

**SELF ASSESSMENT OF MEDICAL EDUCATION AS A TOOL FOR
QUALITY ASSURANCE AND ACCREDITATION OF
AL-AZHAR FACULTY OF MEDICINE**

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ABSTRACT:

Background: The establishment of quality assurance and accreditation in medical education is one of the national reform plans in Egypt. **Aim of the Study:** To identify the current situation of medical education program in-use of Al-Azhar Faculty of Medicine, Cairo, Egypt according to opinion of their staff. **Material and Methods:** A cross sectional study was conducted to assess the situation of medical education in the opinion of medical staff. By stratified random sample a total of 128 medical staff of various posts were chosen to explore the underlying variables. The medical staff was enrolled from different departments of the Faculty during their daily work in the period from February 2005 through March 2006. Well structured questionnaire were used for collection of the required data. Administrative and ethical issues including autonomy, confidentiality and informed consent were obtained during all stages of the study. **Results:** The study found that 63.3% of the studied sample was professors, 40.6% were trained in specialty outside the country and 18.0% had international certificate. The majority of the studied staff (82.8%) agreed on use of the International Standards of medical education and 38.3% were seeing this standard. Nearly 60.9% of the staff knows that the faculty has a mission but 36.7% of them saw this mission, and 9.3% share in its mission formulation. Large proportion of the studied staff (74.2%) considered basic sciences sharing greatly in preparing the student to clinical sciences, and 45.3% of them considered that there is a great shortage in most basic sciences. About 49.2% of the staff knows that the faculty had educational objectives; only 36.7% seeing these objectives and

6.3% shared in its formulation. Nearly 47.6% of the studied staff has a copy of the curriculum, 46.8% read it, and only 39.8% know that there is a curriculum committee. Half of the studied staff (53.9%) knows that the curriculum objectives concise and clear, while 43.8% discussed it and only 18.8% of medical students know the curriculum objectives in the opinion of staff. Small proportions of staff (56.2%, 37.5%, and 36.7%) agree that the educational objectives are corresponding with curriculum content, educational method, and examination methods respectively. Nearly 35.9%, 46.1%, 48.4%, 41.4%, 23.4% and 22.7% of the studied staff respectively considered that the present curricula were regular, avoid duplication, containing suitable application of material related to sciences, regularly developed and in general they are comfortable on the curriculum at all. 59.4% and 50.0% of the studied sample considered the curriculum size and timing for teaching it are suitable. **Conclusion:** The findings of this study identified great shortage of staff knowledge about quality standard, mission, curriculum and educational objectives. This study suggests the need for educational reform through the use of international standards, mission, educational objectives, and well constructed curriculum as to include these topics in the training courses to the new and expected medical staff in the medical education unit.

INTRODUCTION:

The establishment of quality assurance and accreditation in medical education is one of the national reform plans in Egypt (**Elbadrawi, 2004**).

El-Ghor, et al. (2005) stated that accreditation in medical education is very important issue in the national reform plan in Egypt. The performance of the faculty self study as a step to accreditation was a normal response to the global and national call for quality improvement and assurance in medical education. This issue is of intense importance to the faculty.

Elshehka, (1990) stated that Alazher faculty of medicine is one of the national faculties serving the community in Egypt through providing them with physicians since its beginning to work and continues its development steps to fulfill international standards.

Health Committee Report (1978) declared that identifying educational objectives, character of the graduate, admission policy, resources needed were the major determinant for the development in the medical education.

Khattab, et al. (2004) stated that the medical school mission is" to develop an outstanding and honorable clinicians, practitioners, researcher and teachers capable of applying international standards of medical care and following medical ethics, to advance the knowledge base of medicine by developing and encouraging scientific research, and to disseminate knowledge through continuing education of students, graduates, faculty and colleagues. In that study they clarified that the undergraduate curriculum programs of Cairo University provide general education for all career options of medicine. It consists of 6 years, 3 basic and 3 clinical as clerkships. The curriculum utilizes variety of instructional methods, including lectures, tutorial classes, practical training in lab and clinical, in and outpatient rounds, student and faculty seminars in some courses and computer assisted learning

Harvard Medical School Curriculum, (2005) included the following principles:

1. Learning experiences model commitment to the patient as the first priority with respect for the patient's needs and preferences.
2. Learning strategies, educational goals, and curricular content are evidence-based and promote the use of research findings.
3. Learning methods are based on problems, situated in real clinical contexts to foster skills in self-directed and life-long learning.
4. Educational strategies are learner-centered. Learning experiences emphasize continuous improvement through a transparent, timely assessment of student performance and educational programs.
5. All learning experiences have goals and objectives that are clear to learners, faculty, and other participants.
6. Learning methods and experiences promote collaborative problem solving through effective teamwork.
7. Learning experiences utilize state 1 of the art technology and educational strategies.

The Liverpool, (2005) curriculum indicated that the term ' curriculum' refers to why, how, when, where and with what a student will learn. A 'syllabus' refers only what is to be taught. A syllabus is essentially a list of content (e.g. facts, skills, attitudes) whereas the curriculum includes the aims of the course, the learning methods, assessment strategies and procedures, and organization of contents. To achieve its broad aims and objectives, the undergraduate medical course focuses on developing students' understanding and skills relating to generic key concepts and principles, and tries to avoid teaching a plethora of factual information. A core curriculum develops four explicit curriculum themes that are the hallmark of the undergraduate medical course at Liverpool: Structure and Function in Health and Disease, Individuals, Groups and Society, Population Perspective, Professional Values and Personal Development

Amar, et al. (1998) and The Liverpool, (2005) stated that the core syllabus is designed to: equip the student to be a competent and caring doctor at qualification; provide the student with up to date knowledge and skills underpinning current clinical practice, prepare the student to learn and train effectively throughout a post-graduate career. It covers what students need to learn in order to work as doctors at the beginning of their careers and what they need to know in order to understand a particular subject or discipline. The core syllabus is concerned with professional competence and proficiency. As a consequence, the Pass Mark in the formal examinations (which assess knowledge, understanding and skills of the core) has been set at a correspondingly high level.

Ragab and Salah (2006) stated that curriculum is a course of study resulting in new skills and competences for the learners and involving the following steps: needs assessment, a rational statement, key content, educational goals, learning objectives, instructional strategies, evaluation methods, timetable, and future revision and summarize your plans. They also stated that identification of the opinion of the staff in medical education mission, curriculum, and objectives is a key priority as tool for quality assurance and accreditation in medical education, and also set as a base line for further assessment. From these points of view, the current study was conducted to assess knowledge and opinion of medical staff about these important topics in Al-Azhar faculty of medicine, Cairo, Egypt.

MATERIAL AND METHODS:

A cross sectional study was conducted to assess the current situation of medical education in Al-Azhar Faculty of Medicine in the opinion of their staff. Out of 1320 medical staff representing the population universe only 128 staff were chosen representing nearly 10% of total staff of different departments to explore the underlying variables. The size of sample chosen was based on expected knowledge about quality 20%, 3% error and 95% confidence interval. The sample was chosen by stratified random sample according to departments and staff density because in the faculty there are 30 departments of different sizes, some including large number of staff like surgery while other ones like Forensic medicine include small number and therefore the staff were chosen by department and staff density. The medical staff was enrolled from the different departments of the faculty during their daily work in the period from February 2005 through March 2006. The included staff was of various posts from professors to assistant lectures proportionate to their density in the faculty and department. Well structured self administered questionnaire was used for collection of data of the studied variables. Administrative and ethical issues including autonomy, confidentiality and informed consent were obtained during all stage of the study. The data collected were analyzed on SPSS program version 12. A descriptive and analytic statistics were done. The lowest accepted levels of significance were 0.05 or less.

RESULTS:

Out of 1320 medical staff representing the universe, only 128 staffs were chosen representing nearly 10% of the staff of Al-Azhar, faculty of medicine, Cairo, Egypt.

Table (1) showed that frequency distribution of general characteristics of the studied sample. Large proportion of the studied sample (63.3%) were professors, 40.6% were trained in specialty outside the country while 18.0% had international certificate.

Table (2.a) showed frequency distribution of the studied staff about international standard, mission, and educational objectives. The majority of the staffs (82.8%) agree on the use of international standard in medical education, 38.3% of

them were seeing this standard. It also showed that higher percentages of the studied staffs (60.9%) knows that the faculty had a mission, 36.7% of them have seen this mission, and only 9.3% share in its formulation **Table (2.b)**, while it is observed that nearly half of the staff (49.2%) knows that the faculty had educational objectives, 36.7% of them have seen these objectives and also 6.3% shared in its formulation (**Table 2.c**).

Table (3 and 4) showed frequency distribution of knowledge about basic sciences. Large proportion of the studied staff (74.2%) considered basic sciences greatly sharing in preparing the students to clinical sciences, and 45.3% of the sample considered that there is a great shortage in most basic sciences in this preparation.

Table (5) illustrated frequency distribution of knowledge about curriculum: Nearly 47.6% of the studied staff had a copy of curriculum, 46.8% read it and only 39.8% of them know that there is a curriculum committee.

Table (6) demonstrated frequency distribution of knowledge about curriculum objectives: Nearly 53.9% of staff considered that the curriculum objectives are concise and clear while only 43.8% discussed it and only 18.8% of the students know the curriculum objectives in the opinion of staff.

Table (7) showed that 56.2%, 37.5%, and 36.7% of the studied staff considered that the educational objectives are in line with the curriculum content, educational methods, and examination methods respectively

Table (8) showed frequency distribution of characters of curriculum: it is observed that 35.9%, 46.1%, 48.4%, 41.4%, 23.4% and 22.7% of the studied staff respectively considered that the present curricula were regular, free of duplication, containing suitable application of material related to sciences, regularly developed and in general he is comfortable with curriculum at all.

Table (9) illustrated that 59.4% and 50.0% of the studied sample considered the curriculum size and timing for teaching it are suitable.

DISCUSSION:

Accreditation in medical education is very important issue in the national reform plan in Egypt. The performance of the faculty self study as a step to accreditation was a normal response to the global and national call for quality improvement and assurance in medical education. This issue is of intense importance to the faculty. Out of 1320 staff representing the staff universe only 128 staffs were chosen to identify their opinion about the current situation of medical education program. The study found that 63.3%, 18.0%, 10.9%, and 7.8% respectively of the studied sample were professors, assistant professors, lecturers and assistant lecturers which coincide with their proportion in the faculty, so we can generalize the data. A many of the studied staffs (40.6%) were trained in their specialty abroad and 18.0% of them had international certificate (table 1), these findings indicate shortage that necessities more training and traveling to improve knowledge and communication with other universities abroad

High proportion of the studied staff (82.8%) agreed on the use of International Standard in Medical Education and 38.3% have seen this standard as demonstrated in table (2.A). Nearly similar results found in **Khattab, et al. (2004)**, these findings indicate agreement of most of the staff on faculty development which also needs more orientation about importance of educational reform.

In this study nearly 60.9% of the staff knew that the faculty had a mission, 36.7% of them saw this mission, and 9.3% shared in its formulation (table 2.B). Nearly similar results were found in self study by **Khattab, et al. (2004)** of Cairo University which recorded that 52.0% of the staff studied knows the mission, 23.0% read it, and 5.0% shared in its formulation. In the self study of 6 October University by **El-Ghor, et al (2005)** it was found that staff did not participate in mission review. The difference observed between our study and El-Ghor et al. 2005 that our faculty is old in comparison to new ones of 6 October university. The three results indicate lack of awareness of faculty mission.

The study found that 49.2% of the studied staff knew that the faculty had educational objectives; only 36.7% of them saw these objectives and 6.3% shared in its formulation (table 2.C). Nearly similar results were found in the studies of **(Health Committee Report, (1978) and Khattab, et al. (2004)** as they found that 53.0%

know objectives, 23.0% read it, and 8.0% shared in its formulation. These results indicate lack of awareness of the faculty educational objectives which did not improved by time since the health committee report in 1978 that necessity more seminars about quality in medical education.

In the current study nearly 74.3% of the studied staff considered basic sciences greatly sharing in preparing the students to clinical sciences and 45.3% of the sample considered that there are a great shortages in most basic sciences (table 3 and 4). These findings indicate need to take action to improve this stage to improve preparing the student to clinical sciences.

This study found that 47.6% of the studied staff had a copy of curriculum, 46.8% read it, and 39.8% know that there is curriculum committee (table 5). This indicates lack of awareness about educational curriculum that necessities more awareness by the curriculum to be as stated in **Liverpool, 2005**.

It was found that 53.9% of the studied staff considered that the curriculum objectives are concise and clear, 43.8% discussed it and 18.8% of students know the curriculum objectives in the opinion of staff (table 6). In 6 October University study, **El-Ghor, et al. (2005)** stated that inadequate academic autonomy for the staff in curriculum design, and inadequate reflection of the mission and objectives in curriculum components. Similar results found in **(Khattab et al., 2004)**. The difference observed between the current study results and El-Ghor et al. 2005 were due to time as 6 October University is new university while Al-Azhar is an old ones. These results indicate shortage of awareness about educational curriculum among the staff and students that necessities more awareness by the curriculum objectives as stated by **(Ragab and Salah, 2006)**

The study found that 56.2%, 37.5%, and 36.7% of the studied staff considered the educational objectives in agreement with the curriculum content, educational method, and examination methods respectively (table 7). These findings were in agreement with **Khattab, et al. (2004)** and both results indicated that there is urgent need for improvement of the present educational objectives and curriculum

The findings showed that 35.9%, 46.1%, 48.4%, 41.4%, 23.4% and 22.7% of the studied staff respectively considered that the present curricula were regular, free of duplication, containing suitable application of material related to sciences, regularly

developed and in general he is comfortable with curriculum at all (table 8). Our findings are in agreement with **Khatab, et al. (2004)**, which indicate urgent need for improvement of the present curricula.

The study also found that 59.4% and 50.0% of the studied sample considered the curriculum size and timing for teaching were suitable (table 9). **Khatab, et al. (2004)** and **El-Ghor, et al. (2005)** described nearly similar results. This indicates that large proportions of the staff in general were uncomfortable about the present curriculum.

Limitations: limitations of this study should not be overlooked as it involved only the opinion of the staff and not the students; many of the studied staff refuses to complete the questionnaire (nearly 3%). Further studies are needed to study the opinion of students as well as staff on a broad scale.

CONCLUSION AND RECOMMENDATIONS:

In conclusion, there is a great shortage in the staff knowledge about quality standard, mission, curriculum and educational objectives. This study suggests the need for education reforms through use of international standards, mission, educational objectives, and well constructed curricula

Table (1) Frequency distribution of general characters of the studied sample:

1- Posts: n=128	No	%
Professors	81	63.3
Ass. Prof.	23	18.0
Lecturers	14	10.9
Ass. Lecturers	10	7.8
2- Trained in speciality outside the country	52	40.6
3- International certificate in specialty	23	18.0

Table (2) Knowledge of the staff about international standard in medical education, mission, and educational objectives among the studied sample:

2. A-Frequency distribution of knowledge about International standard in medical education:

	Yes		No		Total	
	No	%	No	%	No	%
Agreement on using international standard	106	82.8	22	17.2	128	100.0
Have already seen the standard	49	38.3	79	61.7	128	100.0

B- Frequency distribution of knowledge of staff of the sample about the faculty mission:

	Yes		No		Total	
	No	%	No	%	No	%
Know the mission	78	60.9	50	39.1	128	100.0
See the mission	47	36.7	81	63.3	128	100.0
Participation in setting mission	12	9.3	116	90.7	128	100.0

C- Frequency distribution of knowledge of staff of the sample about educational objectives:

	Yes		No		Total	
	No	%	No	%	No	%
Know the objectives	63	49.2	65	50.8	128	100.0
See objectives	47	36.7	81	63.3	128	100.0
Participation in setting it	8	6.3	120	93.7	128	100.0

Table (3) Frequency distribution of degree of sharing of basic sciences in preparing the student to clinical sciences in the opinion of the studied sample.

Degree:	No	%
Very great	61	47.7
Great	34	26.6
Moderate	21	16.4
Weak	12	9.3

Table (4) Frequency distribution of degree of shortage of basic sciences in preparing the student to clinical sciences in opinion of the sample.

Degree:	No	%
Great shortage	12	9.3
To some extent	46	35.9
No shortage	39	30.5
Do not know	31	24.2

N.B. the basic sciences including: Anatomy, Physiology, Biochemistry, Histology, Pathology, Pharmacology, Microbiology, Parasitology and Behavioral sciences.

Table (5) Frequency distribution of knowledge of the staff about the curriculum:

	Yes		No		Total	
	No	%	No	%	No	%
Presence of curriculum	61	47.6	67	52.4	128	100.0
Read the curricula	60	46.8	68	53.2	128	100.0
Presence of curriculum committee	51	39.8	77	60.2	128	100.0

Table (6) Frequency distribution of the studied staff by their knowledge about the educational objectives:

Characters	yes		No		Do not know	
	No	%	No	%	No	%
Concise and clear	69	53.9	44	34.4	15	11.7
Discussed with staff	56	43.8	57	44.5	15	11.7
Student know it	24	18.8	74	57.8	30	23.4

Table (7) frequency distribution of the studied sample by their attitude towards suitability of objectives of the present curricula

Suitability with the following subjects:	Agree		indifferent		Not agree	
	No	%	No	%	No	%
Curriculum content	72	56.2	28	21.9	28	21.9
Teaching methods	48	37.5	45	35.2	35	27.3
Examination methods	47	36.7	32	25.0	49	38.3
Restriction on curriculum in teaching	87	68.0	22	17.2	19	14.8
Participation in curriculum setting	39	30.5	41	32.	48	37.5

Table (8) Frequency distribution of the studied staff attitude toward the characteristics of present curricula:

The curriculum character	Yes		To some extent		No	
	No	%	No	%	No	%
Regular	46	35.9	56	43.8	26	20.3
Free of duplication	59	46.1	41	32.	28	21.9
Suitable application of materials related to science	62	48.4	36	28.1	30	23.4
Suitability of teaching methods with exam methods	53	41.4	44	34.4	31	24.2
Regularly developed	30	23.4	49	38.3	49	38.3
Comfort ability with the curriculum at all	29	22.7	58	45.3	41	32.0

Table (9) Frequency and percent distribution of the studied staff attitude towards size of curriculum and the time for teaching it:

The curriculum character	Less than needed		suitable		More than needed	
	No	%	No	%	No	%
Curriculum size	20	15.6	76	59.4	32	25.0
Time for teaching	44	34.4	64	50.0	20	15.6

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- مجلس الصحة. هيئة مكتب المجلس. الامانة الفنية. ص.ب ٤٢٤ القاهرة : تقرير عن ندوة الفيوام المنعقدة فى الفترة

من ٢٢-٢٤ / ٣ / ١٩٧٨ و التقرير بالعربية

التقييم الذاتى للتعليم الطبى لكلية الطب جامعة الأزهر: خطوة أولية فى مسار الحصول على توكيد الجودة والاعتماد

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تعتبر توكيد الجودة والاعتماد الدولى فى التعليم الطبى خطوة من الخطوات الإصلاحية العامة فى مصر حالياً. وقد أجريت هذه الدراسة الوصفية على قطاع عرضى من أعضاء هيئة التدريس بكلية طب الأزهر بنين من مختلف الأقسام بلغ عددهم ١٢٨ عضواً تم اختيارهم من جميع الأقسام بواسطة العينة العشوائية الطبقة والتي روعى فيها الأقسام وكذا نسبة أعضاء هيئة التدريس فى كل قسم خلال الفترة من فبراير ٢٠٠٥ حتى مارس ٢٠٠٦. وقد روعيت جميع الخطوات الإدارية والآداب المهنية فى جميع مراحل الدراسة. وقد وجد أن ٦٤.٣% من العينة أساتذة، ٤١.٣% تم تدريبهم فى تخصصهم و ١٨.٣% منهم سافر للخارج للحصول على شهادة فى تخصصه. وقد وجد ان نسبة كبيرة من أعضاء هيئة التدريس وافقت على استخدام المستوى العالمى فى الجودة فى التعليم الطبى بينما وجد ان ٣٨.١% فقط قد اطلع على هذا المستوى العالمى للجودة. ووجد ان نسبة كبيرة من أعضاء هيئة التدريس تعرف رسالة الكلية (٦١.٩) بينما ٣٥.٧% فقط من رأى هذه الرسالة وشاركت نسبة ٩.٥% فى وضع هذه الرسالة. وقد وجد ان ٥٠.٠% من أعضاء هيئة التدريس تعرف الأهداف التعليمية بينما اطلع ٣٧.٣% فقط على هذه الأهداف وشاركت نسبة ٦.٣% فى وضع هذه الأهداف. أكدت نسبة ٧٥.٤% من هيئة التدريس مساهمة العلوم الأساسية فى إعداد الطالب للعلوم الإكلينيكية بينما أكد ٤٦.٠% وجود قصور فى هذا الإعداد. وقد وجد أيضاً أن ٤٨.١% من

الأعضاء تعرف أن هناك منهج دراسي وان ٤٥.٥٪ قرأ هذا النهج وأيضاً أن ٤٠.٥٪ تعرف أن هناك لجنة للمناهج. كما وجد أن ٥٤.٨٪ و ٤٤.٤٪ و ١٩٪ من أعضاء هيئة التدريس تعرف أن المنهج الدراسي واضح و مناقش مع هيئة التدريس و تعرفه الطلاب. بينما وافقت ٥٧.٢٪ و ٣٨.١٪ و ٣٧.٣٪ و ٦٩.٠٪ و ٣١.٠٪ على التوالي من هيئة التدريس على محتوى المنهج وطريقة تدريسه و امتحانه و الاقتصار عليه في التدريس وأيضاً المشاركة في وضعه. مما سبق يتضح ان الدراسة أشارت الى وجود قصور في معرفة أعضاء هيئة التدريس بكل من: الرسالة والأهداف التعليمية والمنهج الدراسي مما يستلزم إعادة مراجعتها وفق المعايير العالمية و إعلام هيئة التدريس بها.