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## Medical faculty development: Perceptions about teachers' characteristics



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### الملخص

**الأهداف:** بحثت هذه الدراسة في خصائص المدرس الطبي الفاعل كما حددها أعضاء هيئة التدريس. كما درست وجهة نظر أعضاء هيئة التدريس فيما إن كانت الخصائص التدريسية المتميزة تتناسب مع سنوات خبرة عضو هيئة التدريس.

**طريقة البحث:** أُجري مسح كمي باستخدام استبيانات مسبقة التقييم يتم تعبئتها ذاتياً عبر الإنترنت وتم توزيعها على أعضاء هيئة التدريس بكلية الطب بجامعة القصيم. عانيت الاستبانة آراءهم حول خصائص وميزات مدرس الطب الجيد.

**النتائج:** استجاب للاستبانة ٧٥٪ من أعضاء هيئة التدريس. وكانت أهم الخصائص من منظور أعضاء هيئة التدريس وجود مهارات تواصل جيدة، والأمانة وعرض المادة التعليمية بشكل منظم. في المقابل، كانت أقل الخصائص أهمية ذكر الطرائف والتجارب الشخصية وغير الحكمية. كما أسند المدرسون ذوو أكثر من ١٠ سنوات من الخبرة قيمة أكبر لخصائص أكثر تنوعاً من زملائهم الأقل خبرة.

**الاستنتاجات:** يجب على برامج تطوير أعضاء هيئة التدريس في كليات الطب التركيز على تحسين خصائص المعلم الفاعل التي تم تحديدها من قبل المعلمين أنفسهم وطلابهم. قد تكشف دراسات مستقبلية عن خصائص أكثر أهمية وبعوض وتفصيل أكبر.

**الكلمات المفتاحية:** تطوير أعضاء هيئة التدريس؛ الأداء الطبي؛ الشخصية؛ التعليم المبني على حل المشكلات؛ المملكة العربية السعودية

### Abstract

**Objectives:** This study explored the attributes of an effective medical teacher as determined by faculty members. The faculty's perspectives about whether teaching qualities correspond to faculty members' years of experience were also studied.

**Methods:** A quantitative survey was performed by using a pretested online self-administered questionnaire that was distributed to the medical faculty of the College of Medicine Qassim University. The questionnaire probed the faculty members' opinions about the qualities and attributes of good medical teachers.

**Results:** Seventy-five per cent of faculty members responded. The most important attributes according to the faculty were good communication skills, honesty, and organized presentations. In contrast, telling jokes, sharing personal narratives, and being non-judgemental were the least-valued attributes. Experienced teachers with more than 10 years of experience attached more value to a greater array of qualities than their junior colleagues.

**Conclusion:** Faculty development programmes at medical schools should focus on improving the attributes of effective teachers identified by teachers themselves and their students. Future studies could identify more significant attributes in greater depth and detail.

**Keywords:** Faculty development; Medical; Performance; Personality; Problem-based learning; Saudi Arabia

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## Introduction

Faculty development and evaluation are key components of medical education. The purpose of faculty evaluation is to identify faculty members who exhibit effective teaching skills. This information is useful for several reasons: 1) known characteristics can be transferred to other faculty who may be less effective teachers,<sup>1</sup> 2) faculty can be evaluated for the purpose of promotion,<sup>2</sup> and 3) effective teaching will obviously benefit students and improve their performance.<sup>3,4</sup> Many studies have reported on the characteristics of effective medical teachers.<sup>5,6</sup> Some of the commonly cited characteristics include content expertise, excellent communication skills, a non-judgemental personality, and good mentorship.<sup>5,7–11</sup>

It has been hypothesized that the evaluation of an effective medical teacher by other faculty may vary according to the context. Some contextual factors might include the language of instruction, the medical speciality, or country-specific cultural practices. There are limited data to suggest any major differences in faculty evaluation pursuant to these factors.<sup>12–14</sup> However, it has been reported that faculty evaluation varies according to the years of experience of the faculty member who is conducting the evaluation.<sup>12</sup> A faculty member with more experience gives higher priority (i.e., scores) to appropriate classroom behaviour (e.g., organization and presentation skills) and to interaction with students (e.g., respectful) than a faculty member with less experience.

It should be noted that the characteristics of an effective medical teacher identified by other faculty members are different from those identified by students.<sup>15</sup> Although student evaluations of faculty are ubiquitous in medical schools, they do have known biases, including student personality and student performance. To that end, we have already published the study findings related to students' perceptions of an effective medical teacher.<sup>16</sup>

The current study was conducted in Qassim, Saudi Arabia. The primary study objective was to assess the faculty perceptions of characteristics and attributes of an effective medical teacher. The secondary objective was to determine whether the assessment of an effective medical teacher varied according to teaching experience. We hypothesized that the more experienced faculty would be more likely to endorse items related to classroom organization and student interactions than the less experienced faculty.

## Materials and Methods

### Context

During April–May 2014, a quantitative survey was performed at College of Medicine, Qassim University, Kingdom of Saudi Arabia (QUCOM). The study was reviewed and approved by the Medical Research Committee of QUCOM. The College of Medicine has adopted a problem-based and student-centred medical curriculum featuring a hybrid problem-based learning (PBL) approach that is both vertically and horizontally integrated and community oriented and that utilizes the spiral approach. A 6-year programme combines basic and clinical sciences. The first 3 years are devoted to an integrated basic medical sciences programme;

the next two years (the clinical science phase) are for clinical rotations, and the 6th year is for internship. The programme includes a mixture of student- and teacher-centred activities. However, the clinical phase mainly utilizes a teacher-centred traditional approach.

### Target population

All teaching staff at QUCOM (120).

### Study procedures

We conducted this study using a self-administered online questionnaire, which the faculty received after reading a brief description of the study and providing informed consent. Anonymity and confidentiality were maintained throughout the study. The questionnaire had two sections. The first section included demographic questions about gender, age, speciality, cultural background and the length of academic experience. The second contained detailed questions seeking the faculty's opinions about qualities and attributes of good teachers. There were 43 items, which were derived from the previously conducted studies designed to identify attributes of good medical teachers and the international guidelines.<sup>10,17,18</sup> Each item was measured on a 5-point Likert scale with the following response options: strongly agree, agree, not sure, disagree, and strongly disagree. The questionnaire was pretested on a small sample, and modifications were made accordingly.

The study proposal was scrutinized and approved by the Medical Research Committee of QUCOM. Raw data were treated with strict confidentiality and used only for research purposes.

### Data analysis

All data were stored in an electronic database using only identification numbers. We collected data on a total of 43 attributes related to faculty perceptions of qualities of a good medical teacher. The items were grouped into two broad categories: 'performance' and 'personality'. Twenty-five attributes belonged to performance, and the remaining 18 belonged to personality. These scales were also used in our previous publication on student perceptions.<sup>16</sup>

In the first step, individual frequencies (the proportion who 'strongly agreed' for any given item or, for reverse coded items ( $n = 2$ ), the proportion who 'strongly disagreed') of all items belonging to the performance and personality categories were calculated separately. In each category, item frequencies were sorted in descending order (from the highest to the lowest). The top five frequencies from each category were selected and graphed. In the next step, the percentages of "strongly agreed" were compared between those with 9 years of experience or less and those with 10 years or more. All tests were two-sided with an alpha of 0.01 because of multiple testing, and analysis was carried out using SPSS version 17.

## Results

The survey response rate was 75%, corresponding to 90 of 120 teaching staff at QUCOM. Of the participating faculty,

79% were male and 21% were female. Half of the faculty (49%) taught during the basic science phase (year 1–3), and the other half (51%) taught during the clinical science phase (year 4–5).

The mean scores for performance and personality attributes were 59.8 and 56.1, respectively, which indicates that faculty do not prefer one set of attributes over the other (Table 1). The items with the highest level of endorsement overall were communication skills, ability to motivate students, presentation organization skills, and subject expertise. Among the performance items, the least endorsed ones were telling jokes and sharing personal experiences. Among the personality items, the least endorsed items were self-sacrificing, non-judgemental, and leniency in giving marks in examinations.

Important characteristics were further analysed by performance and personality (Figure 1). The top five items in the performance category were motivates students, organizes good lectures, is an expert on the subject, understands the role of teacher and teaches at the student level, while the top five items in the personality category

were good communication skills, honest, respectful to students, punctual and good listener. Teachers with 10 years or more of experience assigned more value to a diverse number of attributes (Table 2). All attributes were tested according to years of experience, and the significant ones ( $p < 0.01$ ) were reported. Some of the attributes that were more likely to be endorsed by faculty with  $\geq 10$  years included good skills as PBL tutor, organized presentations, subject expertise, good sense of humour, honesty, and patience.

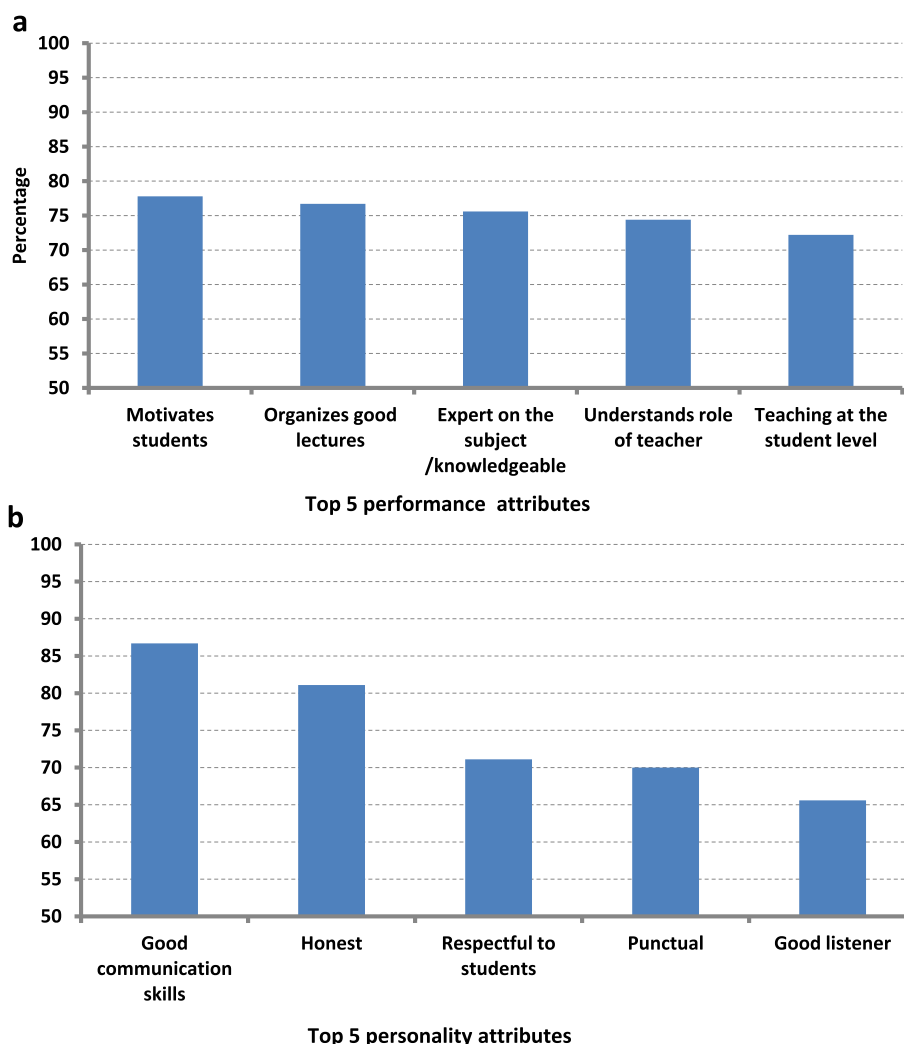
## Discussion

The main finding of the study was that QUCOM faculty identified 'communication skills', 'motivates students', 'organized presentation', and 'subject expertise' as the most important characteristics of a good medical teacher, while 'telling jokes' and 'giving personal narratives' were considered the least important qualities. Correspondingly, the most important attributes from the students' perspectives in our previous study<sup>16</sup> were very similar to those chosen by faculty:

**Table 1: Itemized list of performance attributes and personality attributes along with the percentage of faculty who endorsed each item (i.e., responded 'strongly agreed' or 'strongly disagreed').**

Performance (items = 25)	Percent strongly agreed	Personality (items = 18)	Percent strongly agreed
Motivates students	77.8	Good communication skills	86.7
Organizes good lectures/use of audio-visual aids e.g., power point	76.7	Honest	81.1
Expert on the subject/knowledgeable	75.6	Respectful to students	71.1
Understands role of teacher	74.4	Punctual	70.0
Teaching at the student level	72.2	Good listener	65.6
Desires to promote student's learning	71.1	Helpful	64.4
Good examiner/writes/asks good questions relevant to the students' learning needs in exams	70.0	Enthusiastic	63.3
Interacts with students	70.0	Dresses appropriately	58.9
Good role model	62.2	Open minded	56.7
Good guidance provider	61.1	Emotionally controlled/doesn't get angry easily	55.6
Available for consultation/advice	60.0	Tolerant/patient	54.4
Asks for feedback from students/tries to improve according to their needs	58.9	Friendly	50.0
Understands/relates to students	57.8	Accessible	48.9
Good command of clinical skills/teaches the practical useful points	57.8	Gives good marks to all students <sup>a</sup>	47.8
Good planner and organizer of the course/curriculum	56.7	Good sense of humour	40.0
Develops good learning resource materials for students including study guides (internet based or printed)	56.7	Self-sacrificing	40.0
Monitors students' progress/interested	55.6	Non-judgemental	32.2
Helps in facilitation of students' learning	54.4	Not strict/shows leniency <sup>a</sup>	23.3
Makes students feel comfortable	54.4		
Maintains his decorum as a teacher	52.2		
Offers good mentoring	51.1		
Sensitive to student's problems/needs	50.0		
Good skills as PBL facilitator	50.0		
Explains and shares personal experiences	44.4		
Tells jokes/funny stories during lectures/session to amuse students to maintain their interest	24.4		

<sup>a</sup> Responded as "strongly disagree".



**Figure 1:** a, b: Frequency of top five attributes in Performance (1a) and Personality (1b) categories: percentage who strongly agreed with any given attribute.

“Respectful to students”, “Expert on the subject”, “Organizes good lectures”, “Understands/Relates to students”, and “Good communication skills”. Moreover, “Good sense of humour”, “Explains and shares personal experiences”, “Self-sacrificing”, “Gives good marks to all students”, and “Dresses up appropriately” were the attributes least valued by students.

Considering that QUCOM faculty members represent various ethnic backgrounds, the findings are quite similar to other studies. Previous studies from other countries have also reported that good teachers possess superb communication skills and expertise on the subject and generally relate well to students.<sup>9,11,19</sup> The findings of these studies vary in terms of personal attributes, but communication skills and subject expertise were regarded as important attributes of a good teacher in nearly every study.<sup>12,15,20</sup> Interestingly, the faculty reported that certain attributes such as ‘sharing personal experiences’, ‘having a good sense of humour’, and ‘being self-sacrificing’ were less important in defining a good teacher, which is contrary to some early findings.<sup>12,21,22</sup> Cultural differences either inside the organization or in the way the students and teacher relate to one another could be

the underlying factors for this contrast. In QUCOM, the medical students are of Saudi origin while the faculty are not. Hence, personal experiences may be less relevant in this context compared with medical schools in which students and faculty have the same backgrounds.<sup>23</sup>

This study showed that the faculty with more teaching experience identified a wider array of important attributes than their less experienced colleagues. Other studies have found similar results in cases in which there were significant disparities in years of teaching experience.<sup>12,24,25</sup> This difference could be attributed to the direct effect of teaching experience, or it may be explained by faculty development programmes. QUCOM employs a PBL-based curriculum, which is student oriented. Faculty with more experience have spent significantly more time undergoing training on the PBL approach and other topics related to pedagogical methods. This training may have shaped their perspectives on teaching methods and the qualities associated with good teaching.

To plan for faculty development we need to define the required competencies. Milner et al. have suggested three methods for defining faculty competencies: (1) use of

**Table 2: Selective comparison of attributes (% strongly agreed) between faculty with different years of teaching experience.**

Attribute	Teaching experience		P value
	≤9 years	≥10 years	
	n = 35 Frequency	n = 55 Frequency	
Good skills as PBL tutor	11 (31.4%)	34 (61.8%)	0.005
Organizes good lectures/use of audio-visual aids e.g., power point	22 (62.9%)	47 (85.5%)	0.014
Understands role of teacher	22 (62.9%)	45 (81.8%)	0.040
Explains and shares personal experiences	11 (31.4%)	29 (52.7%)	0.038
Sensitive to student's problems/needs	13 (37.1%)	32 (58.2%)	0.041
Honest	22 (62.9%)	51 (92.7%)	0.001
Good sense of humour	8 (22.9%)	28 (50.9%)	0.007
Self-sacrificing	7 (20.0%)	29 (52.7%)	0.002
Emotionally controlled/ doesn't get angry easily	15 (42.2%)	35 (63.6%)	0.043
Tolerant/patient	13 (37.1%)	36 (65.5%)	0.008
Good guidance provider	16 (45.7%)	39 (70.9%)	0.015
Expert on the subject/knowledgeable	21 (60%)	47 (85.5%)	0.007

characteristics demonstrated by successful faculty members, (2) use of an established competency framework, and (3) 'expert consensus' developed during workshops and conferences. Thus, this work, in addition to other studies in this area, could help define the required competencies for our future faculty.<sup>26,27</sup>

The study strengths include a representative sample of the QUCOM faculty and thorough assessment of potential attributes of a good medical teacher. The study has some limitations. The faculty response may have been biased according to what they perceived was expected of them (i.e., desirability bias). For most items, the percentage of faculty who strongly agreed was unusually high. Another limitation was the absence of items unrelated to performance and personality. It would have been possible to check whether the faculty responded to each item according to the value they really ascribed to it or just gave blanket responses to all items had the questionnaire included additional questions unrelated to teacher characteristics.

### Conclusion and recommendations

Good teaching includes imparting knowledge and mentoring students. It is about preparing medical students to be consumers of the knowledge and skills being offered. Communication skills and content expertise are an almost universally accepted set of skills for medical teachers. QUCOM teachers have very clearly identified professionalism as lying at the heart of being a good teacher. Honesty, respectfulness and punctuality are relevant characteristics that stem from professionalism.

Studies such as ours should precede the design of faculty development programmes at medical schools. Both students and teachers should be surveyed to determine the attributes of good teachers. Faculty development programmes should

be designed pursuant to information gathered by such studies. The development of teachers' professional behaviour should constitute an integral part of all faculty development programmes.

### Competing interests

The author declares that he has no competing interests.

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