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Pain: a content review of undergraduate pre-registration nurse education in the United Kingdom.

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Pain: a content review of undergraduate pre-registration nurse education in the United Kingdom.**Introduction**

The assessment and management of pain has been consistently recognised as an area of poor practice since the early work of Marks and Sacher (1973) first identified poor quality pain management in medical inpatients. Reasons underpinning poor practice are many, including; lack of knowledge and understanding, lack of empathy, the socialisation of nursing and other health care professionals, organisational constraints and patient focused barriers (Sjostrom et al 2000, Schafheutle et al 2001, Lofmark et al 2003, Brockopp et al 2004, Manias et al 2005, Young et al 2006, Dihle et al 2006, Harper et al 2007, Clabo 2008, Duncan et al 2014, Mackintosh-Franklin 2014). This paper focuses on one of these key issues; the educational preparation of undergraduate pre-registration nurses in the United Kingdom (UK) which underpins their ability to successfully assess and manage pain and prevent subsequent suffering.

Background

The presence of pain is a major health issue Paulose and Hertz (2008) in a report on the burden of pain amongst adults in the United States, found that over 50% of adults over the age of 20 report experiencing one or more feelings of pain at any period of time. Pain is present in a large percentage of the population and is also closely associated with poor health and unemployment, with between 15-22% of the working age population unemployed as a direct consequence of pain. The prevalence of pain in the general population is so great that Goldberg and McGee (2011) have argued for pain to become a global health priority, estimating that one fifth of the world's adult population suffer from pain and that 1 in 10 adults are diagnosed with chronic pain each year, as well as suffering from significant disabling co morbidities.

One of the difficulties in prioritising pain as a major health concern is its varied presentation; as a primary condition, as both acute and chronic and as a secondary symptom in association with a wide range of medical and health conditions (McCaffery and Pasero 1999). The three commonest causes of adult deaths in the developed world are from Coronary Heart Disease (CHD), Lung Cancer and Strokes (World Health Organisation 2016). Figures from British Heart Foundation (2014) suggest that nearly 500,000 people in the UK have emergency hospital admissions with CHD every year with over 74000 deaths. Whilst over 4 million cases of cancer require treatment every year, resulting in 166 000 deaths (Office for National Statistics 2010, British Heart Foundation 2014). It has long been recognised that the first symptom of CHD is acute chest pain (Skinner et al 2010) and diagnosis of cancer is also frequently preceded by an initial complaint of pain (Cleeland et al 2013, Biswas et al 2014, Walling et al 2015). These symptoms do not necessarily diminish with diagnosis and many patients with CHD and cancer suffer from both acute and chronic pain. Van den Beuken-van Everdingen et al (2007) estimated that over 53% of all cancer sufferers experience pain with the highest prevalence in those with advanced disease. These figures are supported by the International

Association for the Study of Pain in their Global year against Cancer Pain (2008-2009), who suggest 30-91% of all cancer sufferers are currently experiencing unacceptable levels of pain.

Aside from the symptomatic pain present in these major causes of mortality and morbidity other primary pain conditions are also prevalent. Chronic pain affects around 20% of the adult population in Europe (van Hecke et al 2013) with chronic lower back pain alone identified as one of the top 10 diseases in the Global Burden of Disease Study (2010) and accounting for the highest number of Disability Adjusted Life Years (DALYs) globally (Murray et al 2012, World Health Organisation 2013). Incidence of acute pain prevalence across a range of conditions in inpatient settings also remains high (Ogbole-Nwasor et al 2012, Jämsen et al 2015), with estimates of 40-65% of inpatients reporting moderate to severe "worst pain."

Given the prevalence of pain and its significant negative impact on quality of life and consequent socio economic burden, the management of pain and the relief of suffering should be a key priority of nursing care (Akinsanya 1985). However numerous studies consistently demonstrate that patients continue to suffer unnecessary pain; that pain is poorly assessed and managed and is a low nursing priority (Dihle et al 2006, Harper et al 2007, Clabo 2008, Mackintosh-Franklin 2014 Jämsen et al 2015). Lack of knowledge and understanding has been identified as a key contributory factor (Twycross 2007, Al-Khawaldeh 2013, Krokmyrdal and Andenaes 2015, Chow and Chan 2015) and this has frequently been linked to failings in educational preparation (Twycross 2000, Shaw and Lee 2010, Duke et al 2013).

Appropriate educational preparation can be effective in improving the care of patients suffering from pain (Adalrahim et al 2011, Chow and Chan 2015) and has been identified as crucial if practice is to be improved (Sofer 1985, Taylor 2007, Shaw and Lee 2010). However evidence continues to demonstrate that undergraduate nurse education is not adequately preparing nurses to deal with this fundamental global health priority (Plaisance and Logan 2007, Shaw and Lee 2010, Duke et al 2013). In 2006 Plaisance and Logan called for a critical review of undergraduate nursing curricula on pain education, this was followed with similar calls by; Taylor (2007), Shaw and Lee (2010) Duke et al (2013) and Krokmyrdal and Andenaes (2015), however evidence of subsequent action is unclear.

In order to support improvements in pain assessment and management this paper reports on a review of the curricula of undergraduate nurse education in the UK, to establish the extent to which pain is identified within the curriculum and the nature of its inclusion.

Design

This review took place in February-March 2016 and adopted a systematic step wise approach to descriptive content analysis. The Nursing and Midwifery Council of the UK (NMC) provide information about approved programme providers and from this 71 Higher Education Institutes (HEIs) which offer full time undergraduate pre-registration adult nursing programmes in the UK were identified; 2 in Northern Ireland, 10 in Scotland, 5 in Wales and the remainder in England.

Each of the 71 HEIs was subject to an initial Google search using the key words; nursing, adult and pre-registration, followed by a further search on each HEIs own website using their own site search tool to retrieve detailed information about their programmes. Aside from web based content a total

of 46 documents (64% of the total available) labelled either programme specification or programme handbook were identified and downloaded.

This was then followed by a second search of all 71 HEIs using Google with the HEI name and the word “Pain”, followed by a second search on each HEIs own site using their own search tool again for the word pain”, looking specifically for references to pain within programme/module titles and content. Results from both the first and second stage of searching were recorded on a data base including additional details about the nature of any positive findings.

The third search stage then focused on the downloaded documentation. Each document was systematically searched using the “find” command for both Word and Adobe Acrobat Documents (no other document format was found) using the word “pain”, and information from this entered into the database. A further hand search of each document then took place to allow more indepth descriptive content analysis to take place.

Equivilance in documentation was difficult to determine as all HEIs published differently structured documents with considerable variation in length from 8 pages to 157 pages, although all documents contained details of programme aims and learning outcomes. Additionally each HEi provided variable information about the content of its programme; 9 documents contained no information about the modules or units which made up the programme, 23 documents provided module titles only and 14 HEIs provided documents containing module titles and content summary information, interestingly no HEIs provided full information in the form of module descriptors for each element of the programme. (See table 1).

Table 1: Types of Information from the Programme Documentation (Insert table 1 here).

Ethical guidance on the use of information posted on the World Wide Web is difficult to find, but guidelines from the British Psychological Society (2013) suggest that providing the key principles of; respect for individuals and their dignity, scientific value, social responsibility and minimal harm are adhered to, information which is clearly within the public domain can be used for research purposes without the requirement of consent. In order to minimise harm in this paper no individual HEI or programme is identified. Additionally all programmes were currently approved by the NMC and from the available information on each HEI website actively running and continuing to recruit students.

Findings.

From the findings in the first and third stages of data collection with their focus on undergraduate nursing programme documentation, it quickly became clear that there was little direct reference to pain in any of the programme specifications and handbooks retrieved.

Table 2 identifies the total references within this body of documentation for the word pain.

Table 2: References to Pain in Undergraduate Nursing Programme Documents (insert table 2 here)

Of those 9 documents which made direct reference to pain the nature of that reference is detailed in table 3 below.

Table 3: Types of References to Pain (insert table 3 here)

From this breakdown it is apparent that information on pain within the retrieved documentation on undergraduate nursing curriculum is sparse, with only 6 (13%) documents containing a reference to pain as an area included within the educational content of the programme. This finding must however be placed in context; although all of the 46 documents examined contained details of programme aims and learning outcomes, 9 (19%) had no module details in them, 23 (50%) provided module titles only, with a remaining 14 (30%) providing module titles and summary information.

Findings from the second step of data collection were designed to overcome this apparent lack of information, by focusing specifically on all available web based content from all 71 HEIs offering undergraduate Nursing programmes.

Table 4 reports findings from the Google and HEI site specific search for pain within the content of Courses/Programmes/Modules.

Table 4: Online and HEI site specific search for Pain in Courses/Programmes/Modules (insert table 4 here)

The Google search found 38 (53%) HEIs made no reference on their websites to pain in their programmes, courses or modules, 27 (38%) HEI websites made 1 reference and 6 (8%) HEIs had more than 1 reference to pain. The HEI site specific search was slightly different with 44 (62%) HEIs returning no references, 19 (27%) 1 reference to pain, and 7 (10%) more than 1 reference to pain.

Table 5 indicates the nature of the references to pain using both search methods.

Table 5: Nature of available information from Google and HEI site search (insert table 5 here)

Data in table 5 clearly indicates that no references to pain were found in the UG nursing curriculum of any of the 71 HEIs in the UK which deliver these programmes, using either Google or the HEIs own site specific search tool. Instead all references were for Continuous Professional Development (CPD) programmes at undergraduate or postgraduate level, and a smaller number of references for Masters level programmes.

The reasons behind the failure to include any direct reference to pain on either HEI websites or in their programme documentation is unclear, but may be a consequence of one of the limitations of this study; that its data collection method is entirely dependent on information within the public domain, and that the information available on websites is frequently in summary form with minimal detail. This does not however apply to programme specifications/handbooks which in all cases appeared to be complete documents.

Discussion.

This review effectively confirms the concerns raised by earlier commentators that pain is and remains a neglected area in the nursing curriculum (Twycross 2000, Shaw and Lee 2010, Keyte and Richardson 2011, Al-Khawaldeh 2013, Chow and Chan 2015). Although this review primarily focused on undergraduate pre-registration educational provision, its findings on the minimal number of post registration or Continuous Professional Development (CPD) courses/modules focusing on pain makes equally sobering reading.

Pain is a fundamental human fear and in many instances more than the fear of death people fear pain (Levin et al 1987, Strang 1997, Ferrell and Coyle 2002). If the intention of nursing is to provide compassionate care and promote the relief of suffering, the assessment and management of people in pain should be an absolute priority (Akinsanya 1985, Lisson 1987, Plaisance and Logan 2006, Jabusch et al 2015, Chow and Chan 2015). Aside from professional values and attributes as human beings, nurses are in an ideal position to sympathise and empathise with people in pain at a fundamental humanitarian level, and the failure of nurse education to recognise this basic yet essential component of care is at the very least negligent.

The lack of effective education to support nurses in assessing and managing pain is not new, and a host of studies have identified ongoing inadequacies for at least the past 30 years (Soafer 1985, Taylor 2007, Shaw and Lee 2010). However highlighting the issue appears insufficient to trigger change as most recent figures for unacceptable levels of pain experienced by patients seem little changed (Paulose and Hertz 2008, Goldberg and McGee 2011, Jabusch et al 2015).

Reasons behind the lack of change are complex and subject to debate, these include organisational barriers, poor patient-nurse communication skills, poor multi-professional communication and a lack of resource (Sjostrom et al 2000, Schafheutle et al 2001, Lofmark et al 2003, Brockopp et al 2004, Manias et al 2005, Young et al 2006, Dihle et al 2006, Harper et al 2007, Clabo 2008, Duncan et al 2014, Mackintosh-Franklin 2014). Cultural acceptability, determinants and presentations of pain are varied and can lead to stereotyping and patient labelling and further misunderstandings (McCaffery and Pasero 1999, Hall-Lord and Larsson 2006, Ogboli-Nwasor et al 2012, Krokmydal and Andenaes 2015, Chan and Hammamura 2015). Additionally there is a strong argument to support an overall lack of interest in pain and the alleviation of suffering by nurses, as repeated studies demonstrate nurses lack of emotional interest in pain, nurses socialised acceptance of pain as a normal part of the human condition, and the lack of urgency and overall cynicism in which patients in pain continue to be treated. McCaffery first argued in 1968 that "pain is whatever the person experiencing it says it is, and exists where he says it does" (p95), and although this has been frequently repeated it is rarely operationalised and always moderated by the nurses own judgement (Chuk 2002, Dihle 2006, Klopper 2006, Harper 2007).

As large as these obstacles appear none are insurmountable and the role of appropriate focused education in improving practice in this area is unarguable (Adalrahim et al 2011, Chow and Chan 2015). The very fact that such focused and relevant education appears to be almost entirely omitted from the undergraduate nursing curriculum is a likely cause of many of the current issues perpetuating poor nursing practice. But equally is also a product of the lack of interest many practising nurses have in pain, which in itself may be a reflection of their own inadequate pre-registration educational preparation. As Mackintosh-Franklin (2014) identified not only are student nurses not interested in pain when they commence undergraduate programmes, their initial lack of interest is unaffected by their progression through undergraduate programmes and is mirrored by the views of qualified nursing staff.

Conclusion.

Improvements in pain assessment and management are clearly needed; pain as a primary or secondary presentation be it acute or chronic, is a growing global health issue affecting many millions of people in all areas of the world. Pain is a symptom of two of the three largest causes of death throughout the world, which in many cases cause extreme suffering which is frequently unrelieved (Van den Beuken-van Everdingen et al 2007, Goldberg and McGee 2011, van Hecke et al 2013,). Nurses have a fundamental duty to both care for patients and relieve suffering, however this review of undergraduate pre-registration nursing education in the UK demonstrates that pain is an infrequent component of the curriculum. It does not feature in any programme aim or learning outcome, and only 6 (8.5%) of 71 programmes included in this study make specific mention of it within their content.

Nurse educators need to do more than take note of these findings. Relief of suffering is a fundamental humanitarian concern and the apparent omission of pain assessment and management from the curricula of a longstanding respected caring profession is glaring. The International Association for the Study of Pain (2015) and the Royal College of Nursing (2015) have both published comprehensive pain curricula specifically focused at nurse education, and their freely available recommendations are a useful starting point for any future curriculum revisions.

In the UK the nursing profession has recently been subject to much criticism for failures to care (Willis 2012, 2015), and this review of educational preparation for pain serves as an example of educators failure to adequately prepare the future nursing workforce to be the compassionate, caring and effective nurses we would all hope to meet. Nurse education must change to focus on preparing students for the fundamental needs of patients, not the least of which is the prevention of suffering through the effective treatment of people in pain.

Limitations of Study

This study focused on published web based content and curriculum documentation within the public domain. It could be argued that this is an incomplete picture of pre-registration nurse education and that content on pain may be more clearly articulated elsewhere. However web based programme information and more importantly programme specific documentation are areas where programme content could be expected to be found, including references to pain.

Standards of published documentation and details in content varied greatly, all of which mitigate against direct comparison of documentation and websites. However the use of reliable search tools, such as Google and the HEIs own site specific tools should have enabled differences in documentary and website presentation to be overcome.

Finally this review searched 71 websites but only used 46 programme documents. It is unlikely that a larger sample of more detailed documents would affect the overall picture of the place of pain within the content of UK undergraduate nurse education, but this cannot be asserted with confidence.

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Tables

Table 1: Types of Information from the Programme Documentation.

Table 2: References to Pain in Undergraduate Nursing Programme Documents.

Table 3: Types of References to Pain

Number	Type of Reference
1	Reference to QAA mapping
1	In relation to fitness to practice linked to back pain
1	In relation to the NHS constitution
6	In either the module title or indicative content

Table 4: Online and HEI site specific search for Pain in Courses/Programmes/Modules

Table 5: Nature of available information from Google and HEI site search.

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HIGHLIGHTS

- Pain is a global health issue effecting millions of people worldwide.
- Educational preparation of nurses to assess and manage patients suffering pain is recognised as poor.
- This paper reviews the content of 71 undergraduate nursing programmes in the UK for reference to pain within the curriculum.
- Pain was infrequently referred to; it did not appear in any programme aims or learning outcomes, and was specifically present in the content of 6 (8.5%) undergraduate programmes.
- Pain remains a neglected area of the nursing curriculum and nurse educators need to urgently review its inclusion in their curricula.