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Medical students' attitudes to professionalism: an opportunity for the GP tutor?

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WHAT IS ALREADY KNOWN IN THIS AREA

- Persistent exposure to the hidden curriculum may undermine aspects of professional development, such as empathy and ethical reasoning. Role models encountered during training may affect the development of professionalism positively or negatively.

WHAT THIS WORK ADDS

- Students' attitudes to an overall construct of 'professionalism', as defined by the GMC, appear to decline during medical training; in particular, male students are at risk of problems with professional development.
- As they progress through the undergraduate curriculum, students appear to experience increasing amounts of unprofessional behaviour.
- Teachers need to develop strategies to support professional development and these may need to be tailored to male and female students' differing requirements. GP tutors are in a unique position to provide mentorship and promote professional development in this way.

SUGGESTIONS FOR FUTURE RESEARCH

- More detailed appraisal of the gender differences between students
- Explore GPs' attitudes to providing mentorship
- Evaluate educational interventions designed to counter negative influences of the hidden curriculum

Keywords: gender differences, hidden curriculum, mentorship, professionalism, role modelling, undergraduate

SUMMARY

Objectives Using a novel tool based on General Medical Council (GMC) standards, this cross-sectional survey aimed to assess UK medical students' professional attitudes at different stages of the curriculum, and to investigate the influence of the hidden curriculum on these attitudes through

exposure to unprofessional behaviour during the medical course.

Methods An anonymous online questionnaire was developed, reflecting core professional competences outlined in *Good Medical Practice*. First, third and fifth year students received Section 1: 'Attitudes to professionalism'; third and fifth year students also received Section 2: 'Exposure to

unprofessional behaviour'. 'Professionalism score' (Section 1) and 'Exposure score' (Section 2) were analysed using ANOVA. Thematic analysis was used to analyse free text.

Results Response rate was 50.8% (363/714). Female ($F=18.24$, $p<0.001$) and first year students ($F=12.22$, $p<0.001$) had significantly higher Professionalism scores. Professionalism scores for male students showed a significant stepwise decline from first year to fifth year. Fifth year students had significantly higher Exposure scores ($F=23.4$, $p<0.001$). Qualitative themes included bullying, lack of accountability and sexism.

Conclusion Sensitivity to professionalism, as defined by the GMC, was higher and exposure to unprofessional behaviour lower in first year compared to fifth year. Addressing the hidden curriculum is crucial to protect professional development; GP teachers should be aware of these findings and are ideally placed to provide mentorship and support to medical students.

INTRODUCTION

As society evolves, its relationship with the medical profession continues to develop, with increased emphasis on the importance of openness and accountability, partnership and reflection. In consequence, medical teachers are refining their understanding of what it means to be a doctor and a renewed interest in professionalism has ensued.

There has been extensive discussion of what constitutes professionalism, with many varying and frequently overlapping definitions,¹⁻³ but no consensus has been reached; indeed, professionalism is rooted in cultural context and therefore inherently subject to change. However, in the UK, the General Medical Council (GMC) provides a practical blueprint for professional life, *Good Medical Practice*.¹ Since the GMC regulates medical practice in the UK, this provides a 'gold standard' of professional attitudes and behaviours.

Professional development can be seen as a complex, fluid process where experience and self-reflection lead to forward movement, and attrition may occur through underuse or via external influences.⁴ Medical schools' formal curricula are well documented, but students also learn from what they observe and experience, and the influence of culture and socialisation often remains unacknowledged – the 'hidden curriculum'.^{5,6} Observing teachers behaving unprofessionally has a potentially damaging effect on students' professional development, by creating a conflict between how they feel and how they may behave in order to 'fit in' with the culture of medicine.^{7,8} This is a negative consequence of the hidden curriculum and may lead to an inability to address complex ethical situations appropriately

despite having the requisite knowledge to do so – the 'theory-practice gap'.⁹

In this context the attitudes and actions of those involved in medical teaching become highly significant, as they provide key role models for the developing student.¹⁰ With this in mind, Hilton¹¹ advocated strongly for the role of general practice in education and in promoting professionalism. In general, teaching may help GPs to optimise both morale and clinical skills,¹² while students have demonstrated their preference for learning in general practice,¹³ and the role of the GP tutor extends beyond clinical acumen to role modelling and mentoring. Studies have variously demonstrated primary care physicians to have more patient-centredness,¹⁴ to be more likely to get involved in psychosocial discussion and to offer greater emotional support such as empathy and reassurance,¹⁵ values which are central when thinking about professionalism in practice. Jacobson *et al*¹⁶ argued that GP teachers could enhance professional development via the concept of the 'mensch' – an idea drawn upon from the German-Jewish tradition of a wise person who will listen and provide impartial, practical advice. GPs are ideally placed to fulfil this role, providing mentorship and guidance to medical students, particularly during clinical clerkships where one-on-one discussion and observation is possible. The RCP's working party on professionalism commented that 'Medical professionalism signifies a set of values, behaviours and relationships that underpin the trust the public has in doctors'³ and this will resonate with many GPs whose practice of medicine is deeply embedded in their relationship with their community.

Much literature has focused on particular aspects of professionalism,¹⁷ such as empathy or ability to deal with ethical dilemmas.^{7,8,18-20} However, more information is required about professionalism in its broader context, and how this concept can be mapped onto an understanding of daily practice as clinicians, using the 'gold standard' principles of good medical practice: relationships with patients, working with colleagues, probity and health.¹ Our study differs from previous work in that it is based on these key principles of professionalism, as outlined by the GMC.^{1,21}

Our aim, therefore, was to assess pragmatically students' attitudes to professionalism at different time points within a UK undergraduate medical curriculum, using a novel tool based on GMC-defined standards.

Additionally, by asking about students' exposure to unprofessional behaviour, we aimed to investigate the influence of the hidden curriculum on students' professional awareness.

METHODS

We designed the Queen's University Belfast

(QUB) Professionalism Index (QUBPI) to assess attitudes to professionalism (Section 1) and exposure to unprofessional behaviour (Section 2) among first, third and fifth (final) year medical students at QUB. The study received ethical approval.

At QUB, students undertake a five year systems-based course. Most entrants are school leavers. Students were surveyed early in the autumn semester. First year students were just beginning their training, third year students had completed two years of preclinical training with limited clinical exposure, and fifth year students had completed an additional two years of clinical training. Students who were repeating third or fifth year, transferring into the course from other universities or registering late in the year were excluded.

Students were sent an email containing a link to an anonymous online questionnaire. Reminder emails were sent at intervals. We offered a small incentive in the form of a prize draw (for which ethical approval was received) which students could enter without prejudicing their anonymity. We chose a questionnaire as an accessible method of obtaining data on attitudes from a large number of respondents. Taking previous studies into account,^{22–25} we designed and piloted an instrument to be specifically relevant to UK and Irish medical students. Other reasons for creating a new tool included seeking an overall view of the construct (rather than focussing on a single aspect as in previous studies^{7,8,24}) and that no existing tool was found with the desired pragmatic basis on GMC principles.^{1,21} Section 1 comprised a mix of short vignettes and general statements, and Section 2 a range of unprofessional behaviours. **Each question in Section 1 reflected one of five key domains in Good Medical Practice¹ – probity, health, relationships with patients, working with colleagues and good medical practice. Questions in Section 2 were also derived from these principles, taking into account informal feedback received from students during the pilot.** We included behaviours that we estimated students might be most likely to encounter, such as rudeness towards another team member, together with very significant breaches of professionalism such as racism. Free text boxes were included to gain a deeper insight into student experiences and to allow students freedom to comment on any issues not already covered.

Responses were scored using five point Likert scales, from which an overall Professionalism score (Section 1) and Exposure score (Section 2) were calculated. Higher scores for Professionalism indicated preferred professional attitudes; lower Exposure scores indicated less exposure to unprofessional behaviour. Examples of questions and response options are given in Box 1. The two main outcome measures (Professionalism and Exposure scores) were subsequently analysed using ANOVA. Chi squared tests were used to

Box 1 Examples of questionnaire items

Section 1: Attitudes to professionalism

(Q 5) Doctors can make decisions without involving a competent patient, if the outcome is in the patient's best interests

Strongly agree / agree / undecided / disagree / strongly disagree

(Q 19) Colin, a fourth year student, takes consent on his own from a patient going for an operation

Completely acceptable / somewhat acceptable / undecided / somewhat unacceptable / completely unacceptable

Section 2: Exposure to unprofessional behaviour

How often have you experienced:

(Q 7) A doctor telling a patient something which is not true

Never / rarely / sometimes / frequently / very frequently

(Q 10) Being asked to do something you have not been trained to do

Never / rarely / sometimes / frequently / very frequently

Free text

If you have experienced any of the above:

What kind of situation have you been involved in?

How did being involved make you feel?

compare characteristics of responders and non-responders. Free text responses were analysed independently by three researchers using thematic analysis.

RESULTS

The overall response rate was 50.8% (363/714), with first year (53.4%: $\chi^2=19.97$, df 2, $p<0.001$) and female (48.9%: $\chi^2=4.59$, df 1, $p=0.032$) students most likely to respond (Table 1).

Internal consistency was measured using Cronbach's alpha, which was 0.77 for Section 1 (Professionalism) and 0.88 for Section 2 (Exposure), indicating the questionnaire's ability to measure these two overall constructs was acceptable.

Professionalism and exposure scores

Professionalism scores were significantly higher for first years ($F=12.22$, $p<0.001$), with no difference between third and fifth year scores. Female students scored significantly higher than males ($F=18.24$, $p<0.001$). There was also a significant year by gender interaction, with a stepwise decrease in male students' scores as year increased ($F=3.25$, $p=0.04$; Figure 1).

For exposure score, fifth years scored significantly higher than third years ($F=23.4$, $p<0.001$), with no significant gender difference ($F=0.3$, $p=0.59$).

Table 1 Respondent characteristics

Year	Response rate n/total sampled (%)	Age Mean in years (range)	Gender	
			Male n/total sampled (% response)	Female n/total sampled (% response)
1	135/253 (53.4)	18.9 (18-35)	51/116 (44)	84/137 (61.3)
3	89/261 (34.1)	20.9 (20-28)	39/113 (34.5)	50/148 (33.8)
5	93/200 (46.5)	22.9 (22-27)	32/86 (37.2)	61/114 (53.5)

*Although 363 students responded, only 317 provided the above demographic data

Qualitative data

Free text boxes were included to add depth to the quantitative data and to allow students to comment on issues not otherwise covered. Fifty students gave free text responses. Recurrent themes included bullying, sexism, racism and lack of accountability, with students indicating feelings of humiliation, anger and concern. Examples of comments linked to these themes are shown in Boxes 2 and 3 below.

DISCUSSION

Within this cross-sectional sample of medical students, there was an inverse association

between seniority and professional attitudes and values, with first year students performing best on professionalism score. Additionally, female students outperformed males at all points, with male students' scores showing a marked step-wise reduction in professionalism score across the year groups. Fifth year students reported significantly higher levels of exposure to unprofessional behaviour than did third years. Student comments on their experiences of unprofessional behaviour add perspective to the quantitative results, giving insight into the strength of feeling amongst respondents and providing potential for further qualitative exploration of these issues in future research.

Students entering first year were assumed to have had no exposure to doctors behaving unprofessionally; most third year students in our sample reported some experience of unprofessional behaviour, while mean professionalism score was higher in first than third year. During those first two years, students are being inducted into the culture and practice of medicine and along with this process of socialisation something of their early enthusiasm and idealism appears to be lost and not regained. Mature students did not have better professionalism scores than their younger peers, concurring with reports from the USA where medical students are generally older postgraduates at entry and where progression through medical school, rather than age, appeared to be the defining issue regarding professional development.⁶

Females outperformed their male peers at all stages in their professionalism scores and scores were fairly consistent between third and fifth year, whereas male students' professionalism scores were lowest in fifth year. There was no significant difference between male and female

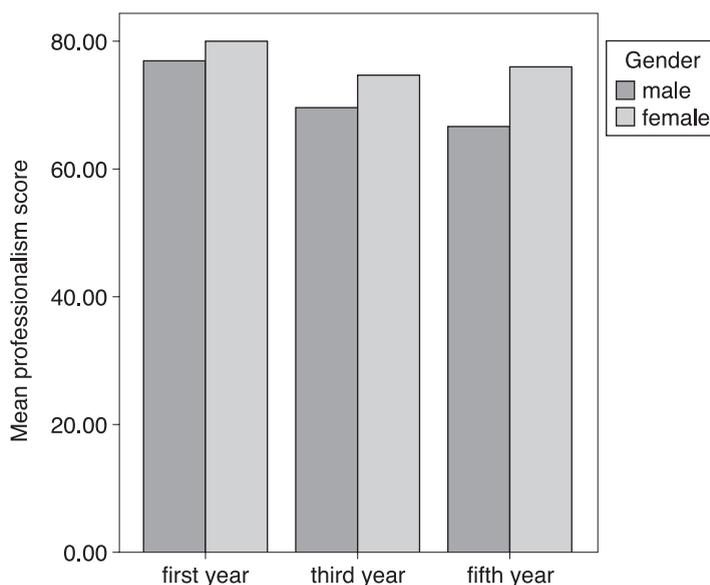


Figure 1 Professionalism score by year and gender

Box 2 Themes from qualitative data**Bullying**

'Bullying or 'teaching by humiliation' is still carried out by a number of consultants'
 'This chasm of consultant expectations vs. teaching reality can be enormous, with the accompanying verbal attacks often being relentless, unconstructive and unprofessional'

Sexism

'Coffee and bun duty is for any girls'
 'I attended a clinic with a male doctor who. . .made it clear he believed females should not be working in his speciality.'

Racism

'A doctor passing judgement on my language skills based on my ethnic background in front of the entire tutorial group'
 'A student in my placement group being stereotyped in front of patients, students and staff because of his ethnic origin'

Lack of respect for patients

'Making funny/ joking remarks about patients in staff room'
 'A doctor totally ignoring a patient's request for information and passing it off as unimportant'

exposure scores, suggesting that male students may show more susceptibility to adverse influences of the hidden curriculum, while female students are resilient to these. The reasons for this gender difference are not clear, although this finding does resonate with other work.²⁶ Females have been known to display more patient-centred communication and empathy²⁷ and male students may view these qualities as being stereotypically 'female'; alternatively, male students may be drawn to role models embodying more traditional aspects of medical culture. More research is required urgently to investigate why this happens and to develop appropriate strategies for managing the gender difference.

The questionnaire is easily accessible and transferrable to other student groups or institutions. All students had a minimum level of computer literacy and had computer access, so an online tool was appropriate. It was hoped that the privacy provided by the internet (compared to a classroom setting) would encourage students to respond frankly. Internal consistency of the QUBPI was good.

Response rate was 50.8% and it is acknowledged that the views of those who replied may not be representative of the whole; any extrapolation of the results should be approached with a note of caution. Although face to face distribution of paper questionnaires might have increased response, we felt an online, anonymous submission was likely to yield more meaningful results. Of particular note, third year and male students were less likely to respond, and since these are the groups who performed least well on profes-

Box 3 How students feel about their reported experiences**Lack of accountability**

'As students, we feel there is no way of reporting such behaviour without adversely affecting our marks at the end of the attachment.'
 'Doctors and nurses are not held accountable for bullying'

Disillusionment

'Like an absolute idiot and makes me seriously question my career choice'
 'My confidence evaporated, I no longer trusted or respected my 'teacher', and I felt completely powerless to say or do anything. Dealing with unreasonable primadonas is an amazingly frustrating experience, and frankly, it puts me off the medical profession entirely.'

Humiliation/ anger

'I felt extremely awkward and uncomfortable, and when I tried to express this I was told that I had to learn to take a joke and it was all part of the training'
 'It made me feel very angry! I have every right to be treated equally and get equal experiences as my male colleagues'

Concern regarding the learning process

'I am aware that there are just 'difficult people' no matter what you do in life, however this environment is not promoting teamwork, communication, probity etc.'
 'Just made me realise the difference between what we're taught and what really happens'
 'The doctor in question becomes quite inaccessible and fails to carry out their role as teacher and guide'

Positive comments

'I think communication skills as it is taught is definitely having an effect on doctors' behaviour and maybe this teaching wasn't as prevalent for the older generation of doctors'

sionalism score, there is a potential source of bias here. Equally, students who have experienced difficulties with professional issues may be more inclined to respond. These factors must be considered in interpreting the study; however, our findings are broadly in line with the wider literature.

This is an observational study and attribution of cause is not possible. Confounding factors such as age, personality, cultural background and differences in life experience which may also influence professional attitudes and values must be considered. Additionally, these findings are from one institution, although the results resonate with other literature as described above, and the demographic mix is similar to that of other studies undertaken at UK medical schools.^{6,24,26} It is not possible to control for possible small differences in teaching within the formal curriculum for different year groups; longitudinal follow up of first year students is planned.

Investigation of the hidden curriculum, while morally imperative to protect students, is ethically sensitive. We felt that given the closeness of the local medical community, students might be reticent in discussing their experiences for fear of jeopardising their future careers; with this in mind we traded a potentially higher response rate from face-to-face invitation for the anonymity of the internet, in the hope that this would encourage students to be frank and open. There was no pressure on students to complete the questionnaire and it was sent out by a member of the research team (JLJ) who was a research student, rather than faculty at the time. Students were asked to refrain from identifying individuals. Although explicit student support was not offered as part of the study, routes by which students can 'whistleblow' or simply discuss any worries are made clear to students at many different points in the curriculum. The findings of this study have important implications for teachers and so were appropriately fed back to university faculty at a local level. Such ethical sensitivities will remain an important consideration for further study into this area.

CONCLUSION

Within the confines of an overstretched healthcare system, it is difficult to allot time and resources to professionalism. However, in addressing the hidden curriculum, we can protect the professional development of tomorrow's doctors. The first step is to increase awareness of its existence. All medical teachers should be aware of the potential impact of their actions on impressionable medical students. Professionalism should be constantly reinforced and assessed.²⁸ Professionalism extends beyond ethics, and relevant teaching topics should include reflective practice, communication skills and relationships with colleagues and patients, together with an appreciation of the wider context of medicine.²⁹ In particular, male medical students must receive support tailored to their needs. Allowing students to discuss difficult scenarios in small groups with a trusted mentor may help students learn how to recognise and resolve professional issues.

Students in general have a positive view of general practice,³⁰ and primary care teaching has unique advantages for addressing the points above. These include one-on-one supervision, accessibility, and, through its community orientation, the ability to help students appreciate the broader context in which medicine is practised. Although professionalism is the domain of all educators, it is arguable that the communication skills, holistic approach and person-centredness which are so integral to general practice³¹ are transferable skills which help GPs listen and respond to students in the same way as to colleagues, patients and families. A secondary consid-

eration is that such mentorship may encourage students both towards careers in general practice and towards better communication across the primary/secondary care interface.

While acknowledging its limitations, this study provides new evidence that there is a negative change in students' attitudes to professional standards, as outlined by the GMC guidelines,¹ during their medical training. In step with this, students are exposed to unprofessional behaviour via their teachers. Greater awareness of the hidden curriculum is important in protecting professional development; GP teachers are in a privileged position of providing mentorship and support to students and should recognise and promote the significance of their role.

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Conflicts of interest

None.

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