Professional development and ethics

Professional development in undergraduate medical curricula – the key to the door of a new culture?

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Context One of the most pressing requirements for contemporary medical education is to develop a framework for theory and practice of professional development which results in the attainment of professional competencies suitably robust for a lifetime's practice. The proposed content of a professional development curriculum may be reasonably straightforward to establish from policy documents and public expectations, but the process of achieving the desired outcomes is more complex, because professional development is largely based on attitudinal learning. Attitudes are at the interface between the personal and public psyche, relying more on individual experience and the accumulated impact of social and cultural interpretations than on propositional knowledge, and are therefore less amenable to factual or didactic teaching.

Aims The purpose of this discussion paper is to develop thinking on the conceptual frameworks which need to underpin curriculum decision-making for professional development, especially in undergraduate medical training where models of good practice are less well-established. It brings together work from educational, sociological and psychological perspectives to elucidate the key principles which are most likely to result in acquisition of desirable professional attributes.

Implications The literature suggests that successful professional development needs to be based on explicit values, which are repeatedly demonstrated in the learning environment, and modelled by senior colleagues and tutors; that the curriculum should incorporate a clear model of emotional as well as cognitive development; should be a major component of summative assessment; and needs to include formative mentorship at all stages of training.

Keywords Education, medical, undergraduate/ methods; professional competence; curriculum; mental processes; mentors/education.

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Professional development in medical education – is there a problem?

The term ‘hidden curriculum’ has been used to describe those ‘processes, pressures and constraints which fall outside ... the formal curriculum, and which are often unarticulated or unexplored’1: this suggests a set of learning experiences which are unintended but are implicit in the organisational setting, and may explain the mismatch between aims and outcomes in some aspects of medical training. The case for re-examining the impact of medical education was made almost 40 years ago, when an important study from the USA2 demonstrated the plasticity of student idealism in the context of an institutional culture where their clinical experience was arbitrarily organised, and their ability to rehearse professional roles was limited. This created considerable pressure on students to adapt themselves maximally to the setting in which they had to procure learning opportunities as and when available. A crucial finding was that students' behaviours did not express their longterm espoused values if these were seen as unacceptable or irrelevant in the immediate setting, and implies that their professional idealism would only be expressed in settings where this was encouraged and rewarded. A later review article3 confirmed that student attitudinal factors rewarded in one setting (e.g. a positive orientation towards psychosocial care) were not maintained in settings where priorities differed: the same author found students failed to develop significant awareness of the roles of other health professionals during their training, in spite of routine and repeated contacts in clinical settings. These examples suggest that assumed 'osmosis' of appropriate values is unpredictable and inconsistent in its outcome.

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Professional development outcomes must be set for undergraduate medical curricula. Achieving these will require change in learning methods and in educational culture. Innovation in this area may pose challenges both for practical and political reasons.

Such issues have contributed to the systematic global attempt over the last decade to reform medical education, and to challenge the increasing emphasis on a narrowly bioscientific and pathological model of medical practice. Medical schools and those responsible for postgraduate training have been expected to address not only knowledge and skills, but also attitudes, and to develop models of learning which enable attitudinal development to be supported and assessed. The outcome of such reforms is eagerly awaited, not only by a public rooked by recurrent examples of major lapses in clinician performance, but also by other health professionals seeking an improved relationship between practitioners, and by specialities such as family medicine where attitudinal factors clearly appear to influence recruitment.

Attempts have been made to establish instruments that can track aspects of attitudinal change over time, and thus measure the impacts of educational reforms and underlying factors. However, such measures are not yet established and are, in any case, designed to assess rather than adapt attitudes. Thus we are faced both with a problem of dissonance between the desired and perceived outcomes of medical education, and with defining or measuring these for research and evaluation purposes. The next section considers some efforts which have already been made to improve the situation.

Contemporary solutions

A number of proposed areas of change already exist which may offer steps to progress in the debate around best practice in medical professional development: these include selection for medical training, new curricular designs, modified educational methods, models of good practice from other health disciplines, and the role of a broader academic education.

Rezler's conclusions from her review were that although courses could not apparently result in a stable attitudinal development towards holistic practice, there was a tendency for students with 'less authoritarian and dogmatic views' to self-select into more innovative courses, and thus that 'the answer lies in selecting students who possess certain attitudes prior to entrance... instead of trying to develop such attitudes ... after they enter'. Although this is somewhat reminiscent of a 'nature vs. nurture' debate, there are now examples of schools with pre-selection criteria and early differentiation pathways whose rationale is to match student attitudes to desired outcome. Other schools have adopted a more environmental response, introducing new professional development themes within their curricula, explicitly exploring and assessing attitudes, and using learning methods such as peer review that require exercise of professional skills in the process of knowledge gain. Many schools have developed learning in medical ethics to explore issues such as informed consent or confidentiality, and with a focus on the expectations of the professional regulatory bodies. However, the outcomes of such attempts are variable, and the impact of single modules may be insufficient to alter longstanding student attitudes.

Other health professions appear to be much more explicit about the development of attitudes and the process that the student may expect. Nursing offers its students specific models of professional socialisation and the expected stages of professional 'growth', against which they can judge their own progress. Social work, psychotherapy, and nursing all employ models of mentoring and supervision which aim to fulfil educational, managerial, and supportive roles in professional development. Another suggested contribution to professional development comes from the protagonists of the inclusion of humanities in medical courses: these are expected to deepen understanding, encourage reflection, and lend a broader academic mien to student experience. All these options are being tried and evaluated: their theoretical and conceptual bases, however, are not always explicit. The next section therefore examines the potential contribution of non-medical perspectives to the debate on how best to implement professional development in basic medical training.

An educational perspective

Maudsley & Strivens have recently recommended some key educational contributions to the acquisition of professional knowledge. These include structuring of experiential learning to maximise impact on professional domains, particularly through the use of student-centred reflection and development of critical thinking. These authors appropriately draw on the work of
Donald Schon,26 who highlighted the need to make skills of professional practice explicit, and who articulated the core theoretical purpose of reflection by professionals as 'the means by which the mind has knowledge of itself and the way in which it deals with experience'. Other key concepts include Kolb's learning cycle,27 where an opportunity to reflect is an essential stage in turning experience into appropriate learning, and the use of adult learning methods.28 The educational rationale for associating adult learning approaches with professional development curricula is robust, because of the nature of the skills to be learned. For example, the mastering of attributes for effective teamwork and collective responsibility for patient care1 appears to have a direct conceptual link to the role of adult learning to 'facilitate problem solving, including problems associated with the implementation of collective action';27 similarly, there is a link between professional self-care20 and the 'recognition of the relationship between personal problems and public issues'.27 By contrast, a large group talk on racism may be informative but will be unlikely to allow students to challenge or change their own behaviours. The tentative conclusion that might therefore be drawn from this work is that professional development learning opportunities must at minimum be constructed to engage students directly with experiences that mimic their future roles, create opportunities that allow them to reflect and rehearse the skills involved in managing such experiences, and require them to take personal responsibility for the outcomes of both their experiences and their learning.

There may, however, be a 'theory–practice gap' that faces medical educators when implementing professional development curricula. Eraut29 points out the danger that many professional competencies are process-related and generic, and that curricula structured around profession-specific propositional knowledge often err by repackaging professional development as if it were a 'know what' rather than a 'know how to'. He also points out that changing behaviour requires more support and effort both for learners and for faculty than does factual knowledge acquisition. His work into professional development has highlighted important differences between types of knowledge: (1) the propositional 'knows what' of disciplines, professional principles, and authoritative disclosures on specific issues; (2) procedural – 'knows how', covering skilled behaviours, acquiring and giving information, and deliberative procedures, e.g. evaluating, deciding, planning; (3) the personal – prepositional, impressions, interpretive, linked with (4) tacit knowledge, accumulated from previous encounters which is neither explicit or questioned, and is therefore not under conscious control.30

The particular significance for this discussion of his body of work lies in its ability to explain some of the unpredicted outcomes of medical education, and its support for explicit attitudinal learning opportunities. He argues that a key skill for professionals is to bring un systematised personal experience 'under critical control by developing greater awareness of how it is used, and re-examining taken for granted assumptions', also pointing out that 'we should not underestimate the degree to which personal knowledge affects the knowledge-creation process'. This implies a need for structured learning through reflection on experience, and raises the question of how the psychology of the individual interacts with the learning environment.

A psychological perspective

Important expertise which has been underdeveloped in more cognitive approaches to learning comes from the psychological literature on affective aspects of learning and working with the 'inner self'. One of Boud's central tenets of learning from experience was that the outcome would be influenced by the socioemotional context of the student experience.31 Role modelling in medicine predominantly works at an affective level, with caring, respectful teaching and abusive episodes both remembered (albeit not necessarily perpetuated) in the long term.32 Teacher behaviours which show empathy and learner-centredness are known to engage and motivate students,33 especially in more challenging learning experiences, and the same work has showed that tutors were able to be both 'tender and tough', i.e. both effective in interpersonal relationships and learning outcomes.

However, the teacher who deliberately works with affective and personal aspects of learning will enter a different level of relationship with their students. The need to 'accept without approving' is often required of tutors who bother to engage with students at a level where attitudes are challenged by either side, and the concept of the medical student as an 'adolescent professional' alerts us to agendas that are likely to come into the learning relationship from previous personal experience. For example, academic achievement is often identified with parental values, and 'the more he (the student) feels dependent for his self esteem on the evaluation of adults, the less he feels a person in his own right ... thus it is counterproductive..., it pushes him back into childhood from which he is trying to free himself'.34 Psychotherapy has offered the important concept of the unconscious to
both developmental and therapeutic practices.\textsuperscript{35} Considering the explanatory value of the unconscious alongside tacit and personal knowledge, we can begin to see how affective personal experiences will interface with the difficulties and abilities of the young professional. The unconscious is dynamic, projecting respect alongside tacit and personal knowledge, we can begin both developmental and therapeutic practices.\textsuperscript{35}

The psychotherapeutic model encourages the formation of a robust ego and an adaptive insightful superego (\textquoteleft conscience\textquoteright), but describes maladjustments at all levels that can be problematic into adult life. This perspective should inform educational as well as clinical practice, insofar as it sheds light on the interpersonal dynamics which may be played out in exploration of personal attitudes, and challenges tutors involved with development of the professional persona to consider their skills and boundaries when dealing with such issues. Training in awareness of interpersonal dynamics has operated for years within the postgraduate sphere in some disciplines,\textsuperscript{36} and is reflected in the literature which articulates the developmental stages in the production of the mature practitioner\textsuperscript{22} but they have not, to the author\textquotesingle s knowledge, figured much in the debate on the learning of professional development for medical students.

All such training implies an attitude of \textquoteleft unconditional positive regard\textquoteright\textsuperscript{37} as the preferred attitudinal baseline of the good teacher, showing respect and concern to the learners. The centrality of the student–tutor relationship has been evaluated by clinical tutors as a key factor in effective learning in new settings,\textsuperscript{38} and the finding has been reciprocated by students in other studies.\textsuperscript{39,40} This raises the question of whether the contemporary environments and interpersonal relationships through which medical education occurs systematically manifest such nurturing values.

A sociological perspective

The question of cultural values that support or detract from professional development is best addressed from a social perspective, as shown by the work from longitudinal cohort studies, which have shown how the \textquoteleft hidden curriculum\textquoteright of conflicting institutional values can moderate the expression of student idealism.\textsuperscript{2} Some authors\textsuperscript{9} question whether progress with curriculum reform to date is sufficient to reshape professional socialisation into a more reciprocal and patient-centred perspective, given some very different experiences described by students. Erat differentiates \textit{professional development from professionalism} (the former an ideology, the latter a set of attributes), and sees professionalisation as the process by which an individual or organisation seeks to advance claims to recognition within a particular ideology. Decisions around educational approaches are always operating in a sociopolitical framework, and the outcomes will be dependent on the dominant ideology of the learning environment: thus, in the contemporary Western medical school, positivism is likely to dominate more reflexive approaches.\textsuperscript{9}

The implications of this are that emotional or value-led interactions will be objectified or neutralised, either by avoiding addressing these within the curriculum, or by favouring attributes of detachment and control.

The question of how learning can depend on (and challenge) culture is addressed in related health literature, where conventional professional attributes of independent practice, responsibility and autonomy in decision-making\textsuperscript{7} have been found to be developed through processes that support strengthening of self identity and personal goal setting.\textsuperscript{41} Conditions which motivate students to learn may therefore also result in an increase in institutional challenge, and while this may be encouraged in principle the extent to which it is in keeping with hierarchical work practices is open to question.

Towards a framework for professional development in undergraduate medicine

A number of case scenarios that I have experienced (see Table 1) show the real challenge we face in delivery of professional development curricula. To summarise the key points:

- professional development curricula are likely to be successful only if based on different tutoring styles and learning methods from more factually oriented teaching;
- a core learning principle in professional development is facilitated reflection;
- using the students\textquotesingle lived experiences as a basis for learning is likely to be more fruitful than abstract examples, and \textquoteleft near patient\textquoteright models of more impact: this implies a central role for simulated and real patients, and raises questions as to what extent professional development curricula can be \textquoteleft backed on\textquoteright to other learning;
- the students will need support in understanding the rationale for exploration of personal ideas and experiences, which might otherwise appear intrusive;
- the culture of the learning experience is therefore likely to be most effective if it operates within quite strict ground rules, and if facilitated by a tutor with
Table 1 Case scenarios in undergraduate professional development

Student 1 is bright, extrovert, with no problems in academic progression. However, peers are critical because s/he dominates group learning sessions, tutors experience them as overly demanding, and nonmedical staff are negative about their perceived arrogant attitudes. Questions: would your medical school collect and collate such comments? If so, who would work formatively with this student? Would this be obligatory or voluntary? Would it form part of their summative assessment?

Student 2 expresses a negative attitude to community-based teaching. His/her attendance in a GP attachment is borderline, enthusiasm little, and one patient comments about their apparent disinterest at an arranged home visit. The student is also the year representative, and claims in committee that 'the student body feels the GP placements should be optional'. Questions: how can clinical faculty evaluate attitudinal factors in student feedback? To what extent do faculty need to support innovations in curriculum regardless of student views? How might you respond?

A school proposes an innovative module integrating ethics, communication skills, and reflection on personal attitudes through facilitated group work with simulated patients. When presented in committee, the costs are deemed excessive, and it is suggested that the student numbers are doubled from 12 to 24 per group. Questions: what arguments can be put to show that such a move is inappropriate? Do we have an evidence base for these kind of decisions?

A student small group focuses on what it means to show respect for patients. One of the students cautiously raises a concern about how the students talk about patients they have seen 'and sometimes really are rude about them'. Other members explain this as 'a joke'. After the session, the student stays behind to confide about a particular student whom she regards as acting inappropriately on a number of occasions. How can peer views be used effectively in learning and in assessment?

Professional development in undergraduate medical curricula. A Howe

good interpersonal skills who holds a high regard for students as people;
- as with all core components, assessment of the attributes gained must be valid and high profile, both to ensure competency and to motivate learning;
- a quality learning environment will extend student strengths, challenge their complacencies, and work with their weaknesses: this implies a tutor:student ratio which permits some level of individual mentoring, even in a group setting;
- therefore, the impact of such curricula is likely to be diminished by under-resourcing of the course, which could impact not only upon tutor availability, but also their training, and learning resources such as simulators or 'patient teachers';
- a dominant clinical culture which does not integrate and manifest the same values as that encouraged in the students will undermine their professional development, and will reduce the impact of the curriculum;
- similarly, the option to select students with appropriate attitudes at the start of a course will need to be followed by a conducive professional development environment, as it is possible to develop negative as well as positive ones attitudes in certain institutional cultures;
- Medical schools should be encouraged to avoid marginalising this aspect of the curriculum by using only one staff group to teach it, as professional development skills are required for lifelong practice in all disciplines.

There are potential benefits of a widespread involvement of clinical practitioners in developing and supporting such a learning culture. The attitudes to be learned have excellent 'fit' with the more patient-centred attitudes required of the modern NHS, and the more self-critical culture of clinical governance and peer accountability. The principles of mentoring and adult learning now being encouraged in postgraduate practice and continuing professional development models are the same as those underpinning these proposals for undergraduate curricula, albeit needing adaptation and structuring for more basic undergraduate needs. The GMC requirement to detect and modify non-professional attitudes, if necessary advising exit from medical training, can only be attempted and defended if students are given clear opportunities to learn another way of functioning which is then rigorously assessed. The lead from other health disciplines in this area around both curriculum and learner support is a clear challenge to medicine either to adjust its programmes or to defend its position not to do so. It may therefore be not so much a case of considering the benefits if we do construct a genuinely humanising professional development curriculum, but the grounds on which we can justify not doing so.
It will be challenging to deliver effective learning in the face of continuing resource challenges, especially in the context of increasing medical student numbers and cross-disciplinary learning; or to create a clinical culture that supports reflection in the face of problematic issues, rather than premature closure or denial. So, will the impetus to implement professional development curricula in undergraduate medical education be the key that unlocks the door to a new culture of medical practice? There are reasons to be sceptical, and to continue to question whether 'the overt changes to curriculum content and pedagogy are capable of making a real difference, or must they amount to a superficial overlay onto a very powerful structure and normative discourse' of the medical profession. To prioritise this work in the curriculum, and demonstrate that more sophisticated models of curriculum are needed to achieve higher level outcomes, academic leaders will need to be cognizant of the points made above, the barriers one may meet, the psychological resistances, and political nature of some issues. Further research into key factors that mediate attitudinal development and the outcomes for students and patients would be immensely helpful in this debate.

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