Editorial

Practical approach to train and assess professional behaviour of medical students

Ghanim Alsheikh[1*]

[1]WHO Collaborating Centre for Public Health Education and Training, Imperial College London, UK.

Received: 4.11.2021 Accepted: 9.12.2021

Abstract

The gradual decline of doctor-patient communication skills and professional attitudes and behaviour have steadily been observed in all countries across the globe. This deterioration has resulted in repeated and renewed demands to make medical schools more aligned to the necessity to train professional behaviours in undergraduate medical study. Medical educators have been criticised for not effectively training and rigorously assessing these skills. Training of behaviour has been abstracted in teaching of ethics and communication skills which in most of the cases is based on theoretical "preaching" lectures and use of book/guide and in some cases, training using supervised role-playing sessions at the best of options. Although good communication skills are essential for an optimal doctor-patient relationship and certainly contribute to improved health outcomes, still other aspects of behaviour are not covered. Furthermore, while the need for training on professional behaviour is specified as a requirement in the adopted graduate outcomes, formal training in these skills has been fragmentary and not clearly addressed in curriculum documents of the medical colleges in Iraq. A practical approach is here proposed to support medical colleges to bridge this gap. The methods of design, construction and use of standardised checklists for training medical students and assessing their acquisition of behavioural (affective) skills is described

Keywords Training, Assessment, Professional behaviour

***Correspondence** to Ghanim Alsheikh, WHO Collaborating Centre for Public Health Education and Training, Imperial College London, UK.

✉ alsheikhg@gmail.com

Compliance with ethical standards
Conflict of interest the authors declare no conflict of interest

The gradual decline of doctor-patient communication skills and professional attitudes and behaviour have steadily been observed in all countries across the globe. [1] Among other factors, this deterioration has resulted in repeated and renewed demands to make medical schools more aligned to the necessity to teach professional behaviours in undergraduate medical study. Medical educators have been criticised for not teaching and rigorously assessing the core values of medicine that determine professionalism. [2]

The combination of conflict and powerlessness, supported and mitigated by the influences of negative and positive role modelling of trainers, led students to either maintain, compromise or reject patient-centered values. [3] In the existence of "hidden" components of curriculum, like role modelling, the students' specific experiences directly influence their career's values and behaviour positively or negatively.

It is obvious that training of behaviour has been abstracted in teaching of ethics and communication skills which in most of the cases is based on theoretical "preaching" lectures and use of book/guide and in some cases, training using supervised role-playing sessions at the best of options. [4] Although good communication skills are essential for an optimal doctor-patient relationship and certainly contribute to improved health

outcomes, still other aspects of behaviour are not covered. Furthermore, while the need for training on professional behaviour is specified as a requirement in the adopted graduate outcomes, formal training in these skills has been fragmentary and not clearly addressed in curriculum documents of the medical colleges in Iraq. [5] Training in professional behaviour (affective skills) needs approaches which are different from that of teaching other clinical subjects including role modelling which presume that students will behave after graduation as their role-model trainer.

It seems that standardised training of medical students on professional behaviour is still the most difficult to design, conduct and certainly more difficult to assess. In this account, we propose a practical approach to train and assess medical students to overcome such difficulty.

To start with and in order to achieve effective results through application of this approach, the proposed tool needs to fulfil the following criteria:

1. Students need not only to absorb and engross the traces of attitude, behaviour and interpersonal skills, but to adhere to these skills throughout their careers.
2. Tools to be designed to use in student training and assessment alike.
3. The steps to be followed in these tools need to match the steps of the standard operating procedures (SOP) used in real clinical practice.
4. The basic pedagogic principle behind the use of these tools is based on experiential learning where formal curriculum provides ample training and practising opportunities for students to repeatedly practice these behavioural skills throughout the 6-year period of the medical study.
5. The standardised tools mean that all trainers and students (trainees) apply the same tools in both training and assessment.
6. Tools should ensure incorporation and integration of professional attitudes and behaviour as an essential component of applied formal curriculum and not as a component of a hidden or elective curriculum.
7. Tools will be utilised throughout the 6-year study activities with incrementing level of performance across the years.
8. Tools would be explicit and easy to follow and implement in training and assessment and likewise easy to design and construct by colleges.

This article addresses the possible ways of standardising training and assessment of attitude and behaviour including communication skills and most importantly, integrating them into the existing curricular clinical training activities. [6]

The difficulty in evaluating professional behaviour stems from the fact that the expected change in student's behaviour is not done at all through lectures, preaching, and even arbitrary role models alone. Rather, it needs other more effective training methods to bring about such change and monitor the change first by measuring the degrees of change. It is evident that the best training methods are to provide training opportunities, in the curriculum, for the trainees to practice this desired behaviour and evaluate it first, to realise its importance in their academic and training achievement to be convinced of its paybacks. Any curriculum that does not include such repeated opportunities during the study years will be accompanied by doubts about the

desired change. But how do we create such opportunities in the curriculum which are recurrent and repeated and can be measured at the same time? Of course, such training needs to be accepted and adopted by trainers who should adhere to the procedures as an example for students in their professional behaviour and their dealings with patients and with students and among colleagues and others.

The proposed approach is to train the student using standardised detailed checklists (CL) for the purpose of training in any professional practice which certainly necessitates an essential professional behaviour. As per criteria we mentioned above, these lists must be used by all trainers without exception during any training, starting with the skill laboratory in the early years, and continuing with clinical training on peers, simulated patients, patients and members of the community. Of course, the lists themselves must also be trusted for the purpose of evaluating the student for performing the same administered behaviour in the required practice. Therefore, these lists must be common among trainers and students alike, and not to be considered confidential documents as if they were exam questions. As long as the curriculum planners decide that the student should be trained according to the steps stated in any checklist for training, the same list must be made available for the students to use in their training as part of self-learning and also to use during summative and formative assessment. The more it is used repeatedly, the more chance of creating a semi-permanent learning and then a permanent transformation.

Let us take a simplified example of a checklist for training medical students as well as for assessing their skills they need to do one of the basic and most frequent abilities in a doctor's professional life which is measuring blood pressure (BP). What do we expect from the doctor to do when measuring the pressure of any of us and how to behave too? We set the requirements according to the sequence of their occurrence, from the start of the act to its completion. We arrange these requirements or steps in sequence and put against each a simple scale to check that the trainee student fulfils any step on a triple scale: the trainee is awarded a zero, if s/he did not try to take the step; one score when the step components were incompletely done; and two degrees when done completely. See example below which includes notes on how each step is regarded completely attempted. (See table 1.)

If we look at the steps to do the competency of measuring BP mentioned in the proposed form, we see that they contain clinical skills, professional behaviour and interaction, and information on anatomy and on BP and its importance and interpretation. The student assessment will follow exactly these same practical lists in observed settings like in-practice situation, OSCE structured stations or short clinical cases with preferably two observers as assessors to reduce subjectivity. What attitudes and behaviour are needed as part of BP measurement competency? That will be identified by relevant committees. We can also determine the number of behavioural skills that we train students on according to their stage in training, and we can also add to it what we think is necessary for the purpose of correct medical practice e.g. patient safety. How we decide what steps each procedure should pass through? This depends on the best standardised example of procedures which are practiced in clinical settings and referred to as standard operating procedures (SOP). Despite the simplicity of these steps with a behavioural dimension, we have found from experience that they leave a lasting impact on the student's professional behaviour. Checklists with behavioural components have been in use in Tikrit University College of Medicine since 1989

and evaluation of graduates from this college showed statistically significant advanced acquisition of 7 out of 8 behavioural skills when compared to graduates from other medical colleges in Iraq. [7] Of course, formulating these CLs for all clinical training with integrated behavioural dimension, can be achieved through the work of teams from various departments and clinical settings for use in both training and examinations. The best way to produce the needed SOPs and CLs can be achieved by small teams who will thoroughly analyse the adopted graduate outcomes to identify the needed CLs needed to train, and assess the resulting competencies. [8]

Each competency incorporates skills to apply knowledge, clinical skills and behavioural skills. In the presented sample of competency to measure BP, we incorporated: 2 skills to apply knowledge (items 9 and 12 in the CL), 7 items of clinical skills (items 2, 7, 10, 11, 13 and 14) and 8 behavioural skills (items 1, 3-6 and 15-16). Some steps integrated more than one domain e.g. steps 15 and 16 integrated knowledge application and behaviour. All these different skills are intermingled and integrated to produce this competency which is indeed the most basic and most commonly performed by doctors throughout their professional life. The CL looks complicated and seems to take long time to perform. However, in practice, almost all practitioners usually perform the 17 items in a few minutes. This difference emphasises the necessity of devising training tools which encompasses all elements of a competency performed by an experienced practitioner but suitable to use in a training setting.

The 8 behavioural skills shown in table 1 can be categorised according to the 3 levels of affective learning objectives we previously described. [9]

1. Level 1 of behaviour: Receiving by demonstrating a will to participate in patient's concerns as in items: 1, 3, 6 and 17.
2. Level 2 of behaviour: Responding by supplying supportive response to patient's concerns as in items 4 and 5.
3. Level 3 of behaviour: Valuing by adopting an obligated and sharing attitude and behaviour towards patient's concerns as in items 15 and 16.

Each checklist should carry name of the college, targeted trainees, date and a serial number for each of the CLs so that all lists can be identified and referred to by the serial number and date as these are subject to revision, improvement and updating. Also, a record of information should be kept at Medical Education Unit/Centre describing when and how each list was developed and by whom plus how and who approved the list. Likewise, if differential values for the different steps are required to use, the value of each item should be recorded and documented in the relevant blue print during scoring in assessment.

Table 1: An example checklist for training and assessment of medical students to acquire skills of measuring BP including integrated (affective) behavioural skills.

Step	Action	Assessment (Check ONLY ONE)			How
		Not Done	Partially Done	Fully Done	
1	Addressing patient				In a receiving manner, address patient with a smile: -Introduce yourself; -Use patient's name.
2	Washing/sanitizing hands				Wash your hands before procedure
3	Recent history				In a receiving manner, ask if patient has participated in any of the following in the previous hour: smoked. Drank coffee, tea, Cola or alcohol or participated in laborious activity. If the answer to any of these is "yes", delay measurement for at least one hour, and record this note.
4	Patient setting				In a responding manner, support patient to: -Sit in a chair or lie down on a bench. -Legs should not be crossed.
5	Patient arm				In a responding manner, support patient to remove or loosen any clothing covering upper arm.
6	Assure patient				In a receiving manner, explain briefly what is involved; patient will feel the cuff tighten and relax on their arm but should not be too uncomfortable
7	Machine position				Machine/Omron should be placed at the level of the patient's heart; neither higher nor lower.
8	Cuff positioning				Arrange the cuff on patient's upper arm to cover circumference of the midpoint of the upper arm.
9	Adjusting outlet tube				-Rotate cuff round so that outlet tube is over the brachial artery. -Rest the arm on a pillow or side of bed ensuring the arm is at heart level.
10	Ensure resting patient				Rest the patient for a while at this stage. Ask patient not to move or speak during procedure.
11	Radial pulse				Feel radial pulse and inflate cuff using the hand pump until radial pulse can no longer be felt to provide an estimate of systolic pressure.
12	Brachial artery				Place diaphragm of the stethoscope over the brachial artery.
13	BP recording				A reading of both systolic and diastolic BP will then be recorded while patient will be resting.
14	Washing/sanitizing hands				Wash hands after the procedure.
15	Explain reading				In a sharing manner, explain to patient the reading and what it means.
16	Advise patient				In a sharing manner, advise patient what to do accordingly and set up further steps like life style, follow up, treatment or advice.
17	Thanks				In a receiving manner, thank patient with a smile while accompanying and offering a goodbye.

Alsheikh 2021

References

1-Reed DA, West CP, Mueller PS, Ficalora RD, Engstler GJ and Beckman TJ. Behaviours of Highly Professional Resident Physicians. JAMA 2008; 300(11): 1326-1333.
DOI: 10.1001/jama.300.11.1326

2-Cruess SR, and Cruess RL. Professionalism must be taught. BMJ 1997;315(7123):1674-1677.
DOI: 10.1136/bmj.315.7123.1674

3-White CB, Kumagai AK, Ross PT, and Fantone JC. A Qualitative Exploration of How the Conflict Between the Formal and Informal Curriculum Influences Student Values and Behaviours. Acad Med 2009; 84: 597–603.
DOI: 10.1097/ACM.0b013e31819fba36

4- Modi, J.N., Anshu, JC, Gupta P, and Singh P. Teaching and assessing communication skills in medical undergraduate training. Indian Pediatrics 2016; **53,** 497–504.
https://doi.org/10.1007/s13312-016-0879-z

5. Al-Sana'a D. Curriculum and syllabi for Iraqi medical colleges. Document

approved by the congress for curriculum development in Iraqi colleges of medicine, Baghdad. 1983. https://www.academia.edu/48940439/1983_Curriculum_and_Syllabi_for_Iraqi_medical_Colleges_as_approved_by_the_congress_for_curriculum_development_in_Iraqi_colleges_of_medicine_Baghdad

6. Alsheikh G, Mustafa O, Alkafajei A and Kadhim TJ. Preparing tomorrow's doctors: A call for reform of Iraqi medical Curricula. Charleston, SC: CreateSpace 2018; pages 136-138. https://www.amazon.co.uk/s?k=preparaing+tomorrow%27s+doctors

7. Mustafa OG, Hasson AF, Jasim TM et al. Evaluation of Medical Graduates' Performance from Their Seniors' Point of View. Medical Journal of Tikrit University 1999; 5: 149-157. https://www.academia.edu/16428906/1999_Evaluation_of_Medical_Graduates_Performance_from_Their_Seniors_Point_Of_View

8. Alsheikh G. Graduate outcomes of Iraqi medical colleges. Cairo: WHO-EMRO 2012. https://www.academia.edu/16429562/2012_Graduate_Outcomes_of_Iraqi_Medical_Colleges

9. Alsheikh G. Misjudgement and misuse of the learning objectives. *The Medical Journal of Basrah University 2020;* 38(2): 1-7. DOI: 10.33762/mjbu.2020.129154.1056

الخلاصة

الطريقة العملية في تدريب وتقييم السلوك المهني لطلبة الطب.

تعاني الأنظمة الصحية في الكثير من بلدان العالم من تدهور تدريجي في مهارات الاتصال بين الطبيب والمريض وكذلك في المواقف والسلوك المهني بشكل مطرد. وقد أدى هذا التدهور إلى مطالب متكررة ومتجددة لجعل كليات الطب أكثر توافقًا مع ضرورة تدريب السلوكيات المهنية في الدراسة الطبية الجامعية. وقد ازداد انتقاد المدربين الطبيين لعدم تدريبهم بشكل فعال وتقييمهم بدقة لهذه المهارات. أختصر تدريب السلوك في تدريس الأخلاق ومهارات الاتصال والذي يعتمد في معظم الحالات على محاضرات نظرية واستخدام الكتاب / الدليل في بعض الحالات والتدريب باستخدام جلسات لعب الأدوار الخاضعة للإشراف في أفضل الخيارات. وعلى الرغم من أن مهارات الاتصال الجيدة ضرورية لعلاقة مثالية بين الطبيب والمريض وتساهم بالتأكيد في تحسين المخرجات الصحية للممارسة الطبية، لا تزال الجوانب الأخرى للسلوك غير مطروقة. وعلاوة على ذلك، فان الحاجة إلى التدريب على السلوك المهني كشرط في تطبيق وثيقة المخرجات التعليمية الطبية ومواصفات الخريج، فإن التدريب على هذه المهارات لازال متشظياً ولم يتم تناوله بوضوح في وثائق المناهج الدراسية للكليات الطبية في العراق. تقدم هذه الورقة اقتراحاً لطريقة عملية لدعم جهود كليات الطب لسد هذه الفجوة. يتم وصف طرق تصميم وبناء واستخدام قوائم التدقيق القياسية لتدريب طلبة الطب أثناء الدراسة الطبية وتقييم اكتسابهم للمهارات السلوكية.