Suggested new standards to measure social accountability of medical schools in the accreditation systems

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ABSTRACT

The role of medical schools as stakeholder for health improvement is well recognized. Medical schools are responsible of producing competent doctors who are capable to meet the society health needs and expectations. Other functions of medical schools are its participation in service and conduction of research.

The concept of social accountability is introduced to strengthen the role of medical schools in health, the concept has been defined by WHO as "The obligation of medical schools to direct its education, service and research towards addressing the priority health concerns of the community, region, and/or nation they have a mandate to serve. Priority health concerns are to be jointly identified by governments, health care organizations, health professionals and the public".

The compliance of medical schools with the expected functions varies from country to country or within the same country.

The objective of this work is to promote the principles of social accountability within the medical schools by developing standards and procedures that can be used by the existing accreditation systems.

This research is qualitative based on the phenomenological type of research and grounded research theory. It concludes the importance of accreditation systems as a lever of improvement and power to change the practice towards the expectations of the society.

Keywords: phenomenological type of research, social accountability, medical school accreditation

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INTRODUCTION

Social Accountability of Medical schools

During the last two decades, the concept of social development has been raised especially in the context of launching the Millennium Development Goals (MDGs). The attainment of the required level of development necessitates social accountability, which has been addressed in all aspects of life, including political, social, and economic aspects. Nevertheless, each discipline has defined social accountability according to the goals of each discipline.(1, 2)

Medical schools are not dissimilar to other sectors that adhere to the principles of social accountability; thus, the WHO has defined social accountability of medical schools as the "obligation of the medical schools to direct their education, research and service activities towards addressing the priority health concerns of the community, region, and/or nation they have a mandate to serve. Priority health concerns are to be jointly identified by governments, health care organizations, health professionals and the public" (3).

When medical education is viewed as an important aspect of a community, one can determine that all people and societies anticipate the presence of medical schools that have the complementary capabilities of responding to individual and societal needs, collaborating with society and the heath system to identify the priority health needs of society, and reacting accordingly (4-7).

In consideration of the social accountability of medical schools, there are many concepts in common with the public accountability of the health system (8). These commonalities may be observed in the context of the four values of the health system, Relevance, Quality, Cost-effectiveness and Equity (3);These four values must be considered when planning the entire programme within a medical school; when implementing such a programme; or when measuring the effects of the school's programme on the community, graduates, and health services.

Accreditation of Medical Schools

The WHO documents defined accreditation as "a voluntary peer-review process designed to test the educational quality of new and established medical programmes" (9). The process of accreditation, either voluntary or mandatory accreditation aims to ensure the compliance of medical schools with pre-established standards to satisfy the consumers of the educational process and to produce competent graduates to ensure a high level of institutional functioning and to improve public confidence in medical schools (10-15). Today, the accreditation process has been implemented in many countries throughout the world (16). Ninety-two countries are registered with the FAIMER Directory of Organizations, which recognises and accredits medical schools (DORA) (15)

Recent advances in the establishment of standards for the accreditation of medical schools include the work led by the World Federation of Medical Education (WFME) in collaboration with the World Health Organization (WHO), which aims to provide a general quality assurance instrument for medical education to be used worldwide on a voluntary basis (17). This work resulted in the publication of the document "Basic Medical Education WFME Global Standards for Quality Improvement" in 2003 (18). The WFME standards for basic medical education include nine areas with a total of 36 sub-areas (18, 19). Accordingly, many regions and countries have adopted the areas suggested by the WFME in their accreditation systems with some modification in the sub-areas (9, 14, 17, 19-23).

Many other countries have developed their own standards and processes for accreditation. For example, the Liaison Committee on Medical Education (LCME), which is the body that is responsible for the accreditation of medical schools in the United States (14, 24). The Australian Medical Council (AMC) is responsible for the accreditation of medical schools in both Australia and New Zealand (14, 25).

This paper represents a part of a PhD thesis with the aim of developing standards to measure social accountability within the accreditation systems of medical schools,

METHODOLOGY

This research is qualitative and is based on the phenomenological type of research and grounded research theory. Phenomenology is a type of research methodology that aims to understand and interpret the meaning that subjects give to their experience of phenomena and how they perceive such phenomena (26). Grounded theory is described as a research method in which theory is developed from data through the inductive analysis of data that are collected either through interviews or document analysis (27).

The above methods were translated in this research work to develop standards that can measure the Social Accountability of medical schools following the following stages:

- 1- Literature review
- 2- Standards Booklet Design
- 2-1 New Standards development
- 2-2 New Standards Classification and analysis
- 3- Testing the new standards
- 4- Ensuring Validity and Reliability

The below sections are details of the above mentioned stages.

LITERATURE REVIEW

A thorough search of the literature was conducted using the terms "Social Accountability", "Socially Responsibility", "Accreditation" and "standards". For all of these terms, another term ("Medical Schools") was inserted between the two terms. "Community-Oriented Education" and "Community-Based Education" were also used as search terms. The search was performed using the PubMed, PubMed Central and ERIC databases and on the websites of the following journals: Medical Education, Academic Medicine, Medical Teacher, Clinical Education, Teaching and Learning in Medicine and Education for Health. The search covered the period from 1990 to 2010.

A free internet search using Google, Google Scholar and Google Books was performed using the same terms, in addition to other search terms, such as "recognition of medical schools" and "medical schools and society". Relevant books in the library were also consulted.

STANDARDS BOOKLET DESIGN

New Standards Development

A set of new standards for accreditation was developed using the following steps:

- The nine areas for the WFME accreditation standards have been adopted, as they have been adopted by many regions and countries. The responses of the deans and the experience of the researcher were also considered in the process.
- Four new areas for the standards were added for "Administrative Staff", "Community Health Services", "Research" and "Graduates". These areas have been added

- according to the experience of the researcher as a member of the accreditation committee at Sudan Medical Council and a reporter for many of the accreditation teams with regard to missing areas in the standards.
- Area five (the Faculty/Staff standard) was changed to Human Resources, and the area of Programme Evaluation was changed to Programme Evaluation and Quality Assurance.
- The order of the areas has been slightly changed to ensure compatibility with the new standards.
- The standards in each area were developed with the consideration that these standards should cover the processes, content and outcome and consider the values of relevance, quality, cost-effectiveness and equity.
- The relationship between society and the health system was also a major area of emphasis.
- A total of 11 published documents were consulted in the process to develop the standards (3, 18, 23, 24, 28-34).

The new set of standards composed of 132 standards grouped into 13 areas. Notes were added to some of the standards for further initial clarification; more notes and wording changes in some of the standards were completed after the discussion of the first draft with medical education experts at Education Development Center-University of Gezira, Sudan (EDC-Gezira) and the Sudan Medical Council and subsequently in response to the discussion with the committees in the two medical schools, where the standards were tested (see below). A data collection guide for the standards was also developed during the self-study step. For each standard, a set of questions to be answered or statements that required responses were suggested, and several types of evidence were needed to support the data, as illustrated in the example below.

Area 1: Mission and Objectives

Standards 1.1: A medical school must have a written mission

Questions to answer/statements requiring a response	Evidence, examples or
	supporting documents
What is the mission of the medical school?	Copy of the mission
Is the mission written?	

An assessment rubric that is composed of three parts was developed to evaluate the level of social accountability in each of the 13 areas of the standards. The levels that were considered are high-level social accountability, moderate-level social accountability and low-level or no social accountability. The criteria for each level indicate the compliance of the school with the standards within each specific area, as illustrated in the example below.

Assessment Rubric

High-level Social	Moderate-level Social	Low-level or No Social
Accountability	Accountability	Accountability
The medical school has a well-	The medical school has a	The medical school has a
defined mission and objectives	defined mission and	stated mission and objectives
that address all of the functions	objectives that address	that are written by the faculty
of medical education. In view of	the functions of medical	or school administration and
the high-priority health needs of	education. The health	are available upon request.
the community, the community	professions participated	
and other stakeholders have a	in the formulation of	
role in formulating the school's	these mission and	
mission and objectives. The	objectives, and there is a	
medical school has a defined	plan for the	
mechanism in place to ensure	dissemination of these	
the dissemination of its mission	ideas.	
and objectives among all of the	(3)	
stake <mark>h</mark> olders.		
The mission and objectives		
must reflect the school's social	()	
responsibilities, such as		
ensuring the relevance, quality,		
equity and cost-effectiveness of		5/
the medical school.		
Additionally, the mission and		4 ~
objectives must be evaluated		
periodically by accounting for		
the changing health needs of the		
community.		

New Standards Classification and Analysis

The new standards were classified into process standards, content standards and outcome standards (Process standards refer to standards that are related to the preparation and execution of a medical school in performing its functions, content standards are standards that relate to the composition of a programme, and outcome standards are related to the results of a programme arising from the three main functions of education, research and service) and were plotted on the Simple Social Accountability Grid. Following the steps below

- The researcher read each standard at least three times and assigned each standard to suitable class in the simple social accountability grid.
- A description for each cell was given by summarizing the definitions of the values written by Boelen and Heck (3). As in the following table

Description of the cells of the social accountability grid

Value	Domains and Values		
	Education	Research	Service
Relevance	The educational	Research planning and	Service is directed
	programme reflects	conduction address	towards the important
	the major health	the major health	health problems
	issues	problems	
Quality	The educational	Research planning and	Service delivered is
	programme address	conduction address	evidence based and with
	production of	health problems using	high technology.
	graduates with needed	the high quality	
	competencies to	methods available	
	deliver quality service		
	within the context of		
	the society	2. 3	
Cost-	The educational	Research planning and	Service delivered have
effec <mark>ti</mark> veness	programme emphasize	conduction have	greatest impact on health
	cost-effective personal	greatest impact on	with optimum use of the
	and society health	health with optimum	available resources
	service	use of the available	
3		resources	<u> </u>
Equity	The educational	Research planning and	Service provided is
	programme exposes	conduction are	available to all people.
	students to problems	directed towards the	
	of all categories in the	problems in all	
13	society. And the	categories in the	8
	programme can accept	society.	
1	students from all those		
	categories		

In the second step, the outcome of the standard defined and accordingly put in the suitable cell of the grid.

Testing new standards by self-evaluation in two schools

The new standards were tested in two medical schools in Sudan: the Faculty of Medicine-University of Gezira and the Faculty of Medicine-Kassala University. Each one has conducted a self-evaluation using it. These self-evaluations began in June 2010 and were managed by a team from both schools. The researcher spent two days with each team to discuss the standards, made the needed clarifications, and discussed self-evaluation strategies. (See the timetable of activities below.) The duration of the self-evaluation step was 6 months in Kassala and 9 months in Gezira, and continuous communication was established between the teams and the researcher_during those periods.

After the completion of the self-evaluation, a questionnaire was sent to each of the team leaders. The questionnaire was composed of nine open-ended questions and an area for free comments. The questions primarily addressed the applicability of the standards.

The responses from each of the medical schools to the social accountability standards were sent to two medical education experts who are members of medical education units in

other medical schools to comment on the effectiveness of the standards and the data collection guidelines to generate similar responses from medical schools.

In view of the different contexts for each medical school, the experts were asked to offer their comments using a 5-degree Likert scale for each standard (in which 1 is not similar at all and 5 is completely identical). The means of the two responses were calculated to obtain the results. Standards with a mean rate of less than two were revised and annotated for further clarification.

The ratings of the two raters for each response were analyzed using the SPSS programme, Pearson Correlation was made between the two ratings.

Validity and Reliability

Validity and Reliability in qualitative research are a little different than in quantities research, because qualitative research is usually context bound and the conclusion may not be generalizable as it is to other contexts (31, 35).

Validity is defined as "a degree to which qualitative data accurately gauge what we are trying to measure", in qualitative research it is described as trustworthiness (35).

According to Guba, Trustworthiness of qualitative research is achieved through addressing the credibility (addressing a real problem), transferability (well-described context to the audiences), dependability (Stability of the data collected), and confirmability (objectivity of the data) of the study and its findings (31, 35, 36).

In this research, the trustworthiness was ensured following the Guba's criteria, as described below:

Credibility: The whole data collected in this research is concerned with the phenomena under study (social accountability and the accreditation of medical schools).

Transferability: The context of the study is very clear, there is clear description of the sources of data, the terminologies used to search the literature, the personnel interviewed, the personnel help in verifying the data and the areas where the standards were tested.

All the questionnaires used and all primary documents of data gathering and analysis are attached an either annexes or appendices.

Dependability: The dependability and stability in this study is multifaceted, the people interviewed and participated in refining the work are all purposively targeted, because they are expert in the field. In many steps in data collection and development of the standards (e,g blotting of the standards in the social accountability grid, classification of the standards, development of the new standards, etc.) the work has been done more than one time and then revised by external expert.

Confirmability: the results have been achieved with triangulation of different sources, published ones, the researcher opinion and expertise opinion.

Reliability in qualitative research is defined as "the degree to which study data consistently measure whatever they measure", as it has been mentioned above that the qualitative research is context-bound, usually the qualitative research is concerned with the reliability of the techniques used in the research and whether they could generate the same data again (35).

For the special concerns of the qualitative research as context-bound, application of the concept of reliability as it is in the quantitative research may be misleading and may wrongly lead to labelling the study as not a good one, that why dependability and transferability (discussed above) are to be the essential criteria for quality (37, 38).

In this research, the transferability and dependability were well maintained as described above and this description can well facilitate the replication of such a work in another place, considering the context of the phenomena.

Results

The new set of standards addressing social accountability in medical schools consists of 60standards within 13 areas. As the aim of this work is to promote the use of these standards in the accreditation of medical schools, another 72 standards have been added to generate a complete set that can be used for accreditation purposes.

These standards are described in the attached "Standards Booklet" see appendix . The booklet contains three sections. The first one contains the standards and its clarification notes. The 60 standards have the following numbers in each area, as shown in the table (1) (Appendix). They are also highlighted in the booklet that contains the full set. Notes have been added to 22 out of the 132 standards to further clarify the meaning of the standard.

The second section contains guidelines on how to collect data to test the compliance of medical schools with each standard during the self-evaluation. These guidelines were added to the standard booklet in the form of questions or asking for evidence (an example is given in the methodology above).

A third section is an assessment rubric for each area that can be used by the visiting accreditation teams. The rubric is composed of three levels: High-level Social Accountability, Moderate-level Social Accountability, and Low-level (or No) Social Accountability. Each of the three levels is described based on the medical school's level of compliance with the standards within the specific area (an example is given in the methodology above).

At the end of the rubric, the evaluator can explain his or her decision based on four options: standards not achieved, standards achieved at the low or no social accountability level, standards achieved at the moderate social accountability level, and standards achieved at the high social accountability level. There is also space for the evaluator's comments on each area.

When classifying the above set of standards into process, content or outcome standards, we conclude that 68 (51.5%) are process standards, 37 (28%) are content standards and 27 (20.5%) are outcome standards.

By plotting the new standards into the simple social accountability grid, we find that 52 (39.4%) address the medical school's social accountability, 14 (10.6%) address the relevance of its education program, 18 (13.6%) address the quality of the education program, 2 (1.5%) address the cost-effectiveness of the education program, 3 (2.3%) address the education equity, 4 (3.0%) address the relevance of the research, 5 (3.8%) address the research quality, 2 (1.5%) address the cost-effectiveness of the research, 2 (1.5%) address the research equity, 13 (9.8%) address the relevance of the service, 8(6.1%) address the service quality, 2 (1.5%) address the cost-effectiveness of the service and 5(3.8%) address the service equity. The details are presented in the table 2 (Appendix)

After the self-evaluations process was completed by the two medical schools, an open-ended questionnaire was sent to the leaders of the teams in both medical schools. The two agreed that the 13 areas of the new standards are compatible with the social accountability issues faced by medical schools and that those standards can be used to promote the addressing of the concerns of the communities and their high-priority health needs through education, research and services.

The leaders agreed that the wording is clear and understandable, and one of the two leaders suggested adding a glossary for some of the terminology. The leaders appreciated the help provided by the guidelines for data collection with respect to each standard. One leader stated, "It will be difficult to complete the self-evaluation without those guidelines".

The two leaders agreed that the new standards can be applied to the accreditation system. This answer was generated based on their experiences with the Sudan Medical Council's accreditation process.

During the data collection process, the college documents were analysed and existing data were used to examine the two medical schools' compliance with the standards. The leaders explained that the schools used most of the data from the previous self-evaluations conducted for the SMC accreditation and that the schools added what was needed for the new standards. Interviews were mentioned as a data collection method by one of the medical schools.

The two medical schools' responses to the standards were examined by two independent experts based on the data collection guidelines to check for the similarities of their responses. The experts agreed that all of the responses are similar, their ratings have positive pearson correlation of 0.728 (significant at 0.01 level). When examining all their ratings, the following six standards, (1.11, 3.3, 3.25, 5.4, 9.8, 10.7), have great discrepancy, therefore the aforementioned standards were revised by the researcher, and the notes explaining those standards were added accordingly.

DISCUSSION

It is evident that many national and international initiatives check for quality assurance in medical education by developing and applying standards (23).

The functions of the standards are to direct the design of the educational programmes, lead the evaluations of the programmes, help assess the consistency among the programmes and help the students understand what is required of them. (28, 39)

The existing accreditation standards are process standards that place little emphasis on the content and outcome standards (16, 40). This explain the attention paid by the European Council toward standards in medical education to address the outcomes rather than the process.(39)

The focus on the process standards partially contradicts the movement toward competency-based education, which concentrates on the outcome of the education process and not on the process itself (41). The contributions of the good processes to the outcomes are not yet clear (16).

The new standards developed in this research include 68 (51.5%) process standards, 37 (28%) content standards and 27 (20.5%) outcome standards. These standards may better satisfy the needs of the outcome-based education movement (41, 42).

The new standards address the social accountability issue by addressing every aspect of the social accountability grid. The new set of standards matches the emphasis of other models, such as the CPU model developed by Boelen and Woollard (43, 44), on social accountability.

The new standards also contain the nine common principles and strategies adopted by THEnet to evaluate the social accountability of medical schools (45).

The new set of standards are composed of 13 areas, which cover most of the areas of academic quality in medical education suggested by Hamilton (40) and include all eight areas suggested by Vroeijenstijn in the paper about quality assurance in medical education (46). The thirteen principles recommended by the GMC in Tomorrow's Doctor are also met (12, 29).

The standards that address social accountability and responsiveness should consider three principles: 1) the social goals should be defined through public discussion, 2) the goals should be specific and 3) the standards should be based on evidence that links them to the fulfilment of social objectives (47). The above three principles are met by the new set of social accountability standards.

The following paragraphs will discuss the 13 areas of the new standards.

Area One is about the Mission and Objectives of medical schools. This area calls for a mission that addresses the community's health needs in education, research and service, the standards in this area also aim to build an alignment between the school's mandate and its commitment to addressing the community's high-priority health concerns (48).

Area Two is about Governance and Administration. The standards in this area include those standards that necessitate institutionalised relations among the health system, the community and the other stakeholders.

The relation between the medical school and the health system is important to the health of people. The school must take responsibility for the planning, organisation, quality and delivery of health services (49, 50) by effectively using its resources and its ability to build relations with other stakeholders in the society.(51)

Each medical school must build partnerships that link it with the outside world (49, 50) to maximise its contribution to the improvements in the community's health status (3).

Although the data on the interactions between medical schools and the community are assuring (48), still there is a room for improvement as one of the benefits of being a socially accountable medical school is that the school's reputation will help the school strengthen its health-related partnerships with all concerned sectors (52).

Area Three in the new standards is about the Educational Programme. This area addresses the process, the content and the outcomes of the curriculum, such as the training in the community, by considering the relevance of the programme to the community's health needs as well as the quality, equity and cost-effectiveness of the programme. These standards are compatible with what is required from a socially accountable curriculum (53) that aims to produce a practitioner who is equipped with the competencies consistent with the needs of the community and the health system (49, 54, 55).

Some standards are related to the teaching of ethics and student-centred approaches to teaching and learning (e.g., PBL). Additionally, some standards encourage the adoption of community-based training, which is one of the strategies recommended by the WHO to reform medical education (56). Community-based training is also a part of the global consensus regarding the requirements of social accountability in medical schools (47-49, 57).

The standards in this area also call for educational programmes that can address underserved populations, as the evidence indicates that students who are trained to address the problems of those groups increase utilisation rates and improve the health of the communities that they serve (47).

Most importantly, the new standards encourage the stakeholders to participate in setting the curriculum, as it has been found that in more than 80% of the medical schools, the only body that defined the priorities of the curriculum was the medical school itself (48).

Overall, the standards aim to generate a socially accountable programme that can produce a practitioner who can deliver high-quality, relevant, and cost-effective services with equity to the community (3, 56, 58).

Area Four is about the presence and effective use of educational resources. This area constitutes a large portion of the process standards in almost all of the accreditation standards (18, 24, 25, 30).

In Area Five, which addresses the Students, the standards encourage each medical school to have a clear student selection and recruitment policy and to have a rule for selecting students from underserved areas. This issue is also addressed clearly in area four of the global consensus regarding the social accountability of medical schools (49).

Area Six addresses the assessment of students. The aim is to ensure that medical schools adopt assessment systems and policies to regularly monitor the students' performances (49).

This system must produce professional graduates who are aware of their moral obligation towards the society and able to translate the social mission and objectives of the school into reality (6), as the excellence of a medical school is only granted if its graduates can use the competencies that they learned in their professional practices (43)

Area Seven addresses the Faculty. This area calls upon medical schools to have qualified staff members who are able to deliver high-quality instruction, who are recruited according to the schools' plans, and who help to achieve the schools' missions and objectives in the area of social accountability by participating in community development, service and research in addition to their teaching activities.

This area is important, as past scholars have found that the staff members in the majority of the world's medical schools focus more on teaching than on research activities and nearly three times as much on teaching as on working with the community (48).

The standards in this area encourage the creation of recruitment policies and a promotion system for the staff that ensures their commitment to and support for the social mission of the medical school (54).

Area Eight concentrates on the administrative and supporting staff. The literature about the roles played by these staff members in achieving the school's mission and objectives is scarce, but anyone who has worked in medical schools cannot ignore the great role that they play in facilitating the work. The staff can be considered as supporting agents who help ensure the school's accountability towards its community.

Area Nine is about the evaluation of the programme and quality assurance. This process is important to the periodical monitoring and development of each institution (49). Both programme evaluations and quality assurance processes are found in all of the accreditation standards (29, 59).

Area Ten encourages medical schools to actively provide health services in accordance with the community's health needs, as indicated by the WHO definition of the social accountability of medical schools (3). This area is important to social accountability standards because medical schools are important stakeholders of communal health.

The lessons learned show that the health care system can only be reformed if the stakeholders share common beliefs regarding how the health needs of the community can be met (60, 61).

It should be emphasised that the creativity of medical education can address the other functions of medical schools instead of concentrating only on the curriculum (43, 51).

Area Eleven addresses the research. This area promotes research that is relevant to the community's health needs. Such research constitutes one of the components of social accountability (3, 57).

The same argument for having an area for the community's health services can be applied to this area as well.

Area Twelve addresses the graduates. It encourages medical schools to set their graduate profiles according to their social accountability missions, to follow up on their graduates' progress and to obtain feedback about not only the graduates' performances but also the needs of the employers and the community.

Data that track the career choices of graduates show that only 50% of the world's medical schools track the career progression of their graduates. The medical schools in the Eastern Mediterranean Region (EMRO) are the least likely to follow up on their graduates (48). It is also well recommended that medical schools play a role in shaping the environments in which their graduates will work (56)

Area Thirteen enhances the continuous renewal and development of this medical school by considering the community's changing health needs.

The standards in this area can be considered as a call for keeping an eye on the society's health needs, which are translated through the standards in the other areas, served by the school.

The Standards booklet contains a section about the guidelines for collecting data from the self-evaluation process. This section includes questions, with or without the suggested needed evidence, to help satisfy each standard.

These guidelines may unify the interpretation of the standard meaning, which may facilitate the self-evaluation process.

These guidelines are found in almost all of the accreditation standards around the world, but no study in the available literature has yet supported or contradicted the above assumption.

The third section in the standard booklet contains an assessment rubric for each area that can be used by the different accreditation visiting teams to generate consistent judgments regarding the level of social accountability of medical schools.

The rubric will lead to a common and uniform interpretation of a school's performance with respect to social accountability, as this rubric presents a continuum of performance levels (31) that differ depending on the degree to which the standards are satisfied. The rubric is composed of three levels: High-level Social Accountability, Moderate-level Social Accountability and Low-level or No Social Accountability.

One of the benefits of using a rubric is that it could lead medical schools and accrediting bodies to track a school's progress in developing higher levels of social accountability (62).

Assessment rubrics are not used widely in the accrediting process of medical schools.

Past studies have shown that social aspects are considered in the evaluations of medical school graduates if the schools receive funds and support from society. (47) For this reason, measuring social responsiveness should be a major component of the accreditation standards and process (48, 49).

CONCLUSION

Most accreditation standards concentrate on the process of delivering medical education. The relations between the accreditation standards and the outcomes of medical education have never been established adequately.

The accreditation system can be a powerful tool for change (43) and can lead schools to consider the impact of their educational programmes rather than the process of delivering these programmes (51). Thus, it is recommended that social accountability be included in all accreditation processes at all levels (59).

The standards should consider the changing health needs of societies and the role played by medical schools as important stakeholders that should collaborate with the health system and other stakeholders to promote the health of communities.

"Considering social accountability in the accreditation of medical schools will push the scrutiny beyond the process of carrying out sets of actions to questioning the impacts of these actions on the health care delivery and possibly on the health status of the people, who medical schools aim to serve," stated Boelen.

References

1. Malena C, Reiner F, Singh J. Social Accountability An Introduction to the Concept and Emerging Practice. world Bank; 2004 [updated December; cited 2011 March 4th];

Available from: http://siteresources.worldbank.org/INTPCENG/214578-1116499844371/20524122/310420PAPER0So1ity0SDP0Civic0no1076.pdf.

- 2. International SA. Social Accountability Standards 8000. 2008 [cited 2011 March 3rd]; Available from: http://www.sa-intl.org/_data/n_0001/resources/live/2008StdEnglishFinal.pdf.
- 3. Boelen C, Heck J. Defining and measuring the social accountability of medical schools. Geneva, Switzerland: Division of Development of Human Resources for Health, World Health Organization; 1995.
- 4. WONCA. Making Medical Practice and Education More Relevant to People's Needs: the contribution of the Family Doctor. World Health Organization and the World Organization of Family Doctors, WHO/WONCA conference Ontario, Canda 1994.
- 5. Boelen C. Towards Unity for Health, Challenges and Opportunities for partnership in health development. Geneva: World Health Organization 2000.
- 6. Canada H. Social Accountability, A vision for Canadian Medical Schools Health Canada; 2001 [cited 2008

December 13th]; Available from:

www.afmc.ca/pdf/pdf_sa_vision_canadian_medical_schools_en.pdf.

- 7. Murray TJ. Medical Education and Society. Canada Medical Association Journal. 1995;153(10):1433-6.
- 8. Lewkonia RM. The mission of Medical Schools: the Pursuit of Health in the Service of Society. BMC Medical Education. 2001;1(4).
- 9. WHO. Accreditation of Hospitals and Medical Education Institutes- Challenges and future directions. Cairo: WHO, EMRO2005. Report No.: EM/RC50/Tech.Disc. 1.
- 10. Ezekiel JE, Linda LE. What is Accountability in Health Care? Annals of Internal Medicine. 1996;124(2):229-39.
- 11. van Niekerk JP. Mission of a Medical School: An African Perspective. Academic Medicine. 1999 August;74(8 Supplement):S38- S44.
- 12. George CF. Measuring Social Responsiveness: A view From the United Kingdom. Academic Medicine. 1999 August;74(8 Supplement):S53-S8.
- 13. Cueto JJ, Burch VC, Adnan NA, Afolabi BB, Ismail Z, Jafr W, et al. Accreditation of undergraduate medical training programs: practices in nine developing countries as compared with the United States. Education for Heath. 2006 July;19(2):207-22.
- 14. vanZanten M, Norcini J, Boulet JR, Simon F. Overview of accreditation of undergraduate medical education programmes worldwide. Medical Education. 2008;42(9):930-7.
- 15. FAIMER. Directory of Organizations that Recognize / Accredit Medical Schools (DORA). 2009 [cited 2009

February 23rd]; Available from: http://www.faimer.org/dora/index.html.

- 16. Davis DJ, Ringsted C. Accreditation of undergraduate and graduate medical education: How do the standards contribute to quality? Advances in Health Sciences Education. 2006;11(3):305-13.
- 17. WHO. WHO Guidelines for Quality Assurance of Basic Medical Education in the Western Pacific Region. Manila: WHO, Regional office for the Western Pacific 2001.
- 18. WFME. Basic Medical Education WFME Global Standards for Quality Improvement. 2003 [cited 2005 March 13rd]; Available from: www.wfme.org.
- 19. Lilley PM, Harden RM. Standards and Medical Education. Medical Teacher. 2003;25(4):349-51.

20. Hamdy H. Standards for Accreditation of Medical Education in Gulf Council Countries, Implications on quality of Medical Education. World Federation for Medical Education

[cited 2009

February 5th]; Available from:

www.2.sund.ku.dk/WFME/Activities/Plenary%20Session%20II%20PDF/Hossam%20Hamdy,%2010.pdf.

- 21. Abdalla ME. Accreditation of Medical Schools, Experience from the Sudan. First Saudi International Conference on Medical Education; Riyadh2008.
- 22. Lim VK. Medical Education in Malaysia. Medical Teacher. 2008;30(2):119-23.
- 23. WFME. WFME Global Standards for Quality Improvement in Medical Education, European Specifications. World Federation for Medical Education 2007; Available from: www.wfme.org.
- 24. LCME. Functions and structure of a Medical School, standards for accreditation of Medical Education Programmes leading to M.D. Degree. Liaison Committee on Medical Education
- 2008 [updated June; cited 2009 April]; Available from: www.lcme.org.
- 25. AMC. Assessment and Accreditation of Medical Schools: Standards and Procedures. 2002 [cited 2009 February 2nd]; Available from: www.amc.org.
- 26. Groenewald T. A Phenomenological Research Design Illustrated. International Journal of Qualitative Methods. 2004;3(1):Article 4.
- 27. Harris IB. Qualitative methods. In: Norman GR, Van der Vleuten CPM, Newble DI, editors. International handbook of research in medical education. Dordrecht, The Netherlands: Kluwer Academic Publishers; 2002. p. 45-95.
- 28. Schwarz AW. Minimum essential requirements and standards in medical education. Medical Teacher. 2000;22(6):555-9.
- 29. GMC. Tomorrow's doctor. General Medical Council
- 2003 [cited 2009 February 5th]; Available from: www.gmc-uk.org.
- 30. TMAC. Accreditation Criteria. 2009 [cited 2009]

February 1st]; Available from: http://www.nhri.org.tw/nhri_org/mc/main4.html.

- 31. Bezuidenhout MJ. A guide for accreditation reviews aimed at quality assurance in south african undergraduate medical education and training: University of Free state 2005.
- 32. ACPE. Accreditation Standards and Guidelines for the Professional Program in Pharmacy Leading to the Doctor of Pharmacy Degree. Accreditation Council for Pharmacy Education; 2006 [cited 2009]

June 15th]; Available from: https://www.acpe-

accredit.org/pdf/ACPE Revised PharmD Standards Adopted Jan152006.pdf.

- 33. Committee GDs. Recommendations and Guidelines on Minimum Standards for Establishing and Accrediting Medical Schools in the Arabian Gulf Countries: Secretariat of the GCC Medical Colleges GCC Medical Colleges Deans' Committee 2001.
- 34. NAAC. Manual for Self-study for health sciences institutions, NAAC, India NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL, India; 2008 [cited 2009 July]; Available from: http://www.naac.gov.in/publications/Manual%20for%20Self-Study%20for%20Health%20Science%20Institutions.pdf.
- 35. Gay LR, Mills EM, Airasian P. Qualitative Data Collection In: Gay LR, editor. Educational Research Comptencies for Analysis and Application 9th ed. New Jerssy PEARSON; 2009. p. 364-82.
- 36. Guba EG. Criteria for assessing trustworthiness of Naturalistic Inquiries. Educational Communication and Technology Journal 1981;29(1):75-91.

- 37. Golafshani N. Understanding Reliability and Validity in Qualitative Research 2003 December 2003 Contract No.: 4.
- 38. Bashir M, Afzal MT, Azeem M. Reliability and Validity of Qualitative and OOpertaional Research Paradigm. Pakistan Journal of Statistics and Operational Research 2008;4(1):35-45.
- 39. Leinster S. Standards in medical education in the Europian Union Medical Teacher. 2003;25(5):507-9.
- 40. Hamilton J. Establishing Standards and Measurement Methods for Medical Education. Academic Medicine. 1995 July;70(7 Supplement):S51-S6.
- 41. Albanese MA, Mejicano G, Mullan P, Kokotailo P, Gruppen L. Definning Characteristics of Educational Competencies Medical Education 2008;42(3):248-55.
- 42. Frank JR. The CanMEDS 2005 Physician Comptency framework. Better standards. Better physicians. Better care. Ottawa The Royal College of Physicins and Surgeons of Canada 2005.
- 43. Boelen C, Woollard B. Social accountability and accreditation: a new frontier for educational institutions Medical Education 2009;43(9):887-94.
- 44. Leinster S. Evaluation and assessment of social accountability in medical schools Medical Teacher. 2011;33(8):673-6.
- 45. Palsdottir B, Neusy AJ. Transforming Medical Education: Lessons Learned from THEnet. Training for Health Equity Network (THENet); [cited 2011 September 8th]; Available from:

http://www.healthprofessionals21.org/docs/TransformingMedEd.pdf.

- 46. Vroeijenstijn AI. Quality Assurance in Medical Education Academic Medicine 1995 July 70(No. 7 Supplement):S59-S67.
- 47. Peabody JW. Measuring the social responsiveness of medical schools: setting the standards. Academic Medicine 1999 August 74(8 Supplement):S59-S68.
- 48. Boelen C, Boyer MH. A view of the world's medical schools: Defining new roles. 2001 [cited 2011 July 19th]; Available from:

http://www.iaomc.org/WHOReptMedSchools.pdf.

- 49. GCSA. Golabl Consensus for Social Accountability of Medical Schools. 2010 [cited 2011 March 10th]; Available from:
- http://healthsocialaccountability.sites.olt.ubc.ca/files/2011/01/GCSA-Consensus-Document-English.pdf.
- 50. Boelen C. The challange of changing medical education and medical practice World Health Forum. 1993;14:213-6.
- 51. Boelen C. Adapting Health Care Institutions and Medical Schools to Societies Needs. Academic Medicine. 1999 August;74(8 Supplement):S11-S20.
- 52. Parboosingh J. Medical school's social contract: more than just education andresearch. JAMC. 2003;168(7):852-3.
- 53. Gastel B. Improving the Social Responsiveness of Medical Schools: Summary of the Conference Academic Medicine. 1999;74(No. 8 Supplement):S3-S7.
- 54. Woollard RF. Caring for a common future: medical school's social accountability Medical Education 2006;40(4):301-13.
- 55. Boelen C, Woollard R. Socail accountability: The extra leap to excellence for educational institutions Medical Teacher 2011;33(8):614-9.
- 56. Boelen C, Jaques ED, Charles WD, Kantrowitz M. Developing protocols for change in medical education. Geneva World Health Organization1992.
- 57. Rourke J. Social Accountability in Theory and Practice. Annals of Family Medicine. 2006 September/October;4(Supplement 1):S45-S8.

- 58. Aretz HT. Some thoughts aboout creating healthcare professionals that match what societies need. Medical Teacher. 2011;33:608-13.
- Stefan L, Karle H. Social accountability of medical education: Aspects on global 59. accreditation Medical Teacher. 2011;33(8):667-72.
- Boelen C. Prospectus for Change in Medical Education in the Twenty-first Century. 60. Academic Medicine. 2007 July;70(No. 7 Supplement):S21-S8.
- 61. Boelen C. Building a socially Accountable Health Professions School: Towards Unity for Health. Education for Health. 2004 July;17(2):223-31.
- Simmon M, Forgette-Giroux R. A rubric for scoring postsecondary academic skills. Practical Assessment, Research & Evaluation [serial on the Internet]. 2001; 7 (18): Available from: http://PAREonline.net/getvn.asp?v=7&n=18.

APPENDIX

Table 1: Number of standards in each area that address Social accountability

Table 1: Number of standards in each area that address Social accountability				
Area	Standard Number			
Mission and Objectives	1.1, 1.2, 1.3, 1.4, 1.6, 1.11, 1.12, 1.14			
Governance and Administration	2.3, 2.9			
Educational Programme	3.1, 3.2, 3. <mark>3</mark> , 3.4, 3.10, 3.11, 3.13,3.14, <mark>3</mark> .15,			
	3.16, 3.17,3.18, 3.19, 3.20, 3.21, 3.24,			
	3.25,3.26,3.31			
Educational Resources	4.3,4.7			
Students	5.4			
Students' Achievements	6.1, 6.7,6.11			
Human Resources (Faculty /Staff)	7.4, 7.8, 7.9, 7.10			
Human Resources (Administrative and	8.1, 8.4			
Supporting Staff)				
Programme evaluation and quality assurance	9.1, 9.3, 9.4,9.5,9.6, 9.8			
Community health service	10.1, 10.2, 10.3, 10.5, 10.6, 10.7			
Research //	11.1, 11.7, 11.8			
Graduates	12.1, 12.4			
Continuous Renewal	13.2, 13.3			

Table 2: The new standards plotted on the social accountability grid

Value	Domains and Values		
	Education Education	Research	Service
Relevance	1-2	1-3	1-3
Retevance	1-3	1-14	1-4
	1-4	2-3	1-14
	1-14	11-7	2-3
	2-3		2-9
		(4=3.03%)	
	3-1		7-8
	3-3		7-9
	3-15		8-4
	3-17		10-1
	3-18		10-3
	3-24		10-5
	9-4		13-2
	12-1		13-3
	12-2		(13=9.8%)
	(14= 1 <mark>0</mark> .6 %)		11 11
Quality	1-1	1-14	1-4
· i	1-6	2-3	1-14
	1-11	3-21	2-3
	1-12	7-10	3-25
	1-14	11-1	10-3
	2-3	(5= 3.8%)	10-6
	3-4	(3-3.070)	10-7
	3-10		11-8
	3-11		(8= 6.06%)
	3-13		(8= 0.0070)
	3-16		
	3-20		
C VIII	4-3		
	5-3		
	6-1		
	6-7		2
1	7-4		<u> </u>
	9-1		
	(18= 13.6%)		
Cost-	1-14	1-14	1-14
effecti <mark>v</mark> eness	2-3	2-3	2-3
	(2= 1.5%)	(2=1.5%)	(2=1.5%)
Equit <mark>y</mark>	1-14	1-14	1-4
	2-3	2-3	1-14
	3-2	(2=1.5%)	2-3
	(3=2.3%)		10-2
			10-5
			(5= 3.8%)
			\ · · · /

Standards Booklet

1. Mission and Objectives

1.1 The Medical School must have a written Mission.

Note: The Mission must describe the main purpose of the medical school's existence.

- 1.2 The Mission must be defined by the school's stakeholders, including the community. *Note: The stakeholder is a person, group or organisation who can influence or will be influenced by the medical school's activities, functions or outcomes.*
- 1.3 The Mission must consider the education, research and service functions of the medical school.
- 1.4 The Mission must reflect the responsibility of the Medical School towards its community by addressing the community's health needs and providing high-quality health care with equity.
- 1.5 The Medical School must have a mechanism to disseminate its mission to the stakeholders, including the community.
- 1.6 The school must have a mechanism to evaluate its mission periodically in accordance with the community's changing health needs.
- 1.7 The Medical School must have written objectives.
- 1.8 The objectives must be defined by the school's stakeholders, including the community.
- 1.9 The objectives must be compatible with the school's mission.
- 1.10 The objectives must be set in outcome-based terms.
- 1.11 The objectives must describe the educational process that produces a competent doctor. Note: The educational process is the series of actions or changes in the educational programme that are intended to help bring the desired outcome.
- 1.12 The competencies required of the graduate, including knowledge, attitude, skills, ethics and professionalism, must be defined and well-known to stakeholders.
- 1.13 The objectives must lead to the preparation of the student as lifelong learner.
- 1.14 The objectives must address the social values, such as relevance, equity, quality and cost-effectiveness, in education, research and service.
- 1.15 The Medical School must have a mechanism to disseminate its objectives to the stakeholders, including the community.

2. Governance and Administration

- 2.1 The Medical School must define its organisational structure, including its relations with the university (if applicable).
- 2.2 The functions and responsibilities must be clear and well known to the administrative staff.

Note: The functions and responsibilities of individuals, units or departments inside the medical school.

- 2.3 The Medical school must set a planning process to direct the institution; the plan must result in measurable outcomes in education, research and health services that target the community's health needs. Previously you use "Medical School", whereas here you use "Medical Schools"
- 2.4 The Medical School must have sufficient autonomy to decide on the processing of the educational programme.

- 2.5 The Medical School must have the appropriate administrative staff members that help achieve the mission and objectives.
- 2.6 The Medical School must have sufficient autonomy for its budgetary practices.
- 2.7 The medical school's academic leadership must be trained in education and leadership skills.
- 2.8 The Medical School must have complete freedom to plan its curriculum and allocate needed resources.
- 2.9 The Medical School must have organised relations with the health system and other stakeholders, including the community.
- 2.10 The Medical School must have sufficient alignment between its academic and administrative planning processes.

3. Educational Programme

- 3.1 The educational programme must be designed while considering the community's health needs.
- 3.2 The educational programme must address the groups of risk and the underserved in the community.

Note: Groups at risk may include pregnant women, children, elderly people, and people at risk of HIV/AIDS.

3.3 The educational programme must consider the Moral and Ethical values of the community.

Note: The Moral and Ethical values are the concerns of right and wrong behaviours in the community.

3.4 The educational programme must aim to teach its graduates basic competencies, such as the five stars doctor profile.

Note: The five stars doctor profile includes the following characteristics: Care provider, Decision maker, Communicator, Community leader and Manager.

- 3.5 The Educational programme must follow a sound educational model.
- Note: The Educational Model may be Disciple-Based, Problem-Based, or Community-Based.
- 3.6 The Medical School must have sufficient autonomy in designing its educational programme.
- 3.7 The sequence and content of the educational programme must be readily available in the medical school.
- 3.8 The educational programme must be designed such that students will take responsibility for their learning.
- 3.9 The management of the educational programme must be the responsibility of the educational programme committee.
- 3.10 The educational programme must include the scientific foundation of medicine. *Note: The scientific foundation of medicine is composed of various disciplines, such as anatomy, physiology, and biochemistry.*

- 3.11 Basic science, clinical science and behavioural science must be integrated.
- 3.12 The educational programme must include the new trends in practice, such as evidence-based medicine and analytical thinking.
- 3.13 The Medical School must have a plan for reviewing and updating its educational programme.
- 3.14 Stakeholders, including the community members, must play a role in the updates and reviews of the educational programme.
- 3.15 The updates and reviews of the educational programme must consider the community's changing health needs.
- 3.16 The educational programme must address the recent scientific and technological developments in health science.
- 3.17 The Medical school must adopt a variety of teaching strategies based on the research evidence, including the teaching strategies in the Primary Health Care (PHC) settings, Ambulatory settings and community settings.

Note: Teaching Strategies are used to communicate the educational programme to the students.

Ambulatory settings are any location in which patients are seen without being admitted as inpatients.

Community settings may include neighbourhoods, schools, and camps.

- 3.18 The educational programme must place equal emphasis on the prevention, social behavioural aspects, and cure of disease.
- 3.19 The educational programme must consider the health system implemented in the community.
- 3.20 The educational programme must lead to early and sufficient contact with patients for the student.
- 3.21 The Educational programme must enhance the students' research skills.
- 3.22 The Educational programme must consider the student's preferences by including elective study modules.

Note: An elective is a course or module that trainees can choose based on their interests.

- 3.23 The Educational programme must encourage the use of technology by the faculty and students.
- 3.24 The Educational programme must encompass the medical ethics and issues of jurisprudence.

Note: Medical Jurisprudence is the branch of medical studies that addresses legal problems.

3.25 The Educational programme must address the quality assurance of health service.

Note: The programme must have content related to evaluations of the performance and impact of the health services provided.

3.26 The Educational programme must encourage the development of positive attitudes, good behaviours and professionalism.

Note: Professionalism is defined as the adherence to a set of values composed of both a formally agreed-upon code of conduct and the informal expectations of colleagues, clients and society.

- 3.27 The Educational programme must be in alignment with the mission and objectives.
- 3.28 The Educational programme must enhance the graduates' decision-making skills.
- 3.29 The teaching methods must be compatible with the educational programme's content.
- 3.30 The teaching and learning methods must encourage students to take responsibility for their learning.
- 3.31 The teaching and learning methods must focus on solving fundamental health problems by using the multidisciplinary approach.

4. Educational Resources

- 4.1 The medical school must have adequate physical facilities to deliver the non-clinical part of the curriculum.
- 4.2 The medical school must have adequate physical facilities to deliver the clinical part of the curriculum.
- 4.3 The medical school must have adequate physical facilities to deliver the part of the curriculum that is conducted in the community, such as the PHC facilities.
- 4.4 The medical school must have a plan for the optimum use and development of its facilities.
- 4.5 The library must be in an adequate location and contain good, up-to-date references, including computer-based and internet-based references, to meet the needs of the educational and research programmes.
- 4.6 The librarian must be readily available to assist the students, staff and researchers.
- 4.7 The medical school must have a plan for implementing teacher training and faculty development programmes.
- 4.8 The staff must be trained in medical education.
- 4.9 The medical school must have access to local, regional, and international educational expertise.
- 4.10 The resources must be evaluated regularly according to the needs of the educational programme.

4.11 The school must encourage the use of information technology in delivering the educational programme.

5. Students

- 5.1 The Medical School must have a clear policy for the application, selection and admission of students.
- 5.2 The policy must be published and readily accessible to the students and other stakeholders.
- 5.3 The policy must be revised periodically.
- 5.4 The policy must comply with the social responsibility of the medical school.

 Note: The plan for student recruitment must reflect the school's responses to the needs of society.
- 5.5 The medical school must have a system in place for student counselling and support.
- 5.6 The medical school must support student organisations and activities.
- 5.7 Students must have representation in the school's committees for the management of the educational programme.
- 5.8 Health services must be available to the students.

6. Student Achievement

6.1 The medical school must adopt a systematic, broad-based assessment system for measuring the students' achievements.

Note: The assessment system is a comprehensive and integrated set of evaluation measures that provide information for use in monitoring candidate performance as well as managing and improving unit operations and programs for the graduate's professional training.

- 6.2 The medical school must adopt a variety of assessment methods that lead to valid and reliable judgment regarding the student's achievements.
- 6.3 Student Assessment Methods must lead to valid judgments about the basic competencies required of the doctor.
- 6.4 The Medical School must define the assessment policy.

Note: The assessment policy is the plan of action agreed upon or chosen by the medical school for conducting the assessment.

- 6.5 Students must have guidance with regard to the assessment methods.
- 6.6 The medical school must have examination rules that are readily available for the staff and students.

Note: The examination rules are statements of what may, must or must not be done in preparing, conducting and marking the examinations.

- 6.7 The medical school must have an appropriate scientific method for standard setting. *Note: Standard setting is defined as setting a cut-off point in the scoring scale that separates the incompetent students from the competent students.*
- 6.8 The assessment methods must be compatible with the educational objectives and teaching and learning techniques.
- 6.9 The medical school must have both formative and summative assessments.
- 6.10 The medical school must have a unit for analysing and reporting the students' results.
- 6.11 The Medical School must have a mechanism for documenting the validity and reliability of the assessment.

7. Human Resources (Faculty /Staff)

- 7.1 The medical school must have a policy for recruiting and promoting the teaching staff.
- 7.2 There must be a balance between the medical and non-medical staff.
- 7.3 There must be a balance between the full-time and part-time staff.
- 7.4 The medical school must have a recruitment plan that helps the school to achieve its mission and objectives.
- 7.5 The medical school must recruit medically qualified teachers to teach basic science.
- 7.6 The medical school must have a plan for the staff's continuous professional development.
- 7.7 The recruitment policy must balance teaching, service and research.
- 7.8 The staff must participate in the community's health development.
- 7.9 The staff must provide services to society.
- 7.10 The staff must contribute to research.

8. Human Resources (Administrative and Supporting Staff)

- 8.1 The medical school must have a policy for recruiting supporting staff members who will help the school achieve its objectives.
- 8.2 The medical school must have a plan for recruiting supporting staff members.
- 8.3 The medical school must have a plan for the staff's continuous professional development.
- 8.4 The staff must provide services to society.

9. Programme evaluation and quality assurance

- 9.1 The medical school must have a mechanism for evaluating its programme and providing quality assurance.
- 9.2 The stakeholders must participate in the planning of the programme evaluation.
- 9.3 The opinions of the students and staff must be carefully obtained and analysed.
- 9.4 The opinions of the other stakeholders must be carefully obtained and analysed.
- 9.5 The programme must be evaluated regularly.
- 9.6 The programme evaluation must consider the community's changing health needs.
- 9.7 The students' achievement results must be carefully analysed and used in the quality assurance process.
- 9.8 The quality assurance process must address the process, content and outcomes of the educational programme.

Note: The quality assurance process must address the medical school's preparation and execution of its functions, the makeup of the programme itself and the results of the programme's three main functions (i.e., education, research and service).

- 9.9 The programme evaluation must address the school's governance and administration in addition to its educational programme.
- 9.10 The quality of the graduates must be addressed in the quality assurance process.

10. Community health service

- 10.1 The medical school must have a policy for the participation of the staff and students in the community's health development activities.
- 10.2 The medical school must have a policy to identify and implement programmes that improve the health status of the underserved and at-risk groups.
- 10.3 The medical school must have a policy for regularly evaluating and improving the services provided to the community.
- 10.4 The community's health activities must be related to the community's health needs.
- 10.5 The medical school must participate in the community's health services at all levels and the community-based health programmes.

Note: All levels refer to the Primary, Secondary and Tertiary levels of health care.

- 10.6 The medical school must formalise its partnerships with the concerned stakeholders to participate in the decision-making process with respect to the health services.
- 10.7 The medical school must be committed to providing high-quality services to the community.

Note: High-quality services use evidence-based data and appropriate technologies to deliver health care to individuals and society.

11. Research

- 11.1 The medical school must have a policy for promoting research.
- 11.2 Research facilities must exist in the medical school.
- 11.3 The medical school must have a policy to foster the relation between research and teaching.
- 11.4 The medical school must provide sufficient opportunities for students to participate in the school's research activities.
- 11.5 The medical school must help the staff publish its research in academic journals.
- 11.6 The research must be included in the undergraduate educational programme through the elective study modules.
- 11.7 The research must address the community's high-priority health needs.
- 11.8 The research results must be used for community health and health system development.

12. Graduates

- 12.1 The medical school must create a profile of the ideal doctor and graduate.
- 12.2 The medical school must follow-up its graduates.
- 12.3 The policy for estimating the graduates' performance must include the graduates, the Ministry of Health and the community.
- 12.4 The medical school must respond to the perceptions of the community and employers about the performances of the graduates.

13. Continuous Renewal

- 13.1 The medical school must have a mechanism for continuous renewal.
- 13.2 The renewal and developments must be in response to the community's changing health needs.
- 13.3 The renewal and developments must be in response to the employers' changing needs.