■ PROFESSIONAL ISSUES

Professional attitudes: can they be taught and assessed in medical education?

Jonathan Martin, Margaret Lloyd and Surinder Singh

ABSTRACT – The medical profession is under increasing scrutiny with regard to the undesirable attitudes and behaviours of some of its members. Despite the setting of objectives for professional attitudes, it remains unclear how these can be taught and assessed. Having defined 'attitudes', we consider some of the influences upon the development of professional attitudes within medicine. We then review possible ways of encouraging desirable attitudes and behaviours. Finally, we review and critique the main types of attitude assessment. We conclude that attitudes are complex, that the influence of medical culture is crucial, and that feasible assessment tools have yet to be developed.

Key words: assessment, CPD, General Medical Council, medical education, professional attitudes.

The performance of doctors has come under increasing scrutiny in both the USA and the UK. This reflects the public's concern over what are perceived to be the inappropriate attitudes and behaviours of some members of the profession, together with an apparent lack of accountability. Sir Donald Irvine, President of the UK's General Medical Council (GMC), has called for a 'new professionalism' and has highlighted the fact that 'the public's unfulfilled expectations of doctors are crucially about attitudes'[1]. Similarly, in the USA, the definition of a profession (attributed to Supreme Court Justice Louis Brandels) stresses altruistic attitudes: 'A profession … cherishes performance … above personal rewards'[2].

How can medical students and doctors be encouraged to develop desirable attitudes? In the UK, medical schools have been revising their curricula in response to the recommendations published by the GMC in *Tomorrow's doctors*[3]. For the first time, the GMC has presented UK medical schools with a list of 'attitudinal objectives' that students are expected to have acquired and demonstrated by the time they graduate (Table 1). At postgraduate level, the GMC has published *Good medical practice*[4], which contains a list of 14 'duties of a doctor' which are similar to, but not exactly the same as, the undergraduate attitudinal objectives (Table 2). The GMC's approach to attitudes is not new. It mirrors aspects of 'the ideal internist', a concept first put forward by the American Board of Internal Medicine (ABIM) in the 1970s[5]. More recently, the importance of attitudes has been reiterated in the USA in the form of learning objectives for medical student education. These have been proposed both by the Association of American Medical Colleges (AAMC)[6] and by a collaboration of the Society of General Internal Medicine (SGIM), the Clerkship Directors in Internal Medicine (CDIM) and the Division of Medicine at the US Department of Health and Human Services[7]. How are these objectives to be taught and assessed? At a conference organised by the GMC in 1997 it was acknowledged that 'the teaching and assessment of professional attitudes was proving to be the most difficult element of the new guidance'[8], and the AAMC concluded that 'universally agreed-upon outcome measures do not exist for all of the objectives'[6].

This discussion paper addresses three main questions:

- What are attitudes?
- What is the role of undergraduate and postgraduate medical education in attitude development? Can attitudes be 'taught'? If so, by what means?
- What types of measures are available for the assessment of attitudes?

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Table 1: A synopsis of the attitudinal objectives in *Tomorrow's doctors*[3]

Patients
- respect without prejudice
- recognition of patients' rights
- awareness of the moral and ethical responsibilities involved in patient care
- awareness of the need to ensure provision of the highest possible quality of patient care

Colleagues
- respect without prejudice
- teamwork
- willingness to participate in the peer-review process

Self
- approaches to learning
- ability to cope with uncertainty
- capacity for self audit
- need to adapt to change

What are 'attitudes'?

Attitudes are complex mental processes that are thought to influence the way in which individuals process information and to motivate behaviour[9]. They have been explored in depth in the psychological literature, where 'attitude' has been defined as:

> *…a psychological tendency that is expressed by evaluating a particular entity {the object of the attitude} with some degree of favour or disfavour[10].*

Attitudes are inferred by observing an individual's response to a situation (a stimulus); they cannot be measured directly (Fig 1)[10]. For example, a doctor holding a pro-life attitude, when confronted by a patient requesting a termination of pregnancy, might respond by refusing to act as the patient wishes, or by explaining his or her beliefs to the patient, or both. But if, in spite of the doctor's beliefs, he or she agrees to arrange the termination of pregnancy, then the patient might not be able to infer that the doctor has a pro-life attitude, and a knowledgeable observer might conclude that the doctor's pro-life attitude is not strongly held compared with competing pressures to act in a counter-attitude manner.

In addition to responses expressed through behaviour (actions, intentions to act) and cognition (eg thoughts, opinions), a further modality of response is that of affect, which includes feelings, emotions and autonomic nervous system activity.

Similarly, antecedents to the development of attitudes are assumed to fall into these cognitive, behavioural and affective domains. An example is the formation of attitude through the gaining of information (cognitive domain), such as might occur on reading an advertisement.

It seems reasonable to believe that attitudes are formed through various types of social learning, such as childhood upbringing, although there is some evidence that genetic influences may be important[11]. In addition, it is likely that some attitudes are more strongly held and, therefore, perhaps less open to change than others.

The three domains of cognition, behaviour and affect provide a structure for understanding ways in which medical education may influence attitudes for good or ill. However, the crucial link between attitude and behaviour is complex, and is influenced by multiple factors in addition to attitude, such as habit or the perceived consequences of a behaviour. The expression of attitude is, thus, context sensitive.

In assessing attitudes, a further influence applies: response bias. This includes 'social desirability', which is the tendency for some individuals to try to present themselves favourably. Any method that seeks to assess an individual's attitudes accurately must be able to account for the effects of social desirability and other response biases. Questionnaire scales for this purpose have been developed[12]. However, it seems reasonable to suppose that the more strongly held the attitude, the more likely it is to induce attitude-consistent behaviour.

Table 2: The duties of a doctor registered with the General Medical Council (from *Good medical practice*[4])

Patients must be able to trust doctors with their lives and well-being. To justify that trust, we as a profession have a duty to maintain a good standard of practice and care and to show respect for human life. In particular as a doctor you must:

- make the care of your patient your first concern
- treat every patient politely and considerately
- respect patients' dignity and privacy
- listen to patients and respect their views
- give patients information in a way they can understand
- respect the rights of patients to be fully involved in decisions about their care
- keep your professional knowledge and skills up to date
- recognise the limits of your professional competence
- be honest and trustworthy
- respect and protect confidential information
- make sure that your personal beliefs do not prejudice your patients' care
- act quickly to protect patients from risk if you have good reason to believe that you or a colleague may not be fit to practise
- avoid abusing your position as a doctor or
- work with colleagues in the ways that best serve patients' interests.

In all these matters you must never discriminate unfairly against your patients or colleagues. And you must always be prepared to justify your actions to them.

Attitude development: the role of medical education

How does medical education influence the development of attitudes? Certain themes in the literature appear to be consistent: in particular, at undergraduate level, there appears to be an increase in some negative attitudes, for example cynicism[13,14]. This results, at least in part, from a process of professional socialisation in what may be an unfriendly and chaotic clinical atmosphere, and is likely to be a learnt behaviour[13].

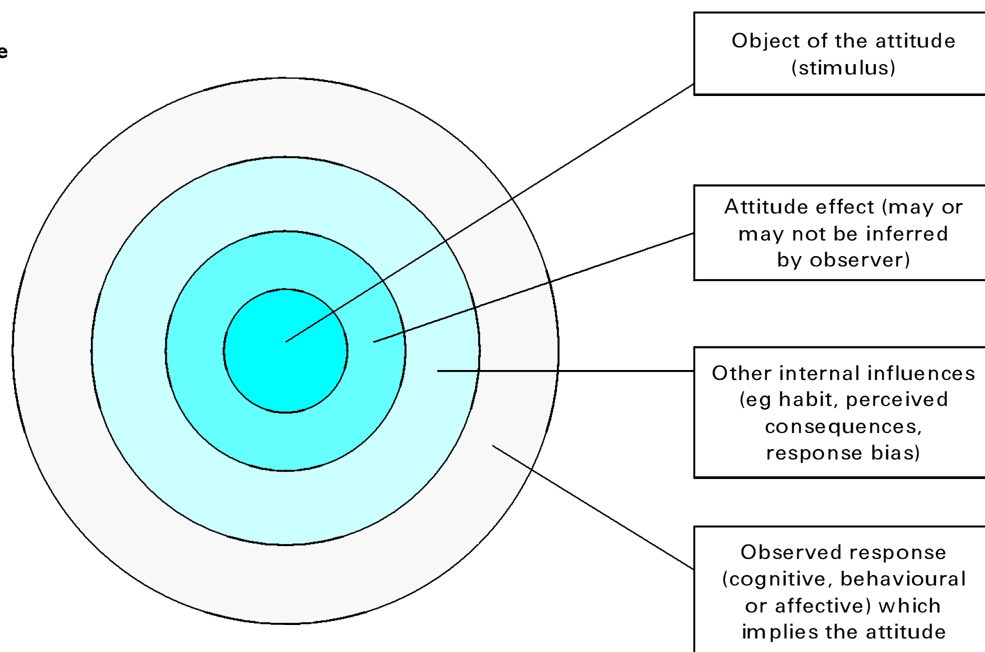
Attitudes are influenced by formal ('taught') and hidden curricula. The latter has been described as the 'corridor' equivalent of bedside teaching[15], and is possibly of greater influence than, and often contradictory to, the taught curriculum[15–17]. It is here that the student's or junior doctor's virtues may be opposed and changed by a contradictory environment[18]. Indeed, some tutors are recognised to espouse views antithetical to the goals of their institution[15,19], and, in such circumstances, individuals may be taught to hide their own feelings and may allow their values to be modified in the direction of the prevailing medical school or institutional culture.

In both the UK and the US literature, there are many recurrent ideas about how students may be encouraged to develop positive attitudes, such as those proposed by the AAMC, the SGIM/CDIM and the GMC.

A committed leadership

A committed leadership is essential[15,18,20]. In order for change to occur, those in authority must be prepared to take the long view,

Fig 1. Attitude is inferred by observing an individual's response to a stimulus



giving appropriate resources and priority to teaching[21]. In addition, they must recognise that medical schools, hospitals and general practices are moral communities[22], and, as such, will transmit their cultural values to their students and staff.

Entry selection criteria for medical school

The process of selection for medical school has come under scrutiny, with some commentators proposing a move away from the narrow focus on excellence in examination results towards a more liberal approach and a more exhaustive selection procedure focusing on 'desirable attributes' (including attitudes) for medicine in addition to examination results[23–26]. However, this approach depends on a recognised consensus of what are the 'desirable attributes' and the valid, reliable and feasible means of identifying and measuring them.

Direct teaching through 'courses'

There are many specific suggestions in the literature that reflect the recommendations of the AAMC, the SGIM/CDIM and the GMC. They include communication-skills training[27], greater emphasis on bioethics teaching[28] and the use of the arts and humanities[29]. Patients and carers, moral philosophers, social scientists and lawyers may all have a place in this teaching[30], as may the use of stories and anecdotes[31–34]. Through the evaluation of these sources of information, students and doctors may deepen their understanding of their patients' experiences, enrich their own lives, and be able to use such sources as tools for teaching. However, in the desire to afford a proper place to professional attitudes in our undergraduate and postgraduate teaching, it is essential not to compromise the development of medical skills[35,36]; simply adding more courses to an already overloaded curriculum may be self-defeating[15].

Method of teaching

There are several important elements to be considered with regard to the way in which students and juniors are taught. Of prime importance is the need to teach by example[21,37]. The behaviour of tutors towards their tutees should be a model of the way doctors should treat their patients[38]: the widespread practice of 'teaching by humiliation'[39,40] must end, since this and other faculty behaviours, such as an inappropriate degree of punishment for wrong-doing, are antithetical to the compassionate forgiving role of the 'physician-healer'[41]. These aspects have been recognised by the GMC, which has recently published a document outlining the desirable personal and professional attributes of doctor-educators: *The doctor as teacher*[42]. Interestingly, some studies report that students rate their tutors' interpersonal skills to be at least as important as their teaching skills[43], and that the demonstration of patient-care skills is positively related to perceived teaching effectiveness[44,45].

A recent study of medical students has revealed that they are sometimes brought into situations where their medical education seems to conflict with the priorities of patient care, or where they are given responsibility beyond their capacity, or even where they are involved in what they consider to be substandard care[46]. These issues are seldom discussed or resolved. Failure to identify and close this gap between teaching and professional practice may give rise to feelings of anger, disillusionment and cynicism in students[47]. The less mature may conclude that professional attitudes are unimportant, while the more aware may be disappointed by the hypocrisy of their chosen profession. A policy on the rights of patients in medical education has been developed[47].

A recent editorial[48] noted that those consultants who complain about the inability of newly qualified doctors to carry out their role as pre-registration house officers are often those

Key Points

Inappropriate medical attitudes are of increasing public and professional concern

Desirable attitudes for doctors and medical students have been proposed by various bodies, including the GMC

Attitudes are complex mental processes that cannot be measured directly, but only inferred through behavioural, cognitive or affective expression

How attitudes can be positively influenced through education is a matter of debate and is, as yet, undetermined

A feasible, valid and reliable method of measuring attitudes needs to be developed before interventions encouraging appropriate attitudes can be assessed

who are actively involved in training students. It concludes that this may be because of the low priority given to teaching compared with the demands of service commitment. So, how should undergraduate teachers respond when faced with students behaving in unacceptable ways towards patients? A paper published in 1999 identified three categories of potentially problematic behaviours[49]: showing disrespect for patients; cutting corners; and outright hostility or rudeness. The attending physicians often failed to respond to these behaviours at all, or, if they did, they often rationalised or medicalised the behaviours. It would, perhaps, be more effective explicitly to discuss attitudes with the student concerned or to refer them to moral and professional norms. Clearly the avoidant approach must change if we are to encourage appropriate attitudes.

An 'education community'

A reaffirmation of the role of the 'education community' has been proposed in the USA, in which a core group of tutors explicitly encourages professionalism over a period of time, and acts as mentors[50]. Other writers also suggest that the influence of role models is powerful[20,37,51] and should be further explored in this context, particularly for those with attitudinal problems[12].

For all the reforms of medical education called for to date, little change appears to have occurred[21]. Clearly, for there to be any hope of positively influencing the development of appropriate attitudes in those lacking them, there must be a consistent improvement in the relationship between doctors and their patients[52]. The consultation remains the central component of medicine, and an improvement in the quality of this basic aspect of clinical care is both the goal of attitudes education and the means by which that goal is to be achieved.

Recently, there has been a call for 'evidence-based medical education'[53]. Unfortunately, research evidence is lacking in the area of attitudes, and many of the suggestions made above are based on opinion. Many of the studies that have been carried out show that the interventions discussed have only a temporary positive effect[54] or do not change key aspects such as empathy[55]. In addition, the relationships between education, attitudes and behaviour are not clear[15]; for example, some papers suggest that an increased awareness of psychosocial issues does not equate with a willingness to pursue such issues in practice[15]. This reinforces the importance of undertaking more research, with longer follow-up periods and more effective tools for evaluating behaviour change in this genuinely difficult area.

Assessment of attitudes

Assessment is an essential part of learning, and, as such, the development of assessment tools may promote the importance of attitudes within medicine and medical education. The list of attitudinal objectives in *Tomorrow's doctors*[3] and the duties of a doctor listed in *Good medical practice*[4] have given the GMC and UK medical schools a 'gold standard' against which to assess attitudinal aspects of practice within the profession and its students, but give no guidance as to how to do so. On the one hand, the GMC is clear that we need to be concerned about attitudes; on the other, it is equally clear that we need to focus on clinical behaviours. Thus, research into assessing medical attitudes should encompass both cognitive and behavioural aspects. In the current literature on assessment, three main approaches have been used: direct self-report questionnaires, paper cases and observation of behaviour.

Questionnaires

Although questionnaires have been widely used to explore students' attitudes to a range of specific medical issues, such as HIV[56] and drug misuse[57], those that examine generic attitudes may be of more general applicability. These include the doctor–patient scale[58], which attempts to discriminate between attitudes that are considered to be doctor-centred and those that are patient-centred. The advantages of questionnaires are their low cost and ease of use. However, although many attitude scales can be shown to be reliable, their validity as measures of attitude and attitude change in the clinical context, particularly as this relates to behaviour, may be in doubt. In addition, their potential susceptibility to response bias leads some authors to believe that self-report questionnaires are of value only when used for anonymous groups[59].

Paper cases

Paper cases, in which students are presented with written clinical scenarios, provide an interesting alternative to the questionnaire. It is possible that the use of clinical scenarios gives paper cases higher face validity than questionnaires, but they may suffer from the same potential for response bias. An example is the Professional Decisions and Values Test[60], which attempts to assess students' underlying values in situations of ethical conflict. This formative test consists of 10 written case vignettes, each followed by a choice of one of three actions and then a further choice of one or two (out of seven) justifications for the action chosen. Within each case are embedded seven

values: autonomy, beneficence, confidentiality, harm avoidance, justice, professional responsibility and truth. Several variations on this theme exist[61,62].

Observation of behaviour

Attitudes are most likely to be conveyed to the patient through the doctor's behaviour, and should, therefore, be assessed by the observation of behaviours in the clinical setting[59]. In terms of the formalised assessment of students and junior doctors, the clinical setting increases the face validity of the observation method, but reliability may depend on the frequency with which behaviours are sampled. In addition, the potential for inter-observer error is likely to reduce the reliability of this approach. A compromise is to use simulated patients[59] with trained observers, perhaps as part of a clinical examination[63,64]. However, the artificiality of an examination setting may reduce validity and increase the potential for response bias.

In the USA, studies of junior doctors' behaviour in real clinical settings have been carried out using nursing staff[65,66], senior medical staff[65,67] and patients[65,67] as observers. This approach raises issues including the cost of training observers, the effect of this task on working relationships, and overall feasibility: more than 50 patient-observations per doctor were required in one study for the results to be reproducible[65]. This study compared the observations of patients, nurses and senior medical staff on the 'humanistic' (attitudinal) behaviour of groups of junior doctors, and found that only the nurses' observations correlated even moderately well with those of the patients. This suggests that either different observers are assessing different aspects of behaviour or that the behaviour of the junior doctors changes according to who is present. Despite these limitations, observation methods are now being used in some North American medical schools to assess students' attitudes[68,69].

In the UK, the government has recently introduced a new body, the National Clinical Assessment Authority, to address the problem of under-performance and incompetence in doctors[70]. It will work with assessment experts to 'devise assessment tools and processes which are fair, evidence-based and effective'[70]. It is, as yet, unclear what these will entail, other than that assessors will conduct local visits to 'suspect' practitioners in order to gather information, including the views of patients. Equally, it is unclear what aspects of practice are to be assessed or whether observation will form a part of the assessment, although this seems likely since there appears to be some correlation with the GMC's own Performance Procedures.

The GMC's procedures have also been designed to assess doctors thought to be under-performing in clinical practice. A recent paper[71] has outlined this process, which specifically includes the assessment of attitudes through observation of practice. It states that attitudes are 'difficult to assess by traditional tests of competence' and that there are problems with establishing the reliability of the approach used in the GMC's Performance Procedures. Reliability is increased, however, through the use of criteria for attitudes and of supporting statements of what constitutes acceptable and unacceptable performance. Nevertheless, this approach relies on judgements, made by 'experts', of unstandardised material, and is therefore open to question.

Of related interest is a recent study comparing three methods of analysing the outcomes of observational assessments of students by their instructors: standard checklists of behaviours, written comments, and formal evaluation sessions in which discussion takes place between the students' various tutors[72]. In this study it was found that the third approach led to the greatest detection of attitudinally related unprofessional behaviours.

The various approaches outlined above offer the opportunity for remedial action, for example counselling or re-training, for students and doctors identified as having unprofessional attitudes. However, evidence that the approaches in current use are valid, reliable and feasible is absent.

Conclusions

The problem of 'inappropriate' attitudes has been formally recognised by the medical profession, both in the USA and in the UK. Long before this, it was recognised by individual patients, and now medical professionalism has become high-profile news. Attitudes are central to the way in which current and future doctors relate to patients and colleagues, but remain apparently variable attributes, which, as yet, defy precise identification.

The ABIM, the GMC and, latterly, the AAMC have all proposed ideal attitudes for students and doctors, and have suggested that these be taught. Irrespective of any attempts to teach attitudes, it is becoming clear that formal and hidden curricula have significant parts to play, and that the moral nature of the medical environment contributes to attitudinal development.

Before influences and interventions can be understood and assessed, a feasible method of attitude assessment must be developed. However, the assessment of attitudes is fraught with difficulty, and the relationship between attitude and behaviour is complex. This short review strongly suggests that a single methodological approach is unlikely to be either comprehensive enough or sufficiently free of problems. We, therefore, propose that a multidimensional approach be developed using the most favourable elements of questionnaires, paper cases and observation. Such an approach is being developed at our institution, but clearly more research is required.

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