

ORIGINAL ARTICLE

ATTRIBUTES OF A GOOD MEDICAL SCHOOL: FACULTY PERSPECTIVE IN LOCAL CONTEXT

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Background: Medical schools and institutions are required to meet the standards of national and international accreditation bodies. These standards guide the attributes of a good medical school. The current study was designed to identify the attributes of a good medical school from a local perspective.

Methods: For this qualitative study based upon grounded theory, 25 participants were recruited through purposive sampling who underwent a workshop to get an insight about the attributes of a good medical school. They were asked to provide the faculty perspectives of a good medical school. The participant responses were put in online software 'Worditout' to look for the repetitions of words, followed by open coding technique. Initial coding was followed by a second phase of axial coding of the data in order to identify themes and thematic analyses of all the data were performed. **Results:** The teaching experience of the participants in medical schools varied from 2 to 20 years. In total, 198 responses/comments from all the participants were recorded. After doing the open and axial coding all the responses were summarized into four themes. The themes highlighted in order of the response frequency were: 1) improved learning strategies and opportunities; 2) modification and improvements in teaching methodologies; 3) standardised and programmatic assessment methods and 4) parameters of quality assurance and management. **Conclusion:** The attributes of a good medical school are guided by the national and international standards. However, some of the standards are contextual and our study showed these standards as attributes of a good medical school. It includes provision of better learning opportunities, teaching methodologies, standardised assessment and quality assurance.

Keywords: Attributes, medical school, faculty, perspective

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INTRODUCTION

Since the Flexner report (1910)¹ much of the focus of evaluating the performance of medical school has been on meeting the standards set by the accreditation bodies.² In addition, medical boards focus on evaluating the curriculum (content and structure) and assessing the performance of students.³

The ranking of medical schools is an essential element of educational activity.⁴ Cole and Lipton⁵, reported factors that are associated with ranking including: research and subsequent publications, faculty reputation and full time versus part time faculty, availability of training grants, research grants and the perception associated with the training effectiveness⁵. The educational programs of institution and quality of graduates are reflected in ranking of medical schools.

Apart from ranking, a variety of global standards exist to evaluate educational programs in medical schools. Globalisation warrants the need for global standards for accreditation purposes to ensure the quality of 'migrating' doctors.⁶ To this end, World Federation for Medical Education (WFME) in collaboration with World Health Organisation (WHO) published accreditation guidelines in 2005. These guidelines provide an excellent framework covering all aspects for a standard medical institution and provide a template for a national accreditation system.

Various factors have been suggested as attributes of a good medical school including mission and outcome, educational programs, student assessment methods, educational resources and curricular content, induction of students, program evaluation, governance, administration, research activity and continuous renewal.⁶⁻⁸

The current study was designed to identify the attributes of a good medical school from a local perspective. The aim was to explore the perspectives of the medical faculty involved in learning and teaching in different medical schools of Pakistan and how they compare or see the attributes of a good medical school in Pakistani context.

MATERIAL AND METHODS

This qualitative study based upon grounded theory was conducted at the Institute of Basic Medical Sciences (IBMS) Khyber Medical University (KMU), Peshawar after getting formal approval from the university. Purposive sampling technique was used to include all the participants till the point of data saturation. A workshop was arranged to provide an insight about the opinion of the experts and evidence from literature about the attributes of a good medical school. The workshop was attended by 25 faculty members of different medical colleges who were specifically involved in teaching, assessment and curriculum planning of their respective medical schools.

At the end of the workshop all participants were asked to provide their perspectives regarding the attributes of an ideal medical school. They were asked to provide the faculty perspectives in local context for the improvement of medical education in Pakistan. All the participants were asked to write their perspectives regarding ideal medical schools on paper.

The faculty varied in their experience of teaching in medical schools; ranging from lecturers to professors. This provided a wide range of opinion depending on the number of years of involvement in teaching, assessment and curriculum development. The participants of the workshop were randomly divided into four groups to have a thorough discussion among them and at the end each of the participants wrote his or her opinions regarding the attributes of a good medical school. All the responses were written anonymously on paper and collected. All of the responses were typed into Microsoft excel worksheet.

Initially all the text was put in an online software 'Worditout' to look for the repetitions of words, followed by analysis of the text manually by the experts independently, using open coding technique and consensus was developed. From the open coding crystalline forms of the key words, phrases and indigenous words were identified. Initial coding was followed by a second phase of axial coding of the data in order to identify themes and thematic analyses of all the data were performed.

RESULTS

The participation in the workshop was voluntary and included faculty with a wide of involvement in teaching ranging from 2 to 20 years. In total there were 198 responses/comments from all the participants. After performing the open and axial coding all the responses were summarized into four themes. The themes highlighted in order of the response frequency were: 1) improved learning strategies and opportunities; 2) modification and improvements in teaching methodologies; 3) standardised and programmatic assessment methods and 4) parameters of quality assurance and management (Figure-1).

Improved learning strategies and opportunities

In this theme majority of the responses were of introducing the newer trends for effective learning. Most of the participants were of the opinion to introduce strategies of problem and outcome based learning. They were of the view to use the student centred, multidisciplinary and encouraging E-learning platforms. The participants also emphasized the use of peer assisted learning as an effective way of learning. In addition, the approaches to internal motivation and self-directed learning (in the form of the motivational workshops and seminar) were another aspect that is needed to be incorporated in a good medical school. Use

of reflective practices along with constructive and timely feedback is another issue accentuated. Very few comments suggested to have pre-defined objectives for each course will help improve learning.

Modification and improvements in teaching methodologies

The second theme obtained from the analysis highlighted the use of more interactive teaching rather than the use of passive learning through didactic teaching methodologies. Majority of the responses suggested having teaching in small group formats such as the small group discussions and interactive lectures. Secondly, the role of continuous medical education (CME) and continuous professional development (CPD) for the teachers was emphasized. The strategies using the SPICES model of teaching needs to be introduced for developing an ideal medical school in the present context. Furthermore, the vertical and horizontal integration was also stressed for the improvement of graduate performance. It was iterated to add up faculty development programmes and faculty training programs, so that teachers act as role models for their students. Furthermore, the teaching methods need alignment with the intended learning outcomes. Specific learning strategies for each learning domain are the core to effective teaching.

Standardised and programmatic assessment methods

The use of proper assessments tools for specific competencies was the core of the responses. Furthermore, alignment of assessment methods to teaching and the proper alignment in the table of specifications of the course were emphasized for effective medical education. Use of multiple assessment tools (OSCE, MCQs, EMQs, SEQs and MEQs) during the examination for all three learning domains i.e. cognitive, psychomotor and affective. The implementation and appropriate practice of formative assessment throughout the academic period and multiple assessments rather than having one summative assessment at the end was emphasised.

Parameters of quality assurance and management

The fourth theme that emerged highlighted the vital role of quality assurance tools for continuous evaluation of the programs. Furthermore, provision of future planning and timely follow up of all the taught programs in a medical school was emphasized. Quality assurance, management and administration of a medical school were deemed important for smooth functioning of the education activities in a medical school. It was pointed out 'to keep-up' with the national and international liaisons to keep the updated standards in order to meet the requirements of national and international accreditations, e.g., WFME. Furthermore, development of a department of medical education to work in

collaboration with the quality assurance department was considered pivotal.

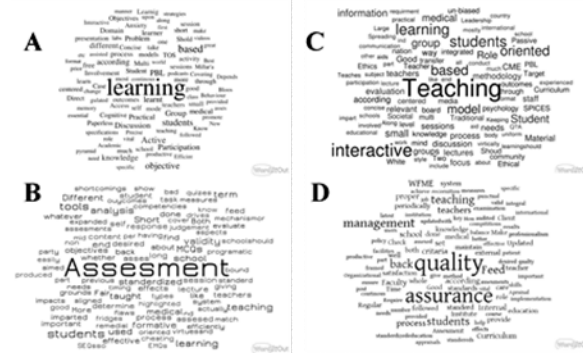


Figure-1: Output of ‘Worditout’ from participant responses

DISCUSSION

Attributes of a good medical school that emerged from our study are interesting. The themes from our study are consistent with the existing attributes and standards of a good medical school^{2,6,8}, yet contextual. The themes emerged were related to new and improved learning and teaching strategies, introducing a standardised assessment and a requirement for quality assurance and management.

Learning strategies and opportunities provided at the medical school are an important part of a medical school.⁹ Problem based learning¹⁰, outcome based educational environment¹¹, E-learning and peer assisted learning¹² was identified by the participants. This is attributed to the fact that most of the medical schools in our local context do not provide these opportunities to learners. In addition, the participants of this workshop had all been through the traditional lecture based and discipline based curricula and they perceive that their student would learn better if these learning opportunities are provided to them.

Moreover, the participants identified self-directed learning, reflective practices and feedback. Clearly, providing these learning opportunities to students in a medical school environment will further enhance their potentials and will help them become reflective learners equipped with problem solving skills.^{10,12}

The participants emphasised the importance of modifying the existing teaching methodologies and introducing novel teaching practices in medical schools. The existing teaching methodologies in the local context are mostly teacher centred and lecture based. The students are mostly passive learners. Small group teaching with more interactive session and student involvement improves the learning environment. A study in our local context has shown the effectiveness of the afore-mentioned assertion.¹³ In addition, the SPICES model should be the focus of medical education

department of a good medical school.¹⁴ Curriculum integration¹⁵ was also discussed. A more integrated curriculum provides a better learning and teaching environment in a medical school and it helps in aligning the learning outcomes, learning environment and assessment of students.

Moreover, in our local context, the significance of CME and CPD¹⁶ is overlooked, which provide teachers the opportunity to explore the required knowledge, skills and attitude for better teaching.

Interestingly, the participants of the workshop considered the current assessment tools as less effective. The importance of multiple assessment tools at multiple time points was emphasised. Thus, programmatic assessment¹⁷ enables active participation of learners in a learning environment and influence student learning. Therefore, a good medical school should adopt programmatic assessment. In contemporary assessment in our local context the affective domain is not assessed and is ignored. This leads to less focus on affective domain in the curriculum which adversely influences the clinical practice of graduating doctors.¹⁸

The continuous evaluation of the programs at a medical school with special focus on the quality assurance tools was emphasised. Quality ensures that the institution is capable of delivering the required learning, teaching and research environment. In addition, it ensures that the medical school is instilling the qualities in its graduates based on the vision and mission that it proclaims.¹⁹ The medical school should be accountable to the general public and it should meet all the national and international standards.²⁰ Thus, to ensure quality education in a medical school, a quality assurance and medical education department should be established.

CONCLUSION

The attributes of a good medical school are guided by the national and international standards and is reflected in WFME and other standards. However, some of the standards are contextual and our study showed these standards as attributes of a good medical school. It includes provision of better learning opportunities, teaching methodologies, standardised assessment and quality assurance.

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