The hidden curriculum in undergraduate medical education: qualitative study of medical students’ perceptions of teaching
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Abstract
Objective To study medical students’ views about the quality of the teaching they receive during their undergraduate training, especially in terms of the hidden curriculum.
Design Semistructured interviews with individual students.
Setting One medical school in the United Kingdom.
Participants 36 undergraduate medical students, across all stages of their training, selected by random and quota sampling, stratified by sex and ethnicity, with the whole medical school population as a sampling frame.
Main outcome measures Medical students’ experiences and perceptions of the quality of teaching received during their undergraduate training.
Results Students reported many examples of positive role models and effective, approachable teachers, with valued characteristics perceived according to traditional gendered stereotypes. They also described a hierarchical and competitive atmosphere in the medical school, in which haphazard instruction and teaching by humiliation occur, especially during the clinical training years.
Conclusions Following on from the recent reforms of the manifest curriculum, the hidden curriculum now needs attention to produce the necessary fundamental changes in the culture of undergraduate medical education.

Introduction
The development of medical education has been described as a history of reform without change.1

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develop into both practitioners and members of the medical profession.

Methods

We undertook a qualitative investigation of the content of the hidden curriculum and how it is delivered to medical students. Full details of the method are available elsewhere. In brief, the study cohort consisted of 36 students in years 1-5 in one medical school in the United Kingdom (table); recruitment was stopped when saturation was reached for the key study themes. The students were selected by random and quota sampling, stratified by sex and ethnicity to ensure that the views of these groups were represented, with the whole student population of the medical school as the sampling frame. Thirteen students refused to participate, and the 36 respondents did not differ in key characteristics from the whole medical student population of the medical school.

Qualitative data were collected in one to one semi-structured interviews (see bmj.com), which took place in a private room in the medical school. We transcribed the interviews, identified emerging and repeated themes, and used NVivo and Concordance software to conduct content and discourse analysis, with simple counting methods. Validity checks included plausibility of the accounts in the experience of the authors; seeking clarification and examples of key points during the interviews; and paying attention to negative instances. Each medical student gave written informed consent to participate in the study.

Results

Four main themes emerged: personal encouragement, haphazard teaching, the importance of hierarchy, and getting ahead by being competitive.

Personal encouragement

Among the 36 students, 26 identified 46 specific staff members as positive role models who had an encouraging and motivating impact on them. These teachers’ commitment to teaching and to communicating with students, patients, and colleagues were highly rated. As one student put it:

There have been a couple of lecturers that I have thought were very good… One of them was one of my tutors as well so I got to know them personally, and he’s a really nice bloke… good lecturers—approachable and you can chat to them about anything else. (Year 2 student)

Most of the role models mentioned were male doctors (27/46), who were seen particularly valued in relation to their knowledge, professional power, and authority. The female medical role models (19/46) were said to convey more “human” attributes: tolerance, integrity, respectfulness, and support towards students. Only two of the 46 named role models were non-white, although 14 of the 36 students were themselves non-white.

Enthusiastic about her discipline, involved students actively in the work, excellent knowledge and practical skills, nice to patients, staff, and students. (Year 5 student)

Haphazard teaching

Most students (25/36) described the haphazard nature of teaching, particularly by clinical staff, who often disregarded the overt timetable. Twenty students indicated that unscheduled changes to teaching sessions were time wasting and very common. Final year students (6/7) were especially critical of what they perceived as a lack of commitment and poor teaching skills in some teachers. Despite this, most students gave a series of excuses to explain teachers’ absence from educational sessions. Often students were profoundly demotivated by their perception that many clinical teachers had a low level of commitment to teaching, and this led to a repetitive cycle of non-attendance by students and teachers alike.

I mean we’ve had so many days where we’ve had sort of, five different sessions scheduled—and no one turns up! You just think, you know, why bother coming in? So that’s irritating. It does happen a lot to everyone. I mean, obviously the people who are teaching have another job—it’s not their only job to teach you—but it’s when you turn up and they don’t get somebody else to do it, or they don’t even let you know that they haven’t turned up. (Year 3 student)

Importance of hierarchy

One of the principal ways in which students learnt about the importance of hierarchy in medicine is through teaching that involved humiliation, a feature noted in previous studies. In total, 21/36 students reported 29 incidents of humiliation: 10 they had observed or heard about and 19 direct personal experiences, particularly during their clinical years. Almost all the reported perpetrators were male doctors (28/29 incidents). Typically the incidents occurred in ward rounds, when students were unable to answer the same repeated question (11 incidents) or when they were criticised for an inadequate clinical examination (8 incidents). In three quarters of the incidents (21/29) the perpetrators were senior medical staff. Again, students often reported excuses for such behaviour by senior teaching staff or blamed themselves for these events.

I’ve found my first rotation was very stressful, humiliating, I worked and read because of fear, because of being targeted—and that was just miserable… One time, the con-
consultant came in when I was examining the patient—his regis-


ter was there, his SHO was there and just started asking


me questions . . . I just went blank and didn't know the


answers to his questions—and then he got angrier . . . after


things like that . . . you don't even have the confidence to take


blood or anything. (Year 3 student)


There were also several reports of nurses and mid-


wives treating medical students disrespectfully (15/23


clinical students). Such behaviour may indicate a


degree of professional rivalry."


When, I think, you go to a teaching hospital, you're again,


you know. “Oh, it's a medical student turned up on the


wards!” The nurses go: “Cor blimey,” you know, “here's


another one!” Some of them actually try and give you a hard
time . . . the midwives especially . . . they'll fob you off . . . most


male medical students, you know, when they do obs and

gynae, they'll have this totally biased opinion of midwives—


which I do at the moment as well. They are the women from


hell! (Year 5 student)


Getting ahead by being competitive


Half of the students (18/36) reported that competition


rather than cooperation is the defining characteristic


of medicine, a view that was more common among


clinical students (16/23) than non-clinical students


(2/13). Related to this, for 13/36 students one


“module” of the hidden curriculum concerned the


need to impress senior medical staff, which was directly


seen to prepare the way for prestigious jobs in the


future. More subtly, some students used phrases during


the interviews which implied some advantage over


other students. For example, 5/9 mature students


reported at the beginning of the interview that they


already had a degree or professional qualification. A


student reflected on this atmosphere:


You notice that students during the clinical years try to stand


out, stabbing each other. (Year 3 student)


Discussion


This study relies on interview accounts rather than


observation of actual teaching. Secret observations,


which are perhaps ethically unacceptable, would be


necessary for further verification of students’ accounts.


An added limitation of this study is the fact that data


were collected from only one medical school. This


means that there is some potential for contamination


between students’ accounts, although this was unlikely


because fewer than 2% of all students at that medical


school were interviewed. Even so, their reports suggest


a worrying lack of accountability of medical teachers in


overstretched clinical settings. The absence of any con-


sistent formal system of monitoring in UK medical


schools is currently under review in relation to the


General Medical Council2 and the Quality Assurance


Agency, although a system of peer review is gradually


being introduced.


Medical education has largely escaped from the


quality control rigours imposed on clinical practice. In


part this may be because clinical practice and research


have long dominated the attention of doctors, and

teaching has been considered a lesser activity, without


clear incentives or career structures. Indeed, relatively


few doctors have received formal training in teaching


methods, educational theories, or modes of assess-


ment.21 The Dearing report of inquiry into higher edu-


cation20 highlighted this as a deficiency for all teachers


employed in universities, not only in medicine, and


made clear recommendations, which have been


endorsed by the General Medical Council.20 For this


reason Leinster has proposed creating a proper system


of rewards for teaching, a formal structure of account-


ability and monitoring within medical schools, a recog-


nised teaching qualification, financial allocations for


identified teaching sessions, and the provision of dedi-


cated administrative staff to minimise the time doctors


lose from patient care and research.24 Teaching could


then be incorporated in the job plans of consultants


and reviewed as part of their annual appraisals.


Although some NHS trusts have introduced meas-


ures intended to stamp out bullying among staff mem-


bers,21 these measures have not yet been widely


adopted within teaching hospitals. Indeed, this would


involve a change in the core organisational culture and


identity of medicine. Such policies could be framed in


terms of “zero tolerance” towards the humiliation of


students, made explicit in the contracts of teaching


staff, with workable ways to allow confidential


reporting of such behaviour without damage to the


career prospects of whistleblowers.


Further studies of the hidden curriculum from


other medical schools are needed, including the


perspectives of clinical teachers, to assess the generalis-


ability of our findings. For example, rapid changes in


the ethnic composition and sex ratio of medical


students may have important implications for medical


education, and understanding these can result in


evidence based changes to the hidden as well as the


manifest curriculum in future.


We are grateful to all the students who participated in the study,


for their time and openness. We also acknowledge the valuable


contributions of the senior staff at the medical school who sup-

ported this research. This study was carried out while HL was a

PhD student in the Department of Sociology, Goldsmiths

College, University of London.


Contributors: HL designed the study and carried out interviews

and the data analysis. CS advised on study design and data

analysis and provided helpful comments.
analysis. Both wrote the paper. Caroline Ramazanoglu assisted at an early stage of the study, Kate Nash provided invaluable advice and support, and Floss Chittenden provided unfailing support with the transcriptions of the interviews. HL is guarantor.

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Ethical approval: The full relevant requirements for the ethical conduct of research, as set out by the British Sociology Association (www.britsoc.co.uk/Library/Ethicsguidelines2002.doc), were strictly adhered to.


Corrections and clarifications

Spinal immobilisation for unconscious patients with multiple injuries

One keynote spoke the identity of the second author of this clinical review by C G Morris and colleagues (28 August, pp 495-9), leading to Eamon Paul McCoy being listed as W McCoy. The correct designation of the authors is C G Morris, E P McCoy, G G Laverty. The bmj.com versions have been amended.

Lassa fever: epidemiology, clinical features, and social consequences

A further small error has belatedly come to light in this clinical review by J Kay Richmond and Deborah J Bagpole (BMJ 2003;327:1271-3). Reference 12 should have read: Bausch D, Lassa fever in Sierra Leone. London: World Health Organization, 2000 (that is, not published by Merlin, as was stated).

Hospital at home for patients with acute exacerbations of chronic obstructive pulmonary disease: systematic review of evidence

The authors of this paper, Felix S Ram and colleagues, point out that they should have said that a longer version of their review (7 August, pp 315-8) is available in the Cochrane Library (www.cochrane.org). Reference 12 should have read: Bausch D, Lassa fever in Sierra Leone. London: World Health Organization, 2000 (that is, not published by Merlin, as was stated).

Testing hypotheses

Medicine is the natural home of the untested hypothesis, says Hugh Pennington while wondering why doctors are so unscientific.1 When the pain started to go down my left arm, one day some four years ago, I considered my family history of heart disease and came to the obvious conclusion. So the next day I cycled from University College London to the Royal Free Hospital, up Hampstead Hill, to my relief without a twinge. With the angina hypothesis disproved, I could safely ignore the pain, and I dug some analgesia in case I needed it. That night I could not sleep for the pain in my arm. Paracetamol did not touch the pain, and, as it spread across the chest and I began to feel nauseated, I finally realised that the disc was innocent. The emergency services moved quickly, and the hospital departments dealt with the incident with great skill. Undergoing an emergency coronary artery bypass graft is an education, particularly if you have no major risk factors for heart disease (the “family history” now being attributed to smoking rather than genetics).

Back on my bike again and even eyeing a tree root in need of extraction, I understand that medicine is the natural home of hypothesis testing, but that we do not test hypotheses under circumstances of our own choosing but according to our hopes, fears, and competing demands.

Steve Lilley senior partner, Lonsdale Medical Centre, London


1 BMJ: first published as 10.1136/bmj.329.7469.770 on 30 September 2004. Downloaded from http://www.bmj.com on 21 October 2002 by guest. Protected by copyright.