read about it on the internet.* [PW10: Warda]

Some women also stated that the midwives discussed written information about the pregnancy care briefly with them and advised them to read it later because the clinic was busy. However, not all women read the written materials, especially if they had no interest in the topics, as Huda stated:

*The midwife provided me three pamphlets containing information about the expected changes of each trimester, food that I should eat, things to avoid, and warning signs during pregnancy. She explained to me briefly to save time and told me that all the information was available in the pamphlets and advised me to read and follow them.* [PW7: Huda]

Several women understood that some disorders and issues of pregnancy did not require medical interventions but could be managed by obtaining information about them from health professionals. Many women valued the teaching opportunities and the importance of having the chance to ask questions and receive a prompt answer from care providers who were familiar with their needs. However, these women reported that they did not have that opportunity during their appointments. For example, Omaima stated:

*Health education is very important for the women. The women may not need treatment but may only need to ask questions and get answers and then she can manage by herself...I need information even in the second pregnancy because I may come across things that I did not experience during my first pregnancy. Since I started my visits, no one provided me with any pamphlets.* [PW12: Omaima]
Women reported receiving information during their visits about a healthy diet, pregnancy supplements, screening for diabetes, birth spacing, antenatal care visits, vaccinations and abnormal signs in pregnancy. However, these women reported that the information they received during their visits was superficial, lacked in-depth explanations, and did not fulfil their needs. Thus, some of the women did not take supplements and were not familiar with the complications of some high-risk factors. It was evident that the healthcare providers anticipated that the women were familiar with some of the topics but, in reality, the women did not know. Khlood’s narrative illustrates this:

*The only topic they taught me about is high sugar in pregnancy that was in a written paper...however, they do not teach me about the effect on the baby. They say you have high sugar level, you should monitor it but what are the consequences for the baby and the mother?...you should take care, but no one teaches us on the effects and prevention...they say take the iron tablets, but they do not tell why we have to take iron tablets. They concentrate on taking a healthy diet but how, we do not know what makes a healthy diet.* [PW5: Khlood]

Some women also suggested topics that they preferred to discuss with the midwives during their appointments based on their individual needs. For example, the importance of antenatal care, changes and the minor disorders of pregnancy and their management, a healthy diet, antenatal exercise, and anticipated risks and management. Interestingly, the same topics were shared between multi- and primigravidae, which indicates a lack of knowledge and understanding due to the limited exchange of information during appointments. It was apparent that women wanted to obtain information about their pregnancy care because they felt a responsibility toward their fetus and wanted to understand things clearly from trustworthy sources. Women heard different stories and myths from other women, which confused them. Thus, they considered the exchange of information based on individual needs important. It was apparent through Warda’s account that she was in doubt and wanted to be reassured by the expert professionals:

*They do not care, and they do not ask about these things. I do not know from which month these stretching marks occur until I asked...They should provide information about the last months of pregnancy and normal childbirth. Some women always tell me that I need to keep space between my legs and elevate them when I sit to help in dilating the cervix and have an easy birth. This is my first experience, so I need more information because many things I do not know.* [PW10: Warda]

Several women reported using the internet to answer their questions or asked female relatives to clarify their doubts due to the limited exchange of information during their appointments. However, the women’s responses indicated that they trusted the information they received from their healthcare professionals more than the material they obtained from the internet. This indicates that these women valued the opportunity to ask questions
and receive answers from an experienced healthcare professional who was familiar with their individual needs, as explained by Omaima:

*I am using Google; I write the question and read...The internet is not a trusted source of information, only the doctor who has speciality can be trusted. However, we read and take the information, and we do not know if they are correct or incorrect. It is different when you meet the doctor and ask in person; she will provide you the answer about your condition.* [PW12: Omaima]

Many women used online forums and pregnancy applications they downloaded on their smartphones to update their knowledge based on the weeks of gestation. They used online information and followed web-based advice without thinking about whether the information is trustworthy. It was clear that the women were eager to learn and were receptive to change for the benefit of their pregnancy. However, this might be an issue if such information is used to make decisions about the pregnancy, as Jameela illustrates:

*We use the internet and online applications on our mobile phone...the application for the calculation of pregnancy providing advice of what I should do during every period of pregnancy and what are the expected changes and the shape and size of the baby in that period...the name of this application is Pregnant Women’s Guide...I do not know and think if this information was trusted, but they might be opinions and the person wrote them might not be a doctor.* [PW13: Jameela]

The care providers indicated that they exchanged information with women while performing physical care, provided pregnancy pamphlets, and asked the women to read them. Consequently, the healthcare providers had confidence that the women read the pamphlets but they did not ask about them, as Asma explained:

*We try our best to provide all the information to them while working...I think the pamphlets are OK, the women read them...primi want to know everything...we explain to them...importance of early booking; we tell them that you do not know what is happening. Maybe you have high blood pressure or high sugar or anaemia, which makes it important to start the antenatal clinic visits early, you do not know if the baby’s weight is OK.* [HCP1: Asma]

However, some midwives reported that the women sometimes had commitments and asked them to focus on implementing physical care because they wanted to finish their visit rapidly. However, the midwives reported having difficulty providing detailed information to the women during their appointments because of the busy clinic and staff shortages. Therefore, the midwives provided written pamphlets to the women and advised them to read them. These midwives anticipated that most women read the written information, except those with a low literacy level. Ebtihal’s narrative exemplifies this:

*We give health education but most of the women...say: no need to talk, you only finish your work, I have to go... to work, and I have so many things to be done, I know everything, I read from the internet...I feel I do not give adequate information to the women due to shortage and overcrowding. We provide quick and brief
information, and we tell them that all of these points are in the pamphlets...Most of them read the pamphlets, but we have fewer women who are not educated. [HCP2: Ebtihal]

Some midwives also reported involving health educators and dietitians in the provision of information to women. The women who had certain risks, such as anaemia, gestational hypertension or diabetes, would be referred to a dietician for a detailed discussion of their dietary management. This would help to provide women with specific information based on the issues or risk factors they had. Some midwives also reported that they arranged with health educators to provide information in the waiting area of the antenatal clinic. This indicates that the midwives were aware of the importance of multidisciplinary collaboration to assist in the provision of information to women and achieve the objectives of antenatal care. This was illustrated by Asma:

When she [the health educator] is available she will come in the morning and give health education on different topics...about anaemia, sickling...early booking...any anaemic women will be referred to the health educator...The pregnant women with anaemia, high blood pressure or high glucose in the blood will also be referred to a dietician. The dietician will also come to the waiting area and provide teaching on an important diet. [HCP1: Asma]

Several midwives stated that they exchanged information with women based on a predetermined list recommended in the national antenatal guidelines according to the weeks of gestation. Thus, the exchange of information with the women was not based on individual needs and preferences but as indicated in the guidelines. This might be interpreted as following guidelines being more important than fulfilling the needs of the women concerned, as suggested by Zwaina:

We explain to the women the kick counting chart that they should do every day until getting ten fetal movements...for each week of gestation, we have a protocol [of health education] that must be completed, and we provide the women the three pamphlets for each trimester. [HCP3: Zwaina]

It was evident during observations that women received limited information during their appointments, even when the clinic was not overcrowded. I observed some women when the clinic was not busy and no other women were waiting. However, the midwife still completed the physical assessments quickly and asked the women to take iron supplements twice daily.

8.7. Professional Competency in Delivering Care

Women with low-risk pregnancies in this study received their antenatal care from their midwives and would only be referred to a GP or specialist for consultation if they developed any risks and complications or needed further assessments. Women verbalised
trusting their midwives more than GPs because they had more knowledge and experience in antenatal care. This perception of trust in the clinical skills and competencies of midwives developed through frequent interactions with them during their follow-up visits, as shared by Huda:

*I feel that the GP will not know better than the midwives. Midwives have more experiences than GPs...I do not know, but I think the nurses have more experience than the GP and they are familiar with what we need.* [PW7: Huda]

Women expected their healthcare providers to be knowledgeable and have expertise in antenatal care and pregnancy issues. It was evident that the women had more trust in midwives who showed professional competency, which they perceived as more important than receiving care from the same midwife:

*I never asked for anything, and the other nurse did not know about it. For example, in this pregnancy the head of the baby was down, so she was not the same nurse that I used to have my follow-up visits with her, another nurse was there, so I asked her, and she was able to answer my question.* [PW13: Jameela]

8.8. **Summary:**

This chapter explored woman-carer interactions through the reflections of women and healthcare providers of their experiences of the social process of care and observations made during the women’s appointments. The women and healthcare providers agreed on the importance of having optimum communication and relationships with each other. The women considered the social process of care important to enable them to express their fears and concerns to obtain the needed advice and support. It was evident that the need for emotional support in pregnancy was as important as physical assessments and care. Although the healthcare providers acknowledged the importance of communication and relationships during the women’s visits, it was evident through the observations that they were busy and provided task-based communication. Thus, some women appeared unhappy with their interactions with the healthcare providers. As a result of the lack of exchange of information, most of the women used online resources and applications to answer their questions, increase their knowledge and alleviate their fears. The women wanted to be responsible for their pregnancies and to have an active role in the care plan and decision making. Thus, continuity of carer could contribute to a better understanding of women’s needs and development of the type of woman-carer relationship that was perceived by participants as important for exchanging information.
Chapter Nine:
Experiences with Antenatal Care Delivery
Chapter 9: Experiences with Antenatal Care Delivery

9.1. Overview
Two sub-categories emerged under this category: ‘Antenatal care environment’ and ‘Organisation of antenatal care’. These two sub-categories are interrelated and affected the women’s experiences of the care they received during their appointments.

9.2. Antenatal Care Environment

9.2.1. Overcrowding of the Clinic
Evidence from the data suggested that overcrowding affected the physical environment and organisation of antenatal care, which had a negative impact on the women’s and their healthcare providers’ experiences. The participants identified the following factors as contributing to overcrowding.

9.2.1.1. Deployment of Staff
The programme manager explained that two midwives were deployed in each health centre but they were also rotated across different clinical areas, such as the emergency room, a diabetic clinic and on different shifts. This was done to ensure that staff with relevant skills were available in all areas and to manage any shortages. Thus, one midwife would be assigned to an antenatal clinic in the morning to avoid leaving the clinic with inexperienced care providers, as Maha stated:

The twelve nurses [including midwives] in the health centres should be trained to work anywhere in the health institution, not only in the antenatal clinic...so the people in the health centre should be one team...We have two midwives in the health centre so at least one midwife should be on the morning duty, the other one can cover in different areas, but we cannot leave the antenatal clinic without a midwife. We got an issue of emergency leave, unplanned things where we are left with no-one in the clinic, so one of the solutions is to train others, so other nurses are also trained in the antenatal clinic. [HCP10: Maha]

However, it was evident through observations that some nurses were assigned to the clinic and provided antenatal care to the women independently, while the midwife was allocated to another area in the general outpatient clinic. This could affect the care the women received because the nurses did not have adequate knowledge and experience to manage different high-risk cases. [Observation field notes]

Deploying midwives to different shifts and clinical areas solved one issue of staff shortages but contributed to many other problems, including overcrowding and longer waiting times for the women. The responses indicated that one midwife could not cope
with the numbers of women attending the clinic and overcrowding occurred as a result. The women understood the length of time needed to complete the consultation of each woman, the booking process, and documentation. They also understood the length of waiting time needed based on the number of staff assigned to the clinic and women waiting for their consultations, which was evident in Khlood’s account:

There was a shortage, and one nurse was available that day in the clinic. Thus, another nurse was called for help. Three other ladies were waiting for new booking, and each one needs at least half an hour or more to complete the visit. If you have a previous pregnancy, so it takes time to read and write the details from the previous card and ask about the family history. [PW5: Khlood]

Sometimes, nurses would be assigned to the antenatal clinic to assist the midwives in the delivery of care. However, some midwives identified assigning nurses to assist them as a source of confusion to the women because the nurses did not have the required knowledge and skills in relation to the routine of the antenatal clinic. However, the nurses at least helped to reduce the pressure on the midwives and shortened the length of waiting time, particularly when providing care to a large number of women. This could also help the midwives to have some time to accomplish other administrative tasks at the antenatal clinic. Nevertheless, it was evident through the midwives’ accounts that the nurses did not have the correct skill mix in the antenatal clinic to provide the care needed, which doubled their responsibilities, as Ebtihal suggested:

Sometimes when one midwife is working in the clinic a trained nurse will come for help...who is not familiar with the work of the clinic, they tell the women to come for the appointment without explaining the needed documents to bring with them for the booking visit. Then the women will come on the day of booking and ask what will be done and what I should do, then again, I have to spend time explaining to the women about booking. Then women will be called many times due to unclear explanation is given to them. [HCP2: Ebtihal]

Some midwives also appeared frustrated with the current staffing levels in the clinic compared with the volume of women attending and considered one midwife and one nurse inadequate to support the women. Some midwives reported that the nurses were not specially trained to provide antenatal care for women with different risk factors, which increased the pressure on the midwives. Thus, the midwives were responsible for providing care to the women, training and answering the queries of the nurse, and completing administrative tasks, as Jana stated:
We are so much affected by the shortage... we are telling them [administration staff] to keep two midwives [assign two midwives in the antenatal clinic], no need to go [rotate them] to shift duty... but they cannot keep [can not assign two midwives in the antenatal clinic]... because they need them for night duty... We are two midwives now or sometimes one midwife. After all the rush of patients, how I can concentrate on that statistics? They do not understand... what we are explaining to them. They want general staff to be trained in [Antenatal care] ANC clinic as in ANC clinic anyone can work; general staff can work in ANC? We see 40-45 women, sometimes 60 but better than before. [HCP8: Jana]

Furthermore, there was only one sonographer in the polyclinic to perform anomaly ultrasound scans. The sonographers reported that an anomaly ultrasound scan for each woman with clear and normal parameters required at least 20 minutes. Each sonographer has around 14-16 appointments per day, which requires working continuously until the end of the morning shift to see all the women within the allotted time.

I am the only one here doing anomaly scans, which is difficult for me. Imagine you came at seven o'clock, and you are not finished until one o'clock, so I suggest that I have to train somebody [to help in performing ultrasound scans] at least they [women] will wait for two hours instead of five hours... I am taking 14-16 women maximum 16 [per day], I finished at one o'clock because anomaly scans take at least 20 minutes. [HCP4: Haifa]

9.2.1.2. Limited Physical Space

All the women identified that a limited number of consulting rooms was another contributing factor to overcrowding, as Omaima’s narrative exemplifies:

There is one room for follow-up visits and the second room for registration of pregnancy. So it is only one room, and there is one nurse. I mean the availability of a second room at least will decrease their load. [PW12: Omaima]

It was noted in observations that women also waited in the same area for different purposes, such as GP consultations, birth spacing advice, immunisation and antenatal care, which contributed to overcrowding. Interviews with nurse managers also indicated issues with the physical structure of each health centre. The managers reported that the limited number of rooms for maternity care was not considered when planning and building the new health centre. Therefore, the same structure that was built twenty years ago was used as a model for building recent health centres. It was evident during observations that the administrators of two health centres tried to manage overcrowding by moving the clinics to a separate building within the unit where more rooms were arranged. According to Ashwaq,
We have three rooms... the first room is for ANC and PNC [postnatal care], a second room for booking of new cases plus blood collection and there is one staff kept for blood collection since they have to cover all Gynaecology OPD [Out-Patient department] and we have the third room for infertility and birth spacing... since the place is very old, the hospital was built in 1981, so we cannot do anything till now. [HCP7: Ashwaq]

9.2.1.3. Referring Women to a Higher Level of Care

Almost all the women and healthcare providers identified referral processes to polyclinics as a contributing factor to overcrowding and longer waiting times. All women receiving care in a health centre that does not have an obstetrician should be referred to a polyclinic at 22-24 weeks for anomaly ultrasound scans. The women should also be referred to a higher level of care if they develop complications (MoH, 2016). However, women were unhappy with this referral process because they knew that they would wait for a longer time in the polyclinic. Zahra’s comment illustrates this:

*The high numbers of referrals to the polyclinic from the whole villages for anomaly scan or to see a specialist is causing overcrowding in the clinic... There are many health centres, but they lack many services including anomaly scan... the cases with problems will be referred to other institutions.* [PW2: Zahra]

Some women appeared in doubt regarding the need to be referred to a polyclinic. These women preferred to have all their antenatal care components completed in the same health centre because it was easier than being referred to an overcrowded polyclinic. However, the referral of women for anomaly ultrasound scans and those with complications to a higher level of care was unavoidable, as Warda stated:

*The nurse told me that I should be referred to the polyclinic because the size of my abdomen is small, why I should be referred to the polyclinic? Why there is no doctor in the health centre? So, once I finished my appointment with the nurse, I can enter directly with the doctor so everything is in one place. I feel that the scan and a doctor should be available at the health centre.* [PW10: Warda]

Furthermore, some women with risk factors, such as gestational diabetes and thyroid problems, should be referred to a polyclinic (a higher level of care) to continue their antenatal care follow-up visits. Some midwives appeared frustrated with referring a large number of women with high-risk factors for follow-up visits to a polyclinic with the current staffing levels. Therefore, the focus of the visits was to complete the physical assessment quickly, which resulted in the delivery of incomplete care to the women, as Jana highlighted:

*They are referred for anomaly scan... high-risks means... thyroid problem... if the patient is thyroid they will refer to us [a polyclinic] for follow-up in ANC clinic, twins pregnancy... they will refer them to the polyclinic... We are a human being with all of this stress... we will not give good work, I feel that we are not giving adequate care for them.* [HCP8: Jana]


9.2.2. Perceptions of the Impact of Overcrowding on Care

9.2.2.1. Long Waiting Times

The women in this study considered long waiting times as one of the major issues influencing their experiences of antenatal care. Anomaly ultrasound assessment was planned at 22-24 weeks of gestation, which would be done concurrently on the same day as oral glucose tests and antenatal follow-up visits. This was also evident during observations, with some women being given appointments for anomaly ultrasound assessment, an oral glucose test and an antenatal follow-up visit on the same day. It was apparent from the women’s responses that this was convenient for them but they considered completing these assessments on the same day responsible for waiting for three to four hours during that appointment. Zahra’s comment exemplifies this:

“If I come to the polyclinic at seven o’clock at morning, I finish approximately at eleven o’clock…I wait for my turn until I finish…for example, on the day that I had my anomaly scan, I waited for a long time, but I tried to finish the other appointments I had on the same day. I finished oral glucose test, anomaly scan and I got the result of a blood test on the same day. [PW2: Zahra]”

Some women understood that if they attended the clinic later than 8 am, their care would be delayed until the visits of all the women who had arrived before them were completed. The data demonstrated that the women arrived at the health centre before the opening of the clinic to avoid delays and have their appointments completed early. Consequently, all the women who attended early were there at the same time, which resulted in waiting for a longer time for those women attending later in the day. Thuryia stated:

“If I have an appointment I reach there at 7 am, and I wait for an hour. However, now I am sending my children to school, so I go to the clinic at 8 am, so eight o’clock means that most of them are full there, so I will be late a little bit because the routine of the clinic who is coming first will be served first. [PW2: Thuryia]”

Some women reported that waiting for a long time increased their tiredness and discomfort and had negative effects on their physical status. The women’s responses also indicated that those women having their follow-up visits in the polyclinic waited longer than those receiving care in the health centre. Zainab’s narrative illustrates this:

“In the polyclinic, I get tired, I used to wait on the day of visits until 2 pm and sometimes I could not finish. However, in this health centre, I do not take a long time…I wait for a long time, sometimes from morning until 2 pm. During my previous pregnancy, I fainted while waiting for the anomaly scan. [PW4: Zainab]”

However, some women described the waiting time, using such strong words as ‘disaster’ to represent their suffering while waiting on hard chairs with the absence of facilities in the waiting area. As Sara stated:
The waiting time is a problem, and is a disaster...I am a pregnant woman and sitting for a long time that makes me more tired...There is not even place to walk, to rest and sit comfortably, you are just sitting and waiting for your turn to come...it is tiring, especially when chairs are not comfortable and hard. [PW12: Omaima]

Some healthcare providers considered long waiting times as the main reason for the dissatisfaction of women with their antenatal care. The extent of the overcrowding in the clinic determined the length of waiting time, so the women could wait three to four hours when the clinic was busy. Asma highlighted the following:

Because of a busy clinic and long waiting time, they [women] are complaining...Waiting time depends on how much we are busy...they may wait for three to four hours and sometimes less, for an hour to two hours. [HCP1: Asma]

A few midwives reported that some women reacted angrily to the length of waiting time and returned home without having their consultations completed, rather than waiting any longer. As Ebtihal illustrated:

Some women will take their cards and go home because they are angry and will come on another day. [HCP2: Ebtihal]

9.2.2.2. Pressure on Staff Affecting the Quality of Care and Communication

The responses of some women in the study reflected their understanding of the situation at the clinic and they described their healthcare providers as working hard to complete physical care within the allotted time. These women reported that overcrowding put a lot of pressure on the healthcare providers and they did not blame them for completing the work quickly:

The nurses are trying their best, but due to a large number of attendants per day, they finish the visit very quickly. [PW1: Soad]

Some women understood that the provision of information and explanations during the women’s appointments delayed the consultation of other women. Therefore, they accepted having their physical care completed without an exchange of information or discussion of their needs. These women considered completing physical care quickly when the clinic was overcrowded as beneficial to minimising delays in waiting, as Aza stated:

If I entered with the nurse and she provided me with health education, the other women will complain and will say what she is doing inside during this long time?...With a large number of women waiting outside, it is impossible for the nurse to be able to provide information to all women because other women will be late. [PW14: Aza]

Some healthcare providers also reported that working under pressure and performing multiple roles negatively influenced the quality of care that they provided to the women. Performing physical care, assisting obstetricians, and completing administrative tasks were
hard to achieve because of busy clinics. Therefore, the midwives focused on completing the physical assessments without considering the quality of care when the clinic was overcrowded, as Jana highlighted:

*Sometimes one midwife is calling patients, taking weight...blood pressure, calculating weeks of gestations, doing palpation, entering on the computer, in the register, in the card... sometimes the doctor will come: sister, I want a midwife now, I want to escort...what we will do?...We have to supply these statistics to the nursing supervisor...If visitors come on that day...but we have patients what we will do? Do whatever and bring those statistics.....Multiple roles and this is affecting the quality of care so much and our health, at the end of the day we are tired.*

[HCP8: Jana]

The sonographers also reported performing ultrasound examinations for large numbers of women per day, which limited the time spent with each woman to explain the findings and resulted in minimal interaction with them. The sonographers also appeared unhappy because they worked continuously and at speed without having time to rest. The issue of ultrasound scans being performed at speed was discussed in detail in chapter 8.

*I am the only one here doing anomaly scan, which is difficult for me. Imagine you came seven o'clock and you are ending at one o'clock...This also makes it difficult for us to review some patient or to be in a hurry.*

[HCP4: Haifa]

9.2.2.3. **Privacy during Antenatal Care Appointments**

A few women in this study reported that their privacy was maintained during antenatal appointments by receiving care alone in a room, which made them feel comfortable. Thuryia stated:

*They are maintaining the privacy and calling one woman at a time, they will not allow others to enter, which is comfortable.*

[PW3: Thuryia]

However, during the observations, I found that privacy was considered in different ways in the health centres involved. In most of the health centres, the door was left open and a curtain was used during the physical assessment as a means of maintaining the women’s privacy. Even when the door was closed, two women were receiving care in the same room at the same time. [Observation field note]

Some women described how their privacy was maintained when they had their consultations alone in a room and the door was closed. This was evident during all observations of women having anomaly ultrasound scans, whereby the specialist maintained privacy by seeing each woman alone, closed the door of the room and drew the curtain, as Khlood illustrated:

*During the scan, the doctor closes the door, so I felt that day comfortable and my privacy was maintained.*

[PW5: Khlood]
It was obvious that the sonographers were sensitive to the women’s feelings and understood their need to maintain their privacy during the anomaly ultrasound scans:

I think it is private things to tell even the sex of the fetus.....some people do not want even the mother to know if it is twins...It is usually in a private room; there is a curtain...we are alone, nobody will be there...even if the relative is there and she will ask me, what about the fetus: girl or boy? I will not say, only I will tell the mother [woman]...for example, if I have something abnormal, I do not want somebody to know. [HCP4: Haifa]

Some women appeared unhappy about the violation of their right to privacy during their consultations and in the waiting areas. They reported feeling frustrated when receiving care in the presence of other women in the room. Some of these women stated that the midwives left the door open during consultations and they closed the curtain only during abdominal assessments. Therefore, the other women in the room and those waiting outside could hear the conversations and fetal heart sounds. All of this was evident during the observations, where some midwives provided care to two women at the same time while the door was left open. While sitting in the waiting area with the women, I could hear some parts of the conversations and the fetal heart sounds, mainly when the clinic was not very busy. This lack of privacy affected the women’s ability to express their concerns, which were more personal because of the presence of other women in the room. Furthermore, during the booking visit and follow-up consultations, the women shared personal and confidential data that they felt uncomfortable discussing in the presence of other women. Khlood shared the following observation:

My privacy is not maintained because during the first visits the nurse asked me many questions that are confidential, the door was kept open, and at the same time, I share my name, husband’s name, my number and many things and those sitting outside can hear what I say. When I sit outside waiting for my turn, I hear what they say. I feel there is no privacy; the time of my visit should be only for me...closing the door is very important. When I sit outside, I can hear the baby’s heartbeat from outside, so there is no privacy. [PW5: Khlood]

Some women felt frustrated when the midwives did not maintain their privacy but felt that they had no power to do anything about it, so accepted it. The women perceived closing the curtain as inadequate because the other women in the room could hear the whole conversation during the assessment. According to Zahra’s narrative:

Three to four women are called together for weight measurement due to overcrowding...It is uncomfortable, but we do not have other choices we have to accept this situation, we are not feeling comfortable with this because there is no privacy, those present in the room they hear the conversation between the nurse and the woman. During the physical assessment, the curtain is kept closed, but the women can hear everything. [PW2: Zahra]
Some women also reported feeling uncomfortable and anxious during assessments because they were afraid that other women entering the room might open the curtain and observe them while their abdomens were exposed. According to Aza:

_When I lay down on the bed, another woman may come, and my abdomen might be exposed...I do not feel comfortable if another woman came and opened the curtain...The door is closed, but still, women are entering the room...they open the curtain to search for the nurse._ [PW14: Aza]

However, other women accepted the presence of other women in the room to avoid delays in care. This indicated that the women perceived completing the care when the clinic was overcrowded within a shorter time frame important, even if their privacy was not maintained. However, the same women reported feeling more comfortable about sharing personal information when they received care alone, as was evident in Zainab’s narrative:

_That is fine for me to receive care in the presence of the other women, otherwise they will not be able to finish...but when I am alone with the nurse, I can tell her anything but when there are other women in the room I feel not able to talk freely and to say what I want...The curtain was kept closed during the abdominal assessment, and I feel more comfortable when it is closed._ [PW4: Zainab]

Whereas, some women accepted receiving care in the presence of another woman in the room and considered that as an advantage and a learning experience for them. This indicates that women were eager to learn about their pregnancy topics, either from professionals or through other women’s experiences. However, Saleima preferred to be alone to be able to share her concerns with professionals:

_I do not feel too much annoyed by the presence of another woman; I feel better this way because I hear the information provided to the other woman in the room, I learn about her symptoms, I am not annoyed with this situation...However, I feel more comfortable when I am alone with the nurse but if another woman is there in the clinic I try to talk in a low voice to the nurse, this does not cause any problem with me._ [PW6: Saleima]

All healthcare providers who participated in the interviews perceived maintaining the women’s privacy difficult in the presence of one or two rooms for the provision of many services and the lack of staffing. Thus, calling two women at a time for consultation saved time and shortened the length of waiting. Although all the healthcare providers acknowledged the importance of maintaining privacy, they felt powerless with the currently available resources, as discussed by Asma:
Maintaining privacy is impossible when we have two staff in one room. However, we keep the curtain closed during the physical assessment...we have one room for antenatal care, postnatal care, birth spacing consultation, and infertility... when we feel that the women want to say something but not in front of other women, we do not allow other women to enter the room. We would like to finish one woman at a time, but as so many women are waiting we cannot do that...I am not satisfied, especially at booking, that needs more privacy. [HCP1: Asma]

Some women also reported that their consultations were interrupted by other women and healthcare professionals who entered the room while they received care. It was obvious in the women’s responses that these interruptions affected the coherence of the care they received. Khlood was annoyed and felt disrespected because healthcare providers entered the room during her consultations and distracted the midwives with unnecessary conversations. The women stated that healthcare providers should respect and value their time because they also had other commitments:

The door is open, and other women come in the room, and they try to finish with her while I am receiving care...The other nurse will come during our consultation and talk with the nurse; this will cause interruption of my care. They should remember that the woman is also busy and they need to finish the visits quickly. This affects the performance of the nurse as we may talk with her and she is not able to concentrate with us, she asks questions and may forget. [PW5: Khlood]

One nurse manager considered interruption of care as unacceptable, particularly in the middle of physical assessments, as this influenced the coherence of care:

If I am in that situation, I will not accept anybody to be with me, but for example, if they are doing abdominal palpation, another woman is going to open the screen, so it is not good. So, I am not accepting this at all...The care will be interrupted and no concentration in care. [HCP7: Ashwaq]

The women also raised another issue relevant to their privacy. Although the waiting areas for the antenatal clinic were separate from the waiting area for men, women complained that men could see them while waiting for their consultations. Men passed through the corridor of the waiting areas or attended with their female relatives. They also attended the clinic to interpret for their female relatives who did not speak Arabic or English. Some women felt uncomfortable and unable to relax because men could see them. During the observations, some women covered their faces with veils throughout the time they were waiting. This was evident in Warda’s account:

When men come to register their visits, they face the waiting area for women. The woman wants to elevate legs or relax her back, so she will not be comfortable. You saw the room where they check the blood pressure; there is a door that is always opened, and facing the male waiting area...we cannot sit facing them...Men can see us, and it is not nice, those men coming with their wives enter the female area. It will be better if at least they keep a curtain or close that door so if any male enter the area, we will be careful with that. [PW10: Warda]
9.2.3. Poor Facilities in the Waiting Area

The women and healthcare providers shared varying accounts of the facilities in the waiting areas. The women considered the presence of appropriate facilities in the waiting area, including comfortable chairs, refreshments, and educational materials, to be important, particularly due to the long waiting times. Some women described the discomfort they felt with standing while waiting for their consultations due to the unavailability of chairs. Thuryia stated:

> After 9:30 am, I feel there is no space, sometimes I stand, and sometimes I get a chair, sometimes with a big tummy women are standing, and I feel sorry for them... standing with a big tummy is so difficult, that chair also with wooden materials is uncomfortable, the back is paining [hurting], but at least if we get a chair, we can sit because standing is difficult. [PW3: Thuryia]

The midwives reported that all health centres had the same kind of hard seating and considered this inappropriate for a waiting area for pregnant women and believed this to be a fault in planning. As Ahoud stated:

> I do not think chairs are comfortable because they are made of ceramic...the disadvantage of this is...back pain...From the beginning, who did this structure, they did not know that these seats are for pregnant women? All our clinics have the same type of chairs...they are uncomfortable. [HCP5: Ahoud]

During the observation periods, I sat on these chairs while waiting for women in order to experience the seating myself and I can confirm that they were hard and uncomfortable. When the seating areas were full, women used the waiting areas opposite the antenatal clinic. Some women stood while waiting for their consultations.

The above were experiences of some of the participants but not all because some of the women stated that seating in the waiting areas was adequate and comfortable.

Some women reported the lack of refreshments in the health centres, or at least a vending machine, because they were fasting in preparation for the oral glucose test. Therefore, if refreshments were available to buy in the health centre, they could eat before leaving or while waiting for further assessments, as shared by Sara:

> There is no cafeteria in the health centre...cafeteria is very necessary, especially on the day of an oral sugar test because we come fasting. For example, if I finished the sugar test, and while waiting for my follow-up visit, I would go and eat something. However, there is no restaurant and no shops near to the health centre, so we are forced to bring water or some food with us. [PW15: Sara]

Conversely, some other women did not perceive the presence of refreshments in the health centre as important because they attended the clinic fasting for their glucose tests and, once they complete the test, they go home. As Omaima stated:
I usually attend the clinic fasting, so I do not need to eat, and once I finish, I will leave. The eating and drinking facility are not needed, but I do not know, maybe they are afraid that the place will be full of rubbish if they are available. For me, it is not important, as I am coming to do tests and return home. [PW12: Omaima]

During the observations in the five health centres, I noticed one vending machine placed at the main entrance of a polyclinic, whereas the others did not have any refreshment facilities available. Some health centres had a water cooler but some women were not aware of their presence or were unwilling to use them because they were for public use for all visitors. Some health centres were also far from the local shops and markets.

The care providers shared a spectrum of opinions regarding the availability of refreshment facilities in the health centres. Some of them considered the availability of vending machines in the health centres as unnecessary because many shops were located nearby, so the women could buy food if they wanted. The following is Ebtihal’s account:

*There are no facilities available in the waiting area, but we have many shops around the health centre; the women can go and buy food and drinks from there. However, if people in administration agree to keep at least a machine for food and drinks, it will be better. The women have to wait for a long time, which is very difficult without the availability of…food and drinks.* [HCP2: Ebtihal]

Some midwives reported that even in the presence of local shops near the health centre, women did not like to go to these shops because of family restrictions. Thus, the availability of refreshment facilities should be part of culturally sensitive care so that women who fasted for their assessments could have something to eat and drink afterwards within the health centre. As Zwainai stated:

*Women here are not going outside the health centre as their families do not allow that, so snacks and water should be provided by having a water cooler available or to bring packed [bottled] water or the women are ready to pay for that.* [HCP3: Zwainai]

Some women also reported a lack of current health education materials in the waiting areas. They considered written information important for them as they could spend their waiting time reading and understanding pregnancy-related topics, particularly when the midwives did not have time to exchange information with them. Omaima commented:

*I wish that they keep for us…health education materials, so even if the nurses are not providing health education so while I am waiting, I can read…There are no educational posters in the waiting area…to read them to spend the time.* [PW12: Omaima]

All waiting areas in the antenatal clinics in the five health centres had a television but the women reported that the sets were not used for the educational purpose of pregnancy-related information. Jameela commented:
I feel as a pregnant woman there is no use of the TV in the waiting area because I never watched any programme on pregnancy and pregnancy care. [PW13: Jameela]

It was evident during the observations in the five health centres that the televisions were tuned to general programmes and were, in some health centres, turned off.

9.3. Organisation of Antenatal Care

9.3.1. Date Only Appointments

Most of the women in this study reported receiving only the date of their appointments and that the midwives asked them to come early at the beginning of the clinic for their visits to avoid delays. It was evident that the absence of times for appointments and asking women to attend the clinic at the beginning of the morning shift resulted in overcrowding and long waiting times because most of them arrived at the same time. According to Saleima:

_The nurses tell me if I want to finish early, I should come early, if I arrive late, I will finish late. For example, if I arrive at 10 am, I will finish at the end of the duty, and those coming before me still did not finish...I am not comfortable because even when I come early, I finished my visit around 11 am, why?...many women arrive early to the clinic at the same time, who will be considered first?_ [PW6: Saleima]

Some women preferred appointments with specific times but questioned their ability to attend the clinic at a given time. The women’s responses indicated that they weighed the advantages and disadvantages of appointments with specific times with ones with a date but no time. Some women considered appointments at a specific time necessary to shorten the length of time waiting and avoid delays in consultations. However, they preferred attending early if they had limited access to a car, particularly in the morning, and they needed to arrange with their relatives to take them to the health centre. As Omaima stated:

_The appointment with specific time has advantages and disadvantages. The advantage is that I will come at the time of my appointment, take my treatment and return home, and the disadvantage is that I may not find a car...or some women may have circumstances and will not be able to attend their appointment._ [PW12: Omaima]

All the midwives also reported providing women with appointments on a particular date but with no time specified, so they could attend the clinic at their most convenient time on that day. Furthermore, some midwives reported accepting women who did not attend their previous appointments and arrived on another day if the clinic was not overcrowded. The midwives reported offering women appointments at their most convenient time to manage the issue of missed appointments, but this was not successful, as Ebtihal illustrates:
We do not specify the time of the appointment; they can come at any time on that day. Here we accept the women at any time unless the clinic is overcrowded, so we give another date of appointments...For working women, we try to give the appointment at the end of the duty or the week so that she can attend her appointment. [2HCP: Ebtihal]

Some midwives considered appointments with specific times as more difficult to implement in the clinic because the length of consultations varied from one woman to another. Failure to complete the care at the given time could result in further problems and conflicts between women and their healthcare providers, as Asma stated:

We tell the women to come at 7.30 am but maybe due to not having a vehicle they will come early to finish soon...we cannot do the appointment with a time because we do not know how long we will spend with each woman, we do not know the needs of each woman. [HCP: Asma]

It was evident that the implementation of timed appointments in the past in some health centres created a delay in care and conflicts between women and their healthcare providers. The implementation of timed appointments was not successful because of a lack of resources and some management issues. Furthermore, accepting postnatal cases without appointments and considering women’s circumstances contributed to the unsuccessful implementation of timed appointments:

The problem was that a woman with an appointment at 10:30 came and the woman with an appointment of 10:15 was still waiting. This made a delay in the appointments and conflicts between the women and the staff. They said this is my time, you have to call me now...In between a PNC case came...so I have to accept her, another lady waiting for two tablets, please accept me...if ANC is provided in a separate room than other services, I can maintain flexible appointments. [HCP: Zwaina]

9.3.2. Debate on the Number of Visits and Frequency of Ultrasound Assessment

Women provided varying views about the number of antenatal visits preferred. Some women considered six visits to be adequate but preferred to have more to obtain further reassurance on the progress of the pregnancy. These women also understood the importance of more frequent follow-up visits for those with high-risk factors. They understood that increasing the number of visits for healthy women would contribute to overcrowding of the clinic and increase the pressure on the care providers, as highlighted by Soad:

I feel that the numbers of visits are convenient...however, I feel more comfortable with more visits to ensure that the baby is healthy, but it is very difficult to increase the number of visits due to a large number of women covered by the clinic. I should have more than four to six visits if I have complications. Increasing the number of visits for healthy women will put more pressure on the staff. [PW1: Soad]
Many women understood the different needs of women with high-risk factors and the significance of more frequent assessments and monitoring of these women compared with others with a normal pregnancy. It was clear that some women considered pregnancy as a physiological event that did not require extra assessments and interventions. The same women also highlighted the importance of explaining to those with high-risk factors about the reasons for asking them to visit the clinic more frequently. According to Khlood’s narrative:

*The number of visits and the spacing between them is adequate...If I do not have any problem in the first few months of pregnancy, so one visit every two months is adequate...The visits are not sufficient for a woman with high sugar or high blood pressure; they need three or four more visits or maybe weekly visits because complications can happen at any time. Women with high-risk should receive information about the reasons for more frequent antenatal visits. [PW5: KhLOOD]*

Similarly, some midwives considered six visits adequate for women with low-risk pregnancies because they would be told to access the nearest health centre if they had any complications at any time. Furthermore, the midwives could provide additional appointments to the women if any risks were anticipated during the physical care. The responses of the midwives indicated that employed women desired fewer visits compared with unemployed women who required more frequent visits, as suggested by Ebtihal:

*I think the six visits are more than enough for women with low-risk pregnancies...because these visits have specific tasks and plan...Most of them were happy, particularly the working women, but those sitting at home were asking why the number of visits reduced...but if we found any risks we call the women more frequently. [HCP2: Ebtihal]*

It was also evident in the women’s reports that their employment and commitments contributed to their preferences for fewer visits, as stated by Warda:

*I feel that not every visit is useful...they can reduce them...it is a chance for me to have fewer visits because I have to go to the college and I am not free to come every month. I missed some lessons to attend the appointments. I am a student in the fourth year; it is very difficult to miss any lessons. [PW10: Warda]*

However, several women reported that the number and spacing of visits were inadequate and questioned the appropriateness of being assessed every two months at the beginning of their pregnancy. It was clear that long gaps between visits increased women’s stress and worries. Therefore, these women suggested a monthly visit or at least eight visits per pregnancy to obtain more reassurance and alleviate their fears and worries, as Sara illustrated:
The numbers of visits are not adequate, as I get sick...tired and difficulty breathing...If without going to private hospitals the numbers of visits are not adequate...At least I need eight visits during pregnancy or a visit every month to feel comfortable and assured on the baby...There is long spacing between visits. Is it all right not to visit the clinic for two months? [PW15: Sara]

Some midwives considered the number and spacing of visits inadequate and provided the women with additional sessions to allow more opportunity for frequent assessments and the detection of risks and complications. The midwives viewed themselves as accountable and would be blamed if the women developed any risks between visits, as stated by Zwaina:

I feel that after 36 weeks no appointment is given to the women, some women have to wait until 42 weeks...better to give appointment for the women after 36 weeks...For example, those came at 12-14 weeks for the visit; their next visit will be after approximately two months, which is considered as so long but we are giving extra appointments if they have any high-risks. [HCP3: Zwaina]

Within the discussion of the frequency of visits, there was also a debate about the frequency of ultrasound assessment in pregnancy, particularly in the third trimester. All women interviewed reported that ultrasound scans were important during pregnancy to reassure them about the well-being of their fetus. These women were unsure of the evidence-based benefits and effects of frequent ultrasound assessments on their fetus. Therefore, the women were questioning if they needed this more frequently during pregnancy. Hearing from relatives or knowing somebody who developed abnormalities at the end of their pregnancy increased the women’s worries and fear of developing complications. Thus, all the women in the study requested additional ultrasound scans in the third trimester to verify a healthy pregnancy and childbirth. The lack of ultrasound scans from 22-24 weeks of gestation made women worry and doubt that the fetus might have some abnormalities, as Warda illustrated:

People say frequent scans may harm the baby, I say it is important, but it may not be very important. However, they are important because I want to ensure that the baby is normal and have no malformation. It will be better if they add one more scan in the last three months to confirm the presentation of the baby. My sister-in-law was pregnant, and the baby’s head was down, but during the last month his feet presented down, and she knew this only during birth...They are the ones who should tell her that the baby’s feet were down. [PW10: Warda]

The responses of some women demonstrated that they were in doubt and uncertain even when the obstetrician reassured them that the fetus was normal. These women thought that future ultrasound scans could reveal some abnormalities that were not identified in the most recent anomaly ultrasound scan, as stated by Aza:
The doctor showed me last time the heart of the baby in the scan and...it was normal, but maybe next time they found something abnormal. [PW14: Aza]

According to the official antenatal guidance in Oman, two ultrasound scans are normally performed during a healthy pregnancy (MoH, 2016). However, some midwives referred women to have third-trimester ultrasound scans, but some of them in other health centres did not do that and followed the recommendations of the national guidelines. This indicates that there was inconsistency in following the guidelines and that the care the women received was determined by the health centres and the midwives providing care for them. Furthermore, it was evident that some midwives were unfamiliar with the standardised number of ultrasound scans in pregnancy, as illustrated by Ebtihal’s account:

We refer all pregnant women at 36 weeks for the third-trimester scan, I do not know about other health centres, and the scan will be done here by a trained GP doctor. [HCP2: Ebtihal]

It was also evident that some midwives did not trust their skills in detecting abnormalities and acknowledged the limitation of estimations made through abdominal palpation. This also indicated their fear of being responsible if anything abnormal happened to the women and the fetus because of undetected abnormalities, as shown in Zwaina’s narrative:

I feel the term scan is essential to determine the position of the baby; sometimes the anomaly scan is done from 24 weeks, which is so far. Even if we do abdominal palpation in the last weeks of gestations, but sometimes the position of the fetus may not be normal, or the women may have increased amniotic fluids that need to be measured or a cord around the neck could be detected. At 36-37 weeks of gestation, the doctor found many problems. [HCP3: Zwaina]

Sonographers supported the need for additional ultrasound assessment in the third trimester to help identify abnormalities undetected in the anomaly ultrasound scans at 22-24 weeks of gestation. According to Vijaykumar et al. (2017), the size and function of internal fetal organs increase with gestational age, which could help in detecting different anomalies in the third trimester. According to Haifa:

Some gastrointestinal tract anomalies can be more accurate at 32 weeks [for example] colon anomalies are more clear after 28 weeks. If we do only anomaly scan, we can miss those anomalies and also some soft markers…it is known it disappears after 32 weeks, so I think it is not enough to have two scans. Also, not all polyclinics have experienced hands to assist fetal weight...a lot of estimated fetal weight is missed, and a lot of macrosomia and even presentation are missed, it is written by midwife as cephalic, but it comes breech. [HCP4: Haifa]

One of the nurse managers reported that two ultrasound scans were adequate in the presence of experienced midwives. Maha considered third-trimester ultrasounds important if inexperienced nurses with inadequate training delivered antenatal care. However, Maha considered midwives to be responsible for referring women for additional ultrasound
assessments whenever they were insecure about the findings of other assessments. This indicated the trust and confidence the nurse manager had in the professional competency of the midwives:

The midwives are certified to do abdominal examinations, so they know deviation from normal...the anomaly scan is the most important. The confirmation scan...is not needed...we have like urine and a blood investigation to make sure that the woman is pregnant. If the midwife is doing an abdominal examination and the gestational age is not corresponding to the height of the fundus ...then the woman needs to be referred...if the midwife is in doubt of the presentation and lie of the fetus immediately she will send to the gynae [obstetrician]. [HCP10: Maha]

9.4. Summary

This chapter provided a detailed discussion of the experiences of women and healthcare providers of antenatal care delivery. Two sub-categories emerged under this category: ‘Environment of antenatal care’ and ‘Organisation of antenatal care’. The two sub-categories were interrelated and reflected women’s experiences of the care they received during their appointments. As a result of overcrowding in the clinics, women reported that their midwives focused on completing physical care and disregarded the exchange of information. It was also apparent that lack of dialogue with health professionals led to increased worries and uncertainty for the women. Overcrowding was the leading cause of long waiting times, privacy issues, interruption of care, and limited exchanges of information. Poor facilities in the waiting areas, including lack of refreshments, uncomfortable chairs and the absence of contemporary health education materials, were reported by women and healthcare providers as having a negative influence on the women’s experiences of care delivery. The women and care providers provided a spectrum of views regarding the frequency of visits and pregnancy ultrasonography.
Chapter Ten:
Supplementary Use of Private Healthcare
Chapter 10: Supplementary Use of Private Healthcare

10.1. Overview

In this study, almost all women used private healthcare to complement unmet needs in publicly funded healthcare. Furthermore, the use of private healthcare was reported to be associated with the timing of the clinics, employment demands, family influence and the hope to get better care and quality treatments and communication.

10.2. Reasons for Accessing Private Healthcare in Pregnancy

10.2.1. Healthcare System Factors

10.2.1.1. Seeking Higher-Quality Treatments and More Reassurance

Seeking more effective treatment and management of pregnancy-related disorders was cited as a reason for accessing private healthcare. Some women’s responses indicated that they sought additional tests and assessments from private healthcare providers, which indicated a shift to a medicalised view of pregnancy. This was evident in Khlood’s account:

*It is better for me to have my follow-up visits in a private hospital. There is a huge difference; even their pregnancy supplements are different. In the public health centre, they only care about providing folic acid in the first three months of pregnancy, checking haemoglobin and giving us some vitamins that we may need but they do not give calcium tablets and other things. In the private hospital, they measure calcium and monitor it throughout the pregnancy. Here how they will know if the woman has a lack of calcium? [PW5: Khlood]*

Some women had more positive experiences with private clinics with the focus on medical aspects of care. The women’s responses indicated that they perceived paying for health services ensured delivery of more effective treatments, as Sara stated:

*At the beginning of the fifth month, the baby was very small; the doctor was not able to see it clearly, but since I started taking the tablets from a private clinic, many things changed. I only used it for three weeks, but even my weight and abdominal size increased, and I am sure that the baby size increased...I feel that the benefit is guaranteed...they provide me a good answer, their medications are good and effective. I feel better and in good health when I take these supplements. It is opposite to the health centre, their supplements are not beneficial, and most of the women are not taking their medications...If I am financially capable, I will go for all follow-up visits to a private hospital as I see it’s more beneficial. [PW15: Sara]*

Several women expected private clinics to provide better services because they paid money for the healthcare they received there. It was evident that the women received additional assessments in private healthcare based on requests they made that were outside the national antenatal guidelines. The women’s responses indicated that customer satisfaction
was important in private healthcare in attracting them to take up the services. Many women stated that they accessed private care to express their concerns and find somebody to listen to them and provide them with information and support. These women wanted to learn and understand more about their pregnancies and they had more time in the private clinic to exchange information. As Warda stated:

*In a private hospital, they must treat you in a good way because you are getting the treatment with your money so they cannot tell you anything, there is a big difference between private and government healthcare...The doctor in the private hospital asked me about my feeling; she told me that the placenta and the baby are normal, and showed me his head, legs, and said that everything was normal thanks to Allah...Then, she said that if I have any questions I can ask her...they explain everything before performing them.* [PW10: Warda]

Some women felt more comfortable using public antenatal care as it is the recognised healthcare provider. However, they described private healthcare as offering higher-quality care because of the attention they received from the staff. These women considered private and public healthcare to have similar facilities and resources but these were improperly utilised in public healthcare. As Omaima commented:

*I feel more comfortable with the public clinic than private hospital, but the private care is better because of the staff and the attention that I receive. Everything that is available in the private hospitals is also available in the public clinic. However, in a public clinic, these resources are not used properly to make the patient comfortable compared to the private healthcare.* [PW14: Omaima]

Some healthcare providers acknowledged the importance of effective communication in attracting women to access private antenatal care and perceived the care offered in public and private healthcare as similar. However, private healthcare received a smaller number of women per day and the antenatal clinics opened in the morning and evening. Therefore, women had the opportunity to spend more time with the providers of care and share their doubts and concerns. The nurse manager considered public healthcare as better prepared and equipped to deal with women with various risks in pregnancy. The nurse manager also reported that women sought additional ‘unnecessary’ tests and investigations in private healthcare because of the lack of explanation about the necessity of these assessments in normal pregnancy. As Maha illustrated:

*When they [women] are going to the private [clinic they receive] more respect, more time talking, discussing when they are asking they are given more time, smiling faces, they know how to attract people...The care they provide is not to the level of government, the government is more qualified, more prepared and even decision making are taking seconds...The services provided by government...may be better and more advance[d]. In private they are not taking a risk whenever having women with problems immediately, they refer to the government, but at least they are helping us with [an] increased number of women they are doing a*
great job...most of the people...feel when I am paying I will be getting good care but...If from the beginning, the mothers are convinced by the doctors and midwives that these investigations are unnecessary [this can be prevented]. [HCP10: Maha]

Some women visited private healthcare to confirm their pregnancy as early ultrasound scans were more widely available to them. For example, women reported that if any unusual events occurred to them, they preferred to access private clinics because they were confident that ultrasound scans would be performed to ensure that the fetus was healthy. This was evident in Jameela’s narrative:

*I went to the private clinic for one visit before coming to the health centre...to make sure that the baby is healthy, I had a scan, and my blood pressure checked...but for example, during this pregnancy I fell more than once...when I went to the private clinic and had a scan, I felt reassured that the baby is fine.* [PW13: Jameela]

Many women accessed private clinics looking for more reassurance through additional visits and assessments because of the long spacing between their appointments in public healthcare. The long spacing between visits contributed to the women feeling more worried about the fetus, so they utilised private healthcare to ensure that the fetus was developing well and to alleviate their fears. This was illustrated in Wafa’s narrative:

*Both private and public clinics do the same things but the visits in the private hospital are more frequent, and they do a scan for us on each visit...every two to three weeks...They begin with a visit every two weeks in early pregnancy, and then they reduced the numbers.* [PW8: Wafa]

The majority of the healthcare providers reported that women accessed private antenatal care to have a third-trimester ultrasound, which was not performed for them as part of public healthcare. However, the healthcare providers stated that the ultrasound assessments offered in private healthcare were ‘unnecessary’. As Asma stated:

*Women approach the private hospital, especially at 36 or 37 weeks, to see the placenta, baby’s position, the baby’s weight. Many women said that their amniotic fluid was less, or have some problems with the baby. For example, cord around the neck or they complained of problems so at that time we are referring them. Otherwise, we do not know if she has any problem...The scan will be done for them if needed or not needed in the private hospital.* [HCP1: Asma]

The sonographers also reported that most of the women visited private healthcare to confirm the findings of ultrasound scans that were performed during their visits to a public clinic. Their responses indicated that women preferred more assessments because of the fear of developing risks and complications. This indicated that the women needed more reassurance and support by hearing from different experts. The healthcare providers expressed their views on the importance of offering guidance to the women on which private clinics to visit based on their knowledge and experience. As Amani stated:
I tell the patient [woman] if she has an anomaly and I found that they will go 100% to confirm, I feel better to guide them where to go. One patient...I diagnosed then she went to a private hospital, and she came to me and said that the baby is normal and whatever you told me is not right, but I told her that I could not believe somebody other than my eyes. So I feel better to guide the patient where to go. [HCP6: Amani]

10.2.1.2. Convenient Appointment Times

The working hours of the antenatal clinics in the public health centres are limited to the morning shift, which extends from 7.30 am to 2 pm, compared with private clinics that offer appointments during the evening shifts. Therefore, due to limited access to transport in the morning, women attended private clinics at a time convenient to them, either in the morning or evening. Furthermore, some women had health insurance for private healthcare, so did not pay for their health services. As Wafa illustrated:

Because my husband sometimes has a day off and sometimes has a shift duty. His duty is changing, one day morning; the other day is evening and sometimes night duty. Thus, I decided to go during the evening time when he was free...my husband’s duty is the main reason...my husband works in a factory, and we have a family health insurance for private hospitals. I can go at any time to the private hospital evening or night at my convenient time. [PW8: Wafa]

Some women in this study worked at home, some were employed, and some were studying at university and had commitments in the morning. Thus, going to a private clinic was easier than re-arranging their morning commitments. Avoiding long queues in the public clinics because of overcrowding contributed to the use of private antenatal care. The waiting times for consultations and ultrasound assessments were shorter in private care than in the public clinics. According to Warda:

We can go to the private hospital at any time...I am a student, and I work on my graduation project, that needs plenty of time...and in the morning I am free and can work on it...for the scan in private clinic, I can go at morning or evening because it can be done at any time within a short period. [PW10: Warda]

The responses of the healthcare providers also indicated that the clinic times were limited to the morning in public healthcare. They considered limited access to transport, employment demands and the desire to bypass long waiting times as contributing factors that prevented women’s attendance to public clinics in the morning and underpinned access to private healthcare. The narrative of one midwife, Ebtihal, illustrated this:
Most of the women are working at morning time, and they cannot come to the clinic because it is in the morning duty, so they prefer to go to the private clinic after their duties. Our clinic is only open in morning time...Most women say that they do not have transportation at morning because husbands and relatives have duty...Some women like to go at evening time...So the main reasons are no transportation, work commitments and timing of the clinic. [HCP2: Ebtihal]

The healthcare providers also indicated that the waiting time was shorter in private clinics because fewer women attend them per day, as not all of them found these services affordable. The appointments were also distributed between morning and evening, which resulted in fewer women waiting for their consultations in the private clinics than in the public clinics, so the waiting time was shorter. As Maha stated:

The private have fewer numbers [of women], so when the women go there they do not need to wait, they will go and immediately see the doctor. They do not have the issue of long waiting time and women will finish fast. They are also opening evening, throughout the day and night but for us, the service is in the morning, and it may not be suitable for them to go in the morning but private at any time they can go. [HCP10: Maha]

Some healthcare providers, particularly the nurse managers, considered the issue of time off work as another contributing factor to the use of private healthcare by employed women. The issue with the complicated process of having time/a day off as a contributing factor to late booking of pregnancy was discussed in detail in chapter 7.

10.2.1.3. Public Clinics Lacking Contemporary Ultrasound Machines

Another contributing factor reported by the women relating to private healthcare was their belief that the technologies used were more advanced and up-to-date. Each woman paid approximately 25 Omani Rial (51 GBP) per ultrasound scan in a private clinic but this was offered free of charge in public healthcare.

Some women stated that public healthcare should strive to update its ultrasound machines and that it should be the leading healthcare system. The reports of these women demonstrated that they preferred to attend private clinics because they had modern ultrasound machines that offered clearer images that increased their confidence in the results of the ultrasonography. This was highlighted by Huda:

Why the private hospitals have modern scan machines, and the government hospitals do not have it? Thus, I feel that women avoid accessing government hospitals and are forced to use the private hospitals. [PW7: Huda]

One of the sonographers confirmed the differences in the quality of ultrasound machines used in public healthcare compared with private healthcare:
I have a Toshiba, 2D but there is a 3D probe coming, but it is not the same as the one in the other polyclinic, it is very good, and previously we had an old Toshiba...I mean I applied many times for this machine, and it came and helps. Because the machine is essential [and] even the mothers know, they will go to private, and they will see the big machine and the big picture. When she comes here, she will see the small machine, of course, she will say that one is better. [HCP4: Haifa]

Some women felt more confident with the ultrasound assessments performed in private clinics as they had modern ultrasound machines that could identify the sex of the fetus early in pregnancy. In public healthcare, the sex of the fetus is disclosed during the anomaly ultrasound assessments at 22-24 weeks. However, identifying the sex of the fetus not only requires advanced ultrasound machines, but also the skills and experience of sonographers. This was evident in Sara’s narrative:

If I went from the beginning of my pregnancy to a private hospital to do scan they might be able to tell me even the sex of the baby and they will tell me everything. [PW15: Sara]

Accessing private healthcare to identify the sex of the fetus appeared common for these women. This was evident during the observation of a primigravida’s appointment for an anomaly ultrasound scan by an obstetrician. The obstetrician started the ultrasound scan and the women immediately asked: “Is he a boy?” The obstetrician looked at the woman, wondering, and asked her: “How did you know that it is a boy?” The woman said: “They told me in the private clinic that I am pregnant with a boy.” [Field note 11]

10.2.1.4. Women Losing Trust in Public Antenatal Care

Many women reported that they had lost confidence in public healthcare but were obliged to attend to obtain the handheld Maternal Health Record they were required to have even if they attended a private clinic. The Maternal Health Record should be carried by women throughout their pregnancies for follow-up and treatment in any healthcare facility in Oman if they develop complications. As Khlood’s responses demonstrated:

I had no trust in public care, and until now I do not trust them, but I booked my pregnancy and attended for the follow-up visits to get the card in case something abnormal happened because I need it for treatment in the health centre and hospital. [PW5: Khlood]

Hearing contradictory results from the healthcare providers in the public health centres caused a lack of trust, not only in the care providers, but also in the whole healthcare system. This was evident in Jameela’s narrative:
One time I did a blood test in the health centre, and the doctor told me that it was normal but in a private hospital, the doctor told me that my haemoglobin was approximately 9 or 9.5, and I thought it was normal. Then I repeated the test in the health centre, and the nurse told me that it was low... I was angry because she said that my haemoglobin was normal and I was not taking my tablets regularly; I got surprised that it was abnormal. [PW13: Jameela]

10.2.2. Social Context

10.2.2.1. Networking with Other Women

Some women constructed their decisions to access private healthcare based on networking with other women and the stories they heard from them. They also based their decisions on knowing somebody with similar issues or problems, which increased their tension and stress. Consequently, women accessed private healthcare to find answers to their queries and to alleviate their anxieties, which indicated information-seeking behaviour. Hearing stories from other women about incorrect findings during anomaly ultrasound assessments negatively affected the women’s perceptions of the clarity of the assessment undertaken in public healthcare. As Huda stated:

The doctor told my friend that her baby did not have kidneys, then she went to a private hospital, and the scan was repeated for her many times, and they told her that the baby was normal. Then they did for her a scan called Doppler to see how the food enters. They saw everything was normal, the baby was born healthy and he is now five months old, and everything is alright with him... I said I would see them first what they will say tomorrow and then I will go to a private hospital if I am not convinced with what the doctor says. [PW7: Huda]

10.2.2.2. Fulfilling Family Expectations

Accessing private healthcare was more common in some families that expected all their female members to have their antenatal care in private clinics because it was perceived as more prestigious and a privilege to those more financially capable. Therefore, some women accessed private healthcare to meet family expectations based on the idea that if all women in the family accessed private clinic, they should do the same. As Khlood stated:

The first reason and before knowing the difference between the public and private care... all women in my family follow up in private hospital in pregnancy [laughed]. Thus, I decided to book my pregnancy in a private hospital. [PW5: Khlood]

The healthcare providers also identified family behaviour as a contributing factor to accessing private healthcare. Therefore, in some areas in the governorate, women only accessed private healthcare in order to meet family expectations locally or in a neighbouring country. Ebtihal, a midwife, stated:

The women in this area used to go to our neighbour country for their healthcare in a private hospital or even in our country. [HCP2: Ebtihal]
One nurse manager reported that accessing private healthcare was considered a form of competition, in which all the women in some families should experience private care in order to demonstrate being responsible towards their pregnancy. As Ashwaq illustrated:

*Maybe according to the situation, they are sitting in the home, so my mother was going and my friend are going so I want to go, so like a competition or something I want to discover it.* [HCP7: Ashwaq]

Some women accessed private clinics to avoid being stigmatised by family and friends for not paying money for more reassurance and support in pregnancy. According to Haifa:

*Families and friends are going, and they will say you...could not spend money; you are going to the government, so they are not that good why you are not going to private, like stigma.* [HCP4: Haifa]

10.3. Summary

This chapter explored the use of private maternity healthcare in addition to publicly funded care among women in this study. Personal, social and healthcare factors contributed to the additional use of private care in pregnancy. Women approached private clinics to confirm pregnancy, access second opinions and seek more specific information that satisfied their needs. They also reported accessing private healthcare to express their doubts and find answers that could alleviate their fears and anxieties because they had less opportunity for that in the public clinics. It was also evident that some women accessed private healthcare because they wanted extra tests, assessments and medical treatments that were not included within evidence-based guidelines. Loss of trust in assessments and findings was another contributing factor to the use of private clinics. Some women reported only accessing private clinics to meet their family’s expectations because all their female relatives received care in private hospitals, so they felt obliged to do the same. The data demonstrated information- and health-seeking behaviours to alleviate the fear of developing complications. Moreover, the women treated their pregnancies like a medical condition that needed more assessments and monitoring, rather than a physiological event.
Chapter Eleven:

Discussion
Chapter 11: Discussion

11.1. Overview

This chapter provides an in-depth discussion of the major findings relating to the grounded theory. It also presents debates on the strengths and limitations of the research, the contributions of the findings to the available body of knowledge, the implications of this study for clinical and academic practice, and suggestions for required future research.

11.2. Overview of the Study

The study explored various perspectives and experiences surrounding antenatal care for women with low-risk pregnancies and antenatal healthcare providers in Oman. In-depth understanding of factors that contributed to the irregular uptake of antenatal care and late booking in public clinics were ascertained by interviewing and observing both women and care providers while they attended antenatal care in the publicly funded healthcare system. This provided a rich insight into antenatal care and enhanced the credibility of this research (Houghton et al., 2013). A review of previously published evidence indicated that antenatal care was underresearched in Oman and in Arabic countries generally. The available evidence from Oman and other Arabic countries focuses on satisfaction surveys, which offer limited insights into women’s experiences and do not include the care providers. Thus, the findings of this study have provided novel insights into exploring antenatal care for women with low-risk pregnancies in Oman and neighbouring countries. The core category identified is ‘Navigating antenatal care’, which comprises five main subcategories:

- Perceived benefits and value of antenatal care
- Timing of the first antenatal visit
- Woman-carer interactions during antenatal care
- Experiences with antenatal care delivery
- Supplementary use of private healthcare

These five sub-categories represent aspects of care that women received during their antepartum experiences and indicate that women ‘felt obliged’ to access public antenatal care during pregnancy. The women’s feeling of obligation to use antenatal care to protect the fetus resulted in their navigation of antenatal care across public and private healthcare providers. Personal, family, sociocultural, and healthcare system factors influenced the decisions the women made regarding when, and from where, to access and receive care. Utilising professional care in pregnancy for these women was socially and culturally
constructed (Davis and Brook, 1985). The women perceived pregnancy as a risky period and anticipated developing complications at any time, even if they were healthy. They also feared being ‘blamed’ for not acting responsibly towards their fetus and for not attending for professional care if any complications occurred. Therefore, attending antenatal care relieved the pressures of social influences because this made the women feel that they did what was expected of them to protect the fetus.

The data collected indicated that the primary focus of antenatal care provided by healthcare professionals was physical care targeting fetal well-being, with limited attention to the support and reassurance needs of the women. Women waited for a long time for their care in an uncomfortable environment; they accepted the care even when their needs and expectations were unmet during their appointments in the public clinics. The women lacked confidence in the real value of antenatal care but they considered it essential for an optimal pregnancy outcome. They felt disempowered and lacking control over their care due to not having sufficient involvement and exchange of information with care providers. These women sought further support and reassurance by accessing private antenatal care, navigating web-based resources, and networking with other women.

11.3. Socially Constructed Value of Antenatal Care

11.3.1. Conforming to Pregnancy Expectations

The women’s knowledge and perceptions of the value of antenatal care and their role expectations were constructed through their interaction with a collective society, which included the beliefs, experiences and stories shared by mothers, sisters and friends. Omani family life is characterised by a dependent collectivism, in which people are integrated into strong and cohesive extended families that include uncles, aunts and grandparents (Abdulhadi et al., 2007). Thus, decision making and responsibilities are shared among and between family members. The women in this study strived for a healthy pregnancy by seeking professional care and information to ensure optimal outcomes. This commitment was described by Mercer (2006) as the first stage of becoming a mother, which begins even before and continues throughout pregnancy and after birth. The women’s understanding of the value of antenatal care was focused more on the benefits for the fetus. Thus, these women’s decisions and actions focused on protecting the vulnerable fetus rather than their own health (Lupton, 2012a). This concurs with O’Brien et al. (2017) in Ireland, where women reported that their decisions were influenced by their desire to make the best choice to protect the fetus. The fetal-centred focus reflected intensive mothering
ideals that are socially constructed in obstetric narrative as “child-centred, expert-guided, emotionally absorbing, labour-intensive and financially expensive” (Hays, 1996, p. 8).

The women in this study perceived their attendance at antenatal care as a social expectation and believed that this was what they ‘should do’ during pregnancy. Medical treatment in pregnancy is accepted as a social right and a necessity for these women. Receiving antenatal care in pregnancy is highlighted in the Child Law that was issued in 2014 but not all women in Oman are familiar with it, as it was only recently disseminated (Al-Jarida Al-Rasmiya, 2014). The women attended their appointments to alleviate sociocultural pressure and minimise any ‘blame’, feelings of guilt and shame if a complication occurred to the fetus. This mirrored the finding of a study by Lupton (2011), in which women in Australia wanted to do their best for their fetus to avoid feeling guilty for not conforming to expectations. Lupton described a social conception of women as ‘incubators’ who are expected to do their best to protect the fetus, which puts women under social pressure (Lupton, 2012a). Women in different cultures are socially idealised as natural carers, nurturers and self-sacrificing to meet expectations (Douglas and Michaels, 2005; Lewis, 2002). However, some women in this study were unsure if what they did was making any difference, particularly those with past experiences with antenatal care, and were unable to conform to expectations due to family commitments and employment demands. Almost all the women were unhappy with the organisation and environment of public antenatal care but felt obliged to use it. However, they attempted to fulfil this obligation by initially accessing private antenatal care.

Women learned what they should do, and avoid, in pregnancy and their role expectations through their interactions with their collective environment, which tied their identities to specific tasks (Heisler and Ellis, 2008; Goodwin and Huppatz, 2010). The women’s responses were aligned with Islamic teaching that considered pregnancy as a holy role and a direct blessing, and the fetus as a gift from Allah. Similarly, Tsianakas and Liamputtong (2001) interviewed Muslim women who considered their pregnancies as a direct blessing from Allah and viewed themselves as responsible for protecting the fetus. The women in this study understood that attending appointments was important so that they could be assessed by a professional and gain information on maternal and fetal well-being to alleviate their fears and uncertainty. However, at the same time, they believed that the uptake of antenatal care would not prevent the predetermined fate of Allah. The religious dimension was highlighted in the background chapter in section 1.3.
Although the opportunity for a maternal-fetal relationship during pregnancy remains controversial, these data highlighted the influence of the maternal-fetal bond on decisions the women made during this period. This bond in pregnancy is a unique form of attachment, which is facilitated by, for example, viewing the ‘real’ fetus in ultrasound scans and feeling fetal movements (Nelson, 2003). This bond enhances health-seeking behaviours to obtain good-quality antenatal care, avoid certain behaviours, determine the best place for childbirth, and influences the transition to the postpartum period (Nelson, 2003). It could also explain why the women in this study accessed private healthcare, requested additional visits and assessments, and sourced web-based information. A traditional theory of transition in pregnancy by Rubin (1976) identified a series of tasks women should master to ensure the safety and acceptance of the fetus and the formation of their role expectations and a relationship with the unborn child that was more medically oriented. Thus, some women relied on medical assessments during pregnancy to protect their fetus, even if that conflicted with their own interests (Lupton, 2012b).

11.3.2. Coping with Uncertainty and Perceptions of Risks

The data indicated that women’s fear of developing risks and complications and uncertainty of the outcome of pregnancy were the main reasons for attending antenatal care appointments. Similarly, Larsson et al. (2016) found that Swedish women linked their pregnancies with anxiety and uncertainty and anticipated the emergence of high-risk factors that might prevent the normal birth of their child. These women anticipated that their engagements with professional care and the exchange of information would help them alleviate their fears and find answers to their questions. Heaman et al. (2004) reported that even women with uncomplicated pregnancies assumed that the risks would decrease if they were monitored by qualified professionals and adopted positive healthcare practices. However, fear of developing complications was centred more towards protecting the fetus from any external dangers, which produced concerns and worries for women on behalf of their fetus (Rubin, 1976). This is known as ‘policing pregnancy’ to manage and minimise risk by seeking out information (Lee et al., 2014, p.142) and following advice from experts (Rothman, 2014).

The women in this study attempted to alleviate their uncertainties and worries by seeking additional clinical assessments, including ultrasound scans. However, if doubts and concerns were not answered during their public clinic appointments, their worries and uncertainty increased. Hence, they sought additional support from private clinics. The
women were aware that more ultrasound assessments would not change the pregnancy outcome but considered it important to ensure that the fetus was healthy and relieve their fears. However, this fear continued even when the ultrasound assessments indicated normal fetal parameters. This concurs with Larsson et al. (2016), where women reported that, if they suspected any risk, hearing from the staff that everything was normal was not adequate and they preferred further ultrasound assessments.

Feeling vulnerable emanated from the booking visit during the women’s medical and obstetric history-taking process to identify risk. In particular, women had a fear of developing gestational diabetes and pregnancy-induced hypertension. The focus on risk factors during pregnancy contributed to the apparent shift of perceiving pregnancy as a physiological event to a more medical condition. A similar perception of potential vulnerability to risks in pregnancy was reported in an ethnographic study in Qatar (Kilshaw et al., 2016). MacKenzie and van Teijlingen (2010) claimed that medicalisation of pregnancy care occurs when society and professionals concentrate on adverse events, rather than the positive aspects of pregnancy. Therefore, some women in this study sought more blood tests, additional supplements and ultrasound scans, or repeated assessments in private hospitals to confirm the findings of a public clinic. Lupton (2011) reported similar anticipation of risks and questioning of actions by women to promote the health and development of the fetus. This conceptualisation of risk results from the availability of a plethora of medical information around pregnancy care and complications (Rudolfsdottir, 2000), and the notion of prevention of risk in pregnancy is associated with a blame culture (MacKenzie and van Teijlingen, 2010). Therefore, the women in this study sought additional assessments to avoid risks and relieve any anticipated ‘blame’ for their inability to protect their fetus. Similarly, the healthcare providers in this study wanted to avoid being blamed and held responsible for not referring women for additional assessments and obstetrician consultations if they were not confident of their assessments.

Some women had a fear of miscarriage in early pregnancy, which was also reported by Ross (2016), where women felt at particular risk of a pregnancy loss in the first trimester. Maternity care is recognised as a high-risk clinical speciality because of the severity of complications such as fetal death and lifelong conditions, as well as the risk of litigation and high settlements (MacKenzie and van Teijlingen, 2010). Therefore, treating pregnancy as a ‘risky event’ in healthcare settings had influenced these women’s perceptions and anticipation of risk. This resulted in women lacking confidence that their normal pregnancies would result in the birth of a healthy child (Heaman et al., 2004). Thus, the
women in this study placed a high value on clinical assessments, sourcing online information and networking with other women to relieve their fears. However, these approaches to coping with the fear of risks also created uncertainty and doubts, which concurs with Hammer and Burton-Jeangros (2013). Reliance on clinical assessments and different sources of information is a sign of a knowledge deficit that might expose women to further medical assessments and management.

11.4. Conflicting Priorities in Antenatal Care Organisation

11.4.1. Lack of Woman-Centred Care

11.4.1.1. Task-Based Communication

Effective communication requires an understanding of the individuals concerned and the experiences they share, as well as the skills to convey a message clearly (Kourkouta and Papathanasiou, 2014). The individuals involved should have time to engage in this interactive process to talk, ask questions and receive answers. In most of the publicly funded health centres involved in this study, midwives were the primary care providers for women with low-risk pregnancies, with support from nurses, sonographers and obstetricians.

Healthcare providers focused predominantly on completing the physical care outlined in the antenatal care guidelines, such as risk grading, referrals, physical and clinical examinations, and immunisation. The guidelines also include a list of topics for education and counselling for each visit based on the number of weeks of gestation (MoH, 2010; 2016). Focusing on the physical aspects of the guidelines without considering the women’s needs and concerns resulted in a lack of woman-centred care and a mismatch of expectations. However, Hanson et al. (2009) argued that guidelines should be used as a means to standardise the care of women, while at the same time considering individual needs and expectations. Similarly, Lyerly et al. (2007) considered that following guidelines strictly in healthcare restricts choices and limits woman-centred care. The women in this study stated that their needs for pregnancy-related information and reassurance were unmet during their appointments. However, the business of the clinics had an impact on both women and healthcare providers, and women understood why the information was limited. Renfrew et al. (2014) argued that the interpersonal dimension of care should receive equal attention to the physical care in order to achieve objectives.

The women in this study identified respectful care as essential to enhance their experiences and motivate them to attend their appointments. According to Kennedy (2000), respectful
care acknowledges the uniqueness of each woman and family and reflects their needs for time, information, encouragement and physiological and emotional support. Some women in this study felt disrespected and ignored when healthcare providers did not maintain eye contact with them while performing physical care. Similarly, women in Finland felt hurt when the midwife acted “inhumanely, mechanically and stereotypically” by focusing on completing physical care without maintaining eye contact while providing information to them (Bondas, 2002, p. 65). Focusing on physical care with minimum communication created a sense that the healthcare providers were uncaring and not interested in delivering care to women.

11.4.1.2. Power Imbalance and Asymmetry of Interests

The data showed an imbalance between women’s expectations and what was received and that the healthcare professionals had power in controlling the time and the process of care, while the women had limited input. This kind of engagement resulted in the carers dominating the discussion they had with the women (Stapleton et al., 2002; Sword, 2003; Hanson et al., 2009; Baas et al., 2015). This was similar to instructional styles in the health education model that occur in the formal manner in which a professional talks and asks questions and the client listens and offers relevant information (McCourt, 2006). Most of the conversations I observed were based on predetermined topics, e.g., informing women about the results of assessments while midwives were busy writing and answering others’ queries. This conversation provided women with minimum opportunities to address their individual needs (Sword, 2003). For instance, information about the findings of the ultrasound was shared with the women based on the sonographer’s initial assessment of their cognitive abilities. This also resulted in disparities between the women’s needs and normative expectations of professionals without considering individual differences (Carver et al., 2008).

Some women did not ask questions in a busy clinic and considered the midwives as experts who understood their needs. Thus, the women accepted all procedures without discussion or asking their care providers about them. According to Carolan and Hodnett (2007), trust in the professional competency of care providers may result in women’s leaving decision making to them and a disparity of interests between them. Similarly, Langer et al. (2002) surveyed 1,600 women in four developing countries and reported that caregivers scored themselves higher on the quality and quantity of information they exchanged compared with the women. Similarly, women in Canada (Sword, 2003) and Egypt (Montasser et al., 2012) reported receiving inadequate and irrelevant information.
Most of the women in this study avoided asking questions during their appointments because the topics were irrelevant to them, the clinic was overcrowded, they did not have privacy, or they realised their midwives were busy. Similarly, Stapleton et al. (2002) observed that midwives exchanged information in measured doses without engaging women in conversation in a busy environment, and women did not ask questions to avoid burdening the midwives. The women’s silence was interpreted as compliance with suggestions and that they did not need further clarification, rather than lacking relevance. Some women in this study reported not reading the written information given to them as it was not important and was irrelevant to them or redundant after their previous pregnancies. Thus, the women looked for an alternative way to complement unmet needs during their appointments in public clinics.

The power relationship between women and their care providers was evident through disrespectful care and abusive verbal communication that used a raised voice to demonstrate anger, particularly when the clinic was overcrowded. This concurs with Roberts et al. (2015), who found that Malawian women considered ‘shouting’ a misuse of authority and that they felt helpless in such situations. Similarly, Canadian women reported situations in which the caregivers were rude and abrupt with them and they felt offended when the caregiver focused on completing the task at hand without considering their needs (Sword, 2003). Some women in this study reported behaving in a way to please the midwives, so that they accepted the care as it was provided and distanced themselves to avoid being embarrassed in front of others. Thus, they did not ask questions, attended early for their appointments, and obeyed the instructions received during their visits. However, these behaviours could be understood as passivity and that the women did not participate actively in the plan of care rather than they were unsatisfied and lacked control over the care they received. It was evident that the power imbalance between the women and their healthcare providers contributed to women’s being passive in the uptake of antenatal care. This concurs with findings of a systematic review by Joseph-Williams et al., (2013) that focused on patient-reported barriers and facilitators to shared decision making and found that patient need power and knowledge to participate in the plan of care and in making an informed choice. Few studies had explored the association between the interactional style between women and their healthcare providers and contextual environment of antenatal care on the women’s level of participation in the plan of care (Carver et al., 2008; Stapleton et al., 2002).
The data indicated that women had a normative view that the professionals were always correct and knew what was in their best interests. These women had a trust in the knowledge and competence of the healthcare providers, which led them to rarely questioned procedures and the care they received (Kabakian-Khasholian et al., 2000). This view potentially results from the limited participation of public voices in planning and evaluating health services (Carver et al., 2008). For example, antenatal care guidelines were developed by policymakers based on normative need assessments to increase utilisation of the programme and improve outcomes, without considering women’s choices (Carver et al., 2008). This lack of partnership with the public in decision making and a plan of care resulted in conflicting priorities in the organisation of care, which led to various levels of dissatisfaction. Esfandiari (2010) argued that for healthcare services to be responsive to individual needs and to increase utilisation of care, the public’s choices in the decision-making process should be acknowledged at the individual and organisational level.

11.4.2. Relationship with and Continuity of Carer

Women and care providers in this study preferred continuity of carer from a known midwife throughout a pregnancy to foster the development of relationships, enhance the exchange of information, and improve the women’s experiences with care (Novick, 2009). This concurs with Stapleton et al. (2002), who identified continuity of carer as important in promoting trust, exchanging information and concerns, and receiving reassuring feedback. O'Brien et al. (2017) reported that women in Ireland identified the relationship with their carer among the factors influencing their definitions and perceptions of the concept of informed choice. Dutch women considered trust, respect and equality as preconditions for optimum woman-midwife relationships that would facilitate the sharing of personal concerns and feelings (Seefat-van Teeffelen et al., 2011). Thus, the woman-carer relationship is essential in constructing positive experiences, mutual understanding, and making an informed choice.

The women and professionals in this study considered continuity of carer essential to save time because the women would not have to repeat the same history at every appointment as their midwives would be familiar with them and sensitive to their needs. Similarly, Bondas (2002) and Baas et al. (2015) reported that women preferred continuity of carer to avoid repeating their data at each visit and to facilitate the process of the exchange of information. Lack of continuity could also affect clinic efficiency because midwives might
spend more time reading the history of unfamiliar women, which might extend the consultation time (Gupta and Denton, 2008). Avoiding conflicting opinions from different midwives was another reason for women preferring continuity of carer, which is similar to the finding in Bondas (2002). Some women described the midwives with whom they had frequent contact as being like sisters or friends and reported feeling motivated to attend their appointments to meet them and had positive experiences compared with women with no continuity. Stapleton et al. (2002) reported that woman-carer relationships enabled women to express concerns, ask questions and refer to the midwives if they were worried. Continuity of carer is important for the development of a relationship that will enhance shared decision making. O'Brien et al. (2017) defined an informed decision as a relational construct that requires in-depth discussion and good-quality relationships with a known professional. Although some women and their care providers preferred continuity of carer, there was no consensus on the number of carers required to achieve the benefits (Green et al., 2000). However, all agreed that it was difficult with the current staffing levels.

The women in this study received care from a small team, e.g., two midwives in the health centres and five in the polyclinics. However, deploying midwives across different clinical areas and shifts caused shortages, which resulted in assigning nurses in the clinic to assist the midwife in providing care. This is consistent with the national guidelines that each woman should receive care from a few staff to enhance satisfaction and continuity of care but not carer (MoH, 2010). However, for continuity of carer to be achieved, midwives should at least be assigned to an antenatal clinic so that the women can receive care from midwives who are known to them.

Some women were hesitant about continuity of carer throughout their pregnancy and provided contradictory opinions about it because they were not confident of the professional competency of all midwives. These women preferred receiving care from any midwife who demonstrated professional competence in caring for them. This concurs with a critical review by Freeman (2006), which identified the content of care as more important to the women than the model of care. Similarly, Carolan and Hodnett (2007) argued that women did not highly regard continuity of carer alone compared with the ethos, consistency and respectfulness of the care provided. Thus, for some women, receiving good-quality care from a competent caregiver who demonstrates interpersonal skills outweighs continuity of carer alone. However, debate on what continuity of carer and care means, how it should be implemented and organised, and if the benefits observed were due to continuity or caused by other confounding factors is ongoing (Sandall et al., 2013). A
systematic review by Sandall et al. (2016) claimed that women receiving midwifery-led continuity of carer were less likely to have epidural analgesia during childbirth, episiotomies at birth, preterm and instrumental births, and increased chances of spontaneous vaginal births.

11.4.3. Unsatisfactory Experiences of Care

The participants of this study highlighted the absence of timed appointments, staff shortages, inadequate consultation rooms, and lack of modern medical equipment in the public health centres as contributing factors to overcrowding and long queuing in an uncomfortable environment.

11.4.3.1. Absence of Timed Appointments

The appointment system in the antenatal clinics depended on a queue discipline of first-come-first-served. The women received a dated appointment with no specific time, so all women attended simultaneously in the morning, which extended waiting times and negatively affected the social process of care. This concurs with the findings of Adeyinka et al. (2017), in which women considered the lack of individual appointments as extending their waiting for their consultations and resulted in less satisfaction with care. Gupta and Denton (2008) recognised the absence of an individual timed appointment as a factor causing dissatisfaction among service users due to the unavailability of timed appointment slots. It was also a source of dissatisfaction to the caregivers due to uncertainty in the number of individuals served per day (Gupta and Denton, 2008). However, care professionals viewed day appointments as more efficient to avoid wasting time associated with missed appointments, similar to Adeyinka et al. (2017).

Although almost all the women in this study were frustrated with receiving a dated appointment and long waiting times, they were not sure whether they could attend at a pre-specified time because not all of them had access to transport. This was in line with Owusu-Frimpong et al. (2010), who reported that men had better access to healthcare resources than women, which indicated a clear relationship between lack of access to a car and attendance to healthcare services due to gender roles. Furthermore, the women and care providers anticipated more problems if the consultations did not take place at the specified time. This was attributed to uncertainty regarding the duration of each consultation in the presence of lack of staffing on some days and limited physical space compared with the number of women served per day. The participants considered the implementation of an inflexible timed appointment as challenging and anticipated this
being a source of conflict rather than solving the issue. The absence of timed appointments resulted in overcrowding, long queuing times, and disorganised care. Anderson et al. (2015) argued that an efficient appointment schedule is sufficiently important to maximise the numbers of women seen daily and minimise long waits to continue using the service but considered it more difficult as human nature is involved in the process. Women’s preferences for having their appointments on a specific day of the week also increased overcrowding of the clinic on those days.

Long waiting times in antenatal care have been explored widely but limited data on the contributing factors and the impact on care are provided (Nigenda et al., 2003; Larsen et al., 2004; Hildingsson and Thomas, 2007; Ghobashi and Khandekar, 2008; Mathibe-Neke, 2008; Donkor and Obed, 2012; Baas et al., 2015; Adeyinka et al., 2017). A study conducted in Oman by Ghobashi and Khandekar (2008) identified similar issues; however, the authors did not explore the contributing factors in depth. Donkor and Obed (2012) identified shortages of doctors and the absence of timed appointments as the main reasons for long waits, which could be managed by midwifery-led care for healthy women as the doctor usually attends to emergency cases (Donkor and Obed, 2012).

Some midwives understood the arrangements some women had to make to attend their visits, so they accepted those who came on different days if the clinic was not busy. Not accepting women for consultations when they arrived without an appointment led to the frustration of these women and resulted in disrespectful communication. This frustration and lack of respect arose from the absence of timed appointments and rules for managing missed appointments. Thus, all women should be informed in the booking visit that they would not be accepted without an appointment. All women have the right to an individual appointment rather than receiving the same appointments as others. There is a need to evaluate the currently implemented appointment system to manage the issue of overcrowding and long waiting times. The responsibility for scheduling and cancelling appointments and recording attendance should be delegated to the administrative staff to use the resources and time efficiently, and to relieve pressure on the midwives (McCarthy et al., 2000).

11.4.3.2. Midwife-Nurse Dual Role
The data indicated that the midwives were deployed on different shifts across different clinical areas to manage the skill mix and staff shortages, which had negative implications for the midwives’ and women’s perceptions of care. The nurse managers’ responses
indicated that at least two midwives were deployed in each health centre and five in each polyclinic. However, it appeared that midwives were expected to work as nurses in different shifts and clinical areas and nurses were assigned to the antenatal clinic. This resulted in many issues for the women and midwives and left the clinic short-staffed. Staff shortages contributed to overcrowding, long waits, inadequate exchange of information, and a lack of continuity of carer and a woman-centred approach. Staff shortages were identified as a major constraint on the exchange of information (Anya et al., 2008), increasing the workload and level of stress for nurses and midwives (Mathole et al., 2005), and as a major cause of burnout for midwives (Hildingsson et al., 2013). Therefore, shortages of staff influenced not only the women’s experiences of their care, but also the performance of the professionals and the quality of antenatal care.

Some women were not able to distinguish between midwives and nurses because they dressed similarly but they were able to recognise inexperienced professionals through their answers to their queries and incomplete handheld records. The midwives were also unhappy because their workload doubled when nurses were assigned to them in the clinic. These midwives performed dual roles of providing care to women and training nurses in the routine of the antenatal clinic, which was time-consuming and delayed the consultations of other women waiting for care.

Furthermore, midwives were frustrated by role constraints and expressed feeling powerless because they preferred to work in the antenatal clinics but their managers did not consider their preferences. They felt that they were better prepared with the knowledge and skills to provide care to pregnant women with various risk factors than they were for working in general nursing departments. Yates et al. (2013) addressed some challenges facing midwives assuming dualistic roles, such as the difficulty in maintaining competence in both midwifery and nursing, lack of interest in working between departments and shifts, and fear of working beyond the scope of practice. Performing dual roles and changing the workplace across many departments where midwives had little control resulted in frustration, stress and role conflict, similar to the findings in Yates et al. (2011). Role conflict is defined by Biddle (1986) as the concurrent appearance of two or more incompatible expectations of the behaviour of a person. Role conflict contributes to stress and job dissatisfaction for staff, which could also have an impact on the care the women received.
Multitask role constraints resulted in stress and frustration and shifted the focus of care to completing physical tasks within a short time without considering the needs of women and the quality of care. Frustration, stress and burnout were major factors that contributed to the demotivation of midwives and decisions to leave the profession (Hildingsson et al., 2013). This was consistent with O'Connell and Downe (2009), in which midwives expressed their frustration and dissatisfaction with the level of care in a hierarchical work environment where they lacked autonomy. This is also in line with Moore (1987), who argued that bureaucratic discourse considers employees in a formal organisation as subordinates who are technically, strategically, cognitively, and morally passive with limited motive for performing their duties. The discourse also considers the subordinate as dependent on rules created by superiors to perform their works.

The nurse managers reported that midwives could train and delegate some general tasks to the nurse assigned to them in the clinic (skill mixing/task shifting). According to Fulton et al. (2011), task shifting could be an option to maximise the productivity and efficiency of healthcare services delivery at a given time, quality and cost. Antunes and Moreira (2013) indicated lack of evidence of the implications, constraints, outcomes, and impacts on quality of care to enable policymakers to take decisions on skill mixes. The majority of such studies have been conducted in the USA and Australia and focused primarily on doctor-nurse mixes. Furthermore, there is no standardised strategy to evaluate the effectiveness of a skills mix as the available literature is unrepresentative and based on descriptive studies (Antunes and Moreira, 2013). Midwives in this study might focus more on midwifery-specific care by delegating general tasks to nurses, such as measuring blood pressure, assessing urine and collecting blood samples. However, this could be the case if nurses were assigned to work with an optimum number of midwives in each clinic, but not to replace one of them. Furthermore, the delivery of care to each woman by two care providers during the same visit raises concerns of fragmentation of care (Haggerty et al., 2003).

11.4.3.3. Debate about the Number and Spacing of Antenatal Care Visits

There is an ongoing worldwide debate on the frequency and spacing of antenatal visits (Dowswell et al., 2015). Women and healthcare providers in this study shared a spectrum of views about the adequacy of the number of antenatal visits, the spacing between them, and the frequency of pregnancy ultrasound tests. A few women considered the number of visits as more than adequate and preferred fewer visits because of employment demands and family commitments. Some women felt that six visits were adequate because they had
a healthy pregnancy but preferred to have more visits for frequent assessments and reassurance. Similarly, some healthcare providers felt that six visits were adequate for healthy women if they were reminded to report any complications that developed. This would be fully justified if the women received adequate information about warning signs that required immediate reporting; however, most of the women reported a lack of awareness about such signs. Some care professionals gave women additional appointments if they doubted the findings of their assessments.

Some women preferred to have a monthly appointment for frequent assessments, reassurance, and to limit their needs for private healthcare. These women were concerned about developing complications that remained undetected due to infrequent contact with professionals. Some women who developed complications during clinic non-working hours accessed emergency care in the labour room and described it as difficult and that it took a long time. Women in all settings were less satisfied with a reduced number of visits because this decreased opportunities for detecting complications and obtaining reassurance (Majoko et al., 2007; Dowswell et al., 2010; 2015). Similarly, Hildingsson and Thomas (2007) identified the real issues regarding reduced numbers of visits were the timing and spacing between the appointments. Interestingly other studies have indicated that women want fewer visits with more emphasis on pregnancy-related information (Kamil and Khorshid, 2013). However, women in low-resource settings accepted a reduced number of visits because of convenience and cost but were unhappy with inadequate learning, the lack of relationship with care providers, and fear of developing risks (Aniebue and Aniebue, 2010).

Furthermore, the frequency and quality of ultrasound scan assessments performed in public clinics was a concern for many women. Both women and professionals preferred having additional assessments in the third trimester to alleviate their fears. The women overestimated the ability of the ultrasound assessments but questioned the safety and real value of frequent scanning during their pregnancies. This indicated a lack of knowledge about the purpose, appropriate timing during pregnancy, and limitations of this type of assessment (Leung and Pang, 2009). However, obstetric ultrasound practice is only ethically justifiable for medical reasons (Leung and Pang, 2009). Some care professionals had a fear of undetected fetal abnormalities in the second-trimester scan, which might also be missed through abdominal palpation and may cause severe maternal and fetal complications. This was consistent with a study by Vijaykumar et al. (2017), in which third-trimester ultrasonography detected thirty-seven structural anomalies that were missed
in the second-trimester scan due to small fetal size, position or poor resolution of the machines. However, some professionals in this study believed that a third-trimester ultrasound assessment was not necessary in the presence of skilful care providers, which indicated trust in the professional competency of the midwives. Those midwives who referred women for further assessment wanted to avoid being blamed for not referring them if they developed complications. Thus, the fear of undetected complications and the desire to avoid feeling guilty and being blamed by others underpinned these women’s and the care providers’ preferences for more frequent visits and ultrasound assessments.

11.4.4. Uncomfortable Contextual Environment of Antenatal Care

In this study, an inadequate and often uncomfortable environment contributed to women’s dissatisfaction with care. The participants from the health centres appeared more frustrated, as one room was used to provide a number of services, including antenatal and postnatal care and family planning, compared with having three rooms in the polyclinics. As with the nurse managers, each health centre was planned to serve a population of 10,000. However, approximately 21% of health centres in Oman serve a population of more than 15,000, which is the case in Muscat and Al Batinah governorates (MoH, 2014). This could well be a major future issue due to the forecast high fertility rate and increasing population, which has expanded from approximately two to four million in the last 20 years (MoH, 2014; 2015b). The issue lies not in the number of health centres, but in using the same physical structure that was appropriate during the last 20 years without considering the annual growth of population, as highlighted in section 1.2 of the background chapter. The issue of a limited physical structure of care was mainly reported in studies conducted in low- and middle-income countries, as in Larsen et al. (2004), whereas Oman is a high-income country.

Inadequate physical space for care affected the privacy and confidentiality of women and the process of the exchange of information, issues and concerns. The women were unhappy with violations of their privacy but accepted them to avoid delays for them and those waiting for their consultations. However, the data indicated that the women were not aware of their rights to privacy in healthcare and accepted the situation as it was the norm. Schopp et al. (2003) identified privacy as a culturally defined concept that is determined by norms, rules and patterns and the way in which individuals experience their privacy, and when it is lost is influenced by their sociocultural contexts. The right to privacy and confidentiality is highlighted in the Code of Conduct of the Oman Nursing and Midwifery
Council. However, providing care to more than one woman in the same room or keeping the door open while others could hear and see what happened inside was not in line with women’s rights to privacy and confidentiality (MoH, 2014-2015). It is noteworthy that women’s privacy was strictly maintained in the ultrasonography room, where women reported feeling relax and comfortable. The sonographer reported that an anomaly scan can be stressful and might involve disclosing unexpected news, although women should be counselled in a private space if necessary. Maintaining women’s privacy is essential to humanise their care and respect their rights, foster development of a trust relationship, and enhance the exchange of personal information. Limited privacy has been highlighted as a barrier to good-quality care in other studies from high- to low-income countries (Larsen et al., 2004; Jallow et al., 2012; Sword et al., 2012).

Furthermore, women were unhappy and felt disrespected when their consultations were interrupted by other women or professionals entering the room. Kalisch and Aebersold (2010) argued that interruption cannot be eliminated entirely but can be minimised by exploring the causes and finding alternative ways to communicate when possible. Some women felt that their right to have adequate time for consultation was not valued and reported that the midwives were unable to focus on their individual needs due to interruptions. This also meant that the environment of care was not conducive to the clarification of women’s doubts and concerns. Similarly, Bondas (2002) reported that women in Finland felt devalued by midwives when their consultations were interrupted by telephone calls or other people. Only a few studies have explored the association between interruption and medical errors (Grundgeiger and Sanderson, 2009; Kalisch and Aebersold, 2010). However, no studies have highlighted clients’ experiences when interruptions occurred during their consultations.

Furthermore, the data in this study indicated a lack of culturally sensitive care, as women were in the same waiting area as men in some health centres and, as a result, some women felt too embarrassed to sit comfortably, relax or even walk about while waiting. According to the MoH (2015b), a waiting area for women should be separate from men, but this was not evident in all health centres. Furthermore, refreshment facilities were unavailable in the female waiting areas and some women were not aware of their availability in the health centre. For some women, it was not culturally acceptable, and they did not feel comfortable doing so, to access external refreshment, particularly after completing oral glucose tests, which require fasting from midnight until completing the test. None of the reviewed studies explored women’s perceptions of the availability of refreshments in a
healthcare facility. Furthermore, the women felt frustrated due to inadequate and uncomfortable seating in the waiting areas, which increased their tiredness, back pain and negatively influenced their perceptions of care. This concurs with a Canadian study by Sword et al. (2012), in which women reported difficulty in finding comfortable seating while waiting for their consultations. Chinese patients were also very dissatisfied with the number and comfort of chairs in a hospital outpatient environment (Tsai et al., 2007). Some women wanted to use their waiting time efficiently by reading or learning about pregnancy-related information. However, unfortunately, the waiting areas lacked current written information and a television was available but was showing general programmes or was turned off.

Thus, the issue of limited physical space for care is a universal one, in which the environment is not organised in a way that adequately receives pregnant women and so contributes to negative perceptions of care.

11.5. Impact of Conflicting Priorities

11.5.1. Late Access to Public Antenatal Care (Conflicting Forces)

The data indicated the presence of discrepancies between what the women expected of their antenatal care and what they actually received. This resulted in later bookings to attend public clinics with private healthcare being used earlier in pregnancy. Rubin (1976) argued that concerns regarding safety during the first trimester of pregnancy are directed more towards women than the fetus because there is no tangible, visual, or kinaesthetic awareness of the embryo/fetus. In the second trimester, women become aware of the fetus and attach a ‘value to him/her’ that generates pleasure and pride, and they start to be more protective of their fetus (Rubin, 1976). This could explain why half the women (fourteen out of twenty-eight) in this study booked their pregnancies in a public clinic after the first trimester. However, these women received professional care in private clinics to confirm the pregnancy and delayed their access to public antenatal care until the second trimester. Access to private healthcare is optional and women can attend when they need to, whereas booking in publicly funded clinics requires continuous engagement and follow-up appointments.

These women preferred to begin their antenatal care in private clinics because they were more accessible compared with the public system. They also aimed to bypass the long queuing typical in public clinics and had more confidence in their diagnostic equipment in private hospital. Thus, the timing of booking visits to public clinics in this study might not
be an accurate indicator of initial access to healthcare (Goddard and Smith, 2001; Hatherall et al., 2016) because all the women received their early care in private clinics. The national statistics available include only the percentage of women who book their pregnancies in the public healthcare system and do not provide an analysis of the total use of both services, similar to Goddard and Smith (2001). No information is available to illustrate the percentage of women who accessed, or did not access, private healthcare before booking with publicly funded clinics in Oman.

The women in this study understood that engagement with antenatal care in early pregnancy, once it was confirmed, was important for them and their fetus but some of them considered it more important for those with high-risk factors. Therefore, early booking in a public clinic in the first trimester was considered important, but less urgent, and had a lower priority for women with a low-risk pregnancy. This was consistent with the findings of studies from high- and low-income countries (Downe et al., 2009; Boerleider et al., 2013; Finlayson and Downe, 2013; Kisuule et al., 2013; Hatherall et al., 2016). Conversely, a study by Ndidi and Oseremen (2010) reported that most Nigerian women booked late because they did not value early engagement with antenatal care during a low-risk pregnancy. However, these women were from low-resource settings, in which the decisions to begin and use antenatal care were shaped by financial constraints and distance to the health centres.

Some women in this study highlighted confusion about pregnancy symptoms and lack of awareness of being pregnant as causes of late booking; this was also reported in studies from high- and low-resource settings (Downe et al., 2009; Haddrill et al., 2014; Chewe et al., 2016). However, some women in this study accessed private clinics as an alternative source of healthcare to confirm their pregnancy during the first trimester. Thus, they delayed their booking visit to a public clinic to bypass frequent appointments with long waiting times. This concurs with the findings of a population-based survey by Ayoola et al. (2010) in the USA that suggested a positive association between early recognition of pregnancy and early booking. The women in the current study who booked their pregnancy late had received some form of professional care in the private clinics but were regarded as a late booking in the public clinic. However, early booking could also be associated with positive past experiences and high motivation to initiate professional care, whereas delaying access to antenatal care could be due to lack of transport, having to care for another child, and the cost of care (Ayoola et al., 2010).
The inability of professionals to meet women’s needs in the past influenced the timing of initiating care in the present pregnancy. The women thought of the value of early booking in public clinics compared with other conflicting priorities, such as family commitments and employment demands. This mismatch between priorities and having previous negative experiences of antenatal care resulted in delaying the booking visit to a public clinic. This concurs with a study in Sweden by Arvidsson et al. (2012), which found a mismatch in the rating of priorities of care by patients and professionals. Furthermore, El Aty et al.’s (2014) secondary analysis in Oman in 2008 demonstrated that multiparity was a contributing factor to inadequate use of antenatal care due to time management, poor perceptions of care in previous pregnancies or knowledge and experiences gained in the past. El Aty et al. (2014) also indicated that approximately 97% of women had four or more visits, which was higher than the number reported in the MoH Annual Health Report in Oman during 2008 and 2012 (80.4%-89.2%). This inconsistency was explained by including women who used both private and public healthcare, which was unexplored in the original survey.

The financial cost of attending for antenatal care led to delays in access to professional antenatal care in high-income countries, such as the USA (Ayoola et al., 2010), and low-income countries such as Pakistan and Uganda (Kisuule et al., 2013; Rahmani and Brekke, 2013). This was not an issue in Oman because antenatal care is offered free to encourage uptake of healthcare services. A survey in Turkey by Erci (2003) identified education and unemployment as leading factors in late booking. In contrast, just over half the women (eight out of fourteen) in this study with late access to public care were university graduates of which five were employed, and nine were housewives. Six women completed their secondary education and one had finished primary level. This indicated that late booking was an issue for employed and unemployed women and those with an advanced level of education. This contradicts the findings of El-Gilany et al. (2008) in Saudi Arabia, which reported an association between women’s employment and late access to healthcare in pregnancy. However, in the current study, the number of non-employed women who booked their pregnancy late were higher than for employed women.

However, employed women found it difficult to have their antenatal care early because they were at work and had considerable commitments that had to be rescheduled. These women preferred to commence their care in public clinics later in pregnancy to avoid burdening work colleagues, who might not be happy with having additional tasks. Furthermore, women were unhappy with a ‘complicated’ time-off process, as they were expected to return to work once they completed their visits and would have preferred a full
day to attend the appointment. Moreover, employed women with more frequent pregnancies booked late for the public clinics as they felt embarrassed about taking time off because they presumed that their colleagues at work would gossip about them. It was noteworthy that employment work-life balance practices and policy-related pregnancy and childcare were not widely applied in the working environment (Alhejji, 2018). Thus, these women attempted to balance their maternal and employment commitments while weighing the advantages and difficulties of early booking in public clinics.

Limited access to a car had a negative impact on the initiation and regular uptake of public antenatal care in this study. There is a lack of public transportation in Oman and women feel more comfortable and secure using their private cars (Belwal and Belwal, 2010). In this study, eighteen women did not drive a car, ten of whom booked their pregnancies late because they depended on relatives who were also employed to take them to the health centre in the morning. However, it was not always possible for these women to attend their visits because their relatives might be working in other governorates or cities or have different shifts. Lack of transportation, having to make travel arrangements and the cost of travelling to healthcare facilities have been reported in many studies conducted in different countries (Erci, 2003; Downe et al., 2009; Phillippi, 2009; Ayoola et al., 2010; Ndidi and Oseremen, 2010; Finlayson and Downe, 2013; Kisuule et al., 2013; Finlayson, 2015; Nisar et al., 2016). However, the findings of these studies were associated with the cost of transportation, whereas cost was not a reason for late booking in this study. The main issue in this study was limited access to a car, lack of public transport, and the inability of relatives to have time off from work.

Unplanned pregnancy and feeling upset contributed to late booking to a public clinic in this study. Yanikkerem et al. (2013) defined an unplanned pregnancy as one occurring earlier than the desired time or when no more children were anticipated. Women with unplanned pregnancies tended to attend late to antenatal care; did not talk about their pregnancy with relatives and friends; engaged in fewer healthy practices; and experienced more depressive symptoms (Arslan Özkan and Mete, 2010; Yanikkerem et al., 2013). However, the women in this study had their pregnancies confirmed in a private clinic but did not initially accept that they were pregnant, so required time to adjust before booking to attend public care. This was in line with a study by Hatherall et al. (2016), which reported that engagement with antenatal care was not of high priority to women until they accepted their pregnancy, had addressed their personal priorities, and coped with important issues in their lives. This also concurs with Duarte et al. (2011), where women in Brazil identified frequent
unplanned pregnancies shortly after the birth of the previous child as a reason for late booking. However, in the UK, Haddrill et al. (2014) identified the decision to continue or terminate an unplanned pregnancy as a reason for late booking, whereas this was not an issue for the women in this study. In Islam, termination of pregnancy is only indicated if the continuation of gestation would endanger the woman’s life (Husain, 2000). Therefore, women who are unhappy with their unplanned pregnancy should have quick and easy access to motivate them in attending for subsequent visits (Hatherall et al., 2016).

Delaying the time of announcing a pregnancy to relatives and friends, and the desire to keep a pregnancy secret in the first trimester, resulted in late booking in public clinics to avoid being seen by relatives and neighbours. Each health centre served a smaller catchment area compared with the private clinics. Many women understood that the risk of miscarriage was high in the first trimester, so they delayed their booking visits to the second trimester (Roberts et al., 2015; Ross, 2015). They preferred to verify the viability of the fetus before announcing the pregnancy and commencing visits. Furthermore, beliefs in the form of superstitions, such as envy and the ‘evil eye’ of others that operate in the society and anticipated harm to the woman and fetus, led to late access to public healthcare. Across different cultures, people consider superstition among the risks in pregnancy that are connected with fetal loss (Kilshaw et al., 2016). Therefore, the risk of exposure to superstition can be avoided by late booking to delay announcing a pregnancy. This mirrors Kilshaw et al. (2016), who found that women reported that the risk of superstition could be avoided by keeping their pregnancy secret. A Zambian study by Chewe et al. (2016) reported that approximately one-third of women identified fear of unspecified superstitions as a reason for late booking. Studies that discussed cultural expectations of the effects of forms of superstition on pregnancy outcomes were from low-income settings. Although Oman is a high-income country that has developed tremendously within a short period of time, certain sociocultural beliefs and traditions are still maintained within the social contexts (Al-Barwani and Albeely, 2007). Subsequently, even if women were motivated to attend professional care early, family and social pressure could demotivate them if they believed that this could harm the pregnancy and the fetus. Rosenstock (2005) defines health decision making as a process in which a person moves through different stages of interaction with individuals and events which may increase or decrease the likelihood of undertaking a subsequent response. Therefore, constant interaction with sociocultural factors and the healthcare system demotivated women with regard to commencing their visits to public clinics in early pregnancy.
In their motivation-facilitation theory of access to antenatal care, Phillippi and Roman (2013) highlighted the need to increase women’s motivation to access care through positive interaction with a clinic and its staff. However, Phillippi and Roman focused only on clinic-based interventions to facilitate access to care, such as increased clinic hours, individual appointments, decreased waiting time, immediate response to calls, free parking, continuity of care, and personalised care through electronic medical records. Sociocultural factors were not acknowledged in their theory as facilitators/barriers to access. Although clinic-based interventions have a significant role to play in facilitating or preventing access to care, sociocultural factors that act as barriers and facilitators should be considered.

11.5.2. Using Alternative Sources of Pregnancy-Related Information

The data demonstrated inadequate exchange of information during the women’s consultations and lack of opportunity to clarify their doubts and worries. This study provides understanding of the way these women accessed information if their needs were unmet during their appointments. Women in three European countries consulted by Luyben and Fleming (2005) identified that receiving reassurances from their caregivers as the most important component of care. The women in this study considered the contact with professionals as a learning opportunity to share their concerns, ask questions and receive relevant feedback. They appreciated those midwives who were attentive to their emotional and psychological needs. However, their visits focused predominantly on physical care, which undermined the women’s need for the exchange of information. Some women wanted to be involved and act responsibly towards their pregnancy by attempting to learn about it in their own way. Similarly, Swedish women considered active participation in care and mutuality as a basic concept in the midwife-woman relationship (Lundgren and Berg, 2007).

The participants of this study considered the exchange of information essential for understanding changes during pregnancy, feeling confident in making informed decisions and preparing them for birth and the postpartum period. Many studies highlight the importance of the exchange of information in enhancing self-confidence and motivating women’s participation in a plan of care (Kennedy, 2000; Bondas, 2002; Hildingsson et al., 2002; Luyben and Fleming, 2005; Lundgren and Berg, 2007; Carver et al., 2008; Seefat-van Teeffelen et al., 2011; Borrelli, 2014; Al-Ateeq and Al-Rusaiess, 2015; Owens et al., 2016). The data from these studies indicated that minimum attention was given to the exchange of pregnancy-related information with women.
Women aimed to understand the physical, psychological and social changes occurring to them during their pregnancy and to receive support and reassurance during their appointments to cope with these changes. This was consistent with responses of migrant women in Australia who appreciated the attendance to antenatal care for the opportunity to receive social support, information, and holistic services from their care providers (Owens et al., 2016). These women’s responses might be affected by being separated from female family members and not having resources that were available to them in their countries of origin, which was not an issue in this study. The finding in this study also concurs with a study by Hildingsson et al. (2002), in which the majority of the women wanted to have time to express their concerns and receive information about childbirth during their visits. This indicated the importance of exchanging information that was woman-centred and relevant to their needs. It is noteworthy that Owens et al. (2016) conducted a phenomenological study that provided in-depth and detailed insight into pregnancy as a lived experience.

In this study, inadequate exchange of information during the women’s appointments made them uncertain about normal or abnormal changes and when to seek professional help. Some women also felt inadequately prepared for their childbirth and transition to motherhood, which increased their worries, particularly if they failed to consult professionals to obtain reassuring answers. Many women understood that having information about minor ailments in pregnancy was helpful to cope with them, whereas medical management was only necessary to treat complications. For instance, these women preferred having clinical assessments if they developed complications to obtain more reassurance of the health of the fetus. This concurs with the findings of Seefat-van Teeffelen et al. (2011) in Amsterdam, in which women preferred to have psychosocial support from their midwives about the transition to motherhood and identified clinical assessments as more reassuring if they had developed complications.

Even multiparous women were not confident about the changes occurring to them and they considered that each pregnancy could bring different experiences. They reported their need for timely and relevant information to enable them to make an informed choice. This was consistent with Seefat-van Teeffelen et al. (2011), in which primigravidae and multigravidae expressed a strong desire to receive information that prepared them for birth, the postpartum period and motherhood. Regardless of parity, multigravidae or primigravidae wanted to receive care and information tailored to their needs because they had different expectations, issues and experiences.
The women identified overcrowding and busy clinics with staff shortages as barriers to receiving pregnancy-related information during their appointments; this was consistent with Lowe et al. (2009). Conversely, many midwives reported that some women were unwilling to receive information during their appointments because this would result in longer consultations. This happened because when women started their consultation, they were tired from being in long queues and had lost interest in information exchange. It was noteworthy that these women had employment and family commitments that were delayed due to their presence in the clinic for a long time. Therefore, being concerned about exchanging information in a busy environment without privacy was not a priority for these women and these midwives. The midwives aimed to provide care to all women with appointments within the allotted time and women hoped to finish their consultations early and avoid delay. However, it was observed that even when the clinics were not busy, and few women were waiting for their care, the midwives exchanged information about tasks on hand and iron supplements and the women did not ask questions. Watson (2007) described the educational role as a conscious interest to engage in a reciprocal relationship that involves caring and is not just about conveying information. The environment of care was not conducive to interactive discussions, as neither the women nor the care providers were ready, women did not ask, so the caregivers anticipated that they did not have any issues. The ‘teachable moment’ in antenatal care was lost due to the lack of a relationship, continuity of carer, time, and privacy. The teachable moment is part of a caring relationship that needs reciprocity and is fostered by the readiness of both parties to exchange relevant and meaningful information and time (Watson, 2007), which was not available during the women’s appointments. These data indicated that there was a discrepancy between what information the women needed and what they received, similar to findings in Collins (2007). Thus, the health promotion and educational potential of antenatal care were not accomplished.

The limited exchange of information encouraged these women to acquire information by networking with other female relatives and using internet resources. This coincides with Lowe et al. (2009), who found that women reported educating themselves formally by reading books and leaflets and informally by networking with others. Web-based information was considered more convenient and readily accessible as an alternative in order to fulfil their needs and was, for example, accessed through the women’s smartphones. The women also hoped to be responsible learners by seeking further knowledge on issues that were not discussed during their visits. Similarly, participants in a
study conducted by Lagan et al. (2010; 2011) used the internet to confirm current knowledge, make informed decisions, and have more control over their pregnancy and care. Although these studies included a large number of participants from different countries, the data were collected via web-based surveys and online group discussions and were limited to English-speaking women, which may limit representativeness and generalisability (Lagan et al., 2010; 2011).

However, the women in this study used online information to complement the discussion with professionals, not to replace it, which is in line with Larsson (2009). Similarly, more than half of the Australian women who participated in a survey by Grimes et al. (2014) considered discussion with a midwife as their main source of information. The majority of women who received care from a midwife did not make significant use of the internet compared with those who received most of their care from a doctor. Therefore, the type of provider influenced the source the women rated as the most useful. However, most of the antenatal care in this study was provided by a midwife and supported by nurses in the case of a shortage of or minimum contact with obstetricians. The issue was in the giving of irrelevant information to the women and inadequate time in which to express doubts and worries due to a busy clinic.

A few studies have discussed the usefulness and challenges of accessing web-based information specifically during pregnancy (Larsson, 2009; Lowe et al., 2009; Grimes et al., 2014). Access to web-based information can usually be achieved with the current advances in technology. However, the use of web-based information to make a reliable, informed decision under inadequate professional guidance might be problematic and needs to be explored (Larsson, 2009).

11.5.3. Complimentary Use of Private Antenatal Care

This research evaluates the reasons for women accessing private healthcare and how they perceived care received through both types of service provider. None of the reviewed studies explored if women used both forms of healthcare at the same time and did not discuss the impact of the concurrent use of both services because these studies aimed to compare them. Private hospitals and clinics, as well as their diagnostic services, have grown in the past years in Oman due to increased demand for convenient, accessible and readily available services (Alshishtawy, 2010; WHO, 2010). The argument made here is not to make a comparison of the quality of care the women received from both forms of service provider, but to discuss the rationales and issues with the use of the two sets of
services. Many studies have explored women’s perceptions of the quality of public and private antenatal care in middle- to low-income countries (Boller et al., 2003; Jallow et al., 2012; Emelumadu et al., 2014; Shabila et al., 2014; Nisar et al., 2016).

Almost all the women in this study used private and public services at different stages in their pregnancy and identified the healthcare system and sociocultural issues as contributing factors. For example, women accessed private healthcare to bypass long queuing times, inconvenient clinic hours, and to obtain good-quality care, reassurance and information. Some women believed that, by spending money in a private clinic, they could receive better and additional care within a short time, even without appointments, which satisfied their needs. This was consistent with a study by Boller et al. (2003) in Tanzania, which described the private providers as better than the public centres. However, that study was conducted in a low-resource setting that differs from the context of this study. According to Owusu-Frimpong et al. (2010), healthcare users will ‘shop’ for the health services that satisfy them. In some families, accessing private healthcare was considered more prestigious and women would be blamed for not spending money for the best for their fetus. Some women in this study also accessed local private antenatal care and even travelled to a neighbouring country as a result of family influence.

Some women felt more comfortable using public healthcare because these are the main healthcare providers but described private clinics as more accessible and the resources they offered were used appropriately to satisfy them. Healthcare professionals identified public antenatal care as more evidence-based in managing various risks and pregnancy complications. This concurs with a systematic review by Basu et al. (2012) comparing the performance of private and public healthcare. The review reported that private care lacked published data to evaluate performance, had greater risks of low-quality care, and served high socioeconomic individuals, whereas public care was less responsive to patients and lacked some supplies. However, the review was conducted in low- and middle-income countries that differ from the context of this research. Similarly, the participants in this study identified lack of resources, difficulty accessing publicly funded clinics when needed, and disrespectful care as reasons for using private care.

Some women had difficulty accessing public healthcare without appointments if they felt worried or suspected complications, particularly outside clinic working hours, which was confirmed by the professionals. Fear of developing risks and complications between appointments was a major factor in accessing private healthcare. The women highlighted
that their individual needs should be more important than the strict following of guidelines and formal processes that complicated their access to care. This coincides with Owusu-Frimpong et al. (2010), who identified that almost half of public users found access to healthcare services difficult compared with the majority of private care users. The private users reported that they could access care within a short time without delay, and opening hours for treatment were more flexible compared with the experience of public users. This indicated an issue with access to publicly funded clinics which needs to be further explored and managed by policymakers.

Some women accessed private healthcare seeking further learning to clarify their doubts and alleviate their worries by consulting an obstetrician because they missed this opportunity in public clinics. This was consistent with a study in Brazil by Victora et al. (2010), which indicated that the private clinics had better organisation and longer consultations than the public centres. The responses of Brazilian women were associated with socioeconomic inequities in the quality of public care between rich and poor and white and black. In Oman, all citizens have an equal right to good-quality healthcare. However, the women had the opportunity for longer consultations in a private clinic as the working hours were more flexible in the morning and evening and there were fewer users of care as they had to pay for services. The opening hours of the private clinics were more convenient for employed women and those with limited access to a car in the morning. This supports the findings of Owusu-Frimpong et al. (2010) that indicated that women who have less access to transport are more disadvantaged with regard to the use of healthcare services. Moreover, many women were employed in the morning and appeared reluctant to absent themselves from work and reschedule their commitments to attend their appointments, similar to findings in Owusu-Frimpong et al. (2010).

Almost all the women in this study accessed private healthcare to complement publicly funded care to fulfil unmet needs and confirm the results of clinical assessments by another expert. For instance, if women were unhappy with the results of assessments conducted in publicly funded clinics, they would access private healthcare to confirm the results. Having different results from a private clinic resulted in a loss of trust in the care and assessments performed for the women in the public healthcare system. This inconsistency in the findings of the assessments was attributed to the use of old ultrasound machines in public clinics, inexperienced staff and assessments performed at speed. However, it was also evident that the loss of trust in public healthcare was based on stories the women heard from relatives, friends and colleagues. The women preferred three-dimensional (3D)
ultrasound scanning because it produced clearer images and a better understanding of normal anatomy or the pathology of the fetus for them (Timor-Tritsch and Platt, 2002). However, 3D ultrasound scanning is not necessary for all types of scan, such as confirming pregnancy and gestational age. The navigation between the two services demonstrated the women’s desire to provide their fetus with the best care possible. This could be associated with intensive mothering to ensure the safety of the pregnancy and the fetus (Nelson, 2003). The navigation of both services could expose women to additional clinical assessments that are not within evidence-based practice. A Brazilian study of the quality of antenatal care in the public and private sectors reported that women who used private care had a higher number of procedures (Victora et al., 2010).

Alshishtawy (2010) argued that involvement of private healthcare is important to reduce the burden on public services and create a competitive atmosphere between them to improve quality of care in Oman. This would be true if the service users only accessed private care that is evidence-based. However, the increasing number of Omanis using private services is challenging to the MoH in terms of improving the utilisation level of primary healthcare centres. This could be facilitated by reducing queuing, having timed appointments and high-quality services, appropriate use of modern technology, medicine availability and easy referral processes in public clinics (WHO, 2010). Both service providers should collaborate and work in partnership with each other through well-established national policy and strategic directions, including information sharing and management through technology (WHO, 2010).

As autonomous individuals, women should have the right to use antenatal care from any service provider, rather than being directed to public healthcare to book their pregnancy even if they prefer private care and have health insurance. This has caused women to use both services and they receive duplicate non-evidence-based interventions. This strategy was only appropriate to reduce the percentage of women with late booking in public clinics but undermined women’s right to autonomous decision making and forced them to use care that did not satisfy their needs. This also contributed to the use of both services, which resulted in an additional burden on public clinics and a waste of resources, for instance, by having clinical assessments and physical care repeated in private and public healthcare systems. Therefore, a well-established mechanism should be in place to ensure that private health policies conform to the MoH national guidelines for evidence-based antenatal care. Most importantly, women should take an active part in their plan of care and the care should be more responsive to their needs and expectations.
11.6. **Overall Summary**

The women in this study appeared to be disempowered and to lack control over the antenatal care they received. They also accepted care and conditions with a central focus on doing their best to protect the fetus. These women felt compelled to accept what was recommended to them by their care providers because they perceived them as more knowledgeable and aware of their needs. Thus, women waited for a long time in uncomfortable environments in the interests of their fetus and their own needs were considered secondary. They wanted to avoid and manage risks and complications through attending antenatal care. However, conflicting interests in the organisation of antenatal care and the quality of the care received resulted in women seeking care and information from alternative sources to cope with their pressures and worries. These women sought information from the internet and networked with other women who had experience and accessed private healthcare for clarification of their concerns. These women recognised access to private healthcare as more convenient and easier than public care but some reported feeling more comfortable using public care as it is the main service provider. Accessing private healthcare in early pregnancy resulted in late booking in publicly funded clinics.

11.7. **Originality, Resonance and Usefulness of the Research**

11.7.1. **Originality**

This study is the first to provide new and in-depth insights into the perceived socially constructed value of antenatal care and the conflicting forces that women undergo during their pregnancy in Oman. This study found a discrepancy in the organisation of antenatal care between what women needed and anticipated and what they received. There is a lack of woman-centred care, empowerment and exchange of information. The women were treated as recipients of care who attended appointments to have the recommended physical care, with the main focus on the fetus. However, these women accepted the care as it was, and fulfilled their unmet needs in their own ways from alternative sources. Even when the women decided to take up antenatal care from private healthcare, they were advised to first book their pregnancy in a publicly funded clinic, which facilitated the emergence of the grounded theory of ‘Navigating antenatal care’. The women attempted to perform their role expectations in an environment of care that was not conducive to them. However, they preferred to attend for their care because they understood this was important to maintain a healthy pregnancy and fetus.
Furthermore, the study also brought into focus that there was a power imbalance between the women and their care providers, whereby the caregivers dominated the discussion and determined what information the women needed. At the same time, the women considered professionals and the MoH as experts who understood women’s needs, which resulted in a mismatch between interests and priorities. The power imbalance was also evident between the midwives and the administrative authority that deployed them to work between departments and shifts without considering their interests and scope of practice. This created many challenges for the midwives, which included assuming dual roles, difficulty maintaining competence in both midwifery and nursing, multiple role constraints, feeling powerless, and lacking choice in how and where they had to work.

The study provides new insight into the factors that shape women’s decisions regarding the timing of a booking visit to a public clinic and the complementary use of private care in the presence of a free public healthcare system. Interestingly, another novel finding of the study is that all women with late booking to public healthcare received some aspects of care in private clinics in early pregnancy and delayed their engagement with public antenatal care until they felt ready to do so. The impact of navigating both types of service provider in pregnancy was not recorded in previous studies. Furthermore, this study provides an in-depth explanation of the reasons for the overcrowding of antenatal clinics and its impact on the experiences of women and their healthcare providers. As there is a lack of studies conducted in Oman and in Arab countries more generally, the findings of this study are anticipated to provide new insights and contribute to the currently available literature on antenatal care.

According to Charmaz (2014), a strong combination of credibility and originality increases the resonance, usefulness and subsequent value of a contribution.

11.7.2. Resonance

Resonance relates to the fittingness and transferability of data to other contexts outside the study situation (Cooney, 2011). It also means that grounded theory makes sense of the participants’ narratives (Charmaz, 2014) and fits the data (Sandelowski, 1986). The findings of this study are presented in a clear and comprehensive way for the target audience. The study will be valuable across different contexts, as it combines interviewing and observing women and professionals together with theoretical sampling, which helped to saturate the property of the core category. This enabled a full description and deeper insight into perceptions of antenatal care from the participants’ perspectives (Cooney,
2011). The study provides an explicit description of the participants’ demographics, the characteristics of the study setting, and the inclusion and exclusion criteria for the initial purposive and later theoretical sampling. Furthermore, the explanations of the findings are supported by direct quotations from the participants to enhance the transparency and truthfulness of the data and to make them meaningful to the audience of the study (Cooney, 2011). The findings are further supported by important recommendations with regard to the national antenatal guidelines in Oman.

11.7.3. Usefulness

The researcher followed a logical method of data collection and analysis, moving through initial to focus and theoretical coding guided by a constructivist grounded theory approach that is explained transparently. The consistency in the findings from the interviews and observations contributes to an in-depth explanation of perceptions surrounding antenatal care that can be integrated to improve future pregnancy care to meet the needs of the service users and the providers of care. The categories and theory that emerged from the data analysis are relevant to informing actual practice and should contribute to existing knowledge (Getaneh Alemu et al., 2015).

11.8. Strengths and Limitations of the Study

11.8.1. Strengths

The ability of the researcher to access literature in Arabic and English, conduct interviews with participants in both languages, and transcribe and translate the data added strength to this study. Another advantage was the generation of data from a wide range of settings - three health centres and two polyclinics across three wilayats in a governorate - involving women at early and late booking and care providers. This enabled a sample of maximum variation to be accessed (Higginbottom, 2004), which facilitated a broader understanding of multiple perspectives and views about antenatal care. Data were collected from multiple sources and methods, which extended the possibilities of knowledge production to answer the research question to the point of theoretical saturation and promote rigour in the research (Flick, 2013). The robust application of grounded theory principles further contributed to the rigour of the study (Glaser and Strauss, 1967). Furthermore, the precise explanation of findings with the most representative quotations rendered the study transparent and enhanced transferability (Graneheim and Lundman, 2004).
11.8.2. Limitations

Being an ‘insider researcher’, i.e., a woman from the same social context and professional background in the MoH, not only enhanced theoretical sensitivity, but also had the potential to influence the progress of the research negatively. Some participants failed to explain their personal experiences because they assumed that the researcher knew what they wanted to say. However, using probing questions enabled clearer understanding and helped to minimise this issue in subsequent interviews. Sometimes, I faced difficulty separating my feelings and perceptions as a woman and a practitioner from those of the participants, which may have resulted in interviews that were shaped and guided by my own experience (Dwyer and Buckle, 2009). However, being an outsider without prior knowledge and experience might not eliminate the influence of personal perspective. As a constructivist, I was aware of the influence of my beliefs and experiences on the data and that this cannot be entirely eliminated (Breen, 2007). However, maintaining a reflexive account of my own assumptions and acknowledging them was helpful to minimise their effects on the interpretation of the data (Corbin and Strauss, 2015).

Although I conducted observations to gain in-depth understanding of the social process, my presence could have influenced the woman-carer interaction (Casey, 2006). For example, in the interviews, many women stated that they were not treated with respect during their appointments and that the staff ‘shouted at them’. However, I did not observe any staff raising their voice while providing care, which could be because the staff avoided expressing anger with women when I was present in the clinic.

Qualitative research depends on the skills of the researcher to generate data important to the research aim and objectives (Anderson, 2010). As a novice researcher, I missed some opportunities for further probing of some areas during the initial interviews that were evident during transcription but which were considered in the subsequent interviews. For example, in some of the situations, I did not ask how the women felt about certain events. Furthermore, I did not have the opportunity to observe the booking visits of any of the women due to tight inclusion criteria.
11.9. Recommendations for Practice, Policy, Education and Research

This study set out to provide in-depth insight into diverse perspectives and experiences surrounding antenatal care for women with low-risk pregnancies in Oman by interviewing and observing women and care providers in different settings. The study provides a holistic account of experiences and perceptions of antenatal care, which, if further explored and acted upon, should improve pregnancy care in the future. Some areas explored in the study had implications for practice, policy, education and future research, as follows.

11.9.1. Practice

- There is a mismatch between women’s expectations of care and those of the care providers due to a lack of a woman-centred approach. Women hoped to be treated as autonomous individuals and to receive culturally competent attention through woman-centred care. Woman-centred care is important to avoid stereotyping experiences and demands involving the partner in the care to feel powerful, such as the husband, mother and in-laws (Leap, 2009). Healthcare providers should work in partnership with women to enhance their active participation in the decision-making processes of their antenatal care. This could be achieved by appropriate assessments of women’s values, needs and expectations, establishing a trusting relationship through continuity of care to enhance sharing of issues and concerns. Involving the partner of care and providing women relevant and appropriate information that satisfy their needs, reduce their fear and enables them to feel more confident in making an informed choice and having control over the care they received (Borrelli, 2014).

- The limiting and facilitating factors highlighted in this study should be considered and acted upon to improve the uptake of antenatal care in future by shifting the value of antenatal care from one of obligation to one of motivation. This could be possible by allowing women the opportunity to learn about their pregnancy, discuss their likes and dislikes, and keeping them informed to demonstrate their rights as autonomous individuals. Listening to women and allowing them time to voice their concerns may help in finding solutions to late booking in public healthcare.

- Although it is challenging in a busy clinic, a woman-midwife relationship should be facilitated through continuity of carer to enhance the sharing of concerns and the process of reassurance. If continuity of carer is not possible with a midwife, the same team of midwives who are familiar to the women should at least be involved in providing care. Continuity of carer with the small team of midwives could be achieved
by for example assigning midwives in the antenatal clinic rather than rotating them across different clinical areas and shifts.

- Women opt to receive safe and effective care from a professional who demonstrates competence, respects them and is attentive to their needs. Thus, the interpersonal dimension of care is significant in order to meet women’s psychological and emotional needs for support and reassurance and to improve perceptions of care.

- The data indicated that the primary driver for attending antenatal care appointments was to be able to cope with perceptions of risks and uncertainty. Healthcare providers should be attentive to the emotional dimension of pregnancy that leads to perceptions of risks and uncertainty to enable them to understand the women’s experiences. When positive emotions are associated with a behaviour to be adopted, the commitment to action increases (Pender, 2011). Most importantly, healthcare providers should focus on positive aspects of pregnancy to enhance women’s experiences and reduce their fears.

- The use of web-based information is a common practice due to its accessibility. Thus, care professionals should be familiar with the websites that offer the most credible information and prepare a list of them to direct women’s searches, provide guidance and support, and discuss the results of the searches with them (Larsson, 2009; Lagan et al., 2010; 2011).

- A system of reminder SMS messages sent before scheduled appointments could be implemented and should ask women to confirm or cancel their attendance. A meta-analysis by Guy et al. (2012) reported that short message reminders substantially increased the likelihood of attending appointments in healthcare settings.

11.9.2. Policy

- This study highlights the importance of preconceptions care for all women of reproductive age that focus on health promotion and the exchange of information about pregnancy care, with particular attention to primigravidae and women with known risk factors.

- To increase early attendance to antenatal care, its value and benefits in the first trimester should be made clear to women, their families and communities. Policymakers should consider the use of evidence-based interventions that have been proved to be effective by research and which are the most appropriate for their social contexts.
All stakeholders should be involved in the development of the core outcome, e.g., women, their partners, and their healthcare providers (Symon et al., 2017). Multidisciplinary collaboration and effective teamwork among various contributors to maternal child health are needed at the local, regional and international levels, and include healthcare providers, programme managers and all those involved in policymaking. Women should have more opportunities to influence the organisation of care, service planning and implementation (Green, 2012). This could be facilitated by listening to the women, providing them the opportunity to voice their needs and expectations of care and issues and challenges they faced in antenatal care. For instance, women could be asked to complete a simple open ended questionnaire giving feedback on their antenatal care experiences and asking for their suggestions to improve the care they received. Then, the women’s responses should be considered by healthcare providers and policymakers in planning, developing health policies and making decisions with the focus on what is best for women and their fetus.

There is a need to keep the health and well-being of the mother and fetus central in any decision making and practice (Shamian, 2014). A woman and fetus need to be considered as an inseparable body, instead of separate identities which are in competition with each other (Lee et al., 2014). Every woman should also be assured that she is the primary focus of care, not only the fetus.

An annual national large-scale survey to assess women’s perceptions and satisfaction with maternal healthcare should be implemented in the country and the outcome used by policymakers to improve the services offered. Policymakers should consider appropriate ways to ascertain women’s voices in service and research planning. Women should be represented in all relevant decision-making bodies and practices put in place to ensure that their voices are heard and integrated (Green, 2012).

11.9.3. Education

The study revealed the need to develop an education programme for both women and caregivers. For the women, the health education programme should go beyond the physiological changes of pregnancy and antenatal care to focus on the emotional and psychological adjustments they should make during pregnancy.

Detailed and culturally sensitive material about pregnancy and antenatal care should be integrated into the basic education to equip women with important information about pregnancy care. This information should include the appropriate timing of booking.
visits, objectives of healthcare in pregnancy, important aspects of care, and myths and preconceptions surrounding pregnancy and antenatal care.

- All healthcare providers need further training programmes on the interpersonal dimension of care and woman-centred care, which could be part of basic education and focus on the needs of every woman, instead of stereotyping their needs based on anticipation.

11.9.4. Future Research

- This study has a broad aim that needs to be followed up by further specific research in this area. For instance, as seen in chapters 6, 7 and 10, women’s decisions were shaped by sociocultural factors that need to be explored in depth to acquire more understanding of them.

- There is a need to deepen understanding of how pregnancy is perceived in the local context and the anticipated social role of women by including mothers, in-laws, husbands, sisters, and friends who are within the direct network. Understanding the way society perceives pregnancy and the surrounding role expectations of women would deepen insights into beliefs held of the value and meaning of antenatal care within the social context. The women in this study disciplined their bodies and behaviours to allow normal development of the fetus and they constructed their perceptions through their interactions with the environment and other women in their social contexts. According to Pender (2011), the commitment to engage in action increases when significant others anticipate it, provide support for it, and perform the behaviour. Therefore, interaction with families, peers, and professionals could increase or decrease commitment to health-promoting behaviour (Pender, 2011). This influence was evident in this study.

- Although the percentage of women who did not access antenatal care during their pregnancy was approximately 1% (MoH, 2015a), their experiences across the social sciences need to be explored, if possible. Women without access to antenatal care could be identified during their birth of their child, so they could be targeted as new research participants in future.

- Further research is required to explore the perceptions of women who only use private healthcare during their pregnancy in order to identify their experiences of care.

- How uncertainty and ambivalence shift over time in pregnancy and how they influence uptake of the available services also need to be explored.
• Exploration of the theoretical underpinning of continuity of carer, organisation and outcome requires further study (Sandall et al., 2013).

• Further research is required to examine the impact of the exchange of pregnancy-related information and empowerment on coping with birth, the postpartum period and the transition to motherhood.

• National hospital-based studies should be implemented to identify the outcome of the pregnancies of those women who commenced their visits in the first trimester versus those with a late booking.
11.10. Conclusion

This is the first qualitative study to follow a grounded theory methodology in Oman and the other Gulf countries in exploring women’s and healthcare providers’ experiences and perspectives surrounding antenatal care for women with low-risk pregnancies. Before conducting this study, the perspectives of women and care providers in Oman and the other Gulf countries were unknown, as most of the studies conducted were satisfaction surveys that involved only pregnant women. The findings of this study showed that women’s motivation to access and use healthcare was shaped by sociocultural and healthcare system factors that need to be considered in future research. The findings of this study demonstrated the commitments and challenges facing these women in adhering to their obligations towards their pregnancies. These women felt obliged to attend antenatal care to protect the fetus and achieve optimum pregnancy outcomes and had a socially constructed fear of developing complications that was centred more on the fetus, which was the main reason to access antenatal care. At the same time, some of these women were employed, had young children at home to care for, or lacked access to a car in the morning. Some of the women did not drive and relied on relatives to escort them to the healthcare facilities. Some women were also unhappy with the antenatal care they received in publicly funded clinics due to overcrowding, long waiting times in an uncomfortable environment, and limited exchange of information and communication with care providers. The data indicated disparities between the care and information the women anticipated and what they received during their appointments, as the care was not woman-centred. Some of the women decided to access antenatal care in private clinics, as those were more convenient and accessible for them. However, they felt obliged to attend public antenatal care to book their pregnancy and obtain the handheld Maternal Health Record that are issued only in the health centres where the women live.

These women appeared disempowered and to lack control over the care they received, so they attended antenatal care and accepted it without discussing their issues and problems with their care providers. They waited for a long time for their consultations in an uncomfortable environment. The data also demonstrated an issue with access to care in cases in which woman had any complications that needed immediate reporting. Thus, the women decided to navigate the antenatal care of both types of service provider to conform to their social expectations as pregnant women and fulfil their need for support and reassurance. This contributed to late booking in publicly funded clinics and the sourcing of online information. This in turn resulted in duplication of the care the women received and
contributed to the treatment of pregnancy as an illness that required frequent medical assessment and monitoring. Recommendations for practice, policy, education and future research have been proposed. These findings will be helpful for informing and developing future antenatal care in Oman and making it more responsive by considering participants’ issues, needs and recommendations in the plan of care.
References


exploration of health workers’ and clients’ perceptions of barriers to completing four antenatal care visits in Morogoro Region, Tanzania. Health Policy and Planning, czw034.


Shamian, J. (2014). Interprofessional collaboration, the only way to save every woman and every child. *The Lancet*, 384(9948), e41-e42.


Turner, K. E. & Fuller, S. (2011). Patient-held maternal and/or child health records: meeting the information needs of patients and healthcare providers in developing countries. *Online Journal of Public Health Informatics*, 3(2).


Appendices 1-33
## Appendix 1: Summary of the Included Studies

<table>
<thead>
<tr>
<th>S. NO</th>
<th>Title/Aim</th>
<th>Setting/country</th>
<th>Participants</th>
<th>Design/Methodology</th>
<th>Sampling</th>
<th>Findings</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Boerleider et al. (2013) Factors affecting the use of prenatal care by non-western women in western countries</td>
<td>Netherlands</td>
<td>Sample size not reported Migrant women in the host country</td>
<td>A systematic review of sixteen articles</td>
<td>Systematic search and explicit inclusion of studies</td>
<td>Lack of knowledge and poor language proficiency were most frequently impeding factors</td>
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<tr>
<td>2.</td>
<td>Carroli et al. (2001b) WHO systematic review of RCTs of routine antenatal care</td>
<td>WHO systematic review</td>
<td>57418 pregnant women</td>
<td>A systematic review of seven eligible RCTs used</td>
<td>Systematic search and explicit inclusion of studies</td>
<td>No clinically different effect of the reduced number of visits in pre-eclampsia, UTI, postpartum anaemia, maternal mortality, LBW. Similar perinatal mortality Women in developed countries were dissatisfied with a new model of care. The cost was equal or less than the standard model</td>
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<tr>
<td>3.</td>
<td>Villar et al. (2001b) Patterns of routine ANC for low-risk pregnancy</td>
<td>WHO SR</td>
<td>60,000 pregnant women</td>
<td>A systematic review of 10 trials</td>
<td>Systematic search and explicit inclusion of studies</td>
<td>Reduced number of visits was not associated with an increase in negative maternal and perinatal outcome reviewed but may reduce women’s satisfaction due to unfulfilled expectations</td>
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<tr>
<td>5.</td>
<td>Dowswell et al. (2015) Alternative versus standard packages of ANC for low risk-pregnancy</td>
<td>WHO SR</td>
<td>seven up-to-date trials with &gt;60000 women</td>
<td>A systematic review in low, middle and high-income countries</td>
<td>Quasi-randomised studies, Cluster-&amp; individually-randomised trials</td>
<td>Reduced number of visits versus traditional models and perinatal outcomes, cost and women’s satisfaction</td>
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<td>6.</td>
<td>Finlayson and Downe (2013) Why do women not use antenatal care in low-and-middle-income countries?</td>
<td>The UK but the articles from low-middle-income countries</td>
<td>More than 1230 women</td>
<td>Meta-synthesis of 21 evidence women in</td>
<td>Systematic search and explicit inclusion of qualitative studies</td>
<td>Three themes were: Pregnancy as socially risky and physiologically healthy Resource use and survival in conditions of extreme poverty Not getting it right the first time</td>
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<td>7.</td>
<td>Villar et al. (2001a) WHO antenatal care RCTs for the evaluation of a new model of routine antenatal care</td>
<td>WHO RCT in Argentina, Cuba, KSA and Thailand</td>
<td>12568 pregnant women in the new model and 11958 in traditional model &amp; Healthcare providers</td>
<td>RCT involved ANC clinics</td>
<td>Cluster randomisation of women to the ANC clinics</td>
<td>The effectiveness of ANC with a reduced number of visits on maternal and perinatal outcomes Women and carer satisfaction No increased cost In some settings, the new model decreased costs</td>
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<td>S. NO</td>
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<td>8.</td>
<td>Majoko et al. (2007) RCT of two ANC models in rural Zimbabwe</td>
<td>Zimbabwe</td>
<td>Recruited 13517 women (6897 new model and 6620 traditional)</td>
<td>RCT with</td>
<td>The randomisation of the clinics that included 23 rural health centres with 11 new model and 12 standard model</td>
<td>The five-visit schedule was more effective in increasing adherence to procedures and better use of healthcare No difference in antepartum or postpartum transfer No difference in preterm or LBW rates Perinatal mortality was statistically not significant</td>
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<tr>
<td>9.</td>
<td>Vogel et al. (2013) Antenatal care packages with reduced visits and perinatal mortality: a secondary analysis of the WHO antenatal care trial</td>
<td>Australia</td>
<td>12568 pregnant women attended 27 intervention clinics, and 11958 women attended 26 the control clinics (high and low-risk)</td>
<td>This is an exploratory secondary analysis of WHO trials</td>
<td>Systematic search and explicit inclusion of qualitative studies</td>
<td>161 fetal deaths (1.4%) in the intervention group compared to 119 in control (1.1%) The risk of fetal death was high between 32 &amp; 36 weeks which was statistically significant for high and low-risk groups that could be due to the decreased number of visits.</td>
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<td>10.</td>
<td>Shabila, Ahmed and Yasin (2014) Women’s views &amp; experiences of ANC in Iraq: a Q methodology study</td>
<td>Iraq</td>
<td>38 postnatal women within a year Q sorting Interview 5 Pregnant women, two nurses &amp; gynaecologist</td>
<td>Q methodology</td>
<td>Purposive sampling</td>
<td>Public maternity services second best Preference for private care Dissatisfaction with public maternity care Satisfaction with public maternity services</td>
</tr>
<tr>
<td>11.</td>
<td>Raatikainen et al. (2007) Under-attending free ANC is associated with adverse pregnancy outcomes</td>
<td>Finland/ university hospital</td>
<td>270 pregnant women were non-attenders and 207 with few ANC (1-5 visits)</td>
<td>A hospital registered based cohort study of pregnancies and self-administered questionnaire</td>
<td>Not clearly stated</td>
<td>Significant increase in LBW babies in under-and none-attenders, more fetal and neonatal death Even when the birth took place in a hospital, under and non-attendance substantially increased the risk of severing pregnancy outcome</td>
</tr>
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<td>12.</td>
<td>Hildingsson et al. (2005) Number of antenatal visits and women’s opinion</td>
<td>Sweden/ Public primary care centre</td>
<td>2421 Swedish speaking women booked for ANC in early pregnancy &amp; at two month postpartum (1990-2000)</td>
<td>Mailing questionnaire after the first visit (self-reported)</td>
<td>Not clearly stated Estimated size: 2952 Response rate: 83%</td>
<td>No association between the number of visits and satisfaction Too few visits were associated with dissatisfaction with a medical and emotional aspect of care 2/3 of women made more visits</td>
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<tr>
<td>13.</td>
<td>Hildingsson et al. (2002) Women’s expectations on ANC as in early pregnancy</td>
<td>Sweden/ Public primary care centre</td>
<td>3061 Swedish speaking women booked for ANC in early pregnancy and at 2 month postpartum (1990-2000)</td>
<td>National survey Mailed Questionnaire (self-reported)</td>
<td>Not clearly stated may Estimated size: 3455 Response rate: 91%</td>
<td>Checking the baby’s health was the most important aspect of ANC, followed the women’s health and making a partner feel involved 70% preferred standard visits, 23% wanted more, 7% wanted less</td>
</tr>
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<td>14.</td>
<td>Hildingsson and Rådestad (2005) Swedish women’s satisfaction with medical and emotional aspects of ANC</td>
<td>Sweden/ Public primary care centre</td>
<td>2746 Swedish speaking women in early pregnancy and at 2 month postpartum (1990-2000)</td>
<td>National survey Two postal questionnaire</td>
<td>Purposive sampling Estimated size: 3293 Response rate: 83%</td>
<td>Majority of participants were satisfied with their ANC, but 23% were dissatisfied with emotional aspects and 18% with medical aspects The midwives were not supportive and did not pay attention to partner’s needs No continuity of care was associated with dissatisfaction</td>
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<tr>
<td>15.</td>
<td>Aniebue and Aniebue (2010)Women’s perception of antenatal care: the issue of fewer antenatal visits</td>
<td>Nigeria/ Hospital</td>
<td>409 pregnant women</td>
<td>individual interviewed survey</td>
<td>Sampling not clearly stated Estimated size 420 Response rate 95.2%</td>
<td>79.6% did not want reduce visits to four despite being assured on the safety in reduction; they did not accept the view that they are adequate to achieve the desired ANC The women who desired reduced number of visits to 4 was because it was convenient and cheaper to them</td>
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<td>16.</td>
<td>Brown et al. (2008) ANC and perinatal outcome in Kwale district, Kenya</td>
<td>Kenya/ all five districts</td>
<td>1562 women</td>
<td>Cohort survey (1/Aug 2004-31 July 2005) Continuous registration and interviewing household every four months</td>
<td>Sampling not reported</td>
<td>Estimated size 1562 Response rate 100% Only 32% had any ANC, attendance associated with women secondary and above education, women living further than 5 KM from the facility were less likely to attend, attending two ANC were more likely to have live birth and a healthy weight baby.</td>
</tr>
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<td>17.</td>
<td>Ayoola et al. (2010) Time of pregnancy recognition and prenatal care use: a population-based study in the US</td>
<td>United States (USA)</td>
<td>136373 Women at childbearing age with registered pregnancy</td>
<td>Secondary analysis Population-based study for the US, Mail and telephone survey methodology to maximise response rate</td>
<td>Secondary analysis no sampling</td>
<td>Early pregnancy recognition significantly increased odds of initiating early ANC and associated with lower odds of having fewer than recommended ANC and higher odds for having more than recommended ANC</td>
</tr>
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<td>18.</td>
<td>Brown et al. (2014) Changing models of public ANC in Australia: Is current practice meeting the needs of vulnerable populations?</td>
<td>Australia/ Victoria private and public hospitals</td>
<td>4366 postpartum women at 5-6 months post birth</td>
<td>Population-based survey through mailed questionnaire</td>
<td>Not clearly stated due to use of mail questionnaire Estimated size 8000 Response rate 52%</td>
<td>Young women, multiple social health problems, non-English speaking, high-risk were least satisfied Receiving care from midwife/GP were the most positive of ANC</td>
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<td>19.</td>
<td>Langer et al. (2002) Are women and providers satisfied with ANC? EB model in 4 developing countries</td>
<td>WHO trials in Saudi Arabia, Cuba, Thailand and Argentina</td>
<td>1600 pregnant women 174 Healthcare providers</td>
<td>Focused group discussion and interviews with women and care providers by self-administered close-ended questionnaire part of WHO ANC trials</td>
<td>Random sample Estimated size 1600 Response rate 100%</td>
<td>Women satisfied with ANC in both models Women in intervention group were more satisfied with exchange of information, The number of visits and timing was an area of concerns for women</td>
</tr>
<tr>
<td>21.</td>
<td>Ghobashi and Khandekar (2008) Satisfaction among Expectant mothers with antenatal care services in Musandam region</td>
<td>Oman/ health centres</td>
<td>83 pregnant women recruited from 6 health institutions</td>
<td>A small survey with an individual interview</td>
<td>Sequential sampling of every fifth woman Estimated size 78 Interviewed 83</td>
<td>49 women graded ANC as excellent in overall satisfaction 67 were happy with ANC services because of the attitudes of staff, laboratory services and overcrowding are leading causes of dissatisfaction</td>
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<tr>
<td>22.</td>
<td>Emelumadu et al. (2014) Perception of quality of maternal health care services among women utilizing ANC services</td>
<td>Nigeria/ university teaching hospital</td>
<td>302 pregnant women</td>
<td>Cross-sectional descriptive study Interview semi-structured</td>
<td>Purposive sampling of health centres, the sampling of women not clear Estimated size 310 Response rate 97.4%</td>
<td>85% of women were satisfied with staff attitudes, (84.1%) waiting time, (79.5%) cost of service Satisfaction associated with age ≥30 years, married, and multiparous</td>
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<td>23.</td>
<td>Kamil and Khorsheed (2013) Maternal perceptions of ANC provision at a tertiary level hospital, Riyadh</td>
<td>Saudi Arabia/ tertiary hospital</td>
<td>244 pregnant women</td>
<td>Individual in-depth questionnaire Interview</td>
<td>Sequential sampling of every 5th women to get the required number Estimated size not reported</td>
<td>Significant higher number of women wanted to follow 4 visit model Higher satisfaction reported in women following 4 visit model 50% did not receive any information about process of labour, breastfeeding or contraception</td>
</tr>
<tr>
<td>24.</td>
<td>Soltani and Dickinson (2005) Exploring women’s views on patterns of ANC provision</td>
<td>Derby Hospitals NHS/ UK</td>
<td>329 postnatal women</td>
<td>A cross-sectional survey with Qualitative and quantitative self-administered questionnaire</td>
<td>Sampling not reported Estimated size: 700 response rate 47%</td>
<td>More than half women preferred to see a midwife Average gestation at booking was 11 weeks perceived to be the right time. Average visits were 11/ per women 87% were allocated to a midwife and 54% preferred to continuity of carer, women were satisfied with ANC</td>
</tr>
<tr>
<td>25.</td>
<td>Donkor and Obed (2012) Waiting time and women’s satisfaction at an ANC clinic</td>
<td>Ghana/hospital ANC</td>
<td>316 pregnant women</td>
<td>A cross-sectional survey using structured closed-ended and open-ended questions. Individual Interview</td>
<td>Convenient sample Estimated size 330 Response rate 95.8%</td>
<td>The duration of time spent in clinic was 6.5±2 hours and women spent more time waiting to see a doctor 68% rated the waiting time as too long and almost half expressed dissatisfaction at the time spent</td>
</tr>
<tr>
<td>26.</td>
<td>Solarin and Black (2013) They told me to come back: women’s ANC booking</td>
<td>South Africa/ public labour wards</td>
<td>208 postnatal women</td>
<td>A cross-sectional study by interviewing postnatal women</td>
<td>Sampling not reported Estimated size &amp; response rate not reported</td>
<td>Attendance was high with 46% seeking care before 20 weeks. Late booking was due to delay appointment 19.2%, no ANC screening in the initial contact 49%, delay in recognition 21.7%, lack of time 20.8%</td>
</tr>
<tr>
<td>27.</td>
<td>Teijlingen et al. (2003) Maternity satisfaction studies and their limitations: what is, must still be best</td>
<td>Scotland UK/</td>
<td>1137 postnatal women within 10 days in Sep 1998</td>
<td>A cross-sectional survey using a 28 audit Self-reported questionnaire.</td>
<td>Not clearly reported Estimated size: 1659 Response rate 69%</td>
<td>Women were satisfied with maternal services The fewer the number of caregivers the more likely the satisfaction with care Characteristic of care provided and the women’s psychosocial circumstances are factors to influence satisfaction</td>
</tr>
<tr>
<td>28.</td>
<td>Soltani &amp; Dickinson (2005) exploring women’s views on information provided during pregnancy</td>
<td>UK Derbyshire Acute hospitals NHS trust</td>
<td>329 Postnatal women</td>
<td>A cross-sectional survey used a quantitative and qualitative questions looking at aspects of ANC period done. Self-reported</td>
<td>Not clearly reported Estimated sample size: 700 Response rate 47%</td>
<td>Women obtained information from HCP, family and friends but 28% used the online information but preferred one-to-one discussion or to receive written information. Some women did not understand the written information</td>
</tr>
<tr>
<td>29.</td>
<td>Davey et al (2005) what is it about antenatal continuity of caregiver that matters to women</td>
<td>Australia</td>
<td>1616 postnatal women who gave birth in Victoria in a 2 week</td>
<td>postal survey were sent for all women, period in Sept 1999, excluding women with stillbirth or infant death, Self-administered</td>
<td>Sampling not clearly reported Sample size 2412 Response rate 67%</td>
<td>Most women described their ANC as very good if had continuity of carer Continuity of caregiver, time spent with carer and individualised care, quality interaction with HCP increased satisfaction</td>
</tr>
<tr>
<td>30.</td>
<td>Anya et al (2008) ANC in the Gambia: missed opportunity for information, education and communication</td>
<td>The Gambia/ rural kurban clinics</td>
<td>457 pregnant women</td>
<td>A cross-sectional survey was conducted using ANC &amp; safe motherhood questionnaire. Interview</td>
<td>Systematic random sampling Estimated sample 384 Response rate 100%</td>
<td>70.5% Women reported spending 3 minutes or less with their care providers Exchanging information with care providers Awareness of danger sign was low, prolonged labour was not recognised as a danger signs</td>
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<td>31.</td>
<td>Jallow et al. (2012) Women’s perception of ANC services in public and private clinics</td>
<td>The Gambia/public and private clinics</td>
<td>502 women interviewed (264 public &amp; 238 private clinics)</td>
<td>Descriptive Cross-sectional survey using validated WHO questionnaire Interview</td>
<td>Simple random sampling Estimated sample size 379 Response rate 98.4%</td>
<td>Satisfaction 79.9% for public and 97.9% for private due of inadequate privacy &amp; space, neatness, poor communication, information, environment of care, technical process</td>
</tr>
<tr>
<td>32.</td>
<td>Ejigu et al. (2013) Quality of Antenatal care services at public health facilities of</td>
<td>Ethiopia/Health Centres</td>
<td>369 ANC &amp; healthcare providers</td>
<td>Facility-based cross-sectional study by semi-structured interview, chart review &amp; observation by trained female nurse graduate. Interview</td>
<td>Systematic random sampling Estimated sample size 396 Response rate 93.2%</td>
<td>Women received part of recommended care as not all receiving iron and folic acid, weight and BP and blood test measured. This made risk grading questionable &amp; affected their satisfaction. Some women were satisfied as absence of clean environment, inadequate information, waiting area, seats, privacy, long waiting</td>
</tr>
<tr>
<td>33.</td>
<td>Chew et al. (2016) Factors associated with late antenatal care booking among pregnant women</td>
<td>Zambia/public clinics</td>
<td>305 pregnant women</td>
<td>clinical-based cross-sectional quantitative approach by interviewing participants</td>
<td>Simple random sampling Estimated sample size 305 Response rate 100%</td>
<td>Late booking associated with maternal age, lack of information and unplanned pregnancy, not recognising pregnancy, marital status; single women were 73% less likely to book late due to more family support, parity is associated with late booking, avoid the risk of wicked by others, misconception, long waiting</td>
</tr>
<tr>
<td>34.</td>
<td>Kisuule et al. (2013) Timing and reasons for coming late for the first antenatal visit by pregnant women</td>
<td>Uganda/hospital</td>
<td>400 pregnant women with a late booking after 20 weeks of gestation by Clinical obstetric examination</td>
<td>A cross-sectional pretested interviewer-administered questionnaire, Interview by trained</td>
<td>Sampling not clearly reported Estimated sample size 400 Response rate 100%</td>
<td>72.7% of women did not know the right time to commence their first visit, 27.5% did not have money for transport, 9.3% thought they had to pay for the service 53.3% did not feel early attendance important, and some of them knew the time to commence their visits</td>
</tr>
<tr>
<td>35.</td>
<td>Ekott et al. (2013) Perceptions of women about antenatal care in a cottage hospital, Nigeria</td>
<td>Nigeria/health centre</td>
<td>410 pregnant women</td>
<td>pretested semi-structured individual questionnaire</td>
<td>Sampling not clearly reported Estimated sample size not reported</td>
<td>94% satisfaction with care which was highest with health talks and lowest with medical consultation Satisfaction with, nature of health talks, prompt attention, polite staff dissatisfaction with unfriendly attitudes of staff and delay at service appointments</td>
</tr>
<tr>
<td>36.</td>
<td>Montasser et al. (2012) Egyptian women’s satisfaction and perception of antenatal care</td>
<td>Egypt/family medicine centre</td>
<td>600 pregnant women</td>
<td>individual interview using a structured questionnaire</td>
<td>Sampling not clearly reported Estimated sample size 750 Response rate 80%</td>
<td>High satisfaction with waiting time for laboratory results, help by staff, trust the doctor, cleanliness, privacy, most accessible items, less satisfaction for location of the health centre, health education, explanation by physician &gt;75% received proper nutritional care, and fetal examination, USG and only 65% received tetanus toxoid, Women were satisfied with health education messages</td>
</tr>
<tr>
<td>37.</td>
<td>Erci (2003) Barriers to utilisation of prenatal care services</td>
<td>Turkey/hospital</td>
<td>446 hospitalised postnatal women</td>
<td>self-reported questionnaire</td>
<td>Sampling not clearly reported Estimated size 467 Response rate: 95.5%</td>
<td>low education and unwanted pregnancy, negative attitude toward pregnancy and ANC, being too busy at home, which decreased the frequency of use and delayed early initiation of ANC</td>
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<tr>
<td>S. NO</td>
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<td>38.</td>
<td>Ndidi and Oseremen (2010) Reasons given by pregnant women for late initiation of ANC</td>
<td>Nigeria/ large tertiary hospital</td>
<td>372 women primi and multi registering late after 14 weeks</td>
<td>A cross-sectional pretested self-reported questionnaire for women able to read &amp; write, filled by a trained person if not</td>
<td>Not clearly reported Sample size estimation not clearly reported Response rate 75.3%</td>
<td>73.6% booked late in the second trimester and 26.4% in the third trimester More than 65.6% booked late due to ignorance or misconceptions of the purpose of and timing of the first visits</td>
</tr>
<tr>
<td>39.</td>
<td>El Aty et al. (2014) Overall adequacy of antenatal care in Oman: secondary analysis of national reproductive health survey, 2008</td>
<td>Oman</td>
<td>1825 records of women who had children&lt;3 years</td>
<td>A secondary in-depth analysis of cross-sectional national survey RHS in Oman, 2008</td>
<td>Probability, multistage, stratified cluster sampling</td>
<td>96.8% had 4+ ANC visits, 74.9% attended ANC in the first trimester, 99.1% received care by trained personnel Overall adequacy of ANC for surveyed women were 53.8% Primigravida was a significant predictor of the overall adequacy of ANC</td>
</tr>
<tr>
<td>40.</td>
<td>Parsa et al. (2018) Factors influencing the behaviours of pregnant women towards using prenatal care services</td>
<td>Iran/ health centre</td>
<td>165 postpartum women based on the number of</td>
<td>Descriptive, analytical cross-sectional self-structured questionnaire and self-reported</td>
<td>Sample size calculation of women with regular and irregular ANC visits Sampling not clearly reported Response rate 100%</td>
<td>72.1% of the women had regular visits &amp; 28% had irregular visits. Knowledge was one of the effective factors on timely ANC visits A higher level of self-efficacy were effective variables on regular ANC visits, which led to more timely visits</td>
</tr>
<tr>
<td>41.</td>
<td>Adeyinka et al. (2017) Predictors of prenatal care satisfaction among pregnant women</td>
<td>American Samoa/ Medical centre</td>
<td>165 pregnant women recruited</td>
<td>Structured survey questionnaire that was self-reported</td>
<td>convenient sampling sample size calculated 215 responded 165 response rate 76%</td>
<td>Living &gt; 20 minutes driving time away from the health centre, spending two hours or more at the clinic, previous pregnancy loss lowered satisfaction Clinic accessibility, waiting time at the clinic, time spent with physician and time taken from employment to attend appointments received the lowest mean of satisfaction</td>
</tr>
<tr>
<td>42.</td>
<td>Kumbani et al. (2012) Do Malawian women critically assess the quality of care? A qualitative study on women’s perceptions of perinatal care</td>
<td>Malawi/ hospital</td>
<td>14 mothers with normal delivery in Malawi</td>
<td>A descriptive qualitative design A semi-structured individual interview with a topic guide</td>
<td>purposeful sampling</td>
<td>Women described good care as: respect, confidentiality, privacy and normal delivery They described unsatisfactory care as: delay in providing care, staff’s attitudes, inadequate care, unavailability of delivery attendants</td>
</tr>
<tr>
<td>43.</td>
<td>Raine et al. (2010) A qualitative study of women’s experiences of communication in antenatal care: Identifying areas of action</td>
<td>Central London/ UK/hospital</td>
<td>30 Women</td>
<td>Semi-structured individual interviews &amp; focus group interviews with a topic guide</td>
<td>purposeful sampling with a maximum variation</td>
<td>constructive communication with care providers as empathic conversational style, openness to questions, sufficient time to talk and proactive contact by providers created reassurance, facilitated exchange of information and improved attendance and foster tolerance to stressful situation. Salient feature of poor communication: lack of exchange of information, insufficient discussion of possible problems and discourteous styles of interaction make women reluctance to engage actively with providers</td>
</tr>
<tr>
<td>S. NO</td>
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<td>44.</td>
<td>Larsen et al. (2004) Antenatal care in Goroka: issues and perceptions</td>
<td>Papua New Guinea/ community</td>
<td>20 women and 4 healthcare workers</td>
<td>semi-structured interviews and focused group interview</td>
<td>Purposive sampling of communities and convenience sampling of women</td>
<td>Staff attitudes and maltreatment were the main concerns. All women were satisfied with care. Care providers were concerned with staff shortage, limited supplies and broken equipment.</td>
</tr>
<tr>
<td>45.</td>
<td>Bondas (2002) Finnish Women’s experiences of antenatal care</td>
<td>Finland/ two primary healthcare centre rural and urban and one central hospital</td>
<td>40 women</td>
<td>Phenomenological Methodology Semi-structured interview and non-participant observation used.</td>
<td>Purposive sampling</td>
<td>The women were concerned with their needs and the health of their fetus and their own health and dignity. They wanted to share their pregnancy and childbirth stories in a confident relationship. They needed protection through evidence-based surveillance, and professional competence was expected. They want to learn, active participation in dialogue and to involve their family in care.</td>
</tr>
<tr>
<td>46.</td>
<td>Nigenda et al. (2003) Women’s opinions on ANC in developing countries: results of study</td>
<td>WHO trial in Cuba, Saudi Arabia, Thailand and Argentina</td>
<td>164 healthy pregnant women with 2 ANC visits in traditional or new models recruited</td>
<td>ethnography methodology: Focus group discussions notes from observation</td>
<td>Random sampling</td>
<td>Concept about pregnancy and healthcare, experience with healthcare and healthcare provider and opinions about the modified ANC program. Women have positive view of the new ANC protocol, the information they receive controversial opinions in Cuba about reduction of visits from 18 visits.</td>
</tr>
<tr>
<td>47.</td>
<td>Sapountzi-Krepia et al. (2011) Mother’s experiences of pregnancy, labour and childbirth: A qualitative study in Northern Greece</td>
<td>North Greece/ public and private maternity and paediatric clinic</td>
<td>607 postnatal mothers</td>
<td>Qualitative design a self-reported questionnaire containing open-ended questions on maternity services and birth</td>
<td>Snowballing</td>
<td>Positive experiences as correct, complete and individualised care, learning about pregnancy, fetal USG follow-up, learning the gender. They wanted detailed and frequent follow up. They need better education of midwives and nurses, modern equipment. They wanted programs that promote their physical and psychological well-being. They wanted their carer to behave in more human and to have maternity care in the community.</td>
</tr>
<tr>
<td>48.</td>
<td>Duarte et al. (2011) Maternal decision on obtaining prenatal care: study in Brazil</td>
<td>Brazil/ publicly funded Brazilian health care system.</td>
<td>21 pregnant women receiving PNC care recruited through</td>
<td>Discourse analysis methodology In-depth face to face interview</td>
<td>Not reported</td>
<td>Organization of PNC and lifestyle features ineffective women-carer communication. Women had negative feelings to their pregnancy which manifest as fear, fear of harming their fetus, of being punished during labour and felt insecurity towards the infants and self.</td>
</tr>
<tr>
<td>49.</td>
<td>Sword et al. (2012) Women’s and care provider’s perspectives of quality of PNC: a qualitative study</td>
<td>Canada/ five urban centre</td>
<td>40 pregnant women 40 HCP from five urban centre in Canada</td>
<td>A qualitative descriptive approach, Semi-structured interview with probing guide.</td>
<td>Purposeful maximum variation sample</td>
<td>Clinical and interpersonal care process to woman-centred care and embrace shared decision. Cleanliness, aesthetic, privacy, seating, welcoming environment, available HCP outside working hours, ease of scheduling, personality of staff, Sharing of information, continuity of carer, respectful attitude, emotional support, approachable interaction style, taking time, meaningful relationship.</td>
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<td>50.</td>
<td>Jenkins et al. (2014) Women’s expectations and experiences of maternity care in NSW - what women highlight as most important?</td>
<td>Australia/ public hospitals with midwifery-led clinics in New South Wales</td>
<td>53 women (pregnant, postpartum, complicated &amp; uncomplicated pregnancy) receiving recruited over 12 months</td>
<td>Semi-structured audio-recorded interviews to explore women’s expectation and experience.</td>
<td>Purposive sampling</td>
<td>Woman-focused care Systems and facilities: resources, type of care, environment, organisation of care Continuity of care: the desire of relationship with a person or team, receive consistent information Family-focused care Differing response by birth experiences</td>
</tr>
<tr>
<td>51.</td>
<td>Goberna-Tricas et al. (2011) Satisfaction with pregnancy and birth services: the quality of maternity care services as experienced by women</td>
<td>Spain/ hospitals</td>
<td>31 postnatal women attending postnatal group</td>
<td>Phenomenology methodology focused group interview</td>
<td>Not clearly reported</td>
<td>Safety and technical skill of the professionals Qualified professionals is indispensable Women made distinction between technical and interpersonal human aspect of skills and relationship; some women were satisfied with healthcare but not with personal treatment</td>
</tr>
<tr>
<td>52.</td>
<td>Mathole et al. (2004) A qualitative study of women’s perspectives of ANC in a rural area of Zimbabwe</td>
<td>Zimbabwe/ health centres</td>
<td>68 pregnant women &amp; partners</td>
<td>5 focus group discussion Eleven in-depth individual interviews selected from FGD</td>
<td>Random sampling as part of trials</td>
<td>Younger women wanted more for more assurance Too wide spacing between visits make help in case of complication difficult Older women &gt;35 years not so concerned with visits, Cultural believes influenced time of pregnancy recognition and reporting or announcing, believed that women are vulnerable to witchcraft in early pregnancy</td>
</tr>
<tr>
<td>53.</td>
<td>Mathibe-Neke (2008) The expectations of pregnant women regarding antenatal care</td>
<td>Gauteng/hospital</td>
<td>18 Pregnant women attending ANC clinic at</td>
<td>in-depth unstructured interviews using open-ended questions that were audiotaped and field notes</td>
<td>Purposive sampling</td>
<td>Healthcare is basic human right that included assessment and examination by doctors, giving medication, history taking important, wanted extra attention as pregnancy is unique. Receiving care from a different carer Communication: need to be well informed and understand situation. Freedom of choice: choice of carer and healthcare intervention, timed appointment and individualised care,</td>
</tr>
<tr>
<td>54.</td>
<td>Hildingsson and Thomas (2007) Women’s perspectives on maternity services in Sweden: Process, problems and solution</td>
<td>Sweden/ ANC clinics</td>
<td>827 Women were recruited from a Swedish national study from 1999-2000</td>
<td>Mailed questionnaire of open-ended questions.</td>
<td>Part of national survey</td>
<td>Desirable characteristic of midwife: relationship with woman and her partner, competent in addressing the psychological and emotional needs and those of partner, clinical skills of midwife, caregivers should be friendly, respectful, attentive, supportive. ANC: longing for reassurance of normal fetus and their own health Structural aspects: wanted more visits, easy and quick access, Continuity with one midwife, ultrasound was important</td>
</tr>
<tr>
<td>55.</td>
<td>Vallely et al. (2013) Exploring women’s perspectives of access to care during pregnancy and childbirth</td>
<td>Papua New Guinea/ community</td>
<td>seven focus group (51 pregnant &amp; postnatal women) &amp; in-depth interviews with 18 women and 3 HCP using interview guide</td>
<td>A descriptive qualitative design FGD and individual interview</td>
<td>Purposive sampling</td>
<td>Women received at least one visit in their pregnancy, ANC was important to ensure normal baby, receive health education and treatment Staff scolding women, Financial constraints Sometimes it was not clear if the experience reported related to ANC or birth</td>
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<tr>
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| 56.   | Rahmani and Brekke (2013)
Antenatal & obstetric care in Afghanistan -
a qualitative study among
healthcare receivers and healthcare
providers                                      | Afghanistan/ Hospital       | 12 pregnant & postnatal women & 15 different healthcare providers          | A qualitative phenomenological approach
Semi-structured interviews & observation were used.     | Nor clearly reported         | Reasons of underusing of healthcare services included low motivation, family decisions, lack of money or transportation problems, treated poorly by HCPs
The mother-in-law is the decision maker or the husband
Physician occupy an authoritarian position in the society
and behaviours supposed to be accepted                  |
| 57.   | Haddrill et al. (2014)
Understanding delayed access to ANC: a qualitative
interview study                                      | UK/ community and maternity
hospital                        | 27 pregnant women booked after 19 weeks of gestation                       | semi-structured interview                                | Purposive sampling              | Causes of late booking were: unaware of being pregnant (absence of symptoms & misinterpretation) avoidance, postponement, poor reproductive health knowledge, and delayed recognition of pregnancy, previous pregnancy experience and perceived ANC value. Deficiency of pregnancy diagnosis |
| 58.   | Hatherall et al. (2016)
Timing of the initiation of antenatal care: An
exploratory qualitative study of women and
service providers in East London                  | UK/ hospital                | 21 interviews with antenatal and postnatal women and 6 focus group with 26
staff and 32 women from four community groups (Bangladeshi, Somali, Lithuanian and Polish) | This was a generic qualitative study
Interview and FGD                                | Purposive sampling with a
maximum variation                                  | Initial care seeking is influenced with a package of care offered. Little perceived urgency in initiating antenatal care Competing responsibilities and commitments in women’s lives and pregnancy with no potential complications or concerning symptoms Difficulty navigating services and referral system. Acceptance of pregnancy and needed time to accept and arrange life commitments |
| 59.   | Nisar et al. (2016)
Qualitative exploration of facilitating factors
and barriers to use of antenatal care services by
pregnant women in urban and rural settings       | Pakistan/rural community and
tertiary care hospital          | Interviews with 6 lady health worker, 10 pregnant women and 4 doctors and 10
focus group discussion with women who had a child aged 5 years or younger | Qualitative explorative study
Individual and focus group discussion             | Purposive sampling               | Facilitating factors: availability of qualified HCPs (private facility), trust in healthcare providers, recommendation from a family, friends, health worker, good quality medical equipment and laboratory facilities, low cost (public facility) and ease of access.
Barriers to access: financial limitations, no major health problems, difficulties in access, restriction from husband or mother-in-law, housekeeping commitments, perceived unavailability of healthcare providers |
| 60.   | Gheibizadeh et al. (2016)
Iranian women and care providers’ perception of
equitable prenatal care: a qualitative study     | Iran/ health centres         | 10 women and 10 care providers                                              | The generic qualitative design
in-depth interview                                      | Purposeful sampling               | Guideline-based care,
Time-saving care: not waiting to receive care was a mean of equitable care. Non-discriminating care: equal care is given for all Privacy-respecting care: privacy was not taken into consideration. Affordable comprehensive care: women pay for GP visit in the health centre, and if necessary they pay for a specialist. Effective relationship, Caregiver competency should have adequate scientific knowledge and competence of OBGN |
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<tr>
<td>61.</td>
<td>Callaghan-Koru et al. (2016) qualitative exploration of health workers’ and clients’ perceptions of barriers to completing four antenatal care visits in Morogoro Region, Tanzania</td>
<td>Tanzania/ health centres</td>
<td>Direct Observation in 18 health centre of 203 women by 30 HCPs Interview 203 women observed and 5 HCP from each health centre</td>
<td>Qualitative in-depth interview Observation of encounter in ANC</td>
<td>Purposive sampling of HCP Sampling of women was not clearly reported</td>
<td>HCP and women positively indicated that FANC improves the convenience of services for women and reduced workload for HCPs, but many tasks implemented in each visit. Barriers: out of pocket costs: inconsistent supply of drugs or testing kits required women to pay outside. Facility practice contributed to women late booking after 16 weeks, delaying services to women in the first-trimester. Poor provider communication and limited awareness of recommended ANC visiting timing</td>
</tr>
<tr>
<td>62.</td>
<td>Luyben and Fleming (2005) Women’s needs from antenatal care in three European countries</td>
<td>Three European countries: Scotland, Switzerland &amp; Netherland</td>
<td>23 pregnant and postnatal women recruited from three European countries: Scotland, Switzerland &amp; Netherland</td>
<td>Grounded theory methodology Interview</td>
<td>Purposive and theoretical sampling</td>
<td>Responsibility is the main reason for seeking ANC and feeling confidence and autonomy are substantial to that</td>
</tr>
<tr>
<td>63.</td>
<td>Wilunda et al. (2017) Barriers to utilisation of ANC services in South Sudan: a qualitative study in Rumbek North county</td>
<td>South Sudan / primary health centres</td>
<td>Data were collected by an open-ended pretested questionnaire for a focus group discussion: 45 men (4FGD), 127 women (8FGDs) and 42 women (2 FGDs) in cattle camps by two facilitators known to the participants using local languages</td>
<td>A cross-sectional qualitative study was appropriate to explore topics &amp; issues in-depth</td>
<td>A random sampling of women and villages</td>
<td>Access and resource availability such as transport/access, proximity of health facility, availability of care, flooding and poor roads, costs Influence of sociocultural context and conflict: domestic chores of women, influence of husbands/male partner, insecurity Perceptions of pregnancy perceived benefits, perceived risks, and perceived quality of care and efficacy of medical treatments</td>
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### Appendix 2: Critical Appraisal of Included Evidence

#### Critical Appraisal of Systematic Review (CASP Tool)

<table>
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<tr>
<th>Author/year/Title</th>
<th>The review address a clearly focused question</th>
<th>The author looks for the right type of papers</th>
<th>Important and relevant studies included</th>
<th>The author do enough to assess the quality of the included studies</th>
<th>Did the combination of the studies reasonable?</th>
<th>What are the overall results of the review?</th>
<th>How precise are the results?</th>
<th>Can the results be applied to the local population?</th>
<th>Were all important outcomes considered?</th>
<th>Are the benefits worth the harms and costs?</th>
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<tr>
<td>1. Carroli et al. (2001b) WHO systematic review of RCTs of routine antenatal care</td>
<td>The review addressed a clearly focused question of whether a model with fewer visits with or without goal-oriented components is least effective?</td>
<td>Systematic literature search done based on search strategy that was derived from study questions PICO as based on Cochrane pregnancy &amp; Childbirth group of Cochrane Collaboration, electronic &amp; hand searching done &amp; the original authors of the original studies were contacted to obtain additional data on unreported outcomes</td>
<td>Seven eligible randomised controlled trials were identified for pregnant women attending ANC based on a predetermined inclusion criteria, final consensus made by the research teams</td>
<td>A list of criteria selected based on Cochrane Collaboration Reviews to assess quality of trials, the criteria were listed and each criterion was rated as met, unmet or unclear &amp; final decision made by all researchers which is very important to confirm the quality of the included study and to avoid selection bias. Publication bias statistical test for all trials was done &amp; funnel plots made which found no evidence of bias</td>
<td>Meta-analysis included both trials that used individual as the unit of randomisation and clinics. Pooled and stratified meta-analysis presented by odds ratios or rate differences and data discussed based on the prior identified outcome measures</td>
<td>No clinically significant effect of reduced ANC visits in comparison with standard visits, some dissatisfaction with care especially among women in developed countries. Effective intervention can be provided within fewer visits than in traditional model without clinically important increase in the adverse outcome</td>
<td>The results of the study were discussed explicitly based on the prior outcome measures with support of illustrating tables for some of the important findings relevant to the outcome measures</td>
<td>Systematic review is in the highest level of the hierarchy, The finding of the study combined the finding of seven RCTs. The populations in this review were 57418 eligible women which was a large scale systematic review. The finding of this study could be applicable in our local setting &amp; have already been considered</td>
<td>The identified primary outcome were all considered adequately for clinical outcome, perceived satisfaction &amp; costs</td>
<td>The result of the study stated that a model with reduce number of visits, with or without goal-oriented components could be introduced into clinical practice without risk to mother or baby with some expected dissatisfaction and lower costs could be achieved. There is no statistical differences between the reduced number of visits model and standardised model</td>
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<tr>
<th>Authors/year/title</th>
<th>Did the review address a clearly focused question?</th>
<th>Did the author look for the right type of papers?</th>
<th>Did the Author include all important and relevant studies?</th>
<th>Did the author do enough to assess the quality of the included studies?</th>
<th>Did the combination of the results of the studies reasonable?</th>
<th>What are the overall results of the review?</th>
<th>How precise are the results?</th>
<th>Can the results be applied to the local population?</th>
<th>Were all important outcomes considered?</th>
<th>Are the benefits worth the harms and costs?</th>
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<tr>
<td>Novick (2009) Women’s experience of prenatal care: An integrative review</td>
<td>This type of review usually address abroad topic on women subjective experience of PNC</td>
<td>The English published studies from 1997-2007 were searched on the topic of women’s experience of PNC. Key term was searched alone &amp; in combination. Selecting English published research indicate publication bias as the study with negative finding tend not to be published</td>
<td>67 articles were retrieved from which 36 met the inclusion criteria that were clearly stated &amp; guide the searching process that examines the women’s overall experiences of PNC, diverse to allow comparison &amp; include racial &amp; ethnic minorities &amp; conducted in the US.</td>
<td>Assessment of the quality and rigour was not an inclusion criterion in this review, but inclusion was based on the relevance to purpose of the study and studies were included based on conceptual richness of the studies</td>
<td>All articles analysed systematically and summarised in separate documents, these summaries were reread, code identified, then entered into ATLAS software &amp; coded using provisional &amp; inductive coding, then code were examined to identify themes. Data were combined into six important themes according to the number of recurrent themes.</td>
<td>36 articles met the inclusion criteria, Results were combined into six themes and sub-themes that were synthesised based on a number of recurring themes that highlighted the women experiences of PNC.</td>
<td>The identified themes were discussed explicitly and tables were used to summarize thematic findings and research studies reporting findings on women’s experiencing PNC</td>
<td>This review synthesised diverse studies on women’s experiences on PNC. The review focused only on English published studies, included racial &amp; ethnic minorities and majority of the population were from the US. Publication bias is evident but still the finding can be applied but with caution</td>
<td>The important outcome were considered, and some other themes emerged from reviewing the relevant studies</td>
<td>The review revealed limited evidence on women’s experiences on PNC which suggested a need for more research in this topic. The findings recommended implementing comprehensive models of care to address women’s needs &amp; preferences &amp; to make ANC more attractive &amp; accessible to women’s experience that may improve the pregnancy outcome &amp; utilisation of ANC</td>
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<td>Author/year</td>
<td>Did the review address a clearly focused question?</td>
<td>Did the author look for the right type of papers?</td>
<td>Did the Author include all important and relevant studies?</td>
<td>Did the author do enough to assess the quality of the included studies?</td>
<td>Did the combination of the results of the studies reasonable?</td>
<td>What are the overall results of the review?</td>
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<td>3. Villar et al. (2001b) Patterns of routine ANC for low-risk pregnancy</td>
<td>The review addresses a clearly focused objective that aims to assess the effects of ANC programs for low-risk women. P: pregnant women</td>
<td>The inclusion &amp; exclusion criteria were clearly based on the objectives of the review objectives in which the focus was on all RCTs comparing different programs of ANC with varied frequency, timing of visits &amp; different types of care providers. The studies were done in developed &amp; developing countries</td>
<td>A systematic way was followed in searching the Cochrane Pregnancy &amp; Childbirth Group trials register, reference lists of articles &amp; contacted researcher, data extracted &amp; analysed to avoid selection &amp; publication bias. Reasons for excluding articles were clearly reported</td>
<td>Data were extracted independently by 3 authors without knowing the name of the authors, journals &amp; country. Then jointly reviewed before analysis, then a quality score was assigned to each trial using specific quality criteria. Methodological quality assessed by grouping them according to the type of intervention. A table of quality assessment of all included study was presented in this review</td>
<td>The summary of the combined study was reasonable that matches the clinical effectiveness and perception of antenatal care. Results were combined into five reasonable themes emerged from the outcome measures</td>
<td>Ten trials involved over 60,000 women were used. 7 trials evaluated number of visits &amp; 3 evaluated type of care provider. Odds ratios were used to measure effectiveness of the intervention, (95%CI) &amp; trials on care providers pooled using Odds ratios &amp; its 95% CI. Similarities &amp; differences in the study were reported.</td>
<td>Funnel plot graphic evaluation is done &amp; 1.2 used as maximum odds ratio to the number of visits&amp; the value of clinically estimated to be relevant with 10% prevalence to have sufficient power to answer reliably the main hypothesis</td>
<td>In our local population a new model of ANC care that includes less number of visits have been started since 2007, and there was no significant adverse effect on the perinatal outcome which supports the result of this review</td>
<td>Important outcomes were considered about effective intervention, biological outcomes, satisfaction outcomes, cost and process outcomes</td>
<td>There were no harm found in reducing the number of visits to the pregnant women with low-risk pregnancy, similar or higher satisfaction found in midwifery and obstetric led care, the reduced visits ANC models was less costly than the standard visits model</td>
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<td>4. Dowswell et al. (2015) Alternative versus standard packages of ANC for low risk pregnancy (Review)</td>
<td>The objective of the review is well written in clearly and focused way which is: Compare the effects of ANC programs with reduced visits for low-risk women with standard care The title of the study reflected the objectives and outcome measures</td>
<td>The review included studies retrieved from different databases, references lists of retrieved papers and personal contact of the principal researcher to obtain data on relevant outcome unreported in the original publication No language restriction applied These are considered the primary studies on this topic that provide an overall picture of the results</td>
<td><em>The review included acceptable RCTs comparing ANC with varied number of visits Quasi-randomised studies</em> <em>Cluster- &amp; individually-randomised trials seven up-to-date trials with &gt;60000 women four were done in high-income and Three in low- &amp; middle-income countries The studies included primi &amp; multiparous women</em></td>
<td>The authors assessed the quality of evidence using GRADE approach relating to reduced number of visits, goal-oriented versus standard visits Two review authors independently assessed for inclusion of potential studies then they discussed for agreement, if not able to Trials were assessed for risk of bias and extracted data for accuracy</td>
<td>Yes The findings reported based on the clinical outcome measures, cost-effectiveness and women’s and healthcare providers’ perceptions of each model.</td>
<td>Reduced visits models were associated with an increase in perinatal mortality compared to standard care in settings with limited resources where the number of visits is already low Admission to neonatal unit could be reduced Women preferred the standard visits In reduced Visits close monitoring of fetal and neonatal outcome is important</td>
<td>The results of the study were written precisely and concisely in which all outcomes measures were discussed clearly and were a risk of bias was anticipated, the control measures were discussed</td>
<td>This systematic review of individual and cluster RCT indicated increased perinatal mortality and decreased women’s satisfaction in a model with fewer number of visits The review included countries of different income level The finding should be considered by policymakers to improve ANC in future and to consider the context of the study</td>
<td>Yes The review focused mainly on the clinical outcome measures for maternal, fetal and newborn Cost-effectiveness and women’s and care providers’ perceptions of care were also included</td>
<td>No harms identified in this systematic review</td>
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<th>Author/year/Title</th>
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<td>5. Finlayson and Downe (2013) Title: Why women do not use antenatal services in Low-and Middle-income countries? A meta-synthesis of qualitative studies</td>
<td>Yes the review aimed to inform the development of future antenatal care programs through a synthesis of findings in all relevant qualitative studies</td>
<td>Yes At the beginning the search directed at all types of studies across sociological, medical and psychological databases exploring antenatal care experiences, attitudes, beliefs who commence their visits after 12 weeks of gestations, infrequently or not at all received ANC No language restriction employed Hand search journals and reference lists</td>
<td>After deleting irrelevant studies, 21 qualitative studies were included in the synthesis that included data from 1239 participants interviewed directly of in focus groups from across the world Mixed methods that reported limited qualitative data were excluded</td>
<td>Two authors reviewed all articles independently and then reached a final conclusion by consensus The researcher did not specify the name of the tool used to assess the quality They mentioned that the tool used pragmatic grading system of A-D scoring and the grade was determined by consensus of C+ and higher This needs more explicit discussion to make the reader informed of the used tool.</td>
<td>Yes as it is required for meta-synthesis of qualitative research, the review resulted in seven themes and three final themes: two related to initial antenatal care attendance, service-oriented, and maintaining attendance These themes resulted in development of hypothetical model to explain why women fail to make adequate use of antenatal care services The analysis was comprehensive and reinforced by evidence of theoretical saturation</td>
<td>Mismatch between the current antenatal care provision and the sociocultural context of some women ANC provision is theoretically and culturally at odds of personal risks of lack of family resources or physical danger of travel Care delivered not meeting needs and expectations Disrespectful care</td>
<td>Detailed and clear explanation of the process of analysis, synthesis, description of studies and themes were included in the review Each theme was explained and supported with some direct quotes</td>
<td>Given the scope and rigour of meta-synthesis reviews, there is great potential to inform and influence policy and underpin strategy than individual qualitative study However, the study findings can be generalizable for the population in similar contexts low-middle income countries and not to all contexts</td>
<td>This was a meta-synthesis of published studies which did not deal directly with a human, so no harm was anticipated</td>
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<td>Did the author do enough to assess the quality of the included studies?</td>
<td>Did the combination of the factors for prenatal care reviewed affect the results of the studies?</td>
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<td>6. Boerleider et al. (2013) Factors affecting the use of prenatal care by non-western women in industrialized western countries: a systematic review</td>
<td>The review study was written clearly to focus on factors affecting the use of antenatal care provided for non-western women receiving care in industrialized countries. To give a systematic review of factors affecting non-western women’s use of prenatal care (both medical care and prenatal classes) in industrialized western countries</td>
<td>The reviewer only searched eleven databases for reviewed articles from 1995-July 2012. Included quantitative and qualitative literature. With no language restriction. However, reference lists was not checked and individual journals were not individually checked, which indicate the search missed some important articles.</td>
<td>The search resulted in inclusion of 16 peer-reviewed articles of which 3 were quantitative, 1 mixed method &amp; 12 qualitative studies and the full-text reviewers were assessed by 5 reviewers and inclusion of studies were done based on the agreement of two reviewers.</td>
<td>The quality were assessed by two reviewers using mixed methods appraisal tool to appraise complex qualitative, quantitative and mixed methods literature. However, the quality of some included studies was 25% indicating low quality.</td>
<td>The studies were synthesized using narrative synthesis including the quantitative studies using conceptual framework to integrate the possible explanation of for the relationship between ethnicity and healthcare use. The factors identified categorized into individual and health services factors.</td>
<td>The review identified the facilitating and impeding factors for use or non-use of ANC in host countries that included: social network, expertise of care, personal treatment, accessibility of care and lack of knowledge of western healthcare system.</td>
<td>The result were synthesis as narrative synthesis of systematic review and presented in form of themes or concepts under which each factors described briefly. The author justified the use of narrative synthesis as the studies were heterogeneous in countries, none western, and methods of analysis.</td>
<td>Not exactly because the findings of the study could be generalizable to none western women receiving care in western countries. The social context of care and the situation of women were different. However, the identified factors could be compared with findings of the study for similarities and differences.</td>
<td>This was a narrative review of systematic review which had no benefits and harms. But the findings might be helpful to identify the factors that facilitate or prevent the use of prenatal care.</td>
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## Critical appraisal of Cohort Study (CASP Tool)

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<tr>
<th>Authors/title/years</th>
<th>Did the study address a clearly focused issue?</th>
<th>Was the cohort recruited in an acceptable way?</th>
<th>Was the exposure accurately measured to minimise bias?</th>
<th>Was the outcome accurately measured to minimise bias?</th>
<th>(a) Are all important confounding factors identified?</th>
<th>Was the follow up of subjects complete and long enough?</th>
<th>What are the results of this study?</th>
<th>How precise are the results?</th>
<th>Do you believe the results?</th>
<th>Can the results be applied to the local population?</th>
<th>Do the results of this study fit with other available evidence?</th>
<th>What are the implications of this study for practice?</th>
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<tr>
<td>7. Raatikainen et al. (2007) Under-attending free ANC is associated with adverse pregnancy outcomes</td>
<td>The study has a clear and focused objective To assess the outcome of pregnancies with low numbers of antenatal care and no antenatal visits groups</td>
<td>A hospital register-based cohort study of pregnancies treated in Kuopio university hospital, Finland, 1989-2001 Inclusion &amp; exclusion criteria were clearly stated which help to limit selection bias. By analysing 23614 births, the researcher identified Women with average 6-18 ANC visits reference group</td>
<td>The study was conducted by self-administered questionnaires at 20 weeks of pregnancy returned to hospital by 22 weeks and then analysed. Having clear selection criteria may decrease the selection bias</td>
<td>There was no intervention but study done to compare between the women with low number of visits with no antenatal visits about Low birth weight, neonatal deaths and fetal deaths are the main outcome measures</td>
<td>logistic regression analysis controlling for all clinically significant possible confounding factors was performed</td>
<td>It was not reported in this study about the follow up because it was a hospital registry study</td>
<td>There were significantly more LBW infants in under and non-attenders more fetal deaths and more neonatal deaths</td>
<td>The researchers reported the results for each primary outcome adequately and some data summarised in table</td>
<td>The findings of this study supported the findings of many other studies that lack of ANC context can be associated with maternal and fetal morbidity and mortality. The factors that may lead to under-attending or not attending ANC were identified.</td>
<td>The finding could be applicable to population in the same context. Because many factors can differ from one context to another which may affect the pregnancy positively or negatively. Could be used with caution due to the use of self-administered questionnaires due to subjectivity</td>
<td>It was reported in the study that the findings of this study showed similar outcomes in the earlier studies although magnitude of risk appeared to vary in different settings depends on the ANC system and degree of low attendance</td>
<td>The study should be used with caution due to its limitation about use of a self-administered questionnaire for collecting data on maternal characteristic. However, the researcher used the hospital database to collect data on complications and pregnancy outcome which may increase the validity of the results</td>
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### Critical appraisal of RCTs (CASP Tool)

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<tr>
<th>Authors/title/year</th>
<th>Clearly focused stated question</th>
<th>Random assignment of patients to treatments</th>
<th>All the patients entered the trial properly included conclusion</th>
<th>Patient, health workers and study personal blind to treatment</th>
<th>Were the groups similar at the start of the trial?</th>
<th>Were the groups treated equally?</th>
<th>How large was the estimate of the treatment effect?</th>
<th>How precise was the estimate of the treatment effect?</th>
<th>Can the results be applied to the local population?</th>
<th>Were all clinically important outcomes considered</th>
<th>Were all the benefits worth the harms and costs?</th>
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<td>8. Villar et al. (2001a) WHO antenatal care RCTs for the evaluation of a new model of routine antenatal care</td>
<td>The study has a clear focused question to Examine if the new model of ANC will improve maternal, perinatal &amp; neonatal outcome as effective as the traditional model. <strong>PICO</strong> component all included</td>
<td>Antenatal clinics were the unit of randomisation, 53 clinics that agreed to participate in the study were randomised into two groups: 27 assigned new model of ANC &amp; 26 assigned standard model of ANC. Inclusion &amp; exclusion were clearly stated &amp; appropriate to the study objectives</td>
<td>Only 2% in the new model groups and 2.4% in the standard model groups were lost to follow up. Which was acceptable because generally, loss to follow should be less than 20% to avoid bias &amp; maintain validity of the initial randomisation</td>
<td>Participants &amp; midwives were not blinded due to nature of intervention which may lead treatment contamination, but the assessors were blind to the model of care; the staff collected data after birth was unaware of group status. Information on emergency events collected to monitor possible bias in data collection</td>
<td>Out of 53 clinics agree to participate in the study 27 clinic randomly allocated to a new model of care &amp; 26 randomly allocated to standard care. Both groups were treated equally. The women in the standard model received ANC care based on the recommend total ANC guideline &amp; women in the new model received a focused ANC care for the four visits based on an identified guideline.</td>
<td>The calculation showed that 19087 women in four study sites enrolled in 12 clinics/site, each clinic recruiting 450 patients, would provide power of 90% for detection of intervention odds ratio of 1.2 in a two-sided test with level of significance of 5% if p is 0.001 that the new ANC model as effective as the standard program.</td>
<td>To establish the equivalence with two-sided CI within a difference of 0.02 with power of 90% about 1700 women will be needed &amp; that 2000 women for the trial provided sufficient power to detect a relevant difference. Assessors were trained on data collection,</td>
<td>To establish the primary fetal/neonatal outcome was LBW in singleton births. The primary maternal outcome was maternal morbidity index, and they were considered adequately in the trial.</td>
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<td>Majoko et al. (2007) RCT of two ANC models in rural Zimbabwe</td>
<td>The trial has a clearly stated question to compare a five-visit ANC model with a specified goal with the standard model in a rural area in Zimbabwe. The objective was written clearly and contains all PICO component of clear questions</td>
<td>This study used a cluster RCT where the health facility was the unit of randomisation because it was not possible to randomise the participants as well as the care provider &amp; the intervention will be based on the cluster level</td>
<td>It was reported that for 2% of women there was no information on maternal and fetal outcomes which was acceptable for the validity of the study</td>
<td>It was not possible to blind the women in the study and midwives responsible for providing intervention because it was based on the number of visit to the unit of and the intervention was applied to the cluster level</td>
<td>All women booking for ANC in the RHCs from Jan 1995 &amp; Oct 1997 were recruited to the trial, all baseline data recorded on the day of booking, then following findings recorded in maternal notes. How the women treated in each group was not clear</td>
<td>The control group received the standardised ANC &amp; the experimental group received the new ANC model based on each model guidelines of care with both group received the important required intervention during ANC</td>
<td>The estimated mean cluster size 500 women with an intra-cluster coefficient of 0.05 and an α of 0.05, it was needed to recruit 6900 women in 14 clusters in each model with power 80% of detecting 10 % decrease in proportion of women making five or fewer visits</td>
<td>It was done through statistical analysis by intention to treat and accounted for cluster correlation. To increase the precision of the study the midwives &amp; nurse participating in the trial were trained on the knowledge &amp; skills about ANC models</td>
<td>It was consistent with findings in similar previous study. However, due to small size sample, the study can be generalizable to women in the sample context</td>
<td>The result was consistent with findings in similar previous study. However, due to small size sample, the study can be generalizable to women in the sample context</td>
<td>There were no differences in rates of preterm delivery or LBW which indicate that the new modified ANC models were feasible and appears suitable for implementatio n, it was associated with efficient use of a limited number of visits</td>
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<td>Title/Authors/ years</td>
<td>Clearly stated question</td>
<td>Appropriate research method (study design) to answer the research question</td>
<td>Clear description of selection of the subjects</td>
<td>Sampling criteria and Selection bias</td>
<td>Representative sample to the Population</td>
<td>Sample size calculated based on Statistical power</td>
<td>Sample satisfactory response rate achieved</td>
<td>Valid and Reliability of measurement instrument</td>
<td>The statistical significance</td>
<td>Confidence intervals given for the main results</td>
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<td>10. Hildingsson et al. (2005) Number of antenatal visits and women’s opinion</td>
<td>The study has a focused and narrow objectives that is appropriate for the design of the study To explore factors associated with number of visits made and with women’s own opinions about these visits</td>
<td>Data collected from Swedish speaking women booked for ANC during 3 weeks period over one year (1990-2000), by mailing questionnaire after first visit. Survey is suitable to collect data from large sample within short time, but it was self-reporting which may have some limitation, e.g., the women may answer the questions based on their understanding or tend to provide positive answer</td>
<td>Inclusion &amp; exclusion criteria were not adequately stated which may lead to selection bias. Researchers make the contact through the gatekeeper in which all women who booked their pregnancy were eligible to participate voluntarily, setting of the study was clearly described</td>
<td>The study had broad inclusion and exclusion criteria which may lead to selection bias. The study included Swedish speaking women which could be a form of bias because women who do not speak Swedish were excluded</td>
<td>The study can be representative for Swedish women in early pregnancy because they were the sample of the study with a good response rate of 82% of all booking. The findings could be used with caution due to the limitation of self-reported mailed questionair, that is recall bias</td>
<td>It was reported that the total number of ANC women booked their pregnancy could not be estimated during the 3 weeks period, so it was not estimated. Sample size is important to be able to predict the statistical power to calculate the clinical significance of the findings</td>
<td>Out of 2952 who consented 2421 filled the questionnaires 82%, which means that the study has good response rate, which is important for generalizability &amp; representation of the sample</td>
<td>The study was part of a national survey for Swedish speaking women that used two questionnaires that were validated in a Swedish context, detailed explanation of items were given and reasons to focus of number of visits justified</td>
<td>Making fewer visits was associated with high educatio level but age &lt;25 years was no longer statistically significant</td>
<td>The Chi-squared test and risk ratio with 95% CIs of categorical data were estimated how much accurate is the findings</td>
<td>This was a self-reported survey with a good response rate The study only included Sweden women which mean that the data can be generalizable to women in similar contexts However, the findings could be used to compare its findings with this study findings</td>
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<td>11. Aniebue and Aniebue (2010)</td>
<td>The study has a focused objective that is appropriate for the design of the study</td>
<td>The study used individual interviewed survey which is appropriate to its aim and would result in collection of data from large population within short period Collecting survey data by interview adds strength and enable the researcher to obtain accurate data that the participants understood as they get immediate clarifications before answering each question but at the same time may introduce some bias</td>
<td>This was explained briefly Any women visiting the ANC clinics in two tertiary hospitals between March-April 2006 were given information on a selected day before their consultations, and those agree to participate signed consents The selection of subjects require further explanation</td>
<td>The inclusion and exclusion criteria were not explicitly highlighted which might lead to selection bias</td>
<td>The sample size could be representative as the response rate of women receiving antenatal care in the tertiary care was estimated to be 399 and achieved 92.2% response rate</td>
<td>The study was conducted by individual interview of all participants thus the response rate was high 95.2%</td>
<td>The survey questions were pretested and administered in English by trained attendants who was fluent in both language, which is important for consistency of questions &amp; responses to avoid losing meanings in translation</td>
<td>Chi-square test was undertaken for statistical significance and P value less than 0.05 were considered statistically significant</td>
<td>Was not calculated which make the interpretati on of the true value of the results as difficult to estimate</td>
<td>They were not addressed in the study, but cost and convenience of the care might be the confounding variables</td>
<td>The study excluded some PHC facilities that they were poorly equipped so the outcome of the study cannot be generalised to such facilities</td>
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<td>12. Hildingsson and Rådestad (2005) Swedish women’s satisfaction with medical and emotional aspects of antenatal care</td>
<td>The Survey has a clear focused question congruent with how the study will be done</td>
<td>It is part of Swedish national survey for 2746 Swedish speaking pregnant women in early pregnancy &amp; 2 months post-delivery. Survey is suitable to provide data for large-scale population. Women answered 2nd questionnaire may be affected with their birth experiences leading to recall bias</td>
<td>Swedish speaking pregnant women with low-risk pregnancy were selected by purposive sampling based on clearly stated inclusion criteria. Reason for excluding some women stated adequately.</td>
<td>A clear inclusion &amp; exclusion criteria were used that help to reduce selection bias of appropriate sample. Midwife help in recruiting did not know which women will be including in the study that limits the selection bias</td>
<td>Out of 72% of women who consented to participate, good response rate achieved 83% which suggest that data can be generalizable</td>
<td>The power calculation of the sample size was based on detecting women with depressive symptoms, however, statistical power was not calculated</td>
<td>83% of pregnant women who met the inclusion criteria completed the two questionnaires which increases the validity of the findings and representativeness</td>
<td>Pilot study with face validation was conducted in 13 women &amp; resulted in minor changes in the wording of the questions to increase the validity and reliability in achieving consistent and accurate measures</td>
<td>95% CI for relative risk was estimated using a method described in Mantel &amp; Haenzel &amp; logistic regression analysis, but the statistical significance was not calculated</td>
<td>95% CI was given for women satisfaction with ANC about socio-demographic background &amp; with structural aspects of ANC</td>
<td>The study findings could be used with caution because it was conducted by a self-reporting questionnaire that considered as one of the limitations as women may provide a socially desirable answer.</td>
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<td>13. Brown et al. (2008) ANC and perinatal outcome in Kwale district, Kenya</td>
<td>The study has a clear and focused question in the abstract That was congruent with how the study conducted</td>
<td>This study was a cohort survey that reports on all women with a birth outcome from 1st August 2004 and 31st July 2005 through continuous registration. Each household in the catchment area was visited every four months &amp; interviewed by the field team. Survey is appropriate to collect large-scale data for large population similar to this study</td>
<td>All women who gave birth between 1st August 2004 and 31st July 2005 were included in the survey. No other inclusion criteria discussed.</td>
<td>All women were included in the surveys which limited selection bias.</td>
<td>Due to high response rate almost 100% indicating high precision in the data which make the findings generalizable to the sample of the population</td>
<td>It was not calculated because all women in the catchment area were included in the cohort survey by continuous registration to the health facility</td>
<td>There was a high response rate almost 100% which is important for generalizability of the findings.</td>
<td>Trained personal collected data by visiting each household by continuous registration using tool that was not described, data were entered into the database by two members to check for accuracy which increases the validity of the data and updated based on the visits.</td>
<td>Statistical significance was calculated for numbers of visits, determinants of attendance for ANC &amp; determinants of pregnancy outcome, p-value more than 0.05 were excluded from subsequent models</td>
<td>Yes the confidence interval was 95% which is an important indicator of how accurate is the measurement</td>
<td>Yes the confounding factors were not listed in the study because it was a hospital-based registry survey</td>
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<td>14. Ayoola et al. (2010) Time of pregnancy recognition and prenatal care use: a population-based study in the US</td>
<td>The study was conducted to address a clearly stated objectives to examine the relationship between the time of pregnancy recognition and time of initiation of PNC</td>
<td>Data analysis of pregnancy risk assessment &amp; monitoring system used including 13,373 women at childbearing age in 29th US states with live birth within 2-6 months before contacted. Data collected by telephone and mail survey methodology to maximise the response. Survey is appropriate for a large population study. Tendency to answer positively is a disadvantage</td>
<td>Inclusion criteria were women delivered live-born infants. Then data on prenatal care was obtained from PRAMS survey &amp; birth certificate. Women who did not have any prenatal care visit &amp; have home delivery were excluded lead to selection bias</td>
<td>Women at childbearing age registered their pregnancy were selected by analysing birth certificates &amp; PRAMS registry. Survey depends on responses rate, if the number of non-respondents was high this might lead to bias. The self-reported study may lead to recall bias</td>
<td>The sample was representative in term of large sample size representative for resident women of childbearing age in U.S.</td>
<td>The sample size was not predetermined but based on the PRAMS &amp; birth certificates analysis; the total population was 136,373. Estimation of sample size should be done to ensure statistical power to detect clinical significance &amp; to avoid overpowere/underpower</td>
<td>The response rate was not reported because all women who delivered within the hospital in 29 US states were included in the survey</td>
<td>This study was a secondary analysis of PRAMS multistate data in the USA. Validity and reliability of the questionnaires was not reported, but it was reported that a standardised data collection procedures and instruments were standardised to allow comparisons between states</td>
<td>Based on the number of outcome variables and the large sample size, the statistical significance level was set to a level of 0.01</td>
<td>Early PNC initiation OR (99% CI) for precise and accurate findings</td>
<td>Some factors could be associated with PNC initiation, e.g. transportation, child care, cost of care, continuity of care by same team &amp; type of care, positive attitude of pregnancy</td>
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| Title/Authors | Focused stated question | Appropriate research method (study design) for answering the research question? | Clear description of selection of the subjects | Sampling criteria and Selection bias | The representative sample to the Population | Sample size calculated based on Statistical power | Satisfactory response rate achieved | Validity & Reliability of instrument | The statistical significance | Confidenc intervals given for the main results | Confounding factors that haven’t been Accounted for | Can the results be applied to your organisation?
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15. Brown et al. (2014) Changing models of public ANC in Australia: Is current practice meeting the needs of vulnerable populations? | The study has a clearly written objective that was congruent with design to investigate women’s views and experiences of public ANC | A population-based survey involving 4366 women who gave birth in South Australia & Victoria. Survey is considered as a primary source of data that can be used for collection of data from large sample & it is appropriate for this study. Data collection was 5-6 months post-partum to avoid potential halo effect. In Self reporting studies people tend to respond positively | All women gave birth in South Australia & Victoria in 8 week period from September/ October 2000. Women with stillbirth & neonatal death were excluded. The researcher made abroad inclusion criteria may be to be able to include a large number of participant | Bias limited by identifyin g all women who delivered within timescale & invitation sent to them, then the questionnaire mailed to them. However, women do not read may not be able to answer the question leading to selection bias | More than 8000 births were eligible to participate, but only 2496 respond to the questionnaire. By looking at the response rate only 52% which is almost the satisfactory level for the representativeness of findings | A priori power calculation showed that a sub-group size of 107 with 2 tailed alpha of 0.05 have 80% power to detect 20% differences in women rating their responses as very good. The anticipated sample of more than 8000 women will be required to ensure 107 women in small models of care | The response rate was only 52% which is the minimum satisfactory level | Validated study instrument used in previous Victorian statewide surveys in 1989, 1994 & 2000 & covered women’s views and mother was adopted. One limitation of the questionnaire that it was not translated into the native participant language which may affect the validity and reliability | Statistical significance was assessed by calculating odd ratios using uni-variable & multi-variable regression to test the hypotheses of the study | The CI were calculated as was 95% CI to provide accurate and precise measurement | Most of the confounding factors were recognised but maybe the length of consultation and previous experience with ANC provider affect the response of women | The finding of the study was consistent with the findings of another similar study. The findings can be applicable to women in Australia & Victoria. The satisfactory response rate was achieved which need to be considered and may affect the generalizability of findings |
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<td>16. Langer et al. (2002) Are women and providers satisfied with ANC? Views on a standard and simplified, EB model in 4 developing countries</td>
<td>The study addressed a clearly written aim that was appropriate to the adopted design</td>
<td>This study was stage 2 of RCTs, done by a standardised 24 close-ended questionnaire addressing questions on preferences, concerns on health status and reassurance received. The questionnaire for the HCPs consists of 15 questions, probing the same issues at the patients. Survey is appropriate for this study as it is the convenient method for a large population on specific issues</td>
<td>All eligible women surveyed on the randomly selected day until enrolling the estimated sample size. The selection bias could be limited to the use of tight inclusion criteria like in this study. All ANC providers were asked to fell self-reported questionnaire</td>
<td>It was part of RCT conducted in four countries, based on the sample size estimation: 1600 women was necessary to (400 in each country), and the study included 1600 women, which made the subject's representative to their country of study</td>
<td>Sample size was estimated as 1600 women needed in the study (800 per arm, 400 in each country) was calculated to detect a minimum difference between a dissatisfaction rate of 5% in one arm and 10% in the other, with two-sided test at a significance level of 5% &amp; with 80% power</td>
<td>The response rate was not calculated because the researcher recruited and interviewin eligible women based on inclusion and exclusion criteria until achieving the estimated sample size. All 174 ANC providers in both arms participated which made the response rate as 100%</td>
<td>Questionnaire was piloted in 4 areas and adjusted accordingly with only minor correction for wording. Due to the known limited validity of questions that include the word satisfaction, there was only one direct question that was adapted from previous ANC trials</td>
<td>Rate differenc es and a t-test were assessed at the cluster level, obtaining the standard errors for the differenc e from a variance analysis adjusted.</td>
<td>CI was given for the main outcomes as 95% CI for women satisfacti on with ANC according to ANC models which is a more accurate measure of the differenc es than the p-value</td>
<td>Other confounding factors were not stated, but setting &amp; culture in which the study took place may work as confounding factors</td>
<td>Some of the findings were similar to other previous studies on the. The study included 1600 women from different countries with 100% response rate which make the applicability of the findings in our local sitting possible</td>
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<td>17. Hildngsson et al. (2002) Women’s expectations on ANC as in early pregnancy: number of visits, continuity of caregiver &amp; general content</td>
<td>The study addressed a clearly stated objective in the abstract that was congruent with the design adopted. To explore women’s expectations on ANC, preferences regarding numbers of visits and attitudes of midwife caregiver for Swedish speaking women.</td>
<td>Data collected from Swedish speaking women booked for ANC during 3 weeks period over one year (1990-2000), by mailing questionnaire after first visit. Survey is suitable to collect data from large sample within short time but it was self-reporting which may has some limitation e.g. the women may answer the questions based on their understanding or tend to provide positive answer.</td>
<td>Inclusion &amp; exclusion criteria were not adequately stated which may lead to selection bias. Researchers make the contact through the gatekeeper in which all women who booked their pregnancy were eligible to participate voluntarily, setting of the study were clearly described.</td>
<td>The study had broad inclusion and exclusion criteria which may lead to selection bias. The study included Swedish speaking women which could be a form of bias because women who do not speak Swedish were excluded.</td>
<td>The study can be representative. For Swedish women in early pregnancy because they were the sample of the study with a good response rate of 75% of all booking. The findings could be used with caution due to the limitation of self-reported mailed questionnaire.</td>
<td>It was reported that the total number of ANC women booked their pregnancy could not be estimated during the 3 weeks period so it was not estimated. Sample size is important to be able to predict the statistical power to calculate the clinical significance of the findings.</td>
<td>Out of all eligible women who consented to participate the response rate was 74% which make the study findings fairly representative for Swedish Speaking Women in the same sitting.</td>
<td>The validity &amp; reliability of the instrument was not discussed, if the researcher developed the questionnaire by themselves or adopted the questionnaire from previous study it was not discussed. But the items included questionnaire were reported to enable the reader understand the interpretation.</td>
<td>The Chi-square test and risk ratio with 95% CIs of categoric data were estimated.</td>
<td>Yes 95% confidenc intervals for categoric data were estimated to detect how much accurate is the findings.</td>
<td>Confounding factors were not discussed in the study because there was no intervention the study was intended to measure the expectations of women.</td>
<td>In many studies that asks on level of satisfaction &amp; expectation the result was high due to tendency to answer positively. The study findings were consistent with many previous studies making its generalizability possible but with caution.</td>
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<td>18. Hildingsson et al. (2014) Swedish women expectat ions about ANC and change over time - a comparative study of two cohorts</td>
<td>The study addressed a clearly focused objective that is congruent with the design used</td>
<td>A cross-sectional survey is comparing a cohort of 2009-2010 with historical cohort 1999-2000. Random assignment is done at level of midwives to provide either group or standard ANC. Women were allocated to a named midwife. Questionnaire given at first visit to fill &amp; return to the clinic. The method is suitable to large population</td>
<td>Researcher sent written information to midwife working in ANC clinic &amp; who consented to participate was randomised to the care. Midwife explains the study to the women who randomly assigned to a named midwife. Random assignment helps to limit selection bias.</td>
<td>Random allocation to either group or standard ANC care but the inclusion criteria should be clearer to help in reducing selection bias. The study included only Swedish speaking women without specifying the rationale for selecting this specific population.</td>
<td>89% of eligible women completed the questionnaire which made the sample as a representative of the population of the study.</td>
<td>Sample size was not calculated, only the percentage of response rate was provided for each cohort. Sample size is important to predict the statistical power to calculate the clinical significance of the findings.</td>
<td>The response rate was satisfactory 89% which mean that the sample was representative of the population in the study.</td>
<td>It was reported that this study used the same questionnaire used in 1999-2000 cohort but no further detail is given about instrument and rating scale used or items included and if pretesting done or not but this was highlighted in the previous studies.</td>
<td>The confidence interval was used as 95% CI which is a generally accepted measure to indicate the precision of the results.</td>
<td>Although the study findings were consistent with findings of previous studies but could be used with caution due to the limitation of the self-reporting questionnai re. The use of random assignment of mother to the two ANC groups are considered among the strength of this study.</td>
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<td>Ghobash and Khandkar (2008) Satisfaction among Expectant mothers with antenatal care services in Musandam region of Oman</td>
<td>The study has a clearly stated objective in the abstract that is congruent with the design adopted</td>
<td>A cross-sectional survey in one region of Oman from 3 &amp; 9 January 2005. The institutions were randomly selected for each day; every 5th women showed to ANC interviewed using close-ended question. This study was appropriate. The use of interview is a strength of this survey</td>
<td>Every 5th pregnant women attended ANC clinic during the study period were selected randomly. Inclusion and exclusion criteria were not addressed in the methods</td>
<td>Selection was random &amp; women willing to participate provided consent. Random selection of clinic &amp; women may limit the selection bias, but the inclusion criteria should be specified clearly</td>
<td>The study used a small sample of 83 women which may limit the representation of the findings</td>
<td>To achieve 90% power &amp; 95% CI of the study with a 10% acceptable error, 78 were needed but the researcher interviewed 5 more women because all were willing to participate in the study. The researcher determined the number of women needs to be interviewed from each five ANC clinic, so they recruited the women until achieved the required number from each clinic, and women interviewed responded to all the questions</td>
<td>The researcher who interviewed the women was trained on research methods. A pilot study was done to test the methods and the instrument before the study which helped to refine the questions to suit local Arabic words &amp; to standardise method of data collection</td>
<td>Data were analysed using parametric method of univariate analysis to examine the hypotheses of the study. Statistical significance were not assessed</td>
<td>CI was estimated at 95% CI for reasons of satisfaction and dissatisfaction of ANC. Which are acceptable standards to indicate the precision of findings</td>
<td>Confounding factors were not addressed in this study</td>
<td>The study findings could be used with caution due to small sample size. The use of interview is considered as a strength because women may ask for clarification before responding to the questions to increase validity.</td>
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<td>20. Emelumadu et al. (2014)</td>
<td>The objective of the study was written broadly, what the researcher wanted to assess in women perception was not stated clearly in the objective. The objective was to assess the perception of pregnant women attending ANC services in PHC facilities in Anambra State, Nigeria</td>
<td>It was a cross-sectional descriptive study conducted in 3 primary health centre &amp; data collected by a semi-structured interview questionnaire within last pregnancy. Survey is appropriate due to large sample size, but the use of close-ended questions limit detailed responses. The use of interview strengthened the findings as follow up &amp; clarification before responding offered.</td>
<td>310 women were selected with previous natal &amp; postnatal experiences from purposefully selected from their healthcare settings. The inclusion and exclusion criteria should be more specific to avoid selection bias</td>
<td>Sample recruited from three purposefuly selected PHC, providing maternal services. Selection bias could be introduced because inclusion criteria were not specific. The reason to select setting was reported adequately. There was bias in selecting those who seek ANC in the centre only</td>
<td>This study was conducted for a year period from September 2007 to August 2008. It was not clearly stated why 310 women were recruited throughout the year.</td>
<td>The sample size was not calculated before the conduction of the study which may limit the representation of the findings</td>
<td>Out of 310 women, 302 completed the questionnaire which means the response rate was 97% representative of women who were included in the study which made the findings representatives for a subject population</td>
<td>Questionnaire was piloted on 10 women before the study to ascertain the suitability of wording &amp; duration which increased the validity &amp; reliability of the instruments</td>
<td>The relation between variables was assessed by Chi-Square test, and the level of significance was set at ≤ 0.05 to estimate the precision and accuracy of the findings.</td>
<td>95% CI for the characteristics of respondent &amp; pattern of maternal health care utilisation &amp; perception. Calculating Confidence interval is very important for the measurement of precision of finding</td>
<td>Survey usually reveals a high level of satisfaction as reported by many researchers who conducted satisfaction survey. They should not be the only measurement that policymakers change the process or services based on them</td>
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<td>21. Kamil and Khorshid (2013) Maternal perceptions of ANC provision at a tertiary level hospital, Riyadh</td>
<td>The study had a clearly written objectives that were stated in the abstract that was congruent with the design of the study done</td>
<td>WHO standard questionnaire devised for assessment of ANC in Saudi Arabia was adopted. Interview was done by trained nurses for every fifth woman attending the ANC clinic to ensure randomisation. This method was appropriate for large sample &amp; get responses in short period. The use of interview increased the validity of the findings</td>
<td>Every 5th women attending ANC clinic in one of the hospitals interviewed in Saudi Arabia were interviewed if consented but the inclusion criteria were not reported in the study.</td>
<td>Inclusion criteria were not reported clearly so the reader could identify &amp; judge on the suitability of the sample selection even. Only high risk excluded could not determine if the sample was representativ e because it was not reported what was the estimated sample size or any statistics about the setting of the area</td>
<td>The sample size was not estimated, it was not clear how the sample size was determined which may affect the generalizability of the findings</td>
<td>The study conducted by interviewing 244 pregnant women in the antenatal clinic. Therefore 100% response rate achieved</td>
<td>The researcher adopted a standard WHO questionnaire for assessing ANC services in KSA that was validated in the previous study conducted in KSA</td>
<td>Statistical analysis was done using SPSS package &amp; Pearson Chi-square test with a degree of freedom =2 and P= 0.05 to identify the accuracy of findings</td>
<td>The confidence interval was not given in the study. It is important to determine the precision of the findings</td>
<td>There was no intervention in this study, and confounding factors were not assessed</td>
<td>The study had a small sample which is considered as a limitation. The sample size was also not estimated to determine the appropriateness of this sample representation</td>
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<td>Satisfactory response rate achieved</td>
<td>Validity &amp; Reliability of instrument</td>
<td>The statistical significance of the main results</td>
<td>Confidence intervals given for the main results</td>
<td>Could there be confounding factors that haven’t been accounted for?</td>
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<td>22. Soltani and Dickinson (2005) Exploring women’s views on patterns of ANC</td>
<td>The study has a clearly written objective that was addressed in the abstract &amp; and appropriate to the design of the study</td>
<td>A cross-sectional survey of quantitative &amp; qualitative questions of aspects of ANC period done. The questionnaire was distributed on the delivery room or postnatal ward or by community midwives for home birth women. Survey is appropriate for large sample study to obtain data on a specific topic within a short period. The use of open-ended question elicited detailed answer</td>
<td>Women who gave birth in Southern Derbyshire NHS Hospitals&amp; who have home birth by midwives were included. The inclusion criteria were not clear. Rationale for selecting postnatal mother for assessing the antenatal care was also not stated</td>
<td>Inclusion &amp; exclusion criteria are important to limit the selection bias. In this study, all women who delivered within the 3 months period were recruited by their midwives to study. Questionnaire was distributed by midwives who may be biased in selecting women for the study</td>
<td>A questionnaire distributed for 700 women who gave birth to a healthy baby, only 329 women returned the questionnaire &amp; not all of them answered all of the questions which make the sample as less representative because the researcher relied on the midwives to distribute the questionnaire for some of the cases in which may be an inadequate explanation given.</td>
<td>Sample size was not calculated before the conduction of the study which makes representativeness of the results doubtful</td>
<td>The response rate to the questionnaire was only 47%, and not all questions were answered which can be one of the limitations of this survey</td>
<td>Instrument was developed after reviewing the literature &amp; with consulting midwives &amp; maternity user group. Appropriate socio-demographic data was collected to evaluate the study population, but pilot testing was not done which may affect validity and reliability</td>
<td>Data analysis was made by SPSS, Mann-Whitney U test used to compare number of visits between low &amp; high risk women &amp; thematic content analysis for qualitative data. Statistical significance was not calculated</td>
<td>The CI was not calculated. The presented data was based on Mean median &amp; standard deviation</td>
<td>This study had no intervention but conducted by questionnaire. Confounding factors were not reported</td>
<td>The result can be applicable to the setting in which study was conducted. Due to low response rate, the study findings could not be generalised for sample in different context. To increase the validity and reliability of the instruments, a pilot testing would be good</td>
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<td>Title/Aut hors/ years</td>
<td>Clearly focused stated question</td>
<td>Appropriate research method for answering the research question</td>
<td>Clear description of selection of the subjects</td>
<td>Sampling criteria and Selection bias</td>
<td>Representative sample to the Population</td>
<td>Sample size calculated based on Statistical power</td>
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<td>23. Donkor and Obed (2012) Waiting time and women’s satisfaction at an ANC clinic in Ghana</td>
<td>The study addressed clearly focused objectives that were appropriate to the study design</td>
<td>The study is a quantitative study using a structured questionnaire of closed-ended questions with some open-ended questions. The method is appropriate to provide feedback on the provided services for a wide population within a short period within the short period from a large number of population</td>
<td>All Pregnant women attending ANC at the national referral hospital were eligible to participate. Inclusion and exclusion criteria were not reported. The setting of data collection was adequately described</td>
<td>Pregnant women were recruited from ANC clinic with the help of the clinic in-charge by Convenient sampling to recruit 330 women. This technique is easy, convenient and cost-effective but also can lead to selection bias &amp; lead to sampling error which limits the generalizability of the data</td>
<td>The sample could be representative to the sample included in the study because the response rate was almost 96% but might not be truly representative of the wider population because they were conveniently selected which may over-represent or under-represent the included population</td>
<td>Sample size was not conducted before the study</td>
<td>Out of 330 who filled the questionnaire 316 were completed which made the response rate almost 96%</td>
<td>It was not reported if validity and reliability of the questionnaire were validated. It was not clear if standardised instruments used or a new questionnaire was developed. But the sections of the tool was listed in the evidence</td>
<td>Analysis was descriptive based on frequency and percentage, and the statistical significance was not assessed</td>
<td>Confidence Intervals was not estimated</td>
<td>This study had no intervention; confounding factors were not reported</td>
<td>The findings of this study were consistent with findings of the previous study. The findings could be applicable in our organisation but should be used with caution due to the limitations with the sampling and validity and reliability of the instruments of data collection</td>
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<td>Solarin and Black (2013) They told me to come back: women’s ANC booking experience in inner city Johannesburg</td>
<td>The study has a clearly written focused objective in the abstract that was congruent with the design of the study</td>
<td>A descriptive cross sectional survey was used. The study included interviewing 208 women that was large sample which make survey as suitable methods. The study was a self-reporting asking on past history without verification of clinical reports which may lead to recall bias.</td>
<td>Women aged 18 years &amp; over who had live birth at one of the three public health care facilities were recruited from three public hospitals from labor room to identify women who did not attend ANC. Inclusion &amp; exclusion criteria were not clearly stated</td>
<td>Convenien t sampling used to recruit women, inclusion &amp; exclusion criteria were not stated clearly that increased the risk of selection bias that is one of the cones of convenient sample. women delivering in this hospital are from low socioeconomic background which may lead to overrepresentation of this group</td>
<td>It can be representativ e to women delivering in public labor wards in urban South Africa</td>
<td>Sample size was not reported, this makes judgment in reason to select only 208 women difficult</td>
<td>The study was conducted by interviewing the women who were eligible to the study &amp; the researcher recruited &amp; interviewed women until they reach 208 women who completed the interview (100%)</td>
<td>The study used a pretested questionn aire that was administered verbally in English or translated by interviewers into preferred language Sections of the tool were highlighte d and correlated with aim of the study</td>
<td>Analysis was conducted using STATA 10.0 for window. Chi-square tests were conducted on categorical variables with Fisher’s exact test but the statistical significance was not calculated</td>
<td>Confidence interval was not given to examine the accuracy of findings</td>
<td>Confounding factors were not discussed as this was not an intervention study it was conducted by interviewing the women</td>
<td>The findings were consistent with findings of previous study. The use of interview was among the strength because women can ask and clarify before answering. However, the study had some limitations sample size not calculated, the use of convenient sampling with no clearly stated inclusion and exclusion criteria. Findings can be used with cautions</td>
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<td>25. Teijlingen et al. (2003) Maternity satisfaction studies and their limitations: what is, must still be best</td>
<td>The study had a clearly stated objective in the abstract and appropriate to the study design</td>
<td>Cross-sectional survey using a 28 audit questionnaire of all women delivering in Scotland in 10 days in September 1998. 1137 women included which make survey as a suitable tool to obtain data from large sample within a short time. Self-reported questionnaire can lead to biased responses &amp; answer is open to the participants understanding</td>
<td>All eligible women who delivered in Scotland during a 10-day period in September 1998 received a Questionnaire distributed by midwives. Reasons for excluding women were clearly stated. Inclusion criteria were not explicit</td>
<td>The researcher depended on the midwives to distribute Questionnaire which may lead to bias in selecting the women for the study. Inclusion criteria were not adequately discussed</td>
<td>The study included 1137 women with good response rate 69% which good representativeness of the whole sample</td>
<td>Sample size was not estimated before the data collection</td>
<td>69% of eligible women who provided consent returned the questionnaire</td>
<td>The questionnaire was developed using existing validated questionnaires, and most of the questions were closed-ended with space for additional comments, it was piloted in Scottish hospitals and was found to be easy to use and acceptable to women</td>
<td>Data analysed with statistical package SPSS and the chi-square test was used to compare differences in proportions to assess the level of significance of</td>
<td>The confidence interval was not given in the study</td>
<td>This was not intervention studies, but it was through self-reporting questionnaire. The confounding factors were not reported.</td>
<td>The study highlighted the importance of satisfaction survey for policy making and that they should be used with caution and preferably as part of an array of tools. The findings could be considered with caution due to self-reporting questionnaire.</td>
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<td>26. Soltani &amp; Dickinson (2005) exploring women’s views on information provided during pregnancy</td>
<td>The study addressed a clearly focused objective stated clearly in the abstract that was congruent with the design of the study.</td>
<td>A cross-sectional survey used quantitative and qualitative questions looking at aspects of ANC period done. The questionnaire was distributed on delivery room or postnatal ward or by community midwives for home birth women. Survey is appropriate for large sample study in which data on a specific topic can be obtained within a short period.</td>
<td>The women who gave birth in Southern Derbyshire Acute Trust NHS Hospitals &amp; who have home birth by midwives were included. The inclusion criteria were not clear. Rationale for selecting postnatal mother for assessing the antenatal care was also not stated</td>
<td>Inclusion &amp; exclusion criteria are important to limit the selection bias. In this study, all women who delivered within the 3 months period were recruited by their midwives to study. Questionnaire was distributed by midwives who may be biased in selecting women for the study</td>
<td>It can be representative of women of the same sitting</td>
<td>Sample size was not calculated before the conduction of the study which makes representativeness of the results doubtful</td>
<td>The response rate to the questionnaire was only 47%, and not all questions were answered which can be one of the limitations to this survey and also among self-reporting questionnaire as the researcher cannot guarantee completion of all questions adequately</td>
<td>Instrument was developed after reviewing literature and with consultation of midwives and maternity user group. Appropriate socio-demographic data was also collected to evaluate comparability of the study population that may lead to valid &amp; reliable questionnaire</td>
<td>Statistical significance was not assessed, SPSS used to analyse descriptive data and comparision. Group comparision is done by Mann-Whitney U test</td>
<td>The confidence interval was not calculated which is a standard measure to assess the precision of the results</td>
<td>This study had no intervention but conducted by questionnaire. Confounding factors were not reported</td>
<td>The findings were consistent with findings of previous and later studies. However, the response rate was low which indicate that the finding of the study could be less representative to women in the study. The use of self-reporting questionnaire is among the limitations of this study because women may answer without understanding the questions leading to recall bias</td>
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<td>Title/Authors/Years</td>
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<td>Appropriate research method for answering the question</td>
<td>Clear description of selection of the subjects</td>
<td>Sampling criteria and Selection bias</td>
<td>Representativeness sample to the population</td>
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<td>27. Davey et al (2005) what is it about antenatal continuity of caregiver that matters to women</td>
<td>The study had a clear focused objective that was addressed in the abstract and congruent with the design of the study</td>
<td>Anonymous postal survey was sent for all women, who gave birth in Victoria, Australia in a 2 week period in Sept 1999, excluding women with stillbirth or infant death, questionnaire mailed by hospital &amp; home birth practitioners when babies were 5 months old. It was appropriate for large sample size, but answering depends on participants understanding and subjectivity</td>
<td>All women who, excluding women with stillbirth or infant death were eligible for the study. Inclusion &amp; exclusion criteria were not adequately discussed which may increase the risk of bias. Setting was described clearly which enable replication of the study by future researchers</td>
<td>Inclusion &amp; exclusion criteria were not adequately stated which may increase the risk of bias. The researcher relied on midwives to send the questionnaire which may lead to selection bias; the researcher should get a list of name with the contact number of eligible women &amp; sent the mail</td>
<td>Out of 2412 eligible women, 1616 women completed the questionnaire (67%) which had a satisfactory response rate which can indicate that the sample is representative of the population under study</td>
<td>The exact sample size estimation was not reported may be because this was part of the National survey and maybe the sample size was reported in the main survey findings</td>
<td>The response rate was satisfactory 67% of eligible women completed the questionnaire</td>
<td>The instrument was developed &amp; was pilot tested on 52 women who recently had given birth, pilot testing focused on clarity of questions, the range of possible responses &amp; ability of questions to compare between experience. Change was made to wording &amp; layout</td>
<td>Data analysed using Stata (16) Odds ratios and 95% confidence intervals &amp; Chi-square comparisons to determine the statistical significance of associations between variables</td>
<td>Confidence intervals were given as 95% CI, which is the standard measurement for the accuracy of the results</td>
<td>All possible confounding factors were considered in the study, and this study was not an intervention study</td>
<td>The study findings were consistent with the previous study on the same topic. Application of the finding could be made but with caution due to the limitations of a mailed questionnaire.</td>
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<td>Appropriate research method for answering the question</td>
<td>Clear description of selection of the subjects</td>
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<td>28. Anya et al (2008) ANC in the Gambia: a missed opportunity for information, education and communication</td>
<td>The study had a clear &amp; focused objective that was stated in the abstract that was congruent with the adopted design</td>
<td>A cross-sectional survey was conducted in November &amp; December 2004 using ANC &amp; safe motherhood questionnaire. Survey is convenient for large sample within Short time. It was conducted by interviewing the eligible women, so if women have doubt on any questions, it will be clarified &amp; response rate will increase. But still, the women’s responses may be subjective &amp; affected by many factors</td>
<td>Pregnant women attending ANC clinic in the rural &amp; urban area were eligible. Women with emergency conditions were excluded. Systematic random sampling was done if more women than required in the clinic. The method was clearly described with broad inclusion criteria. Sampling technique was not described</td>
<td>The researchers used systematic random sampling in case of more women presenting to the clinic which may limit selection bias. One of the ways to limit selection bias is to have a clear inclusion &amp; exclusion criteria. Equal number is given to the rural &amp; urban clinic</td>
<td>The sample subject was based on priori calculation of sample size, and the response rate was almost 100% that makes the sample subject representitive to women with low-risk pregnancy</td>
<td>The sample size was estimated before data collection. To achieve a 95% Confidence level with 10% CI, the required sample size was 192 in each group (rural &amp; urban) based on an estimated 30,000 maternities/year</td>
<td>Yes out of 459 women who were approached, 457 completed the survey which was almost 100%, and this was among the advantage of a survey conducted by interview because the researcher can recruit participant until the required sample obtained</td>
<td>The researcher adopted the antenatal client exit interview, and antenatal record review questionnaire in the safe motherhood needs assessment kit that was validated in previous studies were translated to ensure consistency of response &amp; findings</td>
<td>Data analysed by Chi-square test that is important to determine the statistical significance of associatiions between variables</td>
<td>Relative risk with 95% CI was presented to assess the accuracy of the results</td>
<td>The findings were consistent with another study finding. Although the study finding can be generalizable to women with a low-risk pregnancy in the same setting but the findings could be applied cautiously. The use of random sampling and standardised questionnaire provided strength to the study</td>
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<td>Title/Au thors/ years</td>
<td>Clearly focused stated question</td>
<td>Appropriate research method (study design) for answering the research question</td>
<td>Clear description of selection of the subjects</td>
<td>Sampling criteria and Selection bias</td>
<td>Representativeness of sample to the Population</td>
<td>Sample size calculated based on Statistical power</td>
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<td>29. Jallow et al. (2012) Women’s perception of ANC services in Public and private clinics in the Gambia</td>
<td>The study had a clear focused objective addressed in the abstract that was appropriate to the study design</td>
<td>Descriptive Cross-sectional survey using validated WHO questionnaire to evaluate women’s perception of the quality of ANC in developing countries. It was appropriate to the research objective as large sample was required within a short period. The questionnaire limits ability to talk about complex issues &amp; beliefs</td>
<td>The method was clearly described. Facilities were selected by simple random sampling by a lottery to avoid bias. Women who attend their respective clinics two times were selected &amp; excluded women who attend more than one clinic to avoid potential bias</td>
<td>The inclusion &amp; exclusion criteria were clearly addressed &amp; sites were selected randomly as an attempt to limit selection bias. However, excluding first-time pregnant women &amp; women who attend more than one setting could be a form of selection bias</td>
<td>A total of 502 women were interviewed (264 in the public clinic &amp; 238 in the private clinic). The sample was representative of women in the same sitting because the response rate was almost 95%</td>
<td>A minimum priori estimated sample size was 378 to achieve a 95% CI at a power of 80%</td>
<td>The study achieved high response rate 98.4% that was representative</td>
<td>A validated questionnaire of WHO was adopted. Pretest conducted on 15 pregnant women that resulted in adding two more questions which may increase the validity and reliability of the findings.</td>
<td>The data were analysed by using SPSS. Chi-square tests, Fisher’s exact test and Student’s t-test to explore statistical differences between women’s ratings of public &amp; private clinics</td>
<td>Confidence Intervals were given at 95% CI to estimate the accuracy of the findings</td>
<td>This was not an intervention study; confounding factors were not discussed</td>
<td>The result of the study may not be necessarily generalizable to all women in the Gambia but limited to women in the study setting. Some of the findings were consistent with previous study findings. The use of validated instruments and pilot testing increased the reliability and validity of the instruments.</td>
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<td>30. Ejigu et al. (2013) Quality of Antenatal care services at public health facilitie s of the Bahir-Dar special zone, Northwest Ethiopia</td>
<td>The study addressed a clearly focused objective stated in the abstract that was congruent with the design of the study</td>
<td>Facility-based cross-sectional study was conducted by semi-structured interview, chart review &amp; observation by trained female nurse graduate. It was suitable to address the study objective including the large sample in 2 months. The interview increase the validity of the study because the women were given a chance to ask &amp; understand the question before answering</td>
<td>The participants were 369 ANC users were selected randomly &amp; health care providers selected by purposive sampling. Inclusion &amp; exclusion criteria, study units, sampling techniques participants were adequately described in the study which can enable replication by future researchers on the same topic</td>
<td>The sample can be representative of ANC women on the same population because it was based on priori estimation that was achieved during the data collection</td>
<td>Sample size was calculated by considering 5% margin of error &amp; 95% CI the sample size was 384. The target population was &lt;10,000 formula applied gives 360 by adding 10% non-response rate the number was 396</td>
<td>The response rate achieved was 93.2% which considered good for the sample size calculation</td>
<td>Data were collected by a pretested structured questionn aire adopted from survey to assess family planning &amp; reproductive health services like ANC &amp; to assure the reliability of the instruments the Cronbach ’s alpha coefficient was calculated &amp; it was 0.845</td>
<td>Statistical significance was assessed for the gender of health care providers , privacy, and frequency of ANC visit for a p-value less than 0.05</td>
<td>Confidence Intervals were given at 95% CI for the accuracy of the findings</td>
<td>Previous experience with ANC could be one of the confounding factors</td>
<td>The fining of this study was consistent with findings of other studies. Some of the findings could be applied in my local setting with caution. The study validity increased with the use of interviewing and high response rate.</td>
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<td>Title/Authors (2016)</td>
<td>Clearly focused stated question</td>
<td>Appropriate research method for answering the question</td>
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<td>31. Chew et al.</td>
<td>The aim was stated clearly what to be studied, the participants of the study and the setting. It was written in the abstract: To determine the factors associated with late booking among pregnant women attending late ANC clinics in Ndola District, Zambia</td>
<td>The study employed a clinical-based cross-sectional quantitative approach by interviewing participants. It is appropriate to collect responses from a broad spectrum of the population, which is helpful in determining factors associated with late booking and in person interview are helpful to achieve high response rate to ensure a representative sample.</td>
<td>Seven settings were selected by simple random sampling; all 24 clinics were arranged in alphabet order with sampling frame from 1 to 3. 305 pregnant women.</td>
<td>Women were selected by simple random sampling by draw box of the total women attending that day and blind-picked until five women selected/day to get a required sample size.</td>
<td>The sample is considered representativ e as the researcher were able to achieve the appropriate response rate based on sample size calculation. The participants were pregnant women with late booking that would enable answering the research questions and achieve its aim.</td>
<td>Yes the sample size was calculated using OpenEpi, version 3. To estimate the proportion of women who book late for ANC with 5% of true population proportion of 95% confidence. The calculated sample size comprised 305 participants.</td>
<td>The response rate was 100% which is similar to the calculated sample size.</td>
<td>Same tool used for all women to ensure reliability and validity. Nothing highlighted if the tool was developed by the researcher and piloted for its validity or adopted from others. The tool was in local language, translated into English that may suggest an issue with translated meaning.</td>
<td>The odds ratio &amp; 95% confidence interval (CI) were calculated by logistic regression. To identify the variables of late booking A p-value of &lt;0.05 was considered significant. Age was significant predictor of late booking P=0.010. No significant difference in women with or without children.</td>
<td>CI was given for maternal age P=0.010 Single mothers were less likely to attend late p=0.034 compared to p=0.48 in women with children which was insignificant.</td>
<td>Could there be confounding factor were not highlighted but physical condition in early pregnancy could be among them.</td>
<td>This study determined factors associated with late booking, which might be similar to some factors that caused late booking in our Omani contexts despite the presence of free healthcare in pregnancy.</td>
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<td>32. Kisuule et al. (2013) Timing and reasons for coming late for the first antenatal care visit by pregnant women at Mulago hospital, Kampala Uganda</td>
<td>The objectives of the study reflecting the title and it is appropriately aligned with quantitative data dealing with weeks of gestation at first visit and reasons To determine the gestation age at which pregnant women make their first antenatal care visit and reasons for late booking</td>
<td>The study used a cross-sectional pretested interviewer-administered questionnaire different Clinical obstetric examination was used which may cause inaccurate findings because not all women remember the date of last menstrual period included estimation of the fundal height, calculated weeks of gestation &amp; Ultrasound This was appropriate for the objective of the study</td>
<td>The study was conducted in June 2012 in Mulago referral hospital in Uganda in an antenatal clinic that offers care for 100 women/day However, the study did not highlight how the sample was selected if it was inclusive of all women or some women</td>
<td>Sampling criteria were not clearly explained which might affect the generalisation of the findings</td>
<td>The judgment of the representative sample is difficult in the absence of the calculated sample size to achieve the required sample</td>
<td>No evidence of calculation of sample size but the researcher reported the actual size of 400 pregnant women who commence their booking visit late after 20 weeks of gestation with no evidence of prior contact with professional</td>
<td>Although no data were given on the sample size calculation or the response rate The study was conducted by interviewing women, so it is anticipated that the response rate is 100%</td>
<td>A pretested questionnaire was used by trained interviewers on the day of data collection that included demographic and obstetric history and reasons for coming late In person, interview is known for their strong potential to elicit clear and accurate data</td>
<td>Not calculate Data analysis was carried by SPSS and Microsoft excel using mean and standard deviation</td>
<td>Not given Thus the inference of statistically significant factors is difficult to interpret</td>
<td>Could there be confounding factors that haven’t been Accounted for?</td>
<td>The study lacks the sample size calculation, responses rate and used different methods for determining weeks of gestations for women who attended the clinic after completing 20 weeks These may not be accurate measurement mainly in women who do not remember the first day of the last menses However, factors for late booking might be similar to women in my social contexts</td>
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<td>Ekott et al. (2013)</td>
<td>The objective of the study was to assess user satisfaction with ANC at the centre and to identify constraints at service points, but the title was about perceptions which I think it is better explored through the qualitative perspective.</td>
<td>The data was collected by semi-structured questionnaire: demographic, satisfaction, reasons for satisfaction and dissatisfaction, time spent in each visit and their needs. The use of interview is considered a strength as it provides clarification to the participants and generates accurate and clear data that participants understood.</td>
<td>Not highlighted. The researcher only highlighted that the women attending for follow-up visits were interviewed and that women attending the clinics for the first time were excluded.</td>
<td>Women for follow-up visits were interviewe and the only exclusion highlighte d is women visiting the clinic for the first time. Which might increase the selection bias because the criteria were not tight enough to ascertain bias-free sample.</td>
<td>410 women were sampled but without calculating the sample size. The sample size is important to get results that reflect the targeted population as precisely as possible.</td>
<td>Not calculated so it is unknown if the sample size were precise enough.</td>
<td>Not indicated in the study but the women were interviewe d in person which indicate high response rate.</td>
<td>The questionnaire was developed, pretested, modified and administered by trained interviewers to ensure validity and reliability of the tool but did not highlight if the same questions were asked to all women by the same interviewers.</td>
<td>Data analysis used SPSS, the statistical significance level was &lt;0.5.</td>
<td>Not calculated so the true confidence or percentage of the respondent answer were difficult to estimate.</td>
<td>It was not evident if the questionnaire was administered by staff providing care to the women or not as this might be the reasons for high level of satisfaction reported in the study. The number of visits the women completed before the interview were also not highlighted. Free services also may act as a confounding factor.</td>
<td>The factors affecting satisfaction and dissatisfaction might be similar in many context however, Oman is among high-income countries so many areas might not be the same.</td>
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<td>Montasser et al. (2012)</td>
<td>The objective of the study was written in clear and appropriate way for the nature of the study that are intended to measure satisfaction from a large number of audience. The objective was to assess women’s perception of antenatal care and their degree of satisfaction with different aspect of care.</td>
<td>Data were collected by face to face interview using well-structured questionnaire that asked about demographic, obstetric history and questions to assess satisfaction using in person interviews strengthen the accuracy of the results as clarification can be sought during the interview and before answering the questions. Most items were close ended limiting in-depth exploration of topic.</td>
<td>The participants of the study were pregnant women attending family medicine centre in Shawa village for their antenatal clinic. The participants were appropriate to achieve the aim of the study.</td>
<td>The study did not provide explicit explanation of selection of participant s of the study which might increase the risk of bias. All women attending family medicine centre in Shwan Village were invited.</td>
<td>The researcher stated that 750 women attending their appointment between March to September 2010 were invited but 150 refused, so the total participants were 600. Representative of sample is difficult to estimate in the absence of sample size calculation.</td>
<td>The way how the sample size determined was not addressed in the study.</td>
<td>The researcher invited 750 women and 600 participate d which means the response rate was high but how these women were recruited was not clear 80%.</td>
<td>No informati on given on the reliability and validity of the study and if the instrumen ts were pretested and if the same individual conducted the interviews Content of the questionnai re were listed in the questionnaire.</td>
<td>It was not calculate. The data were analyzed using SPSS. And it is descriptive study using number and percentage to interpret the data.</td>
<td>Not calculated which means that it is difficult to estimate the true value of the factors.</td>
<td>The relationship between the background and satisfaction. The centre was among the model.</td>
<td>The study indicated factors for satisfactions and dissatisfaction which might be similar in many contexts particularly this study was conducted in a Muslim and Arabic country so similar factor might be identified. However, the data lack detailed explanations of sample size to the total population studied which may affect the generalizability of the findings in other contexts.</td>
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<td>35. Erci (2003) Barriers to utilization of prenatal care services in Turkey</td>
<td>The aim of the study was written accurately to match the quantitative perspective. To identify barriers to utilization of prenatal care services in Turkey including the women’s attitudes toward pregnancy and prenatal care.</td>
<td>The data were collected using two self-reported questionnaire: demographic and barriers to prenatal care and the second was about the attitudes toward pregnancy and use of prenatal care. The researcher explained the tool to the women prior completion. The type of questionnaire should be clear to the respondents to elicit accurate answer.</td>
<td>Postnatal women who received or not receive ANC &amp; were hospitalised at birthing house after normal birth were participants (Jan to April 2002). The use of self-reported and inclusion of postnatal women could lead to recall bias.</td>
<td>The sample would be more representativ if responses were elicited from pregnant women. However, the study had good response rate which may be considered representative for women with similar context.</td>
<td>Sample size calculated by power analysis was 467, and 446 responded.</td>
<td>The response rate was good because only 21 women did not respond out of the calculated sample 95.5%.</td>
<td>The attitude questionaire was adopted from another study but translated into Turkish and reviewed by three experts for clarity &amp; back-translated into English to make sure that the instrument would measure what it was intended for.</td>
<td>Chi-square analysis was calculated to estimate the true value of responses. There were significant differences in demographic responses between women receiving or not receiving ANC. Monthly income, education was statistically significant.</td>
<td>P-value</td>
<td>Being a postnatal woman could be among the confounding factors. However, women with none attendance to ANC could only be known through the birth centre.</td>
<td>The respondents of the study were from one centre in one area in Turkey so the results might be difficult to apply in different contexts but it indicates areas of attention to the factors that might facilitate or prevent access to care in pregnancy.</td>
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<td>36. Ndidi and Oserem et al. (2010) Reasons given by pregnant women for late initiation of antenatal care in the Niger Delta, Nigeria</td>
<td>The study aims to determine the reasons for late booking at a major tertiary hospital in Niger Delta. The objective is appropriate to the quantitative nature of the study</td>
<td>The survey is appropriate for this study as it sought to determine factors preventing women from early booking which enabled collecting data from large population. The data collected by self-reported tool which is appropriate to the study but might result in recall bias and result in inaccurate responses based on the respondents understanding.</td>
<td>Yes the inclusion and exclusion criteria were clearly written that included women with late booking after 14 weeks and they were sure of their last menstrual period.</td>
<td>The inclusion and exclusion criteria were written. However, the rationale for excluding some women were not well justified.</td>
<td>Due to no evidence of sample size calculation and the total population of the study it is difficult to judge its representation. This is considered a limitation for this study. Furthermore, the participants were recruited from only the booking clinic which mean that those in the follow-up they did not get chance to be involved.</td>
<td>No evidence reported of sample size calculation but the total participants invited were 494 and 372 responded.</td>
<td>Response rate was good 75.3% but few questionnaire were incomplete.</td>
<td>It was highlighted that the questionnaire was pretested but no further validity and reliability issue was discussed in the article. Women filled the questionnaire in 5-10 minutes. The women who were unable to read were assisted trained staff which expose the responses to risk of social desirability bias.</td>
<td>Data were analyzed using Instate statistical package but the statistical significance was not highlighted which mean that the reader would not be able to make the statistical inference.</td>
<td>Not calculated so the true value of responses was difficult of interpret.</td>
<td>The study setting was hospital where with expensive fee might be a confounding factors.</td>
<td>The women booked late because they did not believe in the value of care in the first trimester. This indicated that the ANC was viewed as curative more than the preventive. Although the study had many limitation but the results could indicate similar issues in different context, but these limitations affect the generalizability of the findings.</td>
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<td>37. El Aty et al. (2014)</td>
<td>Overall adequacy of antenatal care in Oman: secondary analysis of national health survey data, 2008</td>
<td>The study had a well-written objective, but adequacy is not clearly defined in the objective</td>
<td>To explore the adequacy of ANC utilisation of Oman ever-married women (15-49) and the sociodemographic and health services determinants of adequate and sufficient ANC</td>
<td>A secondary in-depth analysis of cross-sectional national survey RHS in Oman, 2008</td>
<td>The researcher re-examined records of 1825 women having children &lt;3 years old out of 3944 women to look specifically for information to answer through this specific sample the research question. However, no justification is given for selecting the sample mentioned above</td>
<td>The included sample constituted only 46.3% of the total sample of the original survey without providing the estimate of the sample size in the study. This could be considered as a limitation of the study</td>
<td>The researcher stated that the sample weights were used to ensure the representativeness of the population but the exact sample size to obtain to suggest representativeness was not highlighted thus it is difficult to judge if the sample was representativeness or not</td>
<td>The responses rate was determined by including 1825 records of the total records included in the primary survey. For response rate to be satisfactorily, it at least needs 70% of respondent. This was not the case here</td>
<td>Nothing highlighted in the study about the researcher attempting to examine the document for fit to the research questions</td>
<td>Chi-squared tests and odds ratio calculations were used to test the association between variables</td>
<td>The logistic regression and adjusted odds ratios with 95% were used to identify the significant predictors independently. The researcher concluded that there was a significant association between first pregnancy (p=0.001), high socio-economic status (P=0.017) and adequate uptake of ANC, which were statistically significant</td>
<td>Fear of risk and lack of knowledge and experiences the first time pregnant women had might be another confounding factor. The study was a secondary analysis, and some data were not covered in detail in the original survey which limited the analysis of previously studied variables</td>
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<td>38. Parsa et al. (2018) Factors influencing the behaviours of pregnant women towards using prenatal care services in Iranian healthcare centres</td>
<td>The Survey has a clear focused question congruent with purpose and methodology adopted To investigate factors influencing behaviours of women to use ANC based on health &amp; belief model, in Iran</td>
<td>Descriptive, analytical cross-sectional study Using self-structured questionnaire by which was self-reported and in the postpartum period indicated a chance of recall bias Survey is suitable to provide data for large-scale population.</td>
<td>Inclusion and exclusion criteria were explicit which are important to reduce selection bias. 165 postpartum women within 1-15 days Were selected from one health centre and five urban health clinic</td>
<td>Convenient sampling of women within 1-15 Days postpartum was adopted. This sampling method is easy but it might be open up to selection bias, but this study had a clear inclusion and exclusion criteria which might help to minimise selection bias</td>
<td>The data were collected from 165 postpartum women based on the number of women with regular and irregular ANC visits</td>
<td>The estimated sample size to be adequate to answer the survey was 165 postpartum women</td>
<td>The response rate was 100% because the questionnaire was completed by the researcher until getting the desired number of participants</td>
<td>The researchers developed questionnaire was based on the RL, books and booklets Full description is given on the component of the questionnaire, To ascertain validity, it was given to 10 HCP to review it &amp; Cronbach’s alpha coefficient that was tested on 30 women to ensure reliability</td>
<td>P-value of less than 0.05 was considered statistically significant</td>
<td>Not calculated, which make the true meaning and precision of the true value of the results difficult</td>
<td>Not considered in the study</td>
<td>The study findings could be used with caution because it was conducted by a self-reporting questionnaire that considered as one of the limitations as women may provide a socially desirable answer. Unwanted pregnancies were not considered among the significant variables in this study</td>
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<td>39. Adeyinka et al. (2017)</td>
<td>The Survey has a clear focused question congruent with purpose and methodology adopted. To identify predictors of ANC satisfaction in American Samoa</td>
<td>Structured survey Using self-structured questionnaire that was self-reported involving pregnant women. The use of self-reported survey indicated a chance of recall bias. Survey is suitable to provide data for large-scale population at a specific time.</td>
<td>Inclusion and exclusion criteria were explicit which are important to reduce selection bias. 165 women who fit the criteria were selected.</td>
<td>Convenient sampling of women was adopted. This sampling method is suitable to collect information from readily accessible participants, but it might be open to selection bias.</td>
<td>The data were collected from 165 women, but the sample size calculation was not evident in the study which makes the decision of representativeness difficult and lacked precision.</td>
<td>The researcher approached 215 women to assess their satisfaction but no information is written about the estimated sample size, which make a decision on the representativeness difficult.</td>
<td>Approached 215 but only 165 completed the questionnaire. Response rate was 76.7% which is considered as good response rate.</td>
<td>A questionnaire was based on the CDC Pregnancy Risk Assessment &amp; Monitoring Survey (PRAMS) specific for low-to-middle income countries. That contained both open and close-ended questions. The predictor variable were explicitly described.</td>
<td>P-value of less than 0.1 was considered statistically significant.</td>
<td>CI for some predictor variables was estimated at 95% which is important for the precise true value of variables.</td>
<td>Not considered in the study.</td>
<td>The study findings could be used with caution because it was conducted by a self-reporting questionnaire that considered as one of the limitations as women may provide a socially desirable answer. However, combining close-ended and open-ended questions added strength to the results.</td>
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Author and title: Shabila, Ahmed and Yasin (2014) Women’s views & experiences of ANC in Iraq: a Q methodology study

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<td>8. Transferability/generizability</td>
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<td>9. Implications and usefulness</td>
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<td>10. Total</td>
<td>28</td>
<td>3</td>
<td>2</td>
<td>33</td>
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</table>


Structured with full information and clear title, objectives, design, results and conclusion provided. Full, concise background to discussion contained up to date literature review and gaps relevant to women experience in Iraq was highlighted. Q methodology was appropriate & useful in exploring human perception & interpersonal relationships. It combines the strength of quantitative & qualitative design used with a small population. The researcher described method clearly with justification. Inclusion and exclusion criteria were adequately highlighted clearly which may help to limit potential selection bias. Setting explained. Purposive sampling was done based on inclusion criteria by the key informants in the area. The analysis was clearly described using different strategies such as PQ Method 2.11 program. Significant differences were calculated & conceptual interpretation was developed for the view point endorsed, themes & subthemes derived from a quotation. Ethical approval obtained, the explanation provided to the participants before providing consent. Other issues were not highlighted. Each theme was explicitly discussed and supported with a direct quotation from the participants to prove the appropriateness of the theme, results presented in easy to understand manner and in a logical progression, tables were used to illustrate the results. Context and sitting explained sufficiently to allow comparison with other contexts and settings. The appropriate sample size for Q methodology range from 40-60 participants & the study sample was 38 that I think still suitable. One of the limitations of this study was the use of predetermined score that limited the in-depth and detailed discussion by the women.
Structured with important information including background, objectives, methods, results and conclusion and important key words but the method part of the abstract was not providing a clear understanding of what was exactly done

This is a secondary analysis of WHO trials which is considered as less important than the primary trials and does not contribute to the sample size calculation of the trial; it is appropriate to study responses to treatment with one or more risk factors like in this analysis and to compare the effect of treatment

Women in the analysed trials were stratified by baseline risk to assess the differences between the intervention and control groups

Generalized linear modelling & robust variance Poisson regression modelling (for clustering within the clinic) to determine relative risks for perinatal mortality & fetal death by gestational age period

All analysis conducted using SAS software

This was a secondary analysis in which the researcher did not provide any evidence of ethics approval because they depend on the sample obtained from the original trials

It is plausible that increased risk of fetal death between 32-36 weeks could be caused by a reduced number of visits but other finding such as diversity of study sample, different quality care and timing of visits could also play a role

Fetal, maternal and neonatal risk monitoring is important when implementing protocols

Different factors may contribute to perinatal mortality in this study and not only the number of visits, limited resources in specific contexts with or without ANC thus care must be taken in comparing findings across varied settings, countries and groups

This finding of secondary analysis can be used cautiously and should not base treatment decision based on the finding of this kind of analysis alone. They also argue to confirm the results in an independent trial designed for this purpose
## Critical Appraisal of the Qualitative studies (CASP Tool)

<table>
<thead>
<tr>
<th>Title and author</th>
<th>Aim is Clearly stated?</th>
<th>Appropriate qualitative methodology</th>
<th>Appropriate research design to address the aims</th>
<th>Was the data collected in a way that addresses the research issue?</th>
<th>Relationship of researcher &amp; participants</th>
<th>Ethical consideration</th>
<th>Was the data analysis sufficiently rigorous?</th>
<th>Is there a clear statement of findings?</th>
<th>How valuable is the research?</th>
</tr>
</thead>
<tbody>
<tr>
<td>42. Kumbani et al. (2012)</td>
<td>The study has a clearly stated objective appropriate to qualitative research.</td>
<td>A descriptive qualitative design is appropriate to address the objective of the study to acquire a deep understanding of the views of women on Perinatal care</td>
<td>14 mothers with normal delivery in Malawi District hospital were selected by purposeful sampling that is appropriate to qualitative research, but the women were recruited directly by the researchers, not through their gatekeepers</td>
<td>A semi-structured individual interview with a topic guide is appropriate in qualitative research that deals with perceptions, feelings, and experiences help participant share personal experiences &amp; gives room to add an additional question by the participants</td>
<td>Women were not given a chance to select the time and place of the interview, and the interview was conducted in the hospital which may indicate that the overall control was with the researcher</td>
<td>Ethical approval obtained, written informed consent taken, anonymity by using numbers on both the recorded interview &amp; transcripts, confidentiality, privacy and voluntary participation were Adequately considered.</td>
<td>Analysis process was described adequately, and the researcher used manual and software tools for coding and storing data which may increase the credibility of findings through the use of multiple methods for analysis. The researchers used reflexivity by identifying the role of the researcher and the influence of being a care provider of the responses of the participants</td>
<td>The researcher provided a thick description of settings, participants, data collection and data analysis as well as direct quotations be used adequately to support the researcher interpretation which could increase the trustworthiness of findings</td>
<td>This article has some value regarding exploring the women’s perceptions of care in Malawi context. The study of good quality in term of sampling, data collection and analysis and reporting of findings</td>
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<tr>
<td>Title and author</td>
<td>Clear statement of the aims</td>
<td>Appropriate qualitative methodology</td>
<td>Appropriate research design to address the aims</td>
<td>Data collected in a way that addresses the research issue?</td>
<td>the relationship of the researcher &amp; participants</td>
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<td>Raine et al. (2010) A qualitative study of women’s experiences of communicati on in antenatal care: Identifying areas of action</td>
<td>The study has a clearly stated objective that is appropriate to the design of the study</td>
<td>The methodology was not clearly stated but the researcher aimed to explore deeply the key elements of communication which make qualitative research as appropriate.</td>
<td>A qualitative design is appropriate to the aims that aim to gain an in-depth understanding of women’s experience</td>
<td>30 Women were recruited from a wide range of setting from different socially and ethnically diverse areas (data triangulation) through their gatekeeper by purposeful sampling with maximum variation to obtain a representative sample. Purposeful Sampling based on sampling criteria Sampling was done until saturation</td>
<td>Semi-structured individual interviews &amp; focus group interviews with a topic guide to help women talk freely, elaborate more on each question &amp; to give room for adding more questions. They were appropriate for qualitative research &amp; the use of two sources of data collection led to source triangulation that increases the trustworthiness of the results of the study</td>
<td>Although inadequately reported the researcher used reflexivity by identifying own beliefs and assumption that may affect the study. The researcher role was highlighted adequately</td>
<td>Need to be addressed adequately. Only approval of ethics committee &amp; informed consent were reported whereas confidentiality, privacy, anonymity and storing of data were not highlighted in this study as well as power relation that needs to be considered</td>
<td>The researcher provided a thick description of the process of data analysis, and audit trails be done which increased the credibility of findings.</td>
<td>Two major themes identified and discussed with sub-themes adequately with the support of direct quotations from participant’s statements to support the researcher’s interpretation</td>
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<td>Title and author</td>
<td>Clearly stated aims</td>
<td>Appropriate qualitative methodology?</td>
<td>Appropriate research design to address the aims</td>
<td>Was the recruitment appropriate to the aims of the research?</td>
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<td>44. Larsen et al. (2004) Antenatal care in Papa New Guinea: issues and perceptions</td>
<td>The study has a clearly stated objective that is inappropriate to the qualitative study</td>
<td>The methodology was not clearly stated</td>
<td>A cross-sectional descriptive study that was retrospective in nature to allow women to talk about their prior beliefs, experiences &amp; perception of women</td>
<td>Purposive used to identify the three communities that were appropriate for qualitative research. Then Convenient sampling was done to identify the participants within these communities. Convenient sampling can be used for large-scale study, and this study has a small sample. The convenient sample may increase the bias via self-selection.</td>
<td>The researcher was a health care provider who was known to the participants which may lead to biased responses provided by the women. However, how the researcher controlled the power of sitting was not discussed.</td>
<td>Ethical approval, voluntary participation, Informed consent &amp; anonymity were briefly reported. Other ethical issues were not addressed, power relation also was not highlighted</td>
<td>Data analysis was not reported in this study which makes it difficult to appraise the analysis of the data. The analysis should be reported systematically so another researcher can duplicate it in the future research.</td>
<td>Four themes were identified, but the interpretation was not supported by direct quotations of participants themes which may indicate the bias in interpretation of the findings. Providing more quotes from participants statements increase the trustworthiness of the findings.</td>
<td>The study had some value of filling the gap of lack of information in this area, and the finding was consistent with other study findings. Multiple methods and perspectives done which increased the credibility of the findings.</td>
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<tr>
<td>Title and author</td>
<td>Clear statement of the aims of the study</td>
<td>Appropriate qualitative methodology</td>
<td>Appropriate research design to address the aims</td>
<td>Appropriate data collection</td>
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<td>Bondas (2002) Finnish Women’s experiences of antenatal care</td>
<td>The study has a clearly stated aims</td>
<td>Phenomenological Methodology that is appropriate for this study to explore the participants lived experience of ANC</td>
<td>A qualitative design was appropriate to explore the participants lived experiences of ANC</td>
<td>40 women who experience ANC recruited through their gatekeepers by purposive sampling based on inclusion criteria. Purposeful sampling is widely used in qualitative research to get participants who lived the experience under study.</td>
<td>Data collected in 2 phases by semi-structured interview appropriate to allow participants to express opinions and to get an in-depth insight of their complex experience freely. Then, non-participant observation used. Using two methods to collect data add to the credibility of the results by method triangulation</td>
<td>It is reported that how the preconception the researcher had before data collection may affect the interpretation. The researcher reported that bracketing is done to be able to report that truly the lived experience of the women. I think it is difficult to set aside all preconception that the researcher had the prior conduct of the study</td>
<td>Ethical approval, information provided to the participant and if they agree they signed informed consent, dignity, anonymity, privacy &amp; confidentiality were all reported</td>
<td>The researcher provided a detailed discussion on the analysis process. Transcript was done by the researcher that is important to get an in-depth understanding of the data</td>
<td>The use of method triangulation in this study and detailed description of participants, sampling and methodology increased the quality and credibility of findings</td>
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<td>Title and author</td>
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<td>Appropriate qualitative methodology</td>
<td>Appropriate research design to address the aims</td>
<td>Was the recruitment appropriate to the aims of the research?</td>
<td>Was the data collected in a way that addresses the research issue?</td>
<td>Relationship between the researcher and the participants considered?</td>
<td>Have ethical issues been taken into consideration?</td>
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<td>Is there a clear statement of findings?</td>
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<td>Nigenda et al. (2003) <strong>Women’s opinions on ANC in developing countries: results of a study in Cuba, Thailand, KSA and Argentina</strong></td>
<td>The study has a clearly stated goal that is appropriate to a qualitative study</td>
<td>Ethnography methodology is appropriate to identify and acquire in-depth insights of women’s opinion on ANC about the new model about different culture and context</td>
<td>The qualitative design was appropriate for this kind of study that deals with how women in different sociocultural contexts experience the new ANC model &amp; how different cultures affect the women’s opinion</td>
<td>The qualitative design was appropriate to identify participants who meet the criteria &amp; can answer the research questions. Sampling was done until saturation.</td>
<td>Data collected by Focus group discussions that were recorded. GGD is appropriate to obtain cumulative data from multiple participants with shard issues. Use of notes from observation increase trustworthiness of the findings</td>
<td>Importance of rapport with participants highlighted to avoid effects of courtesy bias &amp; professional authority especially in developed countries that are important to help the participant’s talk without being under control</td>
<td>Ethical issues were briefly reported about ethical approval and voluntary informed consent &amp; confidentiality only. Other ethical issues were not highlighted. In a focused group, the researcher may face the difficulty in protecting participants privacy &amp; confidential information shared</td>
<td>Data were translated into English by a fluent person in both languages, and then transcribed, local researchers asked to give their opinion to avoid losing data &amp; risk of misinterpretation (researcher triangulation). Software used to code data based on culturally related interpretation. The manual analysis must be done to ensure rigour</td>
<td>This study focuses on how the sociocultural aspects of women may affect the perception of changes in the ANC. The data produced in this study represented women with different sociocultural backgrounds. The use of triangulation in data analysis may increase the credibility of the findings</td>
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<tr>
<td>Title and author</td>
<td>Clear statement of the aims</td>
<td>Qualitative methodology appropriate</td>
<td>Appropriate research design to address the aims?</td>
<td>Appropriate recruitment to the aims</td>
<td>Appropriate data collection methods</td>
<td>Relationship of researcher &amp; participant addressed</td>
<td>Ethical consideration</td>
<td>Was the data analysis sufficiently rigorous?</td>
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<td>47. Sapountzi-Krepi et al. (2011) Mother’s experiences of pregnancy, labour and childbirth: A qualitative study in Northern Greece</td>
<td>The study has a clearly stated aim that is appropriate to a qualitative design</td>
<td>Qualitative design is appropriate to gain an in-depth understanding of women’s experience on ANC</td>
<td>Recruitment is done by snowballing technique by the prospective participants. This technique is effective in identifying the hidden subjects but has issues of selection bias may limit the credibility of the results &amp; ability to generalise findings from the sample. The large sample which may limit data management</td>
<td>Data collected by a self-reported questionnaire containing an open-ended question on maternity services and birth. For qualitative research, it is better to use either semi-structured interview or in-depth interview to allow for clarification and propping and to provide a room for the participant to add a further question that was not thought by the researcher</td>
<td>The researchers were health professional s known to the respondents which may affect their responses. The mother also at risk of recall bias from a previous pregnancy. Need to be considered</td>
<td>Ethical approval, informed consent after explanation, confidentiality, voluntary participation, anonymity were reported</td>
<td>A detailed description of analysis was reported, use of another member for agreement (researcher triangulation) that increase the credibility of findings.</td>
<td>Descriptive results were reported, identified themes were supported with direct quotations from a participant which increased the credibility of the researcher interpretation</td>
<td>The use of self-reporting questionnaire is one of the limitations of his study. The sample size was very large which may lead to difficulty in managing huge data that may lead to error in interpretation.</td>
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<td>Title and author</td>
<td>clear statement of the aims</td>
<td>Appropriate qualitative methodolo gy</td>
<td>appropriate research design to address the aims</td>
<td>appropriate recruitment to the aims</td>
<td>Appropriate data collection methods</td>
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<td>48. Duarte et al. (2011) A maternal decision on obtaining prenatal care: study in Brazil</td>
<td>The study has a clearly stated aim appropriate to a qualitative inquiry.</td>
<td>Discourse analysis methodology is appropriate for social representations of PNC held by pregnant women using the discourse of the collective subject framework to make a coherent set of the meaning of the generated data from the women</td>
<td>The qualitative design is appropriate to get an in-depth knowledge of the phenomena under study</td>
<td>21 pregnant women are receiving PNC care recruited through publicly funded Brazilian health care system. The setting was appropriate for the study purpose but the technique to recruit participants was not reported clearly. The inclusion criteria were not discussed which affect the credibility of the findings Sampling done until saturation achieved</td>
<td>Data were collected by in-depth, face to face interview that is appropriate in qualitative research and used widely by many researchers to be able to interact with the participants.</td>
<td>The role of the researchers &amp; relationship with participants were not reported. Researchers were healthcare professional s that may affect the responses provided about health care provision and the role of the healthcare providers</td>
<td>Ethical approval, anonymity by assigning numbers instead of names, written informed consent obtained. Other issues were not discussed</td>
<td>Discourse analysis was used as a theoretical framework to disclose collective thinking shared by society. Segments of speech extracted, condensed for content representation, core ideas identified, organised in a map, then key ideas organised logically. Researcher’s triangulation &amp; member checking was not reported which affects trustworthiness of the data.</td>
<td>Two DCS themes were reported explicitly with the support of important segments of statements that reflect the discourse identified which are important to the credibility of the interpreted findings</td>
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<td>Title and author</td>
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<td>49. Sword et al. (2012) Women’s and care provider’s perspectives of quality of PNC: a qualitative descriptive study</td>
<td>The study has a clearly stated aim To explore women’s and care provider’s perspectives of quality of PNC to inform the development of items for a new instrument, the quality of PNC questionnaire</td>
<td>The methodology was not reported which affect credibility and transferability of the findings</td>
<td>A qualitative descriptive approach was used to that is appropriate to explore topics &amp; issues in depth that is useful in obtaining straight descriptive answers to the phenomena under study</td>
<td>Data were collected by a semi-structured interview with probing guide. Collected by a trained research assistant with women &amp; HCPs to have different views (data triangulation) at a location of their choice &amp; then follow-up interview done by telephone to validate the themes emerged in the initial interview (member checking). Use of member checking &amp; data triangulation increased the validity of the findings</td>
<td>The role of the researcher &amp; relationship with the participants were not discussed in this study. How power relation was managed was not reported</td>
<td>Ethical approval Inform consent and explanation before signing and voluntary participation was reported</td>
<td>Thick and detailed description of results was provided, researcher triangulation in analysing data, themes validated with participants (member checking). It was done following systematic &amp; rigorous strategies to ensure trustworthiness of findings.</td>
<td>A detailed statement of findings was reported. Themes discussed adequately with the support of direct quotes from the participant's statements to represent the essence of data.</td>
<td>The use of researcher’s triangulation and member checking increased the rigour of the study. However, the use of snowballing techniques to select the HCPs may indicate selection bias and can be considered as a limitation of the study.</td>
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<td>50. Jenkins et al. (2014) Women’s expectations and experiences of maternity care in NSW-what women highlight as most important?</td>
<td>The study has a clearly stated aims To investigate how women understand and experience their maternity care and to report which aspects of care woman highlight as most important</td>
<td>Methodology was not reported which may affect the trustworthiness of the findings because replication will be difficult</td>
<td>A descriptive qualitative design used that was appropriate to address the research aims. Describe how women understand &amp; experience maternity care</td>
<td>53 women (pregnant, postpartum, complicated &amp; uncomplicated pregnancy) receiving public maternity care in New South Wales recruited over 12 months by Purposive sampling with maximum variation (to provide a broad range of perspectives regarding maternity care) through their gatekeepers</td>
<td>Data were collected through semi-structured audio-recorded interviews to explore women’s expectation and experience. The method is appropriate to the qualitative study which will help in evaluating &amp; understanding the women’s perspective through open-ended questions and topic guide.</td>
<td>The researcher role, level of participation and relationship with the participants were not discussed. It is important to describe these because it will increase the reader confidence to know the researcher’s credentials</td>
<td>Ethical approval, informed consent and voluntary participation was discussed, but other ethical issues were not stated adequately</td>
<td>A detailed description of the analysis process, daily reflection maintained to be reviewed &amp; identify consistent categories. Researcher &amp; data triangulation maintained that enhance trustworthy of the interpreted data</td>
<td>Five overarching categories identified. Detailed discussion is given for each with the support of quotes from participants to represent the true essence of the category. A table used to show the different characteristics of participants</td>
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<td>51. Goberna-Tricas et al. (2011) Satisfaction with pregnancy and birth services: the quality of maternity care services as experienced by women</td>
<td>The study has a clearly stated aim that is appropriate to the adopted design and methodology</td>
<td>Phenomenology methodology used that was appropriate to address the in-depth understanding of women’s lived experience About maternity care as a care receiver</td>
<td>Qualitative design was appropriate for the aim of the study to focus on people’s lived experiences about pregnancy &amp; birth experience as a care receiver</td>
<td>31 women recruited by Purposive sampling with maximum variation (type of birth, age &amp; social classes) which is appropriate to obtain a sample with a broad range of perspectives. Women were recruited from a postnatal group</td>
<td>Data was collected by a five focused group interview to produce a large amount of data on a defined area of interest which is appropriate when having common shared issues to be studied but the researcher has to be careful with data management and to provide equal opportunity for all participants to share their views &amp; opinions</td>
<td>The role of the researcher had been reported as observes, describes, understand &amp; interprets the experience &amp; meanings. The relationship with participants &amp; preconceptio &amp; experiences and how to manage the preconceptio was not discussed. Power of should be reported</td>
<td>Ethical approval, informed consent confidentiality and anonymity by assigning a random number to each participant were highlighted</td>
<td>A detailed description of analysis process was provided and enhanced by researchers triangulation to confirm the interpreted data that will enhance the credibility &amp; trustworthy of the findings. The researchers follow systematic &amp; rigorous strategies in analysing the generated data</td>
<td>Three main themes identified and detailed discussion provided with the use of quotes from participant’s statement to support rationale for the identified theme. Tables summarising diversity of the five groups were discussed.</td>
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<td>52. Mathole et al. (2004) A qualitative study of women’s perspectives of ANC in a rural area of Zimbabwe</td>
<td>The objective of the study described clearly, and it is appropriate to the qualitative enquiry to describe the perspectives and experiences of women in their use of ANC</td>
<td>The type of methodology was not reported. Qualitative methodology is appropriate to address the purpose of the study in which the researchers aimed to describe the perspectives and experiences of women on the use of ANC through the women’s narration.</td>
<td>The qualitative design is appropriate to the aim of the study that aimed to obtain an in-depth description of women’s experiences and perceptions.</td>
<td>68 women &amp; partners recruited through their gatekeepers from diverse setting including rural health centres. Purposeful sampling technique with maximum variation based on sampling criteria is appropriate to provide a broad range of perspectives &amp; to explore the issue from a diverse population.</td>
<td>Data collected by 5 focus group discussion to get cumulative responses on similar shared issues. Eleven in-depth individual interviews selected from FGD to allow them to elaborate on certain issues raised in FGD as well as to describe their personal experience regarding pregnancy care. The use of two methods of collecting data is appropriate for the study purpose, and it increases the validity &amp; credibility of the methods through method triangulation.</td>
<td>The researcher roles &amp; relationship with the participants was clearly addressed. The assumption and belief of the researchers were clearly reported. Women were given an opportunity to select the time and place of the interview which facilitates a sense of mutuality between the researchers and participants.</td>
<td>Ethical approval, voluntary participati on and informed consent were discussed</td>
<td>Data were transcribed &amp; translated by linguistic experts, then read &amp; reread by to identify words, segments &amp; units with relevant meaning to minimise loss of meaning &amp; data &amp; to ensure quality. Methods and researcher’s triangulation achieved which enhanced the trustworthiness of analysis.</td>
<td>Three themes were identified and reported explicitly. The researcher’s interpretation was supported by quotes from participant’s statement which is important to increase the credibility of the findings &amp; help the reader to ensure the true essence of interpretation.</td>
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<td>Title and author</td>
<td>Clear statement of the aims</td>
<td>Appropriate qualitative methodology used</td>
<td>Appropriate research design to address the aims of the study</td>
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<td>Mathibe-Neke (2008) The expectations of pregnant women regarding antenatal care</td>
<td>The study has a clearly written aim that were appropriate to the design and methodology used</td>
<td>A qualitative design is appropriate to the aim of the study to enable an in-depth description of the expectation and experience of women of ANC</td>
<td>18 Pregnant women attending ANC clinic at Academic Hospital in Gauteng by recruited by Purposive sampling based on the sampling criteria. Purposive sampling is appropriate in qualitative research to select participants who can contribute to the context of the study. Data saturation was reached with 18 participants</td>
<td>Data collected by in-depth unstructured interviews using open-ended questions that were audiotaped and field notes &amp; logs (audit trailer) (data triangulation). In-depth unstructured interview is appropriate to this study to collect detailed data &amp; it is respondents led, it encourages the participants to talk openly &amp; elaborate on the topic flexibility applied in which more questions can be added during the interview. It allows the researcher to examine meaning in more depth</td>
<td>The role of the researcher during the interview was reported. The relationship was clearly addressed which was good to encourage women to talk freely</td>
<td>Ethical approval obtained, informed consent taken, voluntary participation &amp; right for withdrawing, explained, privacy addressed &amp; anonymity was discussed &amp; addressed. Prior beliefs were reported &amp; Reflective field notes were taken</td>
<td>The researcher followed a systematic way to ensure rigour in data analysis. Many researchers participated in the analysis to ensure credibility &amp; validity of data. Member checking was done by participants checking the theme to confirm the responses &amp; verify accuracy. The researcher adopted Guba &amp; Lincoln 1985 criteria to maintain trustworthiness and authenticity of the findings</td>
<td>Each theme discussed &amp; supports with quotes from women statements to ensure the accuracy of interpretation of each theme. The table also used to provide a summary of themes &amp; subthemes.</td>
<td>The findings of this study were aligned with findings of another study. The researcher was transparent in reporting explicit criteria to maintain rigour and trustworthiness of findings such prolonged engagement, pretesting, audit trail and reflexivity</td>
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<td>54. Hildingsson and Thomas (2007) Women’s perspectives on maternity services in Sweden: Process, problems and solution</td>
<td>The study has a clearly stated aims and objectives that were appropriate to the qualitative enquiry as the study dealt with an in-depth description of women’s opinions on ANC</td>
<td>A qualitative methodology was not reported</td>
<td>A qualitative design was appropriate to address the aim of the study that deals exploring and understanding the perspective and views of women</td>
<td>The qualitative data was based on 827 women out of 3061 Women were recruited from a Swedish national study from 1999-2000 through gatekeepers during the first visit sampling design was not reported properly as well as the sampling criteria were not explicitly reported.</td>
<td>Data was collected by mailing questionnaire of open-ended questions. The questionnaire has the advantage of collecting large amount of information from population sharing same issues that is more appropriate for quantitative studies, but in qualitative studies done in this way, there is no interaction between researcher &amp; subject. The respondents may answer based on their understanding, feelings &amp; lacks validity &amp; ask for information without explanation</td>
<td>Role of the researcher &amp; relation with the participants were not stated because the data were collected by mailing questionnaire</td>
<td>Ethical approval and informed consent were only stated. It was not clear if the questionn aire was anonymou s or not and how anonymity could be maintained particularl y with mailing questionn aire</td>
<td>Data analysed by manual content analysis, all statements read &amp; reread by 3 researchers, category identified &amp; checked by inter-rater reliability with total agreement of 83% (researchers triangulation). 2061 statements were sorted which was huge number to analyse &amp; to manage, some data might be lost &amp; how rigour could be maintained with this much of data for analysis</td>
<td>Four important themes reported adequately. Results discussed adequately for each theme with the support of quotes of some important statements to prove how themes identified and for accurate interpretation of the data particularly to the reader of the research. Some important data summarised in tables</td>
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<td>Vallely et al. (2013) Exploring women’s perspectives of access to care during pregnancy and childbirth: a study from rural Papua New Guinea</td>
<td>The study had a clearly stated objectives that are appropriate to the qualitative enquiry to get an in-depth understanding of women’s perceptions and experiences of pregnancy and childbirth.</td>
<td>A descriptive study design was used that was appropriate to address the research aims that intended to explore women’s experience of pregnancy.</td>
<td>A descriptive qualitative design is used widely in identifying experiences, meaning and perspective of the participants to get a deep insight of their real experiences with phenomena. So it is appropriate to address the objectives of this study.</td>
<td>51 women participated in community workshop were recruited for the study. Techniques to recruit women for FGD were not discussed clearly which make it difficult to judge how participants were selected. For individual interview 18 women &amp; 3 HCPs selected purposefully which was appropriate to obtain participants who can benefit the aims of the study.</td>
<td>Data collected by seven focus group (51) &amp; in-depth interview (21 women) using interview guide &amp; probe. Both methods were appropriate for qualitative research. In-depth interview enables the researcher to listen &amp; interact with women &amp; are respondents lead. Focus group are suitable to share information on a specific &amp; common issue with similar participants: group &amp; data management remain an issue &amp; equal chances should be given to all participants to share their views.</td>
<td>The role of researcher &amp; relationship with participants were not stated. The research took place at the health centre which may indicate power relation. Women knew that researchers were HCP which may bias responses positively.</td>
<td>Ethical approval, informed consent and anonymity maintained by a different name. Individual interview conducted in a separate room to maintain privacy &amp; confidentiality. However, the issue of maintaining confidentiality remains in FGD.</td>
<td>Data analysis explicitly reported. Data were transcribed &amp; translated by expert &amp; checked by team members for clarity (trustworthiness). Content analysis was done manually &amp; with use of Nvivo to code data (method triangulation) the emerging themes identified with the agreement of team members (researcher triangulation).</td>
<td>Three themes &amp; sub-themes were identified, and interpretation discussed adequately with the support of quotes from women’s statements to prove the essence of how themes were identified. Tables containing socio-demographic &amp; obstetric history were provided to show the diversity of the population.</td>
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<td>56. Rahmani and Brekke (2013) Antenatal &amp; obstetric care in Afghanistan - a qualitative study among healthcare receivers and health care providers</td>
<td>The study has a clearly stated objective that was appropriate to the qualitative enquiry to get an in-depth experience of the participants on the exciting antenatal and obstetric health care</td>
<td>It is appropriate because the researcher aimed to explore how pregnant women &amp; HCPs experience ANC &amp; obstetric care. This methodology allowed the researcher to get deeper insight &amp; knowledge about the meaning &amp; views about ANC &amp; obstetric care from perspectives of women &amp; care providers</td>
<td>A qualitative phenomenological approach used that were appropriate to explore the lived experiences of specific life events or phenomena that were the ANC &amp; obstetric care in this study.</td>
<td>12 women &amp; 15 different health care providers recruited by purposeful sampling from 2 hospitals &amp; one ANC clinic with the help of the midwives based on the inclusion criteria. Purposeful sampling is appropriate in qualitative research &amp; in this study different types of participants were recruited to get a wide range of experiences &amp; views</td>
<td>Semi-structured interviews &amp; observation were used. Two types of the questionnaire used one for women &amp; one for care providers. Semi-structured interview appropriate in this study to guide the discussion &amp; it adds flexibility to change &amp; add questions that emerge during the interview. The use of Interview &amp; observation as method triangulation increase credibility &amp; validity of the findings. Interview audiotaped &amp; done in the local language</td>
<td>The role of the interviewer was discussed briefly while providing information to the participants. The use of observatory notes can help in managing reflexivity caused by prior conception the researcher had. However, notes still remain subjective</td>
<td>Ethical approval &amp; written informed consent were obtained. Illiterate participant provided only verbal consent. All interviews took place at the health centre which may indicate power relation. However, the researchers were not clinicians</td>
<td>Data analysis was explicitly recorded. Reading data identify units of meaning, grouping them &amp; then interpreted &amp; described. However, nothing reported about validation of analysis which makes difficult to judge the credibility &amp; validity of findings. Observatory notes were also maintained throughout data collection</td>
<td>Five main themes emerged from the data collected from the participants, and they were discussed adequately with support from their quotes that added to the credibility of the identified themes.</td>
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<td>57. Haddrill et al. (2014) Understanding delayed access to ANC: a qualitative interview study</td>
<td>The study had a clearly stated aim that was appropriate to the qualitative design</td>
<td>The methodology adopted was not reported</td>
<td>It is appropriate to address the aim of the study because the researcher aimed to gain a deeper understanding of the phenomena from the women’s views and also due to lack of literature about reasons late booking</td>
<td>27 pregnant Women booked after 19 weeks of gestation identified through referral letters by research midwife &amp; discussion with the ANC midwives by purposive sampling with maximum variation to have diverse responses that increase the representation of the findings &amp; then theoretical sampling. Sampling was done until saturation</td>
<td>Data collected by first taking notes and checking referral letter to be able to identify women then semi-structured interview conducted that were appropriate for the qualitative study to enable the participants to express their views on the topic &amp; to identify additional areas of discussion. A Combination of interviews &amp; field notes increases the validity of the results (data triangulation).</td>
<td>Researcher’s role was reported. Interviews took place in the health centre which may indicate the power of setting on the participant. Researcher was trained on an interview on qualitative research, and the one who collected the data was not a care provider of any women</td>
<td>Ethical approval &amp; informed consent obtained after explaining, other issues were not reported.</td>
<td>The process of data analysis was reported adequately adopting the grounded theory approach. Manual and computer software analysis done. Researchers triangulation is done in the constant comparison and identification of them and thematic framework which increased the credibility of the findings</td>
<td>Six themes identified from analysis and they were reported adequately with the support of some direct quotes from the participant’s statements to support the identified themes, a summary of the recruitment process, participant’s characteristic &amp; summary of themes were provided in tables which added to the robustness of the findings.</td>
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<td>58. Hatherall et al. (2016) Timing of the initiation of antenatal care: An exploratory qualitative study of women and service providers in East London</td>
<td>The study aim was written in an appropriate way for qualitative research To explore the factors which influence the timing of the initiation of a package of publicly funded antenatal care for pregnant women living in a diverse urban setting</td>
<td>This was a generic qualitative study done by individual interviews that are appropriate for in-depth exploration of perception and experiences of specific phenomena and focused group discussion is suitable to discuss the general shared topic for the participants and would enrich the finding of the study through triangulation of data</td>
<td>An exploratory qualitative design is appropriate for in-depth exploration of the topic under study and to enable in-depth discussions of identified factors It helps to understand the facilitator and barriers to begin a package of publicly funded ANC in early pregnancy</td>
<td>The women recruited by purposive sampling, from London Borough of Newham, from three healthcare settings with a diverse population where over quarter of pregnant women had their antenatal booking later than 12 weeks of gestations, thus pregnant women starting their first visit late are appropriate to answer the research questions This would ensure a varied sample of women with a different range of experiences</td>
<td>The data collected over 6 months through 21 individual interviews and 6 focus group discussions These two methods of data collection are important for gaining in-depth insights of factors of late booking in person and in common to all women, which can complement each other and generate data that explain these factors</td>
<td>No evidence of considering the relationship between the women and the researcher</td>
<td>Yes the study received ethical approval from NHS East London and the University of London research ethics committee Written informed consent obtained from each woman No further data addressed about the ethical considerat ion</td>
<td>Thematic analysis was used for analysis which is appropriate to produce findings that may inform policy development Data were transcribed, and initial coding by three researchers then discuss for consistency and then for later interviews were divided and coded independently and then countercheck by others to ensure credibility &amp; was triangulated</td>
<td>Yes the review provided explicit explanation and reporting of the findings which was supported by representative quotes Then the discussion was examined for similarities and differences through the relevant literature</td>
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<td>59. Nisar et al. (2016) Qualitative exploration of facilitating factors and barriers to use of antenatal care services by pregnant women in urban and rural settings in Pakistan</td>
<td>The study aim was written appropriately to the title of the study To explore the facilitators and barriers to use of ANC services in rural and urban communities of two selected districts in Pakistan</td>
<td>The study used the generic methodology But using specific methodological framework for data collection and analysis would enhance the credibility of the findings</td>
<td>Qualitative, explorative study is appropriate to achieve the research aim, which would enable in-depth exploration of the facilitator and barriers to uptake of antenatal care</td>
<td>Women were recruited from rural and urban areas from two districts in Pakistan to ensure diversity of participants and achieve maximum variations Purposive sampling utilised based on predetermined criteria</td>
<td>Data were collected by individual interviews of 6 lady health worker, 10 women and 4 doctors and 10 focus group discussion with women who had a child aged 5 years or younger This enabled triangulation of the data source and the method of data collection which helped in generating deep insight of diverse perspectives The interviews were done in local language, transcribed and translated by the same researcher who conducted the interview</td>
<td>The relationship between the researcher and women were not highlighted and if the women were given the opportunity to select the time and place of the interviews or this was selected by the researchers was also not clear</td>
<td>Ethical approval was obtained from the district hospital participating in the study and the university of Sydney consent form obtained from each woman briefly</td>
<td>The thematic analysis used for coding by two researchers who collected the data transcribed them independently, then translated into English, then sampled of them counter checked by another one to ensure quality data that resembled the meaning The analysis process explicitly explained Inter-coder reliability was checked by researchers discuss and review themes until an agreement</td>
<td>Yes The findings were clearly reported under four themes that were supported by direct representative quotes to enhance the transparency of explanation and enhance transferability of the findings</td>
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<td>60. Gheibizadeh et al. (2016)</td>
<td>The study aim was written clearly and aligned with the title To explore Iranian women’s and care providers’ perceptions of equitable prenatal care</td>
<td>The study used generic qualitative design to obtain a deep understanding of the equitable prenatal care. However, using specific methodology framework helped increase the credibility and rigour of the study.</td>
<td>The study used generic qualitative design with content analysis method to obtain a deep understanding of the equitable prenatal care which is suitable to address the aim of the study that explores feelings, perceptions, attitudes and motivations to the concept of interest</td>
<td>10 women and their care providers were recruited from 6 urban health centres across Ahvaz, southwestern city in Iran by purposive sampling procedures. The participants are appropriate to address the research questions and using different participants across different health centres maximise variations in the sample and help to generate credible and quality data through triangulation. Inclusion and exclusion criteria were clearly addressed</td>
<td>Data were collected by an individual in-depth interview which is appropriate to address the research aim and obtain in-depth data from diverse perspectives of the study. Rigour through data source triangulation. Data were collected until saturation</td>
<td>The relationship part was not highlighted in the study. It was written that women were interviewed in private room at the selected health centres of their own, this indicated that the women did not have the choice of having the interviews at their own convenient time and place,</td>
<td>Ethical approval obtained from the ethics committee, the explanation given to women about interviews, consent and recording, confidentiality and anonymity but briefly not indicating how</td>
<td>Content analysis was conducted concurrently with data collection, each interview was read several times to provide a sense of the whole, then open coding was conducted through which note taking and labelling of the statements done, then through abstraction, seven themes emerged. This process repeated until data saturation to ensure theoretical in-depth themes</td>
<td>Yes the findings were presented in seven themes that were supported by quotes although it lacks in-depth explanation</td>
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<td>61. Callaghan-Koru et al. (2016)</td>
<td>The study aim is clearly written. To capture providers’ attitudes and behaviours related to visit guidelines and clients’ perceptions of these recommendations to understand potential causes of declining number of visits for women in Tanzania.</td>
<td>The qualitative approach could provide a deep understanding of the participant’s perceptions about the reasons for declining visits. However, the study did not use the specific methodology as it was a generic study.</td>
<td>Participants were recruited from 18 health centres as part of larger study to test for the effectiveness of postnatal care interventions that also responsible for providing focused ANC. However, involving large numbers of settings and participants would result in generating a large volume of data that is difficult to manage and would affect the quality of the findings.</td>
<td>All data were collected over 2-3 days for each facility between Sep-Nov 2012 by in-depth interview of 5 HCP and women from each centre and structured observation checklist by a trained to assess the content of ANC including communication of when women should return to the follow-up visits. However, collecting qualitative data from larger sample as in this study within 2-3 days by conducting interviews and observations could affect the credibility &amp; quality of data generated.</td>
<td>Not highlighted</td>
<td>Ethical approval obtained from the designated committees. Consent was taken from each participant in written and in oral. Some women did not participate due to time constraints.</td>
<td>Yes</td>
<td>The findings were reported in numbers and themes that were supported by direct quotes.</td>
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<td>Data collected by a trained medical doctors. Debriefing meetings of research team &amp; investigators to discuss emerging findings &amp; adjust interview guide, indicated using a structured interview guide. All interviews tape recorded &amp; transcribed in local language then to English by professional translators, which can affect the quality and meaning of the translated data. A detailed explanation of analysis was given about the analysis to ascertain rigour and maintain quality. Triangulation of data source and methods increased the credibility of findings.</td>
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<td>The findings of the study are appropriate to be integrated into the review of the literature as well as it can be transferable to a population with same contexts. The findings indicated that poor communication of healthcare providers based on the anticipation that the women understood their appointments resulted in women not using the ANC adequately.</td>
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<td>62. Women’s needs from antenatal care in three European countries</td>
<td>The study has a clearly written objectives However, the word determine could be changed to explore which indicate a more in-depth data gathering To determine important aspect of antenatal care from women’s perspective to develop a women-constructed conceptual model of antenatal care</td>
<td>Qualitative design enabled generating rich data of women’s needs and expectation in pregnancy</td>
<td>Women recruited from 3 European countries Scotland, Switzerland &amp; Netherlands Healthy women at different stages were recruited up to 6 months of childbirth Women recruited via gatekeepers 23 women recruited from three countries However, this resulted in cross-cultural differences within categories for which saturation was not achieved, and the study continued</td>
<td>Women were sampled through an initial convenience sample Data collected through semi-structured interviews using Interview guide to encourage women telling their stories All interviews audio-recorded And interview took place in a place convenient to the women, field notes also taken after each interview to assist theoretical sampling for further data collection The interview is the primary data collection tool in GT as it enables generation of in-depth insights of participants</td>
<td>Women were recruited through their care providers and were allowed the chance to select the place of the interview, which might enable women feeling empowered and help in establishing a relationship</td>
<td>Access and recruitment started after gaining ethics approval from ethics committee Women were given PIS and asked to contact researcher if they wanted to participate Written consent was taken Identifying data were removed</td>
<td>All interviews were transcribed verbatim Analysis was done in original language without using database Line by line analysis for open coding that was examined and coded The process of analysis was clearly explained using the framework of GT However, it was not evident who interviewed the women and analysed the data</td>
<td>Yes The data were grouped into three categories and explanation were supported with a direct quote reflecting the explanation given to the data which is important for fit and relevance and to increase the credibility and transparency in reporting the study findings</td>
<td>The data of the study is generated by grounded theory research of women’s needs of ANC, which identified responsibility as the main reasons for uptake of ANC The study provided a clear explanation of the whole process of data collection and analysis which is helpful for transferability of the study into other settings The finding can be transferable to women in the similar context</td>
</tr>
<tr>
<td>Title and author</td>
<td>Clear statement of the aims of</td>
<td>Appropriate qualitative methodology</td>
<td>Appropriate research design to address the aims</td>
<td>Appropriate recruitment to the aims</td>
<td>Was the data collected in a way that addresses</td>
<td>Relationship of researcher &amp; participant adequately stated</td>
<td>Ethical consideration</td>
<td>Was the data analysis sufficiently rigorous?</td>
<td>Is there a clear statement of findings?</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------------</td>
<td>----------------------------------</td>
<td>-------------------------------------</td>
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<td>---------------------------------------------</td>
<td>-------------------------------------------------</td>
<td>------------------------</td>
<td>----------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>63. Wilunda et al. (2017) Barriers to utilisation of ANC services in South Sudan: a qualitative study in Rumbek North county</td>
<td>The study has a clearly stated aim that is suitable for the design of the study To identify barriers to utilisation of ANC services in Rumbek North County</td>
<td>The methodology was not reported, but the study finding was reported according to the consolidated criteria for reporting qualitative research (COREQ) indicating that the study was a generic qualitative study</td>
<td>A cross-sectional qualitative study was appropriate to explore topics &amp; issues in-depth</td>
<td>Randomly selected the settings of six villages, Purposive sampling of women and their husband based on inclusion and exclusion criteria</td>
<td>Data were collected by open-ended pretested questionnaire for a focus group discussion: 45 men (4FGD), 127 women (8FGDs) and 42 women (2 FGDs) in cattle camps by two facilitators known to the women using local languages 12 key informants of leaders, staff, were interviewed The sample size might be too large for a qualitative study which might result in a large volume of data that might affect their analysis and management. FGD is appropriate to discuss common issues shared by participants</td>
<td>The FGD was facilitated by known key informants to the women, which might enhance the reciprocity and women feel comfortable to share their experiences. The role of the researcher &amp; relationship with the participants were not discussed in this study.</td>
<td>Not adequately addressed</td>
<td>Thick and detailed description of results was provided, researcher triangulation in analysing data, themes validated with participants (member checking). It was done following systematic &amp; rigorous strategies to ensure trustworthiness of findings.</td>
<td>A detailed statement of findings was reported. Themes discussed adequately with the support of direct quotes from the participant's statements to represent the essence of data.</td>
</tr>
</tbody>
</table>
Appendix 3: Example of Systematic Search

<table>
<thead>
<tr>
<th>Search Terms</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>perceptions or attitudes or opinion or experience or view or reflection or beliefs AND antenatal care or prenatal care or antepartum care AND Low risk pregnancy or low risk pregnant women or healthy pregnancy or normal pregnancy</td>
<td>View Results (1,113)</td>
</tr>
</tbody>
</table>
Appendix 4: Ethical Approval

Ref: ethics/230915
Mrs Fatima Al Maqbali
School of Nursing, Midwifery and Social Work
Date 04/11/15

Dear Mrs Al Maqbali

Study title: Al Maqbali: An exploration of antenatal care provided for women in Oman: A grounded theory study 15391

Research Ethics Committee [3]
I write to thank you for coming to meet the Committee on the 23rd September 2015. I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form and supporting documentation as submitted and approved by the Committee.

This approval is effective for a period of five years. If the project continues beyond that period an application for amendment must be submitted for review. Likewise, any proposed changes to the way the research is conducted must be approved via the amendment process (see below). Failure to do so could invalidate the insurance and constitute research misconduct.

You are reminded that, in accordance with University policy, any data carrying personal identifiers must be encrypted when not held on a secure university computer or kept securely as a hard copy in a location which is accessible only to those involved with the research.

Reporting Requirements: You are required to report to us the following:

1. Amendments
2. Breaches and adverse events
3. Notification of Progress/End of the Study

Feedback
It is our aim to provide a timely and efficient service that ensures transparent, professional and proportionate ethical review of research with consistent outcomes, which is supported by clear, accessible guidance and training for applicants and committees. In order to assist us with our aim, we would be grateful if you would give your view of the service that you have received from us by completing a feedback sheet
https://survey.manchester.ac.uk/pssweb/index.php/153715/lang-en

We hope the research goes well.
Yours sincerely,

Mr. Adrian Jarvis
Secretary to University Research Ethics Committee
Fatma Hamdan Al-Maqbali
Principal Investigator

Study Title: "An exploration of antenatal care for women in Oman: A grounded theory study ".

After compliments

We are pleased to inform you that your research proposal "An exploration of antenatal care for women in Oman: A grounded theory study " has been approved by Research and Ethical Review & Approve Committee, Ministry of Health.

Regards,

Dr. Ahmed Mohamed Al Qasmi
Director General of Planning and Studies
Chairman, Research and Ethical Review and Approve Committee
Ministry of Health, Sultanate of Oman.

Cc
Day file
Liability Insurance

☐ Interview Topic Guide (if using) (Appendix 9-10)
☐ Interview/focus group schedule (if using)
☐ Any advertisements/flyers/posters to be used (appendix 18)
☐ Research Protocol (if applicable) (Appendix 14)

Please note: The UREC will decide based on the information provided in the form and any approval will relate to this information only. If you have a separate research protocol it must be consistent with the information in the form.

Insurance Questions

Please answer the following questions. If in doubt, err on the side of caution and answer yes. If you answer yes to any of the questions below then your application, Participant Information Sheet and Consent form will be forwarded to the Insurance Office by the Research Governance, Ethics and Integrity team. For additional guidance for completing the Insurance Questions, please see Appendix 1.

Title of Research: An exploration of antenatal care provided for women in Oman: A grounded theory study.
Principal investigator: Fatma Hamdan Al-Maqbali
School: School of Nursing, Midwifery and Social Work

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>If any part of the research, or use of the protocol, is to be carried out outside the UK (including internet-based research that could include respondents from abroad), does it have a medical content?</td>
<td>Yes</td>
</tr>
<tr>
<td>Does the research involve “first into man” use of a medicinal product?</td>
<td>No</td>
</tr>
<tr>
<td>Do the research subjects deliberately include:</td>
<td></td>
</tr>
<tr>
<td>• Pregnant women?</td>
<td>Yes</td>
</tr>
<tr>
<td>• Children aged five or under?</td>
<td>No</td>
</tr>
<tr>
<td>• Adults who lack the capacity to give informed consent?</td>
<td>No</td>
</tr>
<tr>
<td>Does the research include medical intervention involving:</td>
<td></td>
</tr>
<tr>
<td>• Investigating a medical device?</td>
<td>No</td>
</tr>
<tr>
<td>• Contraception?</td>
<td>No</td>
</tr>
<tr>
<td>Is the research to be carried out by other organisations where the University is required by contract to provide insurance cover for the research if it proceeds?</td>
<td>No</td>
</tr>
</tbody>
</table>

Signed (PI): Fatma Al Maqbali Date: 24/06/2015

This form should accompany the proposal when it is submitted to the Research Office for review.

Insurance Office approval (not required if all answers above are ‘No’)

Signed: [Signature] Date: 09/11/15

January 2015

Legal Liability Only
Appendix 5: DGHS Letter to the Gatekeepers

Sultanate of Oman
Ministry of Health
Directorate General of Health Services
North Batinah Region

DPHC/752016

Date 22/3/2016

To:

After Compliment,

Sub: An Exploration of Antenatal Care for Women in Oman: A grounded theory study

At the beginning, we use this opportunity to appreciate your hard efforts in the provision of quality services in your respected health institutions. In addition, we would thank you for your cooperation with Ms. Fatima Al Moqbali during her data collection stage of her study. Therefore, we would like to inform you that the above step went successfully with her and she would continue to work with your respected Health Institutions during the next step. The next step will be during the end of February and it will require the participation of the doctors who are involved in practicing the anomaly scan in you institutions. Looking forward for your continues support and coordination.

Thank you

Dr. Hassan AL Buloushi
Director of Primary Health Care

Cc:
- File
- Women & Child Health.
Appendix 6: English Participant Information Sheet: Women/ Interview

An exploration of antenatal care for women with low-risk pregnancies in Oman: A grounded theory study
Version 2, 21/10/2015

Participant Information Sheet

Pregnant women: Interview

You are being invited to take part in a research study as part of a student project to explore antenatal care in Oman. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for taking the time to read this.

Who will conduct the research?
Fatma Al-Maqbali, a PhD Student, based in the School of Nursing, Midwifery and Social Work at the University of Manchester, UK.

What is the purpose of the research?
The study aims to explore the experiences of women having healthcare during pregnancy in Oman. The researchers want to identify issues, concerns, needs and the preferences women have on health care during pregnancy. We want to get better information about health care during pregnancy by talking to women who have experienced pregnancy care at present. The findings of the study may help to improve women’s pregnancy care in the future.

Why have I been chosen?
The researchers are interested in understanding women’s views and experiences of health care during pregnancy. You have been chosen because you are a woman having an uncomplicated pregnancy and have had healthcare during pregnancy in primary healthcare institutions in the North Batinah Governorate in Oman.

What would I be asked to do if I took part?
If you agree we will invite you to take part in an interview that is not normally expected to be more than an hour depending on how much you want to tell me at a time and a location convenient to you. If the interview lasted for more than that you will be offered a break. You will be interviewed by the researcher, a PhD student to discuss your views and experiences of healthcare during pregnancy. There are no right or wrong answers; the researchers are trying to understand your experience with healthcare during pregnancy. With your permission, the interview will be tape-recorded and the researchers may use your word-for-word quotations carefully in publications using a false name (pseudonym) to protect your identity.

What happens to the data collected?
Any identifiable data such as your name and address will be removed to protect your identity. If you agree the interviews will be tape recorded, and the recordings will be transcribed (word for word) into a written format for analysis by the researcher and the supervisory team. All written documents will be saved in a locked cabinet that will be kept with the researcher only. All computerised files will be encrypted and protected by a password that is known only to the researcher. Following transcription, tape recordings will be destroyed. The data will be analysed as part of a PhD programme.
How is confidentiality maintained?
All information collected from you during the interview will be kept strictly confidential unless disclosure is essential to protect you or others from the risk of significant harm, or disclosure is required by law or by order of a court. Any information about you that we may use in publications about the study, including direct quotations, will be referred to using a pseudonym (false name), so you cannot be identified. All documents and digitally-recorded material will be saved in a locked cabinet that will be kept with the researcher only. All computerised files will be encrypted and protected by a password that is known only to the researcher. All digitally-recording and written documents will be destroyed at the end of the study. Any information that will be shared with the supervisory team will have your identification deleted before that, so that you cannot be recognised.

What happens if I do not want to take part or if I change my mind?
It is up to you to decide whether or not to take part, accepting or declining participation will not affect your healthcare in anyway either now or in the future. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a consent form, and you will be given a copy to keep. If you decide to take part, you are still free to withdraw at any time without giving a reason, unless the work has been published. The care you receive, now or in the future, will not be affected in any way by your decision whether or not to take part.

Will I be paid for participating in the research?
You will not receive a direct benefit from taking part in this study. However, your participation in the study will help the researcher to have a better understanding of antenatal care in Oman. We hope to use the findings of the study to improve the future healthcare of pregnant women in Oman. The expenses will be estimated and will be covered up to a reasonable amount.

What is the duration of the research?
The interview is not normally expected to be more than an hour depending on how much you want to tell me. If the interview lasts for more than that you will be offered a break.

Where will the research be conducted?
The interview will be conducted at a time and place convenient to you. It can be conducted in the health centre or at your home.

Will the outcomes of the research be published?
The findings of the study will be published in the national and international journals.

Who has reviewed the research project?
The project has been reviewed by the Research Ethics Committee of the University of Manchester UK and the Ministry of Health in Oman.

What if something goes wrong?
No harm is anticipated as a result of participating in this study but in the event of something going wrong and you are harmed during the research you have the right to seek compensation without any detriment to the normal healthcare services available to you.

What if I want to complain?
If there are any issues regarding this research you should contact the researcher Fatma Al Maqbali, in the first instance between 07:30 am to 03:00 pm, mobile phone 0096892060810 designated for the study purpose or at fatma.almaqbali@postgrad.manchester.ac.uk or please contact the supervisory team in the English language at tracey.mills@manchester.ac.uk and chrisine.furber@manchester.ac.uk.

If there are any issues regarding this research that you would prefer not to discuss with members of the research team, please contact the Research Governance and Integrity Team by either writing to The Research and Ethical Review and Approve Committee at Ministry of Health in Oman by emailing: mohrerac@gmail.com, or by telephoning 0096824695921 or
The Research Governance and Integrity Manager, Research Office, Christie Building, The University of Manchester, Oxford Road, Manchester M13 9PL, by emailing: Research.complaints@manchester.ac.uk, or by telephoning 0161 275 8093 or 275 2674 or

If you want to make a formal complaint about the conduct of the research, you should contact the Research Governance and Integrity Manager, Research Office, Christie Building, University of Manchester, Oxford Road, Manchester, M13 9PL, by emailing: research.complaints@manchester.ac.uk or by telephoning 0161 275 8093 or 275 2674.

**How can I contact you?**

These are the contact details of the principle investigator: Fatma Al-Maqbali at fatma.almaqbali@postgrad.manchester.ac.uk and the supervisory team based in the UK tracey.mills@manchester.ac.uk and chrisine.furber@manchester.ac.uk.

**Thank you for taking time to read the information presented in this information sheet**
Appendix 7: English Participant Information Sheet: Observation/Women

An exploration of antenatal care for women with low-risk pregnancies in Oman: A grounded theory study
Version 2, 21/10/2015

Participant Information Sheet

Pregnant women: Observation

You are being invited to take part in a research study as part of a student project to explore antenatal care in Oman. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for taking the time to read this.

Who will conduct the research?
Fatma Al-Maqbali, a PhD Student, based in the School of Nursing, Midwifery and Social Work at the University of Manchester, UK.

What is the purpose of the research?
The study aims to explore the experiences of women having health care during pregnancy in Oman. The researchers want to identify issues, concerns, needs and the preferences of women have on health care during pregnancy. We want to get better information about health care during pregnancy by talking to women who have experienced pregnancy care at present. The findings of the study may help to improve pregnancy care in future.

Why have I been chosen?
The researchers are interested in understanding women’s views and experiences of health care during pregnancy. You have been chosen because you are a woman having an uncomplicated pregnancy and have had health care during pregnancy in the primary health care institution in the North Batinah Governorate in Oman.

What would I be asked to do if I took part?
If you decide to take part, you will be observed during your usual healthcare visit to the antenatal clinic. The researcher will sit in the clinic during your appointment and observe the care that you receive, and your communication and interaction with your healthcare provider. The researcher will not be involved in providing care but will be observing and writing some notes. The length of the observation depends on the length of the visit that may last approximately up to an hour. With your permission, the researcher may use some of the written notes in publications using a false name (pseudonym) to protect your identity.

What happens to the data collected?
Any identifiable data such as name and address will be removed to protect your identity. If you agree, notes will be written by the researcher during observations and typed up afterwards to be used for analysis by the researcher under the guidance of the supervisory team. The data will be analysed as part of a PhD programme.

How is confidentiality maintained?
All information collected from you during the observation will be kept strictly confidential unless disclosure is essential to protect you or others from the risk of significant harm, or disclosure is
required by law or by order of a court. Any information about you that we may use in publications about the study, including direct quotations, will be referred to using a pseudonym (false name), so you cannot be identified. Some of the observation notes will be used in publications, but your name or any identifying details will not be mentioned. All written documents will be saved in a locked cabinet that will be kept with the researcher only. All computerised files will be encrypted and protected by a password that is known only to the researcher. All written documents will be destroyed at the end of the study. Any information that will be shared with the supervisory team will have your identification deleted before that, so that you cannot be recognised.

**What happens if I do not want to take part or if I change my mind?**
It is up to you to decide whether or not to take part, accepting or declining participation will not affect your health care in anyway. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a consent form, and you will be given a copy to keep. If you decide to take part you are still free to withdraw at any time without giving a reason. The care you receive, now or in the future, will not be affected in any way by your decision whether or not to take part.

**Will I be paid for participating in the research?**
You will not receive direct benefit from taking part in this study. However, your participation in the study will help the researcher to have a better understanding of antenatal care in Oman. We hope to use the findings of the study to improve the future healthcare of pregnant women in Oman. The expenses will be estimated and will be covered up to a reasonable amount.

**What is the duration of the research?**
The length of observations will depend on the length of the visit that may last up to an hour.

**Where will the research be conducted?**
The observations will be conducted in the pregnancy care clinic during your usual care.

**Will the outcomes of the research be published?**
The findings of the study will be published in a PhD thesis, national and international journals.

**Who has reviewed the research project?**
The project has been reviewed by the Research Ethics Committee of the University of Manchester UK and the Ministry of Health in Oman.

**What if something goes wrong?**
No harm is anticipated as a result of participating in this study but in the event of something going wrong and you are harmed during the research you have the right to seek compensation without any detriment to the normal healthcare services available to you.

**What if I want to complain?**
If there are any issues regarding this research you should contact the researcher Fatma Al Maqbali, in the first instance between 07:30 am to 03:00 pm, mobile phone 0096892060810 designated for the study purpose or at fatma.almaqbali@postgrad.manchester.ac.uk or please contact the supervisory team in the English language at tracey.mills@manchester.ac.uk and chrisine.furber@manchester.ac.uk.

If there are any issues regarding this research that you would prefer not to discuss with members of the research team, please contact the Research Governance and Integrity Team by either writing to The Research and Ethical Review and Approve Committee at Ministry of Health in Oman by emailing: mohrerac@gmail.com, or by telephoning 0096824695921 or

The Research Governance and Integrity Manager, Research Office, Christie Building, The University of Manchester, Oxford Road, Manchester M13 9PL, by emailing: Research.complaints@manchester.ac.uk, or by telephoning 0161 275 8093 or 275 2674 or
If you want to make a formal complaint about the conduct of the research, you should contact the Research Governance and Integrity Manager, Research Office, Christie Building, University of Manchester, Oxford Road, Manchester, M13 9PL, by emailing: research.complaints@manchester.ac.uk or by telephoning 0161 275 8093 or 275 2674.

How can I contact you?
These are the contact details of the principle investigator: Fatma Al-Maqbali at fatma.almaqballi@postgrad.manchester.ac.uk and the supervisory team based in the UK tracey.mills@manchester.ac.uk and chrisine.furber@manchester.ac.uk.

Thank you for taking time to read the information presented in this information sheet
Appendix 8: English Participant Information Sheet: Healthcare Provider/Interview

An exploration of antenatal care for women with low-risk pregnancies in Oman: A grounded theory study
Version 2, 21/10/2015
Participant Information Sheet
Healthcare Providers: Interview

You are being invited to take part in a research study as part of a PhD student project to explore the antenatal care in Oman. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for taking the time to read this.

Who will conduct the research?
Fatma Al-Maqbali, a PhD Student, based in the School of Nursing, Midwifery and Social Work at the University of Manchester, UK.

What is the purpose of the research?
The study aims to explore the experiences of women having an antenatal care in Oman. The researchers want to identify issues, concerns, needs and the preferences of women in antenatal care from the perspectives of healthcare providers who have experiences in providing antenatal care at present. We want to get better information about healthcare during pregnancy from healthcare provider’s perspectives and experiences. The findings of the study may help to improve pregnancy care in future.

Why have I been chosen?
The researcher is interested in understanding of antenatal care from the perspectives the healthcare providers including midwives, nurses, doctors, health educators, dieticians and medical orderlies. You have been chosen because you are a healthcare provider of antenatal care in the primary healthcare institutions in the North Batinah Governorate in Oman.

What would I be asked to do if I took part?
If you agree to take part, we will invite you to take part in an interview that is not normally expected to be more than an hour depending on how much you want to tell me at a time and a location convenient to you. If the interview lasted for more than that you will be offered a break. You will be interviewed by the researcher, a PhD student to discuss your views and experiences of health care during pregnancy as a healthcare provider. There are no right or wrong answers, we just want to try and understand antenatal care from your experience as a healthcare provider. With your permission, the interview will be tape-recorded and the researchers may use your word-for-word quotations in publications using a false name (pseudonym) to protect your identity.

What happens to the data collected?
Any identifiable data such as name and address will be removed to protect your identity. If you agree the interviews will be tape recorded, and the recordings will be transcribed (word for word) into a written format for analysis by the researcher and the supervisory team. All written documents will be saved in a locked cabinet that will be kept with the researcher only. All computerised files will be encrypted and protected by a password that is known only to the researcher. Following transcription, tape recordings will be destroyed. The data will be analysed as part of a PhD programme.
How is confidentiality maintained?
All information collected from you during the interview will be kept strictly confidential unless disclosure is essential to protect you or others from the risk of significant harm, or disclosure is required by law or by order of a court. In this case, data will be reported to the relevant authority in the primary health care institutions. Any information about you that we may use in publications about the study, including direct quotations, will be referred to using a pseudonym (false name), so you cannot be identified. All documents and digitally-recorded material will be saved in a locked cabinet in the home office that will be kept with the researcher only. All computerised files will be encrypted and protected by a password that is known only to the researcher. All digitally-recording and written documents will be destroyed at the end of the study. Any information that will be shared with the supervisory team will have your identification deleted before that, so that you cannot be recognized.

What happens if I do not want to take part or if I change my mind?
It is up to you to decide whether or not to take part, accepting or declining participation. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a consent form, and you will be given a copy to keep. If you decide to take part, you are still free to withdraw at any time without giving a reason. There will be no effect on you now or in the future in any way by your decision whether or not to take part.

Will I be paid for participating in the research?
You will not receive a direct benefit from taking part in this study. However, your participation in the study will help the researcher to have a better understanding of antenatal care in Oman. We hope to use the findings of the study to improve the future antenatal care of pregnant women in Oman. The expenses will be estimated and will be covered up to a reasonable amount.

What is the duration of the research?
The interview is not normally expected to be more than an hour depending on how much you want to tell me. If the interview lasted for more than that you will be offered a break.

Where will the research be conducted?
The interview will be conducted at a time and place convenient to you. It can be conducted in the health centre or a location convenient to you.

Will the outcomes of the research be published?
The findings of the study will be published in a PhD thesis, national and international journals.

Who has reviewed the research project?
The project has been reviewed by the Research Ethics Committee of the University of Manchester UK and the Ministry of Health in Oman.

What if something goes wrong?
No harm is anticipated as a result of participating in this study but in the event of something going wrong and you are harmed during the research you have the right to seek compensation without any detriment to the normal healthcare services available to you or any effect on your work.

What if I want to complain?
If there are any issues regarding this research you should contact the researcher Fatma Al Maqbali, in the first instance between 07:30 am to 03:00 pm, mobile phone 0096892060810 designated for the research purpose or at fatma.almaqbali@postgrad.manchester.ac.uk or please contact the supervisory team in the English language at tracey.mills@manchester.ac.uk and chrisine.furber@manchester.ac.uk.
If there are any issues regarding this research that you would prefer not to discuss with members of the research team, please contact the Research Governance and Integrity Team by either writing to The Research and Ethical Review and Approve Committee at Ministry of Health in Oman by emailing: mohrerac@gmail.com, or by telephoning 0096824695921 or
The Research Governance and Integrity Manager, Research Office, Christie Building, The University of Manchester, Oxford Road, Manchester M13 9PL, by emailing: Research.complaints@manchester.ac.uk, or by telephoning 0161 275 8093 or 275 2674 or

If you want to make a formal complaint about the conduct of the research, you should contact the Research Governance and Integrity Manager, Research Office, Christie Building, University of Manchester, Oxford Road, Manchester, M13 9PL, by emailing: research.complaints@manchester.ac.uk or by telephoning 0161 275 8093 or 275 2674.

How can I contact you?
These are the contact details of the principle investigator: Fatma Al-Maqbali at fatma.almaqbalipostgrad.manchester.ac.uk and the supervisory team based in the UK tracey.mills@manchester.ac.uk and chrisine.furber@manchester.ac.uk.

Thank you for taking time to read the information presented in this information sheet
Appendix 9: English Participant Information Sheet: Healthcare Provider/ Observation

An exploration of antenatal care for women with low-risk pregnancies in Oman: A grounded theory study
Version 2, 21/10/2015
Participant Information Sheet
Healthcare Provider: Observation

You are being invited to take part in a research study as part of a PhD student project to explore antenatal care in Oman. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for taking the time to read this.

Who will conduct the research?
Fatma Al-Maqbali, a PhD Student, based in the School of Nursing, Midwifery and Social Work at the University of Manchester, UK.

What is the purpose of the research?
The study aims to explore the experiences and perceptions surrounding antenatal care in Oman. The researchers want to identify issues, concerns, needs and the preferences of women in antenatal care from the perspectives of healthcare providers who have experiences in providing antenatal care at present. We want to get better information about healthcare during pregnancy from healthcare provider’s perspectives and experiences. The findings of the study may help to improve pregnancy care in future.

Why have I been chosen?
The researcher is interested in understanding antenatal care by observing the healthcare providers including midwives, nurses and medical orderlies. You have been chosen because you are a healthcare provider with experience in providing antenatal care for pregnant women.

What would I be asked to do if I took part?
If you decide to take part, you will be observed while providing care in the antenatal clinic. The researcher will sit in the clinic and observe the usual care that you provide in the clinic, communication and interaction with pregnant women. The researcher will not be involved in providing care but will be observing and writing some notes. The length of the observation depends on the length of the visit that may last approximately up to an hour. With your permission, the researcher may use some of the written notes in publications using a false name (pseudonym) to protect your identity.

What happens to the data collected?
Any identifiable data such as name and address will be removed to protect your identity. If you agree notes will be written manually by the researcher during the observations then will be typed up afterwards to be used for analysis by the researcher under the guidance of the supervisory team. All written documents will be saved in a locked cabinet that will be kept with the researcher only. All computerized files will be encrypted and protected by a password that is known only to the researcher. Following transcription, tape recordings will be destroyed. The data will be analysed as part of a PhD programme.
**How is confidentiality maintained?**
All information collected from you during the observation will be kept strictly confidential unless disclosure is essential to protect you or others from the risk of significant harm, or disclosure is required by law or by order of a court. In such situation, the information will be reported to the relevant authority in the primary health care institutions. Any information about you that the researcher may use in publications about the study, including direct quotations, will be referred to using a pseudonym (false name), so you cannot be identified. Some of the observation notes will be used in publications, but your name or any identifying details will not be mentioned. All written documents will be saved in a locked cabinet that will be kept with the researcher only. All computerized files will be encrypted and protected by a password that is known only to the researcher. All written documents will be destroyed at the end of the study. Any information that will be shared with the supervisory team will have your identification deleted before that, so that you cannot be recognised.

**What happens if I do not want to take part or if I change my mind?**
It is up to you to decide whether or not to take part, accepting or declining participation. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a consent form, and you will be given a copy to keep. If you decide to take part, you are still free to withdraw at any time without giving a reason. There will be no effect on you now or in the future in any way by your decision whether or not to take part.

**Will I be paid for participating in the research?**
You will not receive a direct benefit from taking part in this study. However, your participation in the study will help the researcher to have a better understanding of antenatal care in Oman. We hope to use the findings of the study to improve the future health care of pregnant women in Oman. The expenses will be estimated and will be covered up to a reasonable amount.

**What is the duration of the research?**
The length of observations will depend on the length of the visit that may approximately last up to an hour.

**Where will the research be conducted?**
The observations will be conducted in the antenatal clinic during the usual care that you provide to the pregnant women in the clinic.

**Will the outcomes of the research be published?**
The findings of the study will be published in a PhD thesis, national and international journals.

**Who has reviewed the research project?**
The project has been reviewed by the Research Ethics Committee of the University of Manchester UK and the Ministry of Health in Oman.

**What if something goes wrong?**
No harm is anticipated as a result of participating in this study but in the event of something going wrong and you are harmed during the research you have the right to seek compensation without any detriment to the normal health care services available to you.

**What if I want to complain?**
If there are any issues regarding this research you should contact the researcher Fatma Al Maqbali, in the first instance between 07:30 am to 03:00 pm, mobile phone 0096892060810 designated for the research purpose or at fatma almaqbali@postgrad.manchester.ac.uk or please contact the supervisory team in the English language at tracey.mills@manchester.ac.uk and chrisine.furber@manchester.ac.uk.

If there are any issues regarding this research that you would prefer not to discuss with members of the research team, please contact the Research Governance and Integrity Team by either writing to
The Research and Ethical Review and Approve Committee at Ministry of Health in Oman by emailing: mohrerac@gmail.com, or by telephoning 0096824695921 or

The Research Governance and Integrity Manager, Research Office, Christie Building, The University of Manchester, Oxford Road, Manchester M13 9PL, by emailing: Research.complaints@manchester.ac.uk, or by telephoning 0161 275 8093 or 275 2674 or

If you want to make a formal complaint about the conduct of the research, you should contact the Research Governance and Integrity Manager, Research Office, Christie Building, University of Manchester, Oxford Road, Manchester, M13 9PL, by emailing: research.complaints@manchester.ac.uk or by telephoning 0161 275 8093 or 275 2674.

**How can I contact you?**

These are the contact details of the principle investigator: Fatma Al-Maqbali at fatma.almaqball@postgrad.manchester.ac.uk and the supervisory team based in the UK tracey.mills@manchester.ac.uk and chrisine.furber@manchester.ac.uk.

**Thank you for taking time to read the information presented in this information sheet**
بحث استثماري نوعي عن الرعاية الصحية أثناء الحمل منخفض الخطورة في عمان: باستخدام منهج النظرية المنجزة

ورقة معلومات للمشارك في المقابلة للسيدات الحوامل ومن يقدم الدعم

الخصائص 2015/10/21

لقد تم دعوتك للمشاركة في هذا البحث كجزء من مشروع طالبة دراستية دراسة في التمريض لاستكشاف الرعاية الصحية للحمل منخفض الخطورة في مؤسسة الرعاية الصحية الأولى في عمان. فالمهم لنينا أن تفهمي أهمية هذا البحث قبل أن تتخذ القرار بشأن المشاركة. يرجى أخذ الوقت الكافي لقراءة المعلومات التالية ومتناقشتها مع شريكك الأسري إذا كنت ترغب في المشاركة وفي المقابلة. سنتعرف على البيانات التي تقيمها في المقابلة. شكرا لك لأخذ الوقت الكافي للمشاركة.

ما هو البحث؟

تهدف هذه الدراسة إلى استكشاف مدى الوعي ووجهات النظر والخبرات من متطلقي الرعاية الصحية أثناء الحمل للتعريف على أهم التحديات والمعاناة التي تواجهها النساء بصلاحيتهم أو من خلال القرارات الصحية الخاصة. كما أن استكشاف الاهتمامات والاحتياجات الخاصة للنساء من الرعاية الصحية في فترة الحمل يتطلب بحثاً على المعلومات الكافية عن الرعاية الصحية المقدمة للمرأة الحامل من خلال المشاركة في البحث والتي من المرجح أن تسهم نتائجه في تحسين الرعاية الصحية للحوامل مستقبلاً.

ما هو الغرض من هذا البحث؟

تهدف هذه الدراسة إلى استكشاف مدى الوعي ووجهات النظر والخبرات من متطلقي الرعاية الصحية أثناء الحمل للتعريف على أهم التحديات والمعاناة التي تواجهها النساء بصلاحيتهم أو من خلال القرارات الصحية الخاصة. كما أن استكشاف الاهتمامات والاحتياجات الخاصة للنساء من الرعاية الصحية في فترة الحمل يتطلب بحثاً على المعلومات الكافية عن الرعاية الصحية المقدمة للمرأة الحامل من خلال المشاركة في البحث والتي من المرجح أن تسهم نتائجه في تحسين الرعاية الصحية للحوامل مستقبلاً.

ما هو الدول المطلوب منك القيام به إذا شاركت؟

إذا قررت المشاركة، سيتم دعوتكم للمقابلة في الوقت والمكان المناسب لتكسبون المحادثة مسجلة تسجيلًا صوتيًا. سوف يكون المقابلة مرتبطةً بإمكانية رؤوس النماذج وردات النصوص الشخصية، وهي طالبية دكتوراه تتم في مختلف الأماكن وخبراتكم وأفكاركم حول الرعاية الصحية المقدمة للمرأة الحامل خلال فترة الحمل. يوجد هنا إجابات صحيحة أو خاطئة، ولكننا نريد أن نفهم منا بشكل منهجي ما تصوركن حول الرعاية الصحية التي تلتقينها خلال الحمل.

ماذا سيفهم البيانات التي تجمعها؟

سيتم تدوين البيانات وتحليلها وتعويمها لتعرف على نصص المشاركات حول الرعاية الصحية التي يتلقينها في الفترة الحالية. سنتفهم الملاحظات على صيغة البيانات الشخصية حتى لا نتهم التعرف على هوية المشاركات عن طريق دعوى أي بيانات شخصية عند كتابة نشر نتائج الدراسة تحت أشراف مشرفين أكاديميين من ذوي الخبرة والاختصاص.

كيفية الحفاظ على السرية؟

جميع المعلومات والبيانات التي سيتم تجميعها خلال المقابلة ستكون سرية تامة في حالة أن المشاركة أدلت ببيانات تل على الحذر على حياتها أو على حياة الأخرين من حولها أو التي يعثر الأدباء عليها مطلب صادري حيث في تلك الحالا يتوجب إبلاغ الأشخاص المعنيين. سنتحرين رؤوس سرية لكل الأوراق والتصور والمواد المسجلة التي تحتوي على البيانات لحفظ السرية والخصوصية والحفاظ على هوية المشاركات. سنقدم نصوص المقابلة فقط من قبل الباحث والفريق الإشرافي. سنдвиг إدراج الاقتباسات وغيرها من البيانات أثناء كتابة البحث بدون ذكر أسماء المشاركات. سيتم تدوين التسجيلات الصوتية للمقابلات من خلال التسجيل الصوتي لكل المقابلات.
قبل البدء في غرفة خاصة ومتزامناً مع استخدام مصرف الصوتية وتسجيلات المكالمات المحوروية بشكل سر للاعراف السوياً وسوى الباحث. سيتم وضع نسخة من قرار المشاركة في ملف الحماية الخاصة بالباحثين على رغبتهم ليكون مقدمي الرعاية على دراية بمشاركتهم.

ماذا سيحدث إذا كنت لا أريد أن أشارك أو إذا قمت باستغلال الأدوار؟

لا يوجد أي مشكلة يمكن أن ينشأ من المشاركة في هذا البحث، ولكن مشاركتك سيستلزم تقييمك على تحقق العوامل والوقت والاحتياجات. وقد تكون لديك امكانيات للتعلم وتحسن الرعاية الصحية للنساء الحوامل من وجهات نظرهم والمحترفين. هذه الامكانيات ستكون متاحة بناءً على احتياجاتك ومتطلباتك. هنالك إعادة المشاركة في البحث لن يؤثر على الرعاية الصحية المقدمة لك في أي وقت وبدون ذكر أسباب.

هل سيتم نشر أي معلومات شخصية للمشاركة في البحث؟

لا يوجد أي نشاط جري العين، ولكن مشاركتك سيستلزم تقييمك على تحقق العوامل والوقت والاحتياجات. قد تكون لديك امكانيات للتعلم وتحسن الرعاية الصحية للنساء الحوامل من وجهات نظرهم والمحترفين. هذه الامكانيات ستكون متاحة بناءً على احتياجاتك ومتطلباتك. هنالك إعادة المشاركة في البحث لن يؤثر على الرعاية الصحية المقدمة لك في أي وقت وبدون ذكر أسباب.

أين سيجري إجراء البحث؟

سيجري البحث في الوقت والمكان المناسب للمشاركة سواء في البيت أو في المركز الصحي.

هل سيتم نشر نتائج الدراسة في المجلات والمؤتمرات المحلية؟

سيجري نشر نتائج الدراسة في المجلات والمؤتمرات المحلية والدولية.

من هو رجل المشروع البحث؟

تم مراجعة البحث من قبل لجنة الأخلاقيات بالبحث في كل من جامعة مانشستر في المملكة المتحدة ووزارة الصحة في سلطنة عمان.

ماذا لو حصلت مشكلة أثناء فترة المشاركة؟

لا يوجد أي مشكلة يمكن أن ينشأ من المشاركة في هذا البحث، ولكن مشاركتك سيستلزم تقييمك على تحقق العوامل والوقت والاحتياجات. قد تكون لديك امكانيات للتعلم وتحسن الرعاية الصحية للنساء الحوامل من وجهات نظرهم والمحترفين. هذه الامكانيات ستكون متاحة بناءً على احتياجاتك ومتطلباتك. هنالك إعادة المشاركة في البحث لن يؤثر على الرعاية الصحية المقدمة لك في أي وقت وبدون ذكر أسباب.

ماذا لو رغبت في تقديم شكوى؟

إذا رغبت في تقديم شكوى رسمية حول البحث يمكن أن يكون تقدمك إلى إدارة البحوث والنشرة العامة، جمعية مانشستر، شارع أكسفورد، مانشستر، M13 9PL، رقم الهاتف: 016127580932674، أو بالبريد الإلكتروني: research.complaints@manchester.ac.uk.

كيف يمكنني الاتصال بك؟

يمكنك التواصل مع الباحث الرئيسي وفريق الاشراط على الامكانيات التالية: fatma.almaqball@postgrad.manchester.ac.uk، tracey.mills@manchester.ac.uk، tracey.mills@manchester.ac.uk، tracey.mills@manchester.ac.uk

شكرا لقراءة المعلومات الواردة في ورقة المعلومات هذه.
بحث استكشاف نمط الرعاية الصحية أثناء الحمل منخفض الخطورة في عمان: باستخدام منهج النظرة المجتهرة

ورقة معلومات للمشاركة في الملاحظة للسياقات الحوامل أثناء الزيارة لعائدة الحوامل

10/10/2015

لقد تم دعوتكم للمشاركة في هذا الباحث كجزء من مشروع طالبة دكتوراه في التمريض لاستكشاف الرعاية الصحية للحمل منخفض الخطورة في مؤسسة الرعاية الصحية الأولية في عمان. من مهم لدينا أن نفهم أهمية هذا الباحث قبل اتخاذ القرار بشأن المشاركة. يرجى أخذ الوقت الكافي لقراءة المعلومات التالية بعناية ومناقشتها مع أفراد العائلة إذا كنت ترغب في ذلك. كما نرجو منكم طرح الأسئلة إذا كان هناك أي شي غير واضح أو إذا كنت ترغب في المزيد من المعلومات. سنحن الوقت الكافي لتقرير ما إذا كنت تتغير في المشاركة. شكراً لك لأخذ الوقت الكافي لقراءة هذه المعلومات.

من هو الباحث؟

فاطمة الممبالة طالبة دكتوراه في كلية التمريض والمبالة في جامعة مانشستر بالمملكة المتحدة

ما هو الغرض من هذا الباحث؟

تهدف هذه الدراسة إلى استكشاف مدى المعرفة وجهات النظر والخبرات من متلقي الرعاية الصحية أثناء الحمل للتعريف على أهم التحديات والصعوبات التي تساهم أجراً باسباب على مدى تلك الرعاية. كما أيضاً ستستكشف الاهتمامات والاحتياجات الخاصة للنساء من الرعاية الصحية في فترة الحمل والفرص الجسمية في الملاحظة عن الرعاية الصحية المقدمة للمرأة الحامل من خلال المشاركة في البحث والتي من المرجح أن تساهم في تحقيق الرعاية الصحية للحوامل مستقبلاً.

لماذا تم اختياري للمشارك؟

ترغب الباحثة في تنفيذ هذه الدراسة لاستكشاف وجهة نظر النساء الحوامل وأفراد أسرهم الذين يمكنهم الدعم لهن. ولقد تم اختيار هذه المجموعة من النساء الحوامل لكونهن أتماراً حامل في الثالث أو الثالث من الحمل منخفض الخطورة وتقديم الرعاية من المراكز الصحية في محافظة شمال الباطنة.

ما هو الدور المطلوب منك؟

إذا قررت المشاركة، سوف يتم ملاحظتك خلال موعد زيارتك القادمة لعائدة السياقات الحوامل حيث ستقوم الدراسة بتصفية ملاحظتك كأنها تعبر عن الرعاية الصحية المقدمة في الفترة الحالية. ستقوم بواسطة ملاحظتك بعدم التعليق على أي بيانات شخصية عند كتابة أو نشر نتائج الدراسة تحت أشراف المشرفين الأكاديميين من ذو الخبرة والمسؤولية.

كيفية الحفاظ على السرية؟

 سيتم تخزين البيانات وتحليلها ووصفها للتعاريف على تصور المشاركات حول الرعاية الصحية المقدمة في الفترة الحالية. سيتم المحافظة على سرية البيانات الشخصية من عدم التعرف على هوية المشاركات بحذف أي بيانات شخصية عند كتابة أو نشر نتائج الدراسة تحت أشراف المشرفين الأكاديميين من ذو الخبرة والمسؤولية.

بيد أن معابة هذه الدراسة، سيتم تجميع البيانات وتحليلها ووصفها للتعاريف على تصور المشاركات حول الرعاية الصحية المقدمة في الفترة الحالية. سيتم المحافظة على سرية البيانات الشخصية من عدم التعرف على هوية المشاركات بحذف أي بيانات شخصية عند كتابة أو نشر نتائج الدراسة تحت أشراف المشرفين الأكاديميين من ذو الخبرة والمسؤولية.

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مكان آمن وممفل. وتم تشفير جملة الملفات المحوسبة بكلمة سر لا يعرفه إلا الباحث. وتم وضع نسخة من البحوث في ملف مقدم الرعاية على دراية بالمشارك.

ماذا يحدث إذا كنت لا تريد أن تشارك أو إذا قمت بتعيينت؟

الأمر متروك لك تقرير ما إذا كنت ترغب في المشاركة أو لا. وإذا قررت أن تختارين تطبيق كلمة سريطة للمرة الأولى. فإن الدراسة ستتم على أساس الموافقة. حتى إذا قررت المشاركة فأنك لا تتلقين أي موعد.’ لتمكين حرية الاستماع في أي وقت. وبدون ذكر أسباب.

المامة التي لا تؤثر على الرعاية الصحية المقدمة لك بأي شك من الأشكال.

هل سيتم دفع أي مبلغ مالي للمشاركة في الدراسة؟

ليس هناك فائدة مالية للمشاركة في هذا البحث. ولكن مشاركاتك في الدراسة ستتم إلى مستوى مقدم للعوامل والمواصفات.

ما هو مدى من الدراسة؟

تتم مراجعة البحث من قبل جمعية إشراف البحوث في المملكة المتحدة، حيث لا يوجد حالات مفيدة للعملاء في فترة الدراسة.

أين سيتم إجراء الدراسة؟

سيتم نشر نتائج الدراسة في المجلات العلمية والمشاركة في المؤتمرات المحلية والدولية.

من الذي سيشمل البحث؟

سيتم نشر نتائج الدراسة في المجلات العلمية والمشاركة في المؤتمرات المحلية والدولية.

ما هو زمن اجتماعات المشاركون؟

سيتم نشر نتائج الدراسة في المجلات العلمية والمشاركة في المؤتمرات المحلية والدولية.

ما هو رغبتي في تقديم شكوى؟

إذا حدث أي مشكلة في الرعاية الصحية، فكم من الاتصال بالباحث الرئيسي: فاطمة المسباكلي أو البحث: tracey.mills@manchester.ac.uk

كيف يمكنني الاتصال بك؟

يمكنك الاتصال بالباحث الرئيسي: فاطمة المسباكلي أو البحث: tracey.mills@manchester.ac.uk

شكرًا لقراءة المعلومات الواردة في ورقة المعلومات هذه.
بحث استكشافي نوعي عن الرعاية الصحية أثناء الحمل منخفض الخطورة في عمان: باستخدام منهج التنبؤ النظري المتجذر

ورقة معلومات للمشاركة في الملاحظة لمقدم الرعاية الصحية أثناء الزيارة لعيدة الحوامل

الإصدار 2. 10/10/2015

قد تمت دعوتكم للمشاركة في هذا البحث كجزء من مشروع طالبة دكتوراه في التمريض لإعداد الرعاية الصحية لحمل منخفض الخطورة في مؤسسة الرعاية الصحية الأولية في عمان. من المهم لدينا أن تفهموا أهمية هذا البحث قبل اتخاذ قرارات بشأن المشاركة. يرجى اخذ الوقت الكافي لقراءة المعلومات التالية بعناية ومناقشته مع أفراد العائلة إذا كنت ترغب في ذلك كما نرجو منكم إعطاء إجابات واضحة أو إذا كنت ترغب في المزيد من المعلومات سيتم ملء الوقت الكافي لتقرير ما إذا كنت ترغب في المشاركة. شكراً لكم لأخذ الوقت الكافي لقراءة هذه المعلومات.

ما هو الهدف من هذا البحث؟

تهدف هذه الدراسة إلى استكشاف مدى الوعي وتوجهات النظر والخبرات من منظور الرعاية الصحية أثناء الحمل للتعريف بأهم النتائج والعمل الذي تساهم ايجايبا وسلبا على مدى تلقي الرعاية كما أيضا سيتمكن أستكشاف الاهتمامات والاحتياجات الخاصة للنساء من الرعاية الصحية في فترة الحمل. ترغب الباحثة في الحصول على المعلومات الكاملة عن الرعاية الصحية المقدمة للمرأة الحامل من خلال المشاركة في البحث والتي من المرجح أن تسهم نتائجه في تحسين الرعاية الصحية للحوامل مستقبلا.

ما هو الدور المطلوب منك؟

يعبر الباحث عن الضرورة على الرعاية الصحية تلقي النتائج والعمل الذي تساهم ايجايبا وسلبا في مدى تلقي الرعاية كما أيضا سيتمكن أستكشاف الاهتمامات والاحتياجات الخاصة للنساء من الرعاية الصحية في فترة الحمل.

ما هو紅 الالتزامات؟

يتم التوقيع والموافقة والتوفيق للعمل في مجال الرعاية الصحية في محافظة شمال الباطنة.

كيفية الحفاظ على السرية؟

جميع البيانات التي يتم جمعها خلال الملاحظة ستكون محفوظة بواسطة نظام الحضور، سيكون التوقيع والموافقة والتوفيق للعمل في مجال الرعاية الصحية في محافظة شمال الباطنة.
من إذا كنت لا تريد أن تشارك أو إذا قمت بتغيير رأيك،
الأمر متروك لك وتقرر ما إذا كنت ترغب أو لا ترغب المشاركة. إذا ما قررت أن تشارك ستعطي لك ورقة
المعلومات هذه لحفظها و سيطلب منك التوقيع على استمارة الموافقة. إذا قررت المشاركة لا تزال تستطيع تمكنك حرية
الانسحاب في أي وقت و بدون ذكر أسباب. لن يثبت قرار عدم المشاركة عليك بغير شكل من الأشكال.
هل سيتم دفع أي مبلغ مالي للمشاركة في البحث؟
ليس هناك فائدة مادية للمشاركة في هذا البحث ولكن مشاركتك في الدراسة ستؤدي إلى فهم معمق للمعلومات والموارد
واحتياجات ورغبات السيدات الحوامل ومقدمي الرعاية لجهة بالاجتماع للطرفين ويأمل أن تؤدي نتائج هذه الدراسة إلى
تحسين الرعاية الصحية لنساء أثناء الحمل في سلطنة عمان مستقبلاً بما يتضمن مع الاختبارات والمعايير المنصوص
عليها.
ما هي مدة من البحث؟
تعتمد مدة الملاحظة على الوقت الذي تقضيه لأنجاز الأنشطة المنصوص عليها خلال فترة الزيارة والتي من المتوقع
أن تستغرق ما يقارب ساعة واحدة.
إذن سيتم إجراء البحث؟
ستجري الملاحظة أثناء موعد الزيارة القادمة لعيادة الرعاية الصحية للسيدات الحامل في المركز الصحي.
هل سيتم نشر نتائج الأبحاث؟
سيتم نشر نتائج الدراسة في المجلات العلمية والمشاركة في المؤتمرات المحلية والدولية.
من الذي راجع مشروعة البحث؟
تم مراجعة البحث من قبل لجنة اختلال البحوث في كل من جامعة مانشستر ووزارة الصحة في سلطنة عمان.
ما إذا حدثت مشكلة أثناء فترة المقابلة؟
لا يوجد حدوث أي مشاكل نتيجة المشاركة في هذه الدراسة. حتي لو وقعت عليك ورقة الموافقة، سيكون لديك الحق في
الانسحاب في أي وقت دون الإشارة إلى الأسباب. ولكن إذا حصلت أي مشكلة خلال فترة البحث فلن يحرز حق اللجوء
للقضاء للتعويض من قبل جامعة مانشستر ووزارة الصحة في عمان و بدون أن يتأثر سلباً تشارك في البحث.
ماذا لو كنت رغبت في تقديم شكوى؟
إذا حصلت أي مشاكل جراء المشاركة في هذا البحث فيمكنك الاتصال بالباحث في المقام الأول فاطمة المقبالي، هاتف
0096892606810 على الاميلات التالية: tracey.mills@manchester.ac.uk أو برجر الإشراف بـ من التاذير الإنجليزية في جامعة مانشستر في المملكة المتحدة
Christine.furber@manchester.ac.uk الاتحاد على إدارة البحوث و مدير النزاهة كريستي، جامعة مانشستر، شارع أكبر، مانشستر، عن
M13 9PL 0161 275 8093 طريق البريد الإلكتروني: research.complaints@manchester.ac.uk
كيف يمكنني الاتصال بك؟
يمكنك الاتصال بالباحث الرئيسي: فاطمة المقبالي، و تقرير الأشراف على الاميلات التالية:
Fatma.almqabali@postgrad.manchester.ac.uk Tracey.mills@manchester.ac.uk
Chrisine.Furber@manchester.ac.uk
شكرا لقراءة المعلومات الواردة في ورقة المعلومات هذه.
Appendix 12: English Consent Form: Women/Interview

An exploration of antenatal care for women with low-risk pregnancies in Oman: A Grounded Theory Study

Version 2, 21/10/2015

Informed Consent
Pregnant Women: Interview

If you are happy to participate, please complete and sign the consent form below.

Please initial box

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I confirm that I have read the attached information sheet dated 21 October 2015 version 2 of the above project and have had the opportunity to consider the information and ask questions and had these answered satisfactorily.</td>
</tr>
<tr>
<td>2.</td>
<td>I understand that my participation in the study is voluntary and that I am free to withdraw at any time without giving a reason and without detriment to myself now or in the future and that I will not be able to withdraw my data once it has been published.</td>
</tr>
<tr>
<td>3.</td>
<td>I understand that my data will remain confidential and only will be shared with the supervisory team without disclosing the identity of the participants</td>
</tr>
<tr>
<td>4.</td>
<td>I understand that the interview will be audio-recorded.</td>
</tr>
<tr>
<td>5.</td>
<td>I agree with the use of anonymous quotes.</td>
</tr>
<tr>
<td>6.</td>
<td>I understand that the results of this study will be part of a PhD thesis</td>
</tr>
<tr>
<td>7.</td>
<td>I understand that data generated in this study will be stored for ten years</td>
</tr>
<tr>
<td>8.</td>
<td>I agree to be interviewed</td>
</tr>
</tbody>
</table>

I agree to take part in the above project

Name of participant __________________________ Date __________________________ Signature __________________________

Name of researcher __________________________ Date __________________________ Signature __________________________

A copy of the form will be returned to you at the interview. A further copy will be stored in the researcher file and your medical records.
Appendix 13: Consent Form for Healthcare Provider/Interview

An exploration of antenatal care for women with low-risk pregnancies in Oman: A Grounded Theory Study

Version 2, 21/10/2015

Informed Consent

Healthcare Provider: Interview

If you are happy to participate, please complete and sign the consent form below.

Please initial box

| 1.   | I confirm that I have read the attached information sheet dated 21 October 2015 version 2 of the above project and have had the opportunity to consider the information and ask questions and had these answered satisfactorily. |
| 2.   | I understand that my participation in the study is voluntary and that I am free to withdraw at any time without giving a reason and without detriment to myself now or in the future and that I will not be able to withdraw my data once it has been published. |
| 3.   | I understand that my data will remain confidential and only will be shared with the supervisory team without disclosing my identity |
| 4.   | I understand that the interview will be audio-recorded. |
| 5.   | I agree with the use of anonymous quotes. |
| 6.   | I understand that the results of this study will form be part of a PhD thesis |
| 7.   | I understand that data generated in this study will be stored for ten years |
| 8.   | I agree to be interviewed |

I agree to take part in the above project

Name of participant ___________________________ Date __________ Signature __________

Name of researcher ___________________________ Date __________ Signature __________

A copy of the form will be returned to you at the interview. A further copy will be stored in the researcher file and your medical records.

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## Appendix 14: Consent Form: Women/ Observation

### An exploration of antenatal care for women in with low-risk pregnancies Oman: A Grounded Theory Study

**Version 2, 21/10/2015**

**Informed Consent**

**Pregnant women: Observation**

If you are happy to participate, please complete and sign the consent form below.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong></td>
<td>I confirm that I have read the attached information sheet dated 21 October 2015 version 2 of the above project and have had the opportunity to consider the information and ask questions and had these answered satisfactorily.</td>
</tr>
<tr>
<td><strong>2.</strong></td>
<td>I understand that my participation in the study is voluntary and that I am free to withdraw at any time without giving a reason and without detriment to myself now or in the future and that I will not be able to withdraw my data once it has been published.</td>
</tr>
<tr>
<td><strong>3.</strong></td>
<td>I understand that my data will remain confidential and only will be shared with the supervisory team without disclosing my identity</td>
</tr>
<tr>
<td><strong>4.</strong></td>
<td>I understand that the written notes will be taken during the observations.</td>
</tr>
<tr>
<td><strong>5.</strong></td>
<td>I understand that the results of this study will be part of a PhD thesis</td>
</tr>
<tr>
<td><strong>6.</strong></td>
<td>I understand that data generated in this study will be stored for ten years</td>
</tr>
<tr>
<td><strong>7.</strong></td>
<td>I agree with being observed</td>
</tr>
</tbody>
</table>

Please initial box

---

I agree to take part in the above project

Name of participant: ____________________________ Date: ____________ Signature: ____________________________

Name of researcher: ____________________________ Date: ____________ Signature: ____________________________

A copy of the form will be returned to you at the observation. A further copy will be stored in the researcher file and your medical records.
Appendix 15: Consent Form: Healthcare Provider/Observation

An exploration of antenatal care for women with low-risk pregnancies in Oman: A Grounded Theory Study

Version 2, 21/10/2015

Informed Consent

Healthcare Provider: Observation

If you are happy to participate, please complete and sign the consent form below.

Please initial box

1. I confirm that I have read the attached information sheet dated 21 October 2015 version 2 of the above project and have had the opportunity to consider the information and ask questions and had these answered satisfactorily.

2. I understand that my participation in the study is voluntary and that I am free to withdraw at any time without giving a reason and without detriment to myself now or in the future and that I will not be able to withdraw my data once it has been published.

3. I understand that my data will remain confidential and only will be shared with the supervisory team without disclosing my identity.

4. I understand that the handwritten notes will be taken during the observations.

5. I understand that the results of this study will be part of a PhD thesis.

6. I understand that data generated in this study will be stored for ten years.

7. I agree to being observed.

I agree to take part in the above project.

Name of participant ___________________________ Date ___________________________ Signature ___________________________

Name of researcher ___________________________ Date ___________________________ Signature ___________________________

A copy of the form will be returned to you at the observation. A further copy will be stored in the researcher file and your medical records.
بحث استكشافي نوعي عن الرعاية الصحية أثناء الحمل منخفض الخطورة في عمان: باستخدام منهج النظرية المتجذرة

الإصدار 2
21/10/2015

استمارة موافقة على المشاركة في البحث
المرأة الحامل: مقابلة

إذاعتي في المشاركة يرجى تعبئة وتوقع استمارة الموافقة أدناه.

الرجاء التوقيع في كل مربع

<table>
<thead>
<tr>
<th>رقم</th>
<th>نص السؤال</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>أؤكد أنني قد قرأت وقرأت المعلومات المؤرخة بتاريخ 21 أكتوبر 2015 الإصدار 2 على المشروع أعلاه، وقد أتيحت لي الفرصة للنظر في المعلومات وطرح الأسئلة والحصول على الإجابة بصورة مرضية.</td>
</tr>
<tr>
<td>2</td>
<td>إذا أعطت أنني مشاركتي في الدراسة طوعية وأنني حر في الانسحاب في أي وقت دون إحدى أي أسباب ودون التأثير على الرعاية الصحية المقدمة لي الآن أو في المستقبل.</td>
</tr>
<tr>
<td>3</td>
<td>إذا أعطت أن البيانات الخاصة بي ستبقى سرية، وسوف تكون مشتركة فقط مع الفريق الإقراشي دون الإفصاح عن هوية المشاركون.</td>
</tr>
<tr>
<td>4</td>
<td>إذا أعطت أن المقابلة ستكون مسجلة صوتياً.</td>
</tr>
<tr>
<td>5</td>
<td>إذا أعطت على اقتياس النصوص بصفة مجهولة في كتابة الحث.</td>
</tr>
<tr>
<td>6</td>
<td>إذا أعطت أن نتائج هذه الدراسة ستكون جزءاً من أطروحة الدكتوراه.</td>
</tr>
<tr>
<td>7</td>
<td>إذا أعطت أن البيانات التي تم جمعها في هذه الدراسة سيتم تخزينها لمدة عشر سنوات.</td>
</tr>
<tr>
<td>8</td>
<td>إذا أعطت أنها قابلة للمقابلة.</td>
</tr>
</tbody>
</table>

إذا أعطت على المشاركة في البحوث المذكور أعلاه

تاريخ التوقيع
اسم المشارك

تاريخ التوقيع
اسم الباحث

سوف تتطلب نسخة من النموذج لك في المقابلة. سيتم تخزين نسخة إضافية في ملف الباحث والسجلات الطبية الخاصة بك.

Appendix 16: Arabic Consent Form: Women/Interview
Appendix 17: Arabic Consent Form: Healthcare Provider/Interview

بحث استكشافي نوعي عن الرعاية الصحية أثناء الحمل منخفض الخطورة في عمان: باستخدام منهج النظرية المتجردة

الإصدار 2. 2015/10/21

استمارة موافقة على المشاركة في البحث

أمريированية الرعاية الصحية: مقابلة

إذا رغبت في المشاركة يرجى تعبئة وتوقيع استمارة الموافقة أدناه

الرجاء التوقيع في كل مربع

<table>
<thead>
<tr>
<th>رقم</th>
<th>مراجعة</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>أؤكد أنني قد قررت ورقة المعلومات المزروعة بتاريخ 21 أكتوبر 2015 الإصدار 2 على المشروع أعلاه، وقد أتيحت لي الفرصة للنظر في المعلومات وطرح الأسئلة والحصول على الإجابة بصورة مرضية</td>
</tr>
<tr>
<td>2</td>
<td>إذا أفهم أن شاركتني في الدراسة طوعية وأنه يمكنني الانسحاب في أي وقت دون إبداء أي سبب دون التأثير على الرعاية الصحية المقدمة لي الآن أو في المستقبل</td>
</tr>
<tr>
<td>3</td>
<td>إذا أفهم أن البيانات الخاصة بي ستبقى سرية، وسوف تكون مشتركة فقط مع الفريق التشريفي دون الإفصاح عن هوية المشاركين</td>
</tr>
<tr>
<td>4</td>
<td>إذا أفهم أن المقابلة ستكون مسجلة صوتيا</td>
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<td>5</td>
<td>إذا أتفق على اقتباس التصوير بصفة مجهولة في كتابة الحث</td>
</tr>
<tr>
<td>6</td>
<td>إذا أفهم أن نتائج هذه الدراسة ستكون جزءًا من أطروحة الدكتوراه</td>
</tr>
<tr>
<td>7</td>
<td>إذا أفهم أن البيانات التي تم جمعها في هذه الدراسة سيتم تخزينها لمدة عشر سنوات</td>
</tr>
<tr>
<td>8</td>
<td>إذا أقبل المشاركة في المقابلة</td>
</tr>
</tbody>
</table>

إذا أتفق على المشاركة في البحث المذكور أعلاه

تاريخ التوقيع

اسم الباحث

تاريخ التوقيع

اسم الباحث

سوف تعطي نسخة من النموذج لك في المقابلة. سيتم تخزين نسخة إضافية في ملف الباحث والسجلات الطبية الخاصة بك.
Appendix 18: Arabic Consent Form: Women/Observation

بحث استكشافي نوعي عن الرعاية الصحية أثناء الحمل منفظ الخطورة في عمان: باستخدام منهج النظرية المتناجزة

الإصدار 2. 21/10/2015
استمارة موافقة على المشاركة في البحث
المرأة الحامل: ملاحظة

إذا كنت سعيداً للمشاركة يرجى تعبئة وتوقيع استمارة الموافقة أدناه

الرجاء التوقيع في كل مربع

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>أنا أؤكد أنني قد قرأت وفرزت المعلومات المرتبطة بتاريخ 21 أكتوبر 2015 الإصدار 2 على المشروع أعلاه، وقد أتيح لي الفرصة للنظر في المعلومات وطرح الأسئلة وكانت هذه الإجابة بصورة مرضية</td>
</tr>
<tr>
<td>2</td>
<td>أنا أفهم أنني مشارك في الدراسة طوعية وانني حرة في الانسحاب في أي وقت دون إبداء أي أسباب ودون التأثير على الرعاية الصحية المقدمة لي الآن أو في المستقبل</td>
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<tr>
<td>3</td>
<td>أنا أفهم أن البيانات الخاصة بي ستبقى سرية، وسوف تكون مشتركة فقط مع الفريق الإشرافي دون الإفصاح عن هوية المشاركين</td>
</tr>
<tr>
<td>4</td>
<td>أنا أفهم أنني سيتم اتخاذ مذكرات مكتوبة خلال الملاحظات من قبل الباحث</td>
</tr>
<tr>
<td>5</td>
<td>أنا أفهم أن نتائج هذه الدراسة ستكون جزءاً من اطروحة الدكتوراه</td>
</tr>
<tr>
<td>6</td>
<td>أنا أفهم أن البيانات التي تم جمعها في هذه الدراسة سيتم تخزينها لمدة عشر سنوات</td>
</tr>
<tr>
<td>7</td>
<td>أنا أقبل المشاركة في الملاحظة</td>
</tr>
</tbody>
</table>

إذا أوافق على المشاركة في البحث المذكور أعلاه

تاريخ التوقيع
اسم المشارك

تاريخ التوقيع
اسم الباحث

سوف تعطى نسخة من النموذج لك أثناء الملاحظة. سيتم تخزين نسخة إضافية في ملف الباحث والسجلات الطبية الخاصة به.
بحث استكشافي نوعي عن الرعاية الصحية أثناء الحمل منخفض الخطورة في عمان: باستخدام منهج النظرية المتجذرة

الإصدار 2.0

استمارة موافقة على المشاركة في البحث

تقديم الرعاية الصحية: ملاحظة

إذا كنت سعيداً للمشاركة برجي تعبئة وتوقيع استمارة الموافقة أدناه

الرجاء التوقيع في كل مرتبة

إذا كنت غير موافق على المشاركة في البحث المذكور أعلاه، أُفصيلت في الإصدار 2.0

<table>
<thead>
<tr>
<th>المرتبة</th>
<th>السؤال</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>أنا أفهم أن شرطي الرعاية الصحية في الأشرفية ستحتفل في الأشرفية في أي وقت دون إلغاء أي منظور قراءة مقدمة في الأشرفية، وكما أنها تتمتع بدقة بصورة مرضية.</td>
</tr>
<tr>
<td>2</td>
<td>أنا أفهم أن البيانات الخاصة بي ستبقى سرية، وسوف تكون مشتركة فقط مع الفريق الإشرافي دون الإفصاح عن هوية المشاركين.</td>
</tr>
<tr>
<td>3</td>
<td>أنا أفهم أن سيتم أخذ مذكرات كافية خلال الملاحظات من قبل الباحث.</td>
</tr>
<tr>
<td>4</td>
<td>أنا أفهم أن نتيجة هذه الدراسة ستكون جزءًا من أطروحة الدكتوراه.</td>
</tr>
<tr>
<td>5</td>
<td>أنا أفهم أن البيانات التي تم جمعها في هذه الدراسة سيتم تخزينها لمدة عشر سنوات.</td>
</tr>
<tr>
<td>6</td>
<td>أنا أفهم أن البيانات التي تم جمعها في هذه الدراسة سيتم تخزينها لمدة عشر سنوات.</td>
</tr>
<tr>
<td>7</td>
<td>أنا أُفهم أن البيانات التي تم جمعها في هذه الدراسة سيتم تخزينها لمدة عشر سنوات.</td>
</tr>
</tbody>
</table>

أنا أوافق على المشاركة في البحث المذكور أعلاه

<table>
<thead>
<tr>
<th>تاريخ التوقيع</th>
</tr>
</thead>
<tbody>
<tr>
<td>إسم المشارك</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>تاريخ التوقيع</th>
</tr>
</thead>
<tbody>
<tr>
<td>إسم الباحث</td>
</tr>
</tbody>
</table>

سوف تعطى نسخة من النموذج لك أثناء الملاحظة. سيتم تخزين نسخة إضافية في ملف الباحث والسجلات الطبية الخاصة بك.
Introduction:

a. Welcome and specify the purpose of the interview
b. Go again through the informed consent and confirm the willingness to participate (can withdraw at any time) and take permission for audio recording, check the tape-recorder
c. Request participant to ask for clarification if there is anything, they do not understand.

Could you tell me about yourself and your current pregnancy?
Explore: how is your health during this pregnancy?
  How is your baby’s health?
  How do you feel about this pregnancy compared to previous pregnancy?

I would like to hear from you about your current experience on antenatal care, could you please tell me about how do you feel about it.

What stage of pregnancy did you first attend antenatal care?

What triggered you to attend then?
Explore: current experience on a number of visits, spacing, waiting time, continuity of care, health care providers, information, tests that you had communication and attitudes of the providers, essential components
  Could you tell me more about that?

Can you tell me about your most positive experience with care you received during pregnancy?
  Explore: what factors encouraged you to attend to ANC?
  What are the reasons for that?
  What factors have contributed to your feelings about antenatal care? (Prompt)
Staff attitude, information, communication, distance, maternal and fetal well-being, past experience,

What went well?
What did not go so well?

Can you tell me about any issues and concerns that you have on the care that you receive during your pregnancy?

Explore: organization of clinic (privacy, waiting area, waiting time), health care providers, and number of visits, resources, distance, and transportation

**How could your antenatal care be improved?**

Explore: what are the needs from antenatal care?

What kind of care you prefer to get during antenatal care?
What you would like to see?
What will help you be more satisfied with care during pregnancy?
What do you mean?
Can you elaborate more?

Is there anything you would like to add about your experience about antenatal care?

Is there anything I have left out you think is important?

How do you feel after finishing the interview?

Would like me to contact anyone for you?

Thanks a lot for your time and participation in this study.
Appendix 21: Topic Guide/Healthcare Provider

An exploration of antenatal care for women with low-risk pregnancies in Oman: A Grounded Theory Study

Topic Guide for Healthcare Provider

Version 2, 21/10/2105

Introduction:

a. Welcome and specify the purpose of the interview.
b. Go again through the informed consent and confirm the willingness to participate (can withdraw at any time) and take permission for tape-recorder, check the tape-recorder.
c. Request participant to ask for clarification if there is anything they do not understand.

Can you tell me about your experiences in antenatal care clinic?

Explore experience with the traditional and new model, issues, concerns,

As a healthcare provider can you tell me about your views and opinions about the available antenatal care for low-risk pregnancy?

Explore opinions about: number of visits, continuity of care, essential components

What ideas do you have about the women’s experiences of antenatal care?

Explore: happy about the care received, Are they happy?

What makes them happy in your opinion?

What makes them unhappy?

What information do women want to know?

How do you provide information to women?

What aspects of antenatal care do you think have been satisfactory to you in your role?

Are women pleased with their care?

Explore: continuity, components, teaching and information, time of care, guidelines

Are there any aspects of antenatal care which you think have been less satisfactory for you?

Explore: time and number of visits, tasks, health teaching and communication, guidelines

Are there any aspects of antenatal care which you think have been less satisfactory for the women?
Can you tell me what can be improved to increase the women’s perceptions of antenatal care?

Is there anything you would like to add to your experience of antenatal care?
Is there anything I have left out you think is important?
How do you feel after finishing the interview?
Would like me to contact anyone for you?

Thanks a lot for your time and participation in this study
Appendix 22: Arabic Topic Guide/Women

دليل المقابلة للنساء الحامل

بحث استكشافي نوعي عن الرعاية الصحية أثناء الحمل منهج النظرية المتجذرة

مقدمة:

أ. أرحمنا بمشاركة وأشرح الغرض من المقابلة

ب. تذكر المشاركات مهمة بالعلومات المهمة عن مشاركتها في البحث والتتأكد من رغبتها في المشاركة (يمكن الأنساب في أي وقت) وأخذ إذن لتسجيل المقابلة، والحصول على تسجيل أداة تسجيل ج. أعضاء المشاركة الوضع الكافي لتوضيح أي شيء غير مفهوم والاستفسار عن بعض الاتجاه.

هل يمكن أن تخبرني عن نفسك وحكمك الحالي؟

استكشاف: كيف هي صحتك أثناء هذا الحمل؟
كيف صحة الجنين؟
كيف تعبرين حيال هذا الحمل مقارنة بالحمل السابق فيما يتعلق بالرعاية الصحية للحوامل؟
ما هي أهمية الرعاية الصحية للحوامل من وجهة نظرك؟
ماذا تعرفين عن الرعاية الصحية للحوامل؟
وأود أن أسمع منك عن تجربتك الحالية عن الرعاية الصحية التي تتلقينها خلال الحمل ، فارجو أن تخبرني كيف تشعرين حيال ذلك.

استكشاف: التجربة الحالية على عدد الزيارات والفترتين بين كل زيارة وأخرى، وقت الانتظار، واستمرارية الرعاية ومقدمي الرعاية الصحية، والمعلومات والمشورات المقدمة من مقدمي الخدمات والمكونات الأساسية للرعاية الصحية للحوامل

هل يمكن أن تخبرني المزيد عن هذا الموضوع؟

هل يمكن أن تحدثني عن تجربتك الأكثر إيجابية مع الرعاية التي تتلقينها أثناء الحمل؟
استكشاف: لما هي العوامل التي شجعتك للحضور والاستمرار في تلقي الرعاية؟
ما هي أسباب ذلك؟
ما هي العوامل التي ساهمت في تكوين مشاعرك تجاه الرعاية الصحية التي تتلقينها؟
تعامل الكادر الصحي ومشاركة المعلومات وطريقة التواصل بينكم، بعد المساحة، توفير المواصلات، الخبرة السابقة، هل يمكن أن تحكي عن المخاوف وآرك الأسباب التي من الممكن أن تتأثر سلبية على بداية الزيارات للعيدة، والاستمرار في تلقي الرعاية الموصى بها؟
استكشاف: تنظيم الزيارة وتقديم الرعاية الصحية، عدد الزيارات، والموارد، وبعد المساحة، والنقل
كيف يمكن تحسين الرعاية الصحية من وجهة نظرك؟
استكشاف: ما هي احتياجات من الرعاية الصحية في فترة الحمل؟
ماهي الرعاية التي تفضلن الحصول عليها خلال الرعاية الصحية للحوامل؟
ما هي الأشياء التي ترغبين أن يتم تطويرها؟
ما هي الأشياء التي من الممكن أن تساعد في جعلك أكثر ارتياحاً من الرعاية أثناء الحمل؟
ماذا تعتني؟
هل يمكنك توضيح أكثر من ذلك؟
هل هناك أي شيء كود أن تضيفه حول تجربتك حول الرعاية الصحية خلال فترة الحمل؟
هل هناك أي شيء لم يتم مناقشته وتعتبرنه مهم من وجهة نظرك؟
ماهو شعورك بعد الانتهاء من المقابلة؟
هل من الممكن إذا طلب البحث أن نتواصل معك مستقبلاً لتوضيح بعض النقاط في مقابلة أخرى؟
شكراً جزيلًا على وقتك والمشاركة في هذه الدراسة
**Appendix 23: Participants’ Demographic Data**

**Template for Participants’ Demographic Data**

### Pregnant women:

<table>
<thead>
<tr>
<th>S. No</th>
<th>Code No</th>
<th>Age</th>
<th>Marital status</th>
<th>Education</th>
<th>Occupation</th>
<th>No of Pregnancy</th>
<th>No of live children</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
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</tbody>
</table>

### Healthcare Provider

<table>
<thead>
<tr>
<th>S. No</th>
<th>Code No</th>
<th>Age</th>
<th>Education</th>
<th>Years of experience</th>
<th>Designation</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
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<td>4.</td>
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<td>5.</td>
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</tbody>
</table>

### Birth Partner:

<table>
<thead>
<tr>
<th>S. No</th>
<th>Code No</th>
<th>Age</th>
<th>Marital status</th>
<th>Relation to the women</th>
<th>Education</th>
<th>Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
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Appendix 24: Flow Chart on Access and Recruitment of the Participants

**Recruit pregnant women**

- Gatekeeper approached women and introduced the research to gain permission for researcher to discuss study.
- Women agreed to share their contact details were given copy of Participant Information Sheet and Informed consent.
- The researcher sent a text message via SMS/WhatsApp asking the woman to respond to the message if they agree to be contacted further.
- Women who did not respond to this message were not contacted further.
- Women who responded with agreement were contacted via telephone and further explanations of the study and an opportunity to ask questions were provided to them.
- I contacted again after at least 24 hours and those agreed to take part in the study: date, time and place of interview/observation were arranged.
- I provide further explanation on the day of interview/observation, signed informed consent and conducted the interview/observation.

**Recruit Health care Professionals**

- I explained to the gatekeepers the possibility of involving health care professionals and advised them to disseminate and those interested to contact me.
- Healthcare professionals interested to participate shared their contact details, I took permission to call them back.
- I provided explanation regarding their participation in the interview/observation and allowed at least 24 hours thinking and deciding.
- Care providers agreed to participate, arranged for date and place of the interview/observation based on their convenient time and place.
- On the day of the interview/observation, I provided further explanation and signed consent form.
- Conducted the interview/observation.
Appendix 25: Flow Chart of Distress Policy (Draucker et al., 2009)

The participants indicate they have a high level of stress or emotional distress or look too stressful by crying or shaking

The Researcher will:
- Stop the interview
- Offer immediate support
- Assess mental status

If participants want to carry on the interview, resume interview

- If the participants unable to talk stop the interview
- Encourage the participants to contact their GP or mental health provider if they need further help or emotional support
- Follow participant up with phone call
- Encourage participants to call back if they experience increased distress
Appendix 26: Lone Worker Policy

In order to reduce the associated risks the lone policy worker of the University of Manchester was followed at all times. I ensured that the car was used for travelling for data collection was covered by insurance. A professional colleague was appointed to stay in direct contact with me. I informed her about the timing of each interview, starting time and the estimated time of the length of the interview. I provided the designated person with a sealed envelope containing participant address and contact details, and I asked her to open it only if the contact with me was impossible for two hours. We created a plan of contact between both us that I should call the designated person by telephone just before starting of the interview and at the end of the interview. If I did not call the designated person after two hours from starting the interview, the designated person should call me. If no response and all attempts to contact me failed, the researcher’s family members should be called, if a family member did not have any information about the researcher or not able to get in touch with the researcher, then the police should be informed immediately. The supervisory team were also informed about the plan made for the interviews.

To avoid the risk associated with psychological distress caused by information given at the time of recruitment, I provided detailed explanation presented in the written Participant Information sheet and informed consent to ensure that all important questions were discussed with the participants. Each participant was given time to think, discuss with their family members regarding their participation in the study and then to decide.

I was familiar with some of the areas where the interviews took place. For the areas that I was not familiar with I asked the guidance of healthcare professionals for landmarking and queries on the safety of these areas. While visiting the health centre, I did some visits to neighbourhood areas for assessment to determine any risk to personal safety before data collection. Omani people are well known for being respectful, peaceful and polite. However, I was aware that issues might arise. I arranged with the participants to schedule the time of the interviews during the daytime to avoid travelling during the night because it is culturally unaccepted for women to travel alone at night for long distance. I conducted the interviews/observations on a fixed date and time. Before each visit I confirmed the correct address and name provided to be able to find the place of the interview.

No adverse incident occurred during the travel or during data collection to both the researcher and the participants that need to be reported. I used a study telephone number not the personal one so the participant cannot contact me at home, only professionally.
Appendix 27: Recruitment Poster

Would you like to take part in a research
Exploring Antenatal Care in Oman

Purpose
To explore the experiences, perceptions and issues
surrounding antenatal care for low risk pregnancies
in Oman

Who can take part
1. Pregnant woman with low risk pregnancies
   aged 18-40 years, had at least two previous visits
2. Birth partners of those women
3. Health care providers of antenatal care

All participants must speak either Arabic or English

What does it involve
Talking to the researcher about your experiences
of care during pregnancy OR being observed during
the visit

More information
Please contact the researcher Fama Al-Ma'gbool
a PhD student at the University of Manchester
on a mobile: 00968-93260810
from 07:30 am to 06:00 pm

The Study Poster

MANCHESTER
The University of Manchester

Ministry of Health
Sultanate of Oman

Would you like to take part in a research
Exploring Antenatal Care in Oman

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the visit

More information
Please contact the researcher Fama Al-Ma'gbool
a PhD student at the University of Manchester
on a mobile: 00968-93260810
from 07:30 am to 06:00 pm
Appendix 28: Workshop Outline

An Outline of the presentation with the in-charges of the Primary Healthcare Institutions and the Antenatal care Providers

Directorate General of Health services in North Batinah Governorate: An hour workshop

Outline:

- Refreshment
- Welcome all Audiences
- Who is the researcher? What is the researcher doing?
- Introduction to the research study;
- Aims and objectives, and importance of the research study;
- The prospective participants of the study;
- Inclusions and exclusions criteria
- The role of the managers of the health centres and clinical staff in promoting access to the participants;
- Why should they be involved in accessing the participants?
- The expected level of disruption to the workflow of the clinic during the study;
- How will data be collected for the study?
- Conclusion
Appendix 29: Observation Template

<table>
<thead>
<tr>
<th>S. No</th>
<th>Area</th>
<th>Observation</th>
<th>Comments on observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Number of rooms for ANC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Appropriate size of the clinic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Number of HCP providing care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Designation of HCP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Number of visit for this participant</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. Reception of the woman by the midwife/nurse/Obstetrician/Other

- Greeting used (verbally and non-verbally)
- Initial assessment
- Information about waiting time

7. Waiting area

- Ventilation
- Cleanliness
- Availability of current health education resources
- Availability of drinking and eating facilities
- Adequate and comfortable chairs/seats
- Open or closed waiting area
- Number of women waiting
- Availability of toilets
- Facilities to pass time such as magazine, TV and other

- Unexpected events/additional comments
8. Contact with healthcare professional

- **Verbal communication:**
  - Use of clear and easy language for the woman during consultation
  - Talking in a friendly manner
  - Encouraging the woman to express concerns
  - Respecting woman and showing interest during a conversation

- **Nonverbal communication**
  - Maintain eye contact during speech
  - Nodding head and hand movement
  - Use of touch and response
  - Demeanor and appropriate facial expression
  - Unexpected events/additional comments

9. Privacy

- The door is closed during the consultation
- The curtain is closed during the assessment
- Number of women in the room at the same time
<table>
<thead>
<tr>
<th>10. Information and consent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explaining any procedure to the woman</td>
</tr>
<tr>
<td>Informing woman about the planned care delivery for this visit</td>
</tr>
<tr>
<td>Explaining findings of investigations and assessment</td>
</tr>
<tr>
<td>Explanation of the plan for a future visit</td>
</tr>
<tr>
<td>Unexpected events/additional comments</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>11. Provision of health education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provision of important health education for pregnancy verbal and written</td>
</tr>
<tr>
<td>Topic of health education discussed</td>
</tr>
<tr>
<td>Providing adequate time for asking questions and clarifications</td>
</tr>
<tr>
<td>Unexpected events/additional comments</td>
</tr>
</tbody>
</table>
Appendix 30: The Concept Map of the Preliminary Core Category

Interaction of women’s personal, family, social and health care factors

Constructing perceptions of antenatal care
Meaning and benefits of antenatal care

Perceptions of Women-carer interaction

Perception on health care delivery system
1. Environment of care
2. Organization of care

Perceived benefits & value of antenatal care:
Ensuring healthy fetus & pregnancy
Preventing risks and avoiding blaming

Weighting benefits and barriers of ANC

Feeling obliged to protect the fetus

Timing of first antenatal visit to public clinics

Supplementary use of private healthcare

Looking for alternative source of information and reassurance
Appendix 31: Initial Coding with Nvivo 11 Software

| Code | Node Description | Source | References | Created By | Created Date | Modified By | Modified Date |
|------|------------------|--------|------------|------------|--------------|--------------|--------------|---------------|
| 32   | appointment system | 4      | 32         | FH         | 18/10/2010:10:43 | FH          | 29/03/2010:16:37 |
| 32   | burden for regular attendance | 6      | 29          | FH         | 18/10/2010:12:38 | FH          | 29/03/2010:16:37 |
| 32   | booking a visit | 5      | 11         | FH         | 17/10/2010:17:17 | FH          | 29/03/2010:16:37 |
| 32   | causes of overcrowding | 4      | 10         | FH         | 18/10/2010:11:50 | FH          | 29/03/2010:16:37 |
| 32   | continuity of care | 5      | 14         | FH         | 18/10/2010:17:52 | FH          | 29/03/2010:16:38 |
| 32   | culture and late booking | 2      | 3         | FH         | 21/10/2010:12:09 | FH          | 29/03/2010:16:38 |
| 32   | culture and private | 1      | 2         | FH         | 29/03/2010:13:27 | FH          | 29/03/2010:16:38 |
| 32   | effect of overcrowding on patient | 4      | 10         | FH         | 18/10/2010:11:10 | FH          | 29/03/2010:16:38 |
| 32   | effect of overcrowding on staff | 3      | 11         | FH         | 18/10/2010:10:59 | FH          | 29/03/2010:16:38 |
| 32   | Encourage to ask questions | 6      | 7         | FH         | 18/10/2010:15:10 | FH          | 29/03/2010:16:38 |
| 32   | factors influencing regular attendance to the clinic | 6      | 20         | FH         | 18/10/2010:17:28 | FH          | 29/03/2010:16:38 |
| 32   | fear of both female and male baby | 6      | 23         | FH         | 18/10/2010:16:54 | FH          | 29/03/2010:16:39 |
| 32   | fear of doing glucose test | 4      | 6         | FH         | 18/10/2010:12:59 | FH          | 29/03/2010:16:39 |
| 32   | fragmented and disorganized care | 2      | 7         | FH         | 24/10/2010:15:19 | FH          | 29/03/2010:16:39 |
| 32   | going to private for appropriate treatment | 1      | 1         | FH         | 25/10/2010:17:14 | FH          | 29/03/2010:16:39 |
| 32   | going to private for pregnancy only | 4      | 4         | FH         | 18/10/2010:12:05 | FH          | 29/03/2010:16:39 |
| 32   | going to private to do scan | 0      | 15         | FH         | 18/10/2010:10:55 | FH          | 29/03/2010:16:39 |
| 32   | happy with the attitude of the doctor | 2      | 7         | FH         | 18/10/2010:13:10 | FH          | 29/03/2010:16:40 |
| 32   | HCP at ANC | 3      | 2         | FH         | 21/10/2010:16:22 | FH          | 29/03/2010:16:40 |
| 32   | HE to be included during visits | 5      | 9         | FH         | 19/10/2010:11:00 | FH          | 29/03/2010:16:40 |
| 32   | health education topics given | 5      | 10        | FH         | 18/10/2010:12:17 | FH          | 29/03/2010:16:40 |
| 32   | importance of early booking | 2      | 5         | FH         | 18/10/2010:17:03 | FH          | 29/03/2010:16:40 |
| 32   | importance of health education | 2      | 2         | FH         | 20/10/2010:17:42 | FH          | 29/03/2010:16:40 |
| 32   | importance of scan during pregnancy | 8      | 13        | FH         | 18/10/2010:16:52 | FH          | 29/03/2010:16:40 |
| 32   | important information during scan | 3      | 5         | FH         | 19/10/2010:14:22 | FH          | 29/03/2010:16:40 |
| 32   | inadequate and uncomfortable chair | 5      | 12         | FH         | 19/10/2010:16:36 | FH          | 29/03/2010:16:40 |
| 32   | inadequate explanation and consent to treatment | 5      | 22        | FH         | 18/10/2010:10:12 | FH          | 29/03/2010:16:40 |
| 32   | inadequate number of staff | 8      | 17        | FH         | 18/10/2010:16:15 | FH          | 29/03/2010:16:40 |
| 32   | inaccessibility of clinical services in the HC | 2      | 3         | FH         | 18/10/2010:17:27 | FH          | 29/03/2010:16:40 |
| 32   | interruption of care by other PA and staffs | 4      | 17         | FH         | 29/10/2010:17:07 | FH          | 29/03/2010:16:40 |
| 32   | privacy is maintained | 1      | 7         | FH         | 19/10/2010:16:20 | FH          | 29/03/2010:16:40 |
| 32   | The mother and the baby health during pregnancy | 6      | 27         | FH         | 17/10/2010:17:39 | FH          | 29/03/2010:16:40 |
### Appendix 32: Summary of the Emergent Categories and Sub-Categories

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<tr>
<th>S. NO</th>
<th>Subcategory</th>
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<tbody>
<tr>
<td></td>
<td>Ensuring a Healthy Pregnancy and a Healthy Fetus</td>
<td>Perceived Benefits and Value of Antenatal Care</td>
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<td></td>
<td>Identifying Risks and Preventing Complications</td>
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<td>Fulfilling Social Role Expectations</td>
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<td>Perceptions of the Value of Early Booking</td>
<td>Timing of First Antenatal Visit</td>
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<td>Late Attendance for Antenatal Care</td>
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<td>Personal Factors</td>
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<td>1. Awareness and Acceptance of Pregnancy</td>
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<td>Influence of Family and Friends</td>
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<tr>
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<td>1. Networking with other Women</td>
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</tr>
<tr>
<td></td>
<td>2. Keeping Pregnancy Secret</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Factors</td>
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<tr>
<td></td>
<td>1. Employment Demands</td>
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<tr>
<td></td>
<td>2. Limited Access to a Car</td>
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<td>Poor Experiences with Care in Previous Pregnancy</td>
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<td>Receiving Initial care in Private Clinic</td>
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<td>Respect during the Women’s Appointments</td>
<td>Women-carer Interaction during Antenatal care</td>
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<td>Support and Attention to the Women’s Needs</td>
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<td>Relationship and Rapport</td>
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<td>Communication and Explanation of Assessments and Plan</td>
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<td>Experiences of Antenatal Care Delivery</td>
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<td>Referring Women to a Higher Level of Care</td>
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<td>Long Waiting Time</td>
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<td>Pressure on Staff Affecting the Quality of Care and Communication</td>
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<td>Poor Facilities in the Waiting Area</td>
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<td>Date only Appointments</td>
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<td>Debate on the Number of Visits and Frequency of Ultrasound Assessment</td>
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<td>Reasons for Accessing Private Healthcare in Pregnancy</td>
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<td>1.1.1. Seeking Quality Treatments and More Reassurance</td>
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<td>1.1.3. Public Clinics Lacking Contemporary Ultrasound Machines</td>
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<td>1.1.4. Women Losing Trust in Public Antenatal Care</td>
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## Appendix 33: Participants’ Demographic Characteristics

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