REVIEW ARTICLE

Assessment of non-scholastic skills (non-clinical) in trainee residents

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Abstract

Doctors are clinicians and are trained in clinical work. Many non-clinical qualities, apart from the ability to examine and treat, matter a lot in their professional success. Traditionally, knowing the book well or mastering the content of the curriculum was considered enough to succeed in a medical career, but recent recognition of having good communication skills in a physician has changed the medical curricula the world over. A recent look at the formative assessments done to see the on-job trainees during their residencies in various countries, like India, the United States and Turkey, has revealed that most trainees are overworked and find it difficult to cope with the demanding training requirements centred around mastering the clinical skills. The supervisors are also very busy. Non-scholastic abilities, like good emotional quotient and extracurricular activities that do not directly relate to things learnt from the book or the ward are being graded as very important for medical students because all these abilities are essential for a doctor not only to help the patients medically and psychologically, but also emotionally. He should be able to protect his self from care-provider's stresses. Personal qualities of a doctor are seen as important predictors of clinical performance in medicine. There are opportunities during training that the senior trainer can become a role model and impart non-scholastic skills most effectively. Supervisors must show their trainees how to behave with a patient. This change in attitude and behaviour has to be induced by performing these things in front of the trainee residents. The problem with non-scholastic skills, unlike the scholastic cognitive/psychomotor domains, is that these skills are quite elusive to routine assessments. However, lone reliance upon a final examination for assessing attitudes can be biased. If the behaviour of residents is to be tested in an exit examination they are likely to behave more consciously only to pass the examination, which is called the Hawthorne effect. No one can ensure that one behaves in a uniform manner in every social situation. Our responses may vary every day in the face of emerging challenges. Probably a balanced combination of formative plus summative assessment supplemented with a well-planned continuous internal assessment is the answer.

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Introduction

Senior faculty members are frequently asked to evaluate a person's suitability for hiring, inclusion into a training programme and recommending any trainee for further training.[1] These are difficult decisions as these decisions at this stage will determine the progress of a person in the profession. It is very difficult to pick the most suitable person because knowledge can be measured, but attitude cannot.[2,3] No two persons with the same qualification maybe the same in behaviour or attitude. Psychological tests are more valid and useful in such situations. Qualitative tools, such as document analysis, observation, in-depth interview, response to case scenarios and computerised simulations, and 360-degree assessment etc., can be utilised, but they are labour-intensive, time-consuming and impracticable. But sooner or later, technology may come to help. A hanging video camera, or a chip fixed in the apron pocket can monitor all the activities of a student and reveal his / her true behavior.[4] Society demands good clinical skills and social behaviour which cannot be measured like clinical skills can be evaluated in the examination.

Traditionally, knowing the book well or mastering the content of the curriculum was considered enough to succeed in a medical career, but recent recognition of having good communication skills in a physician has changed the medical curricula the world over. The basic question is, who is a good doctor; one who is just knowledgeable, or the one who is also skilful at handling the patient or difficult situations? Orthopaedic surgery demands an even more versatile doctor who can handle a family in emergency crisis due to an injured family member. Trauma, though treatable and curable compared to many afflictions, can have a prolonged treatment and may lead to many operations being done upon the same individual periodically. Prolonged morbidity and disability are common and the patients tend to lean more on the physician for psychological support. Everyone would like to be treated by a well-groomed, empathetic, nicely-dressed, polite, tactful and confident doctor. None of these is taught in any of the curricula. Only a stable person can provide relief to another person.[5-7] A recent look at the formative assessments done to see the on job trainees

during their residencies in various countries, like the United States, Saudi Arabia, Turkey, etc., has revealed that most resident doctors are overworked and find it difficult to cope with the demanding training requirements.[8-10] The trainees are overburdened with large volumes of reading and learning. The supervisors are also hard-pressed to aid the pupil.[9] Any effort at formative assessment tends to centre more on cognitive and skill development aspect of training, leaving the development of attitude or a professional behaviour to the unevaluated part of training, presuming that "these will have been acquired". What is not tested is rarely achieved.[8] Non-scholastic abilities, like good interpersonal relationships, management skills, communication skills, a suitable emotional quotient (EQ) and extracurricular activities have been suggested as being very important for medical students because all these abilities are essential for a doctor in not only helping patients medically and psychologically, but also emotionally. Doctors should be able to protect their own self from the care-provider's stresses.[4,5] Studies suggest that training in communication skills may improve students' ability to gather accurate and relevant information.[1,4] Many institutions now insist upon formal training for these. Personal qualities are seen as important predictors of clinical performance in medicine.[1,2,4]

The Apprentice

Skills are developed with supervised learning. Frequently the learner is given a demonstration for these skills at workplace during clinics or ward rounds. Many recent studies point to the hard fact that faculty members are overburdened by their responsibilities so much that even clinical examination skills are not demonstrated to the trainees in a satisfactory manner.[7] Declining results of trainees in objective structured clinical examination (OSCE) are frequently cited as proof of this.[8,9] Learning of the book and acquiring clinical skills are seriously monitored both formatively and summatively. How does the trainee behave with the patient is never evaluated formally. A recent study in Turkey explored the residents' perspective in Orthopaedics and Traumatology.[10] What was interesting to note was that the residents felt they learnt the most when assisting at surgery and wished they could spend more time with the supervisor, as they had direct access to the senior staff only 36% of the time. These are the opportunities where the senior trainer can be a role model and impart non-scholastic skills most effectively. The non-clinical skills of a trainee are never evaluated during training or at the end of apprenticeship. Patients' attendants, when exposed to extreme emotional challenges in a casualty department, behave aggressively at times. The doctors in the emergency room (ER) respond with a similar aggression, leading to brawls. Such a crisis, unmanaged or mismanaged in these circumstances, compounds the problem. To put it simply, crisis management is never taught like ward management. Success of various training programmes is monitored using tools designed to look at clinical skills and understanding of the subject during training, like most programme directors in the US use Orthopaedics In Training Examination (OITE) to monitor the training standard of the orthopaedics trainees appearing for the American Board of Orthopaedics Surgery (ABOS1) exam.[11] When seen closely, OITE checks the cognitive and skills domain, not the attitude or behaviour of the residents during training. The supervisors remain busy with their clinical responsibilities and the attention required to coach the residents in informal learning of management/communication/ leadership remains neglected. Howard Gardner suggested in 1983 that an array of different kinds of "intelligence" exists in human beings. He suggested that each individual displays varying levels of these different intelligences, and, thus, each person has a unique "cognitive profile".[5,6] Not all humans have the similar levels of performance in various kinds of intelligence-measuring tests because we have a good potential for one kind of work, but not for some other kind. All humans differ in their capacities to adjust to or protect their own self under stress. A few attributes of human nature, like creativity or intelligence, when studied in detail show we differ from each other. Herald Gartner presented the concept of multiple intelligences.[5,6] Educators have welcomed the idea because it explains why some students do well in examinations while others may fail. Same can be said about our behaviour under stress. The residents must be taught how to handle difficult situations in life.

The same dilemma haunts the problem of measuring non-scholastic abilities Recently, employers and medical educationists have begun to appreciate the expected non-scholastic abilities of a young doctor apart from learning of medical facts and clinical skills only.

The Mentor

Curricula are being improved, post-graduate trainings are being diversified and medical education is being modified so that learners become more humane, empathetic, resourceful and skilful doctors to look after their patients at the end of the learning session. A notable work has been published by Al Haideb et al. recently which tried to understand the factors affecting better learning by the residents enrolled in Saudi and Canadian orthopaedics residency programmes. While Canadian residents tended to learn more with reading scholarly materials than their Saudi counterparts, both agreed that they learned better during rounds and interactive teaching sessions. Most

noteworthy is that both sets of residents feel that supervisory staff gets less time to interact with them.[12] This lack of interaction maybe the root cause of less attention being given towards unconventional learning, and what Aristotle called 'non-scholastic learning'. Another publication pointed out the bitter feelings that poor or less motivated supervisors produce among trainees. Supervisory bodies, like postgraduate boards or colleges, have a responsibility towards their trainees. Such role models should either be retrained, incentivised or censured if they fail to improve.[12,13] In both the publications, the residents noted that too many trainees were being admitted into training centres which can neither accommodate nor maintain the required training standard.[12,13] The problem with non-scholastic skills, unlike the scholastic cognitive/psychomotor domains, is that these skills are quite elusive to routine assessments. Most authorities agree that a summative evaluation is inappropriate. The basis of teaching non-scholastic skills lies in the fact that these can best be inculcated with role modelling by the trainer or repeated cycles of periodic review followed by feedbacks. In some training programmes, formative evaluation, like continuous internal assessment (CIA), is done during the training period.[1,8,9] The learner is taught and assessed at the place of teaching before the final exit examination, like the best place to teach how to win the confidence of a distressed patient can only be taught at bedside. If during the training, the learner is found to need improvement in behaviour or attitude, a feedback followed by a review is made. In overcrowded wards and by too busy supervisors, this part of training is never formally assessed or evaluated. The thing that is never assessed or evaluated is likely to suffer from loss of quality. Non-scholastic skill-imparting needs close supervision by the teacher and individuals need to be guided to develop their strong abilities to the fullest potential.[4]

Assessment

It would not be impertinent to add at this conjecture that what is not examined is not learnt. It is a common observation that the students tend to ignore the subjects that are not examined and have poorer proficiencies in skills which are not examined in the summative assessment. However, a lone reliance upon a final examination for assessing attitudes cannot be recommended. There is a strong possibility of a Hawthorne effect changing the performance of candidates in the examination process, like during clinical examination or objective structured physical examination (OSPE) when they know they are being observed.[7,14] Another way of assessing the non-scholastic skills is review by peers like classmates. Probably a balanced combination of formative plus summative assessment supplemented with a well-planned continuous internal assessment is the answer. A lyceum like Aristotle's would be close to what would perhaps be the best way to ensure adequate development of non-scholastic abilities. A supervisor should mentor these things to the trainee. Ours is a rather nascent postgraduate training environment and adopting a 'systems' approach we need to review our training practices to point out likely shortcomings that may affect the end product's quality. Both overworked supervisor and the under-trained resident need to be helped if the system is to grow smoothly.

Conclusion

Non-scholastic skills are difficult to assess. Any evaluation has to be a 360-degree assessment, preferably during the formative phase of the training and not at the summative stage only when Hawthorne effect is likely to cause inaccuracies. A periodic or regular mechanism of assessments should be developed as a cyclical regular activity during training period and assessment in the exit examination should be developed.

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