Provider Perspectives

'They've just got symptoms without science': Medical trainees' acquisition of negative attitudes towards patients with medically unexplained symptoms

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ABSTRACT

Objective: Doctors find patients with medically unexplained symptoms (MUS) challenging to manage and some hold negative attitudes towards these patients. It is unknown when and how these views form. This study examines medical trainees' beliefs and influences about MUS.

Methods: Semi-structured interviews with 43 medical trainees. Using an iterative approach, initial emergent themes were explored in subsequent interviews. Data generation continued until thematic saturation was achieved.

Results: Participants had received no training in MUS but had developed views about causes and management. They struggled with the concept of 'diagnosis by exclusion'. Attitudes towards patients had developed through informal clinical observation and interactions with doctors. Many welcomed formal training but identified a need to integrate theoretical learning with clinical application.

Conclusion: Despite limited teaching, medical trainees are aware of the challenges in diagnosing and managing patients with MUS, acquiring attitudes through a hidden curriculum. To be welcomed, training must be evidence-based, theoretically informed, but clinically applicable.

Practical implications: Current medical training fails to equip doctors to engage with MUS and potentially fosters the development of unhelpful views of these patients. Informed teaching on diagnosis and management of MUS is necessary at a trainee level to limit the development of negative attitudes.

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1. Introduction

Medically unexplained symptoms (MUS), somatic symptoms inadequately explained by organic pathology, account for around 10–15% of primary care patients [1,2]. MUS can affect all bodily systems hence such patients are also common to most branches of secondary care [3,4].

MUS are commonly characterised as having a psychological component: when compared with patients with explainable symptoms, patients with MUS report greater levels of distress [5] and seek more emotional support from healthcare professionals [6]. However, patients are often reluctant to share psychosocial aspects of their illness experience with doctors for fear of being dismissed [7]. Furthermore, when emotional cues are presented, GPs often fail to capitalise upon these opportunities, instead offering somatic investigation, referral and treatment [8]. Studies document the frustration doctors' experience when

working with these patients (e.g. [6,9–14]). Clinicians report viewing MUS as illegitimate medical problems and describe patients as 'difficult' [15–17]. A similar literature reveals patients' frustrations with their clinicians and resulting breakdown in relationships [7,18–20].

Effective psychosocial interventions exist, though typically these are delivered within secondary care services and by trained mental health practitioners [21]. Training GPs to manage patients with MUS has also proved useful in improving consultation skills and providing meaningful explanations to patients of their 'unexplained' symptoms [22]. However, where such opportunities exist, uptake of training is limited [23]. Salmon et al. [9] found that GPs who had declined an opportunity to receive training, held negative attitudes towards patients with MUS, and undervalued their own psychological abilities [9]. Uptake of training is therefore more likely to be made by those already more skilled and confident in working with patients with MUS. Hence educational research should focus on accessing those clinicians with greatest need who may not readily seek such opportunities. An important strategy therefore would be to provide education for all trainee doctors early in their careers, before negative attitudes develop, where training cannot only be selected by those with greatest confidence and interest in the topic.

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To date there has been no known exploration of the beliefs and attitudes of pre-registration trainees towards MUS. Friedberg and colleagues [24] found improved self-reported attitudes towards patients with chronic fatigue and irritable bowel syndromes following a seminar to medical students. However, the range of beliefs held by trainees and the influences operating upon these have yet to be examined within this population.

2. Methods

The study was approved by a university ethics committee (490/07U). The sample was drawn from medical trainees from the clinical phase of their undergraduate training, thus ensuring they would have had opportunities to observe patients in a variety of settings. All 3rd and 4th year undergraduate students at a large medical school in the Northwest of England were invited to participate. From participants who responded, a purposive sample was identified to ensure maximum variance of gender, age and year of study. Consenting participants completed an interview with one of the authors.

A topic guide (Appendix A) served as a flexible, participant-led framework for questioning and explored participants' experiences of MUS and views about learning needs. Interviewers combined open questions to elicit free responses with focused questions for probing and prompting. Data generation was guided by principles of grounded theory [25] and the topic guide was amended to allow exploration of emerging themes and ideas in subsequent interviews. Interviews were digitally audio-taped and transcribed verbatim.

The inductive analysis proceeded in parallel with the interviews, taking an interpretative stance [26]. Coding was iterative and informed by the accumulating data, continuing analysis and discussion [27]. Thematic categories were identified in the initial interviews and then tested or explored in subsequent interviews which sought disconfirming evidence [25]. Each transcript was read by at least three authors and coding discrepancies resolved through team discussions. The process continued until thematic saturation was achieved, at which point data generation ceased.

The final sample included 43 participants, comprised of third ($n=27$) and fourth year students ($n=9$) and seven medical students who were taking an intercalated degree. Intercalating students spend their penultimate year of degree-level study undertaking a one-year honours programme in a medicine-related subject before returning to their medical programme. Intercalating students were studying psychology ($n=2$), pharmacology (1), physiology (2), and physiology with pharmacology ($n=2$). Of the 43 participants, 22 (51%) were male. Participants ranged from 20 to 24 years of age (mean = 21.23).

3. Results

The data are organised within two main themes which emerged from the data corpus: (1) Understanding and managing MUS and (2) Attitudes towards patients with MUS and learning opportunities. Both are described in turn, supported by illustrative quotes. Participant identification codes are provided in parentheses.

3.1. Understanding and managing MUS

Participants unanimously reported having never had any formal teaching about MUS. However, they had all observed patients presenting with these problems and had views about the possible causes of MUS, diagnosis and management. They had also developed ideas based on learning about long term

conditions and mental health problems that they considered had similar features.

3.1.1. Perceived causes of MUS

Participants held a variety of causal models of MUS. Principally MUS were viewed as being associated with psychological distress or psychosocial factors. Models were largely unsophisticated, making simple associations between mood and symptoms, without an understanding of possible mechanisms involved. Others attempted to explain the role psychological factors could play in causing and maintaining symptoms:

'Due to things like anxiety and stuff and thinking you've got something wrong actually does manifest itself as physical symptoms' (id 39)

Participants also believed that individual factors could contribute to developing MUS, though again, these were largely left unspecified:

'Some people will just probably never get these kind of diseases whereas some people are more susceptible' (id 33)

Some inferred that patients' personality might be a contributing factor. Others viewed all physical symptoms as having a purely biological basis. Here they believed clinicians had failed to investigate adequately, or that science currently lacked the knowledge and technology to detect the causal mechanisms:

'Things we have not known about yet. So it could be to do with a certain neurotransmitter we have never heard of yet, and we have not found, things like that' (id 23)

Moreover, some participants believed that science would never be able to adequately explain all physical phenomena that patients presented with, and this was a feature of medicine and medical practice:

'At the end of the day there is not always a cause for everything' (id 25)

3.1.2. A diagnostic challenge

Reaching a diagnosis for MUS was viewed as challenging. Many believed these symptoms should be labelled as MUS only in the absence of identifiable disease, emphasising that it was the doctor's role to continually search for an organic cause. MUS was a diagnosis by exclusion and should only be made as a last resort when other avenues proved unfruitful:

'They should...keep trying to find a cause for a symptom or like an underlying pathology 'till they've kind of exhausted all possibilities before...kind of ignoring it or putting a blank line under it as unexplained' (id 15)

This was the model of diagnosis that they perceived they were being trained in and therefore applied to this condition, even though it was a diagnosis they hadn't learnt about.

'Do all the investigations you can to rule out every single possibility. Through your training in med school you start off with something very simple and then you come up with differentials of what this could be and then you have to look at each one and decide why it's not that one and why it is most likely that' (id 24)

Participants perceived that MUS are often co-morbid with other disorders, presenting additional diagnostic challenges. MUS were viewed as 'less important' and 'serious' compared with more readily explainable symptoms:

'People have lots of different conditions going on at the same time. So that [MUS] seems to be almost forgotten if everything else is more serious' (id 13)

Table 1
Psychological management approaches suggested by participants.

Approach	
Acknowledge reality of symptoms	<i>'The biggest thing was to say that they have real pain. The pain that they're feeling, their chest pain is real, it's not fake pain that you treat as if they were joking' [11]</i>
Reassurance	<i>'Reassure the patient. I know it doesn't tell them what's wrong, but I think it would help them a lot, like taking away a lot of worries of what it could have been' [39]</i>
Developing relationship and being honest	<i>'Making sure I had a good relationship with the patient where I could be honest. ...that was maybe one of the downfalls. The doctors never said "I'm not sure what's going on. We're not sure"' [10]</i>
Behaviour change and exercise	<i>'Get them to look at their lifestyle and why they might be feeling like they're always aching, always tired, always got stomach-ache; so getting them to do exercise and better chemical releases in their brain to make them feel, sort of, well' [35]</i>
Relaxation techniques	<i>'Ways of, sort of, educating them at having a better outlook, I guess, on their physical health and if someone's particularly anxious there are a lots of, sort of, relaxation therapies and things like that that could be helpful' [35]</i>
Referral to mental health specialists	<i>'Stuff like counselling, yeah I'd say that seems quite good as well because there's massive waits for it but that's clearly because people do get a lot out of it, yeah like CBT and all that kind of thing.' [4]</i>

A further challenge to diagnosing MUS was distinguishing between patients with 'genuine' symptoms and those who were 'faking'. Participants believed as a diagnostician it was their role to tease out the 'truth':

'The patient's not going to lie, but there are times when you have to be able to differentiate when the patient is making it up' (id 8)

Participants were more familiar with functional diagnostic labels than the broader term of MUS (e.g. Irritable Bowel Syndrome or ME). They showed an awareness of the ongoing debate among healthcare professionals regarding the validity of these types of conditions:

'There is a lot of debate amongst doctors whether IBS is a real disease or not um and whether the patients are just kind of, not imagining the symptoms but. . .they get a lot of attention' (id 29)

Some described strategies they used to make a judgement over how legitimate symptoms were, such as noting the consistency of a narrative:

'You can't say to her that she is making it up if she is telling you that it is [a real experience]. And she never changed her story. . .always exact same description, everything exactly the same' (id 32)

3.1.3. Proposed potential management strategies

Despite no teaching about MUS, participants had ideas of how patients with MUS should be managed. These were informed by their beliefs about the causes of MUS: for those who held biomedical causal models, this principally involved dogged pursuit for an organic cause:

'I don't really see much other way to go around it than to just keep testing them, and testing them like periodically' (id 3)

Where this approach failed to reveal a pathological explanation, participants were limited to attempting to treat patients symptomatically, or to hope symptoms resolved spontaneously.

'The greatest tool for a GP, which I have been told quite a few times, is that you can say "Go away and come back if it gets worse"' (id 29)

Psychological management approaches were however often considered (see Table 1), such as acknowledging the reality of patients' experience and ensuring patients felt understood and taken seriously. Reassurance that the symptoms were not life-threatening was described as a valuable technique. Effective reassurance was thought to involve taking time to listen to a patient's concerns and didn't necessarily require a causal explanation. Participants believed it was important to invest time and effort in building a doctor-patient relationship and this could allow them to be 'frank' with patients.

Participants proposed encouraging lifestyle changes might be beneficial, particularly exercise which was thought to have a positive effect on mood. Education around managing anxiety and learning relaxation techniques or distraction were also suggested potential methods to prevent excessive focus on the symptoms.

Structured interventions such as cognitive behavioural therapy were viewed as potentially effective, however they believed this was beyond a doctor's remit and skill level.

'It's important for them [doctors] to like acknowledge it and stuff but I think in terms of treatment wise and stuff I think they [patients] should go off and see a specialist. I don't think doctors are particularly well trained to deal with that sort of thing' (id 6)

Ultimately there was a limit to how much psychological input could be achieved within routine medical consultations:

'In-depth emotional support is not really practical in a seven minute consultation' (id 34)

Whilst referral to mental health services was a way forward, participants were generally uncertain as to how psychological interventions worked. The mechanisms that might improve symptoms were thought to be either by alleviating MUS-associated stress or by validating patient's experience and improving their mood:

'If they do go to like counsellors and psychologists they can actually be sorted out because if they validate their concerns and stuff it can make the person happier and the symptoms might go away...it could actually be the answer, it could work' (id 30)

However, participants acknowledged that patients might not want to be referred to mental health services and that such a referral would only work if patients were open to the idea:

'If the patient doesn't agree and they think there is. . .something actually physically wrong with them, then it is not going to work 'cos they are not going to believe in it' (id 23)

3.2. Attitudes towards patients with MUS and learning opportunities

Participants described a range of attitudes towards patients with MUS and were aware of the implications of their attitudes and opinions on the doctor-patient relationship.

3.2.1. Developing attitudes

Although there was an overall negative attitude towards this group of patients, some voiced sympathy about patients' situation and the lack of solution. These participants spontaneously considered the impact that patients' unexplained symptoms might have, and were usually those who voiced less negative views of

MUS and described having had more substantial encounters with patients with MUS:

'Once you get to know people and you see their experience and you try and put yourself in their shoes, you realise the problems they go through and the lack of support they can get sometimes' (id 24)

Participants identified feeling frustrated and powerless when working with these patients. Encounters they had experienced or observed led many to report feelings of hopelessness, uncertain how to help:

'We want to do something but we are at a bit of a loss' (id 27)

Many believed that being unable to offer treatment emphasised their incompetence as doctors and devalued their skills:

'You aren't doing anything and you are obviously failing as a doctor' (id 30)

This led to participants experiencing a lack of confidence due to being unable to explain why MUS occur:

'It is really disheartening and a little bit surprising 'cos there is a lot of things we can explain nowadays so when you find something you can't, it's a knock to your confidence' (id 28)

Often, participants reported having experienced frustration towards the patients. Some claimed that patients had unrealistic expectations of their doctors, which further intensified the difficulty in communicating the limited amount of care that could be offered in practice:

'We are not miracle workers, we can do as much as we can do but ultimately we are not God, we don't actually know everything!' (id 29)

For these reasons, participants perceived potential for a breakdown of the clinical relationship. They acknowledged that some patients distrust their GP and lose faith in the healthcare system:

'Medicine's failed them really, and I suppose it would leave them feeling quite lost' (id 34)

Participants often identified doctors as a patient's sole 'hope' in managing their problems. Several recognised that problems within the relationship have serious implications for both the patient and health care system:

'It is a really big public health issue if patients don't trust doctors' (id 29)

Although some participants were sympathetic towards patients' experiences and the frustrations this could cause them and their doctors, others were dismissive of MUS as a legitimate healthcare problem. These individuals viewed such patients as attention-seekers, negating the reality of unexplained symptoms and the impact of these on patients' lives:

'A lot of these symptoms are minor [participant emphasis]. They're not like [pause] IBS, Fibromyalgia—they're irritable symptoms, they're not gonna kill you!' (id 9)

Repeatedly, students' attributed their negative attitudes to having been learnt through encounters with senior doctors and observing how doctors talked to and about patients with other health professionals as well as to the students. Participants believed that doctors were typically dismissive and unsympathetic in their approach to these patients:

'The minute she walked out the doctor was like, "She's making it up!"' (id 36)

Participants perceived that many of the doctors were 'set in their ways':

'Older doctors think it is completely like, there is nothing wrong with you, you are making it up, you are just pretending, it's not there – it's all in your head' (id 30)

Participants described frequently hearing views that denied the existence of patients' symptoms and, in some cases, that patients were mentally ill:

'The consultant thought she was completely insane really, 'cos she was a bit eccentric with her mannerisms' (id 23)

3.2.2. Identifying a learning gap

Despite participants reporting having received no formal teaching in the topic, they had acquired knowledge by listening to patients and observing doctors talk with and about patients:

'I've not had formal teaching on it, but I've had bits that I've picked up along the way' (id 2)

Many recognised that there was a training need in this area for doctors and that it was important to gain this learning early in their training in order to prevent negative attitudes forming:

'If you learn about it at the end after you have seen some people you have already got an attitude set like for or against' (id 30)

However, participants expressed concern that training might offer little. Some believed that training in specific communication skills was unnecessary, but that education was needed to ensure students developed an appropriate attitude towards this group of patients:

'You can't really train someone for it because there's no science behind it. There's nothing to really say other than symptom management, that's being a doctor anyway – just manage the symptoms. So, I'm not really sure there should be any training on it. Just tell people not to be prejudiced' (id 36)

Others were not aware of any interventions which were effective and stressed the importance of having evidence-based interventions to treat patients with MUS:

'Unless someone came out and said 'there's this new technique that if you speak to a patient, they're much more likely to respond better', then I would go to it, but if there's no evidence then I'm less likely to' (id 40)

Participants had strong views on how any training should be delivered to be useful and engaging. The value of learning about MUS through a combination of methods was argued to be important (e.g. lectures, group discussions, clinical placements). This was thought to reinforce learning and would underline the importance and relevance of the topic:

'I think it would have to be perhaps a bit of a mix... have a little seminar type thing, discuss it and then go to a certain part of the hospital where it would be relevant and then like just straight away go from learning it into practicing it' (id 14)

Learning embedded within clinical placements allowed students to recognise the practical application of the topic. There was concern that if training were delivered separately from clinical placements and labelled as purely theoretical, it would be easy for some students to dismiss the topic as irrelevant:

'In the first two years we did have psychology lectures... no one really enjoyed doing that because that's not what you signed up, that's not what our course is... I think people who aren't interested

in learning about it won't see any benefit to patients even if they did have more teaching' (id 7)

Nevertheless, several students voiced concerns about the lack of suitably qualified and experienced educators to deliver such training. They felt that training needed to be delivered in tandem with those who had an understanding of the theoretical underpinnings of MUS, and that there was a potential risk that if learning came exclusively from what was observed during clinical placements what would be taught was principally negative attitudes:

'I think a lot of doctors are quite honest, but I don't think it would be too helpful. . . like a lot of them would say "Oh it's in their head". . . so maybe it's not the best err. source of information. . . so maybe from the university maybe or from the psychology department' (id 7)

4. Discussion and conclusion

4.1. Discussion

This is the first study to explore the experiences and attitudes of medical trainees towards patients with MUS. Despite being a common disorder, students reported having no formal training in MUS. Nevertheless, they were aware of the problematic nature of diagnosing and managing MUS. Their understanding of the condition arose from experiential learning within clinical placements where students learnt from health professionals that such presentations were problematic and, in some cases, illegitimate medical presentations. Some students spontaneously recognised the challenges this type of health problem raised for patients and the frustrations that they might experience. However, many had already acquired negative views of MUS and felt frustration and hopelessness at the prospect of managing these patients.

Trainees generally valued the possibility of additional teaching to better manage patients with MUS. However the context of this training was a major factor in how open they were to additional learning opportunities. Particularly important was having evidence-based, theoretically sound learning that was clinically relevant and practical.

Although communication skills are now part of a core curriculum [28], there is a current lack of research into training students to diagnose and manage MUS. While students often receive training in how to break bad news to patients, no training is provided in breaking no news to patients [29].

Some attempts have aimed to improve doctors' communication with MUS patients. Reattribution training provides patients with an understandable explanation of their MUS [22] and is effective in improving communication between doctor and patient [23] and improving patients' satisfaction and beliefs that their symptoms may have a psychological basis [30]. As a model it is practical and easily taught, and maybe a useful framework to provide trainees with a way of working positively and effectively with these patients.

Students are increasingly exposed to clinical placements earlier in their training [31]. Health professionals have been identified as significant role models and are considered fundamental in shaping and altering trainees' attitudes [32]. Our study revealed that the clinicians whom students meet whilst on placements were the principle source of knowledge and inspiration about MUS. Doctors with negative attitudes towards MUS patients run the risk of passing on similar attitudes to trainees [31].

This hidden curriculum represents aspects of learning which are not necessarily directly or even intentionally taught; part of an organisation's culture [33]. This hidden curriculum is a core component of trainees' learning (e.g. [34,35]). Qualitative research

has provided a strong rationale that trainees' learning experiences can provide a better understanding of the hidden medical curriculum and ultimately can inform medical education [36].

At the very least, aspects of the hidden curriculum which contribute to the negative stigma associated with MUS need to be acknowledged by clinical teachers. Attempts to allow practitioners to examine emotionally difficult scenarios in an exploratory environment have demonstrated positive effects on patient-centred beliefs [37,38]. Subsequent efforts need to include preparation to manage patients with no identified cause to their symptoms.

In addition to addressing student's learning directly, our study reveals the need to address the attitudes of clinical tutors towards patients with MUS. Training interventions to address these attitudes and ensure learning about management of MUS is more positive, hopeful, and informed by evidence-base is an important avenue for further research.

Although the sample is relatively large for a qualitative study, it represents only a small proportion of the population of 3rd and 4th year undergraduates. Recruitment materials to the study stated clearly that interviews were not a test of students' knowledge and participants didn't need to be familiar with this patient group or condition. Interviewers took a naive stance during questioning, making it clear they were not expert in the topic. However, it is likely that those agreeing to participate in the research would have more positive attitudes towards MUS [9]. It is therefore interesting that participants were so forthcoming in describing negative views, and those of peers and clinicians they had observed. Suggesting that even amongst this more positive sample, attitudes depicted in the literature amongst experienced doctors had already developed. It is possible therefore that the level of negative views expressed is an under-representation of the views held by the medical undergraduate population.

4.2. Conclusion

Training for medical students about MUS is acquired informally through listening to patients and doctors. These encounters teach students that MUS are difficult to diagnose, frustrating to manage, and make illegitimate demands on doctors and healthcare services. Trainees were generally receptive about more formal learning opportunities if they were evidence-based and clinically relevant.

4.3. Practice implications

Findings reveal that not only is MUS a topic largely absent from the formal medical curriculum, students are learning, through observed clinical encounters, negative attitudes towards these patients and from an early stage, acquiring feelings of hopelessness in managing them. Whilst educational interventions to equip students to work effectively with patients presenting in this way would be useful, without addressing the learning needs of medical educators and clinical tutors, its impact may be limited.

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Conflict of interest

None.

Authors' contributions

SP conceived of and designed the study. LS, HW, KC and KA conducted the interviews and analysis. LS led the writing of the

manuscript to which all authors contributed and approved the final draft.

Appendix A. Topic guide

The order and exact content of the questions are determined by the participant and ongoing analysis. The following topics and prompts serve as an interview guide.

1. Experience of medically unexplained symptoms
 - What do you understand by 'medically unexplained symptoms'?
 - What do you think might cause medically unexplained symptoms? How do such symptoms arise?
 - Tell me about your experience of patients with MUS
 - Tell me about a patient you've come across with medically unexplained symptoms
 - How was this patient managed?
2. Management of medically unexplained symptoms
 - How do you think medically unexplained symptoms should be diagnosed and managed?
 - What role if any do psychological therapies have in relation to MUS patients?
 - How much do you think doctors are responsible for providing emotional support to MUS patients?
3. Learning needs
 - What, if any, training have you had about MUS?
 - What, if any, MUS management training would be useful?
 - When and where in your course would this type of training be most useful?
 - To what extent do you think MUS are a problem in medicine?

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