

# **SELF STUDY**

*Faculty of Medicine*

*Cairo University*

**2004**

### ***From the Dean of the Faculty***

*In a speech in front of a joint session of the People's Assembly and the Shoura Council President Hosni Mubarak asserted the importance of education and decided upon the establishment of an agency for Quality Assurance and Accreditation. Consequently, the Minister of Higher Education and Research, his excellency, Dr. Mofid Shehab constructed a time frame for improving higher education emphasizing the significance of quality assurance.*

*Following these steps, Cairo University and the Faculty of Medicine, took the lead in improving the educational program as well as setting a plan for self study*

*Kasr El-Aini Medical School is an institution that has been functioning, without interruption, for 176 years. It represents the oldest, largest, and by far the most community-attached establishment in recent Egyptian history. It is a landmark of medical education and health service.*

*Kasr EL-Aini is the Faculty of medicine of Cairo University. Its graduates exceed hundreds of thousands in number, spanning the entire world as international figures and experts in their fields. Kasr El-Aini has spawned University Presidents, Deans, and Ministers alike. Out of the roots of this prestigious organization has branched out remarkable new medical faculties, offering further education and health services*

*Kasr El-Aini, for the first time is running a vast self-assessment study as a tool for educational development, aiming for national as well as international accreditation. We hope to reach this goal through genuine evaluation and acquisition of monitored corrective actions.*

*A self study of such a large scale encompasses 8 hospitals of more than 5000 beds, about 2700 faculty staff, and approximately 10,000 paramedicals and working staff. This self study aspires to analyze and weigh present situations and inconsistencies and ultimately find suitable solutions for them. All this while holding strong to our adopted high education reform and hoping to fulfil our community's needs, hopes and expectations.*

*Here, a word of thanks is due to the sincerely hard working group at the Medical Education Development Center for making this vision a possible reality.*

***Prof. Dr. Madiha Khattab***  
**Dean, Faculty of Medicine,**  
**Cairo University**

### ***From the Chair person of Self study***

*The establishment of an independent agency for Quality Assurance and Accreditation is one of the key pillars of the National reform plan in Egypt. Realizing this fact as well as following the lead of President Hosni Mubarak in emphasizing the value of education , the Faculty of Medicine , Cairo University has taken the initiative in being the first medical school in Egypt to perform a self study set in accordance to international standards.*

*The Medical Education and Development Center (MEDC) have been responsible for performing the first self study of the Faculty of Medicine Cairo University. The first phase of the self study includes creating awareness, initiating culture of quality, and designing and organizing workshops for faculty members confronting the issue of quality assurance in medical education. During phase two, the implementation stage, MEDC's task force and non-academic staff spent more than 500 working hours on the study.*

*I am delighted and extremely proud of MEDC's task force group, it's non-academic staff, as well as the affiliated faculty members, for their hard work on this project. MEDC's staff are the reason this project has become a reality and without their dedication, honesty, enthusiasm, and positive attitude, none of this would have ever been possible. I hold great admiration for them and am positive they feel just as proud as I am that our project has finally taken off.*

*I would like to express my gratitude to the faculty members of the school of medicine for their contribution to this task, particularly for answering the extensive questionnaires and spending a big portion of their valuable time on interviews and focus group discussions to brain storm and propose corrective actions for our educational concerns.*

*I would also like to thank the students whose contributions were extremely beneficial. We truly appreciated their serious approach and dedication to the project despite their initial surprise and hesitancy.*

*Last but not least, I would like to give my appreciation to the dean of the faculty, Prof. Dr. Madiha Khattab, for her immense support in conducting this venture. My gratitude is directed particularly to her, supporting, and motivating the faculty and the students to cooperate with the task force group to complete this vital endeavour.*

### ***Dr. Nadia Badrawi***

*Prof. Paediatrics/Neonatology*

*Chairperson of task force of self study*

*Director of the Medical Education & Development Center*

*Cairo University*

## Task Force Group

<b>Prof. Madiha Khattab</b> <i>Dean of Faculty of Medicine</i>	<i>Person in authority</i>
<b>Prof. Nadia Badrawi</b> <i>Director of Medical Education &amp; Development Centre (MEDC)</i>	<i>Chairperson of task force</i>
<b>Prof. Esmat Sheba</b> <i>Associate director of MEDC</i>	<i>Associate Chairman of task force</i>
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<b>Miss Doaa Mohamed Gohar</b>	<i>Executive Director</i>
<b>Mr. Ahmed Abd El Moneim</b>	<i>Data entry &amp; analyst</i>
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<b>Miss Heba Ahmed Abd El Hamead</b>	<i>Data entry</i>

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## Self Study Faculty of Medicine, Cairo University General Information

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Number of Students	9423
Number of Postgraduate Students	3732
Number of Faculty members	2773
Number of Non Academic Staff	970
Number of Academic Departments	37
Number of Awarded degrees	112

## **Historical Background of the School of Medicine in Cairo University**

- The school of medicine was inaugurated in 1827 as a 6-year study program in assembly of the Paris Medical School. The French doctor, Clot Bey, served as the president of the school. By 1837, the number of graduates had reached 430 doctors. Until 1848, the faculty of medicine had graduated 800 doctors.
- When Abbas Pasha came to rule Egypt, he tried to demolish all that was French following the British councillor's advice. As a result, Clot Bey resigned in 1849 and was succeeded by Dr. Duvigneau, then Peron Bey and then Shafi Bey, who was the first Egyptian president of the school.
- When Khedive Ismail came to rule, the school again progressed rapidly by appointing its second Egyptian director Mohamed Ali El-Bakli Pasha.
- In 1925, the school of medicine was incorporated into the Egyptian university and was named the "Faculty of Medicine". The faculty was ready for graduating doctors with the degree of Bachelor of Arts in medicine and surgery, after a study period of five and a half years. The faculty was now capable of granting a doctorate in medicine.
- In 1927, it was decided that a new hospital consisting of 1200 beds and a modern medical school should be established. King Fouad laid the foundation of the new faculty and its hospital on December 16, 1928.
- The advancement and expansion continued throughout the following years by establishing different units that were both scientifically distinguished and technically equipped with the latest modern instruments and devices.
- At the present time, the Faculty of Medicine includes 37 departments, 42 specialized units, 2773 faculty members, 9423 undergraduate students, and 3732 post graduate students. The faculty awards a Bachelor degree of Science in Medicine and Surgery, 37 master degrees, diplomas and doctorate degrees in the different specialties of medicine.
- The Cairo University hospitals affiliated to The Faculty of Medicine comprise more than 5200 beds representing the largest medical institution in the Middle East and probably one of the largest centres in the world. Kasr El-Aini is considered a symbol of the medical profession in Egypt, a stronghold of science and culture, and a towering image of human mercy. Hence, the founding date of Kasr El-Aini on March 11, 1827 was appointed as the day of the annual festival for the Egyptian medical profession.

## **Introduction to the self study**

The council of Faculty of Medicine, Cairo University, nominated a task force to work in the self study program in November 2003.

The task force group studied the different international standards for medical education and approved of the global standards for undergraduate medical education of the world federation (WFME) (annex 1) as the benchmark. WFME published global standards for undergraduate, postgraduate, and continuing professional development in Copenhagen in 2003. Each standard includes basic standards and standards for quality improvement.

The task force group agreed to consider the basic part of the standards to be our benchmark.

The goals of conducting the self study of the faculty of medicine in Cairo University were to:

- Design and excite an awareness campaign for the faculty members, administration, and students about the quality assurance of medical education.
- Identify the points of strength and the points of weakness.
- Plan for reformative and corrective actions.
- Prepare the faculty to be ready for accreditation, both nationally and internationally.

## **Methodology**

This self study is directed to the undergraduate medical program. The methods used in conducting this self study were:

### **1. Awareness Campaign:**

In order to introduce the concepts of quality assurance and self review as well as the global standards of medical education to the authorities, administration, faculty members and students (from April 2003 until today).

### **2. Task Force Nomination:**

By the faculty council in November 2003.

### **3. Approval of the Benchmark:**

Quoted from the basic standards of medical education from the WFME global standards (annex 1).

### **4. Data Collection and Analysis:**

Data were collected through interviews, documents, questionnaires, and focus group discussions:

#### ***A. Interviews and documents:***

Interviews were conducted with the aim of obtaining information about current policies and practices, as well as obtaining the opinions and suggestions of the key persons. Prepared interviews were conducted by members of the task force with stake holders as syndicates, directors of hospitals in the Ministry of Health and Cairo University hospitals, administrative authorities of the faculty, academic and non-academic staff and department chairpersons. Documents of relevant laws and regulations were also examined.

#### ***B. Questionnaires:***

##### **i. Design:**

Questionnaires were designed mainly to address the current situations and practices at the faculty in relation to the benchmark (guided by the questions published by the WFME as an annex to the standards) as well as the published objectives of the faculty. Opinions of the respondents were sought regarding suggested actions. Different questionnaires were designed for faculty members, students, and alumni. Alumni who have graduated within the last five years were targeted in order to gather accurate opinions about their undergraduate education, to be expressed in annexes 2, 3, and 4.

**ii. Implementation:**

Members of the taskforce were present during the running of the questionnaires to contribute to the awareness campaign and to clarify any issues raised by the respondents. Confidentiality was maintained and the names of respondents were not requested, to assure the validity of their replies.

Responses were obtained from 908 students (9.6% of the student body), 530 faculty members (representing 19.1% of all members), and 400 alumni.

**iii. Data Analysis:**

Appropriate statistical methods were determined. A database was designed for each questionnaire using Microsoft Excel, and the data from the questionnaires were fed into the computer. Statistical analysis of the data was performed and the results are presented in annexes 5, 6, and 7.

***C. Focus Group Discussions:***

Focus group discussions were conducted aiming at obtaining detailed opinions of groups of faculty members and students regarding issues of concern, the underlying causes of these issues, and suggestions for addressing them. Faculty members and students were involved in multiple taped sessions.

**5. Analysis of Collected Information:**

Collected information was discussed by the task force and compared to the benchmark in order to assess strengths and weaknesses. The points of weakness, strength and suggested corrective actions were then discussed with faculty members.

**6. Writing the Final Report.**

**7. Approval of the Report by the Faculty Council .**

**8. Approval of the Report by the University Council .**

**9. The spreading of the results among the faculty members, students, and other stakeholders.**

**10. Development and implementation of an action plan that addresses the points of weakness and methods to improve the current status of the faculty.**

## **Components of the self study**

The standards consist of 9 areas, each contains several "sub" areas with a total number of 36 standards.

### **1-Mission and Objectives**

- 1.1-Statements of mission and objectives
- 1.2-Participation in mission and objectives
- 1.3-Academic autonomy
- 1.4-Educational outcome

### **2-Educational Program**

- 2.1- Curriculum models and instructional methods
- 2.2- Scientific methods
- 2.3- Basic biomedical sciences
- 2.4- Behavioural and social sciences and medical ethics
- 2.5- Clinical sciences and skills
- 2.6- Curriculum Structure, Composition, and Duration
- 2.7- Program management
- 2.8- Linkage with medical practice and the health care system

### **3-Assessment of Students**

- 3-1- Assessment methods
- 3-2- Relation between assessment and learning

### **4-Students**

- 4-1- Admission policy and selection
- 4-2- Student intake
- 4-3- Student support and counseling
- 4-4- Student representation

### **5-Academic Staff/Faculty**

- 5-1- Recruitment policy
- 5-2- Staff policy and development

### **6-Educational Resources**

- 6-1- Physical facilities
- 6-2- Clinical training resources
- 6-3- Information technology
- 6-4- Research
- 6-5- Educational expertise
- 6-6- Educational exchange

### **7-Program Evaluation**

- 7-1- Mechanisms of program evaluation
- 7-2- Teacher and student feedback
- 7-3- Student performance
- 7-4- Involvement of stakeholders

### **8-Governance & Administration**

- 8.1- Governance
- 8-2- Academic leadership
- 8-3- Educational budget and allocation of resources
- 8-4- Administration staff and management
- 8-5- Interaction with health sector

### **9-Continuous Renewal**

## **1- Mission and Objectives**

### **1.1 Statements of Mission and Objectives**

- *The medical school must define its mission and objectives and make them known to its constituency. The mission statements and objectives must describe the educational process resulting in a medical doctor competent at a basic level, with an appropriate foundation for further training in any branch of medicine and in keeping with the roles of doctors in the health care system.*

The medical school's mission (annex 8) is “*to develop an outstanding and honourable clinician, practitioner, researcher, and teacher 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 the continuing education of our students, graduates, faculty and colleagues*”.

The school's mission is also “*to promote outstanding programs of medical care to serve the society and promote environmental development, to maintain the atmosphere of co-operation, peer relation and mutual respect in the university society, and to encourage and foster the individual creativity in the university society*”.

In order to achieve the part of the mission related to the undergraduate medical education, the school has developed general goals and detailed objectives (annex 9). The general goals are broad in vision and few in number; they summarize what we really expect our graduates to be. Such concised goals would be easily circulated and memorized by every faculty member and student who will be more likely to internalize and ultimately implement these goals. The following is the statement of these general goals:

At the time of graduation medical students should be:

1. *Broadly educated* with an appropriate foundation for further practice in any field of medicine, including general practice (family medicine), residency programs for medical, surgical, investigational or other specialties, and careers in medical research, public health medicine, or health service administration.
2. *Knowledgeable physicians* by acquiring a core body of scientific knowledge that provides a foundation for the practice of medicine and for the integration of future knowledge.
3. *Skilled clinicians* by possessing the necessary diagnostic problem solving and decision making skills to accurately evaluate and decide on the appropriate treatment for each patient.

4. *Good communicators and collaborators* by effectively communicating with patients and families and collaborating with healthcare professionals to provide optimum care to individual patients and the community.
5. *Aware of the social and community contexts of health care* by understanding their role and responsibility in the care for the health of the community and by appreciating the effect of community-related factors on health and disease.
6. *Committed to sound ethical and professional behaviour* by behaving at all times towards patients in a manner that is consistent with the ideals of the profession and by using sound ethical principles in clinical decision-making.
7. *Lifelong learners* by developing a lifelong commitment and ability to continuously improve their knowledge and skills.

The objectives were written in a detailed manner to enable the committees responsible for curriculum design at the departmental level to clearly realize the types of competencies that should be provided both by the educational program as a whole and by individual courses.

The goals and objectives are expected to fulfill the part of the mission related to undergraduate medical education.

Our mission, goals, and objectives were made known to the administration. A copy of them has been discussed in a Faculty Council meeting. The Faculty Council includes representatives of the administration, staff, and other stakeholders (annex 10). The Faculty Council approved the mission, goals, and objectives. In addition, the Dean regularly presents the mission at the beginning of any committee meeting she attends with the aim of propagating it in the school.

The university received a copy of our mission, goals, and objectives, but other stakeholders such as the Ministry of Health (the principle user of our graduates) and the Medical Syndicate (an NGO that gives the license for practice and monitors doctors' performance) did not receive such copies.

Faculty members and students, however, are not all well acquainted yet with the mission, goals, and objectives. Only 51 % of the faculty members and 27 % of the students know of the presence of the mission, and 23% and 8 % of them have read it respectively. The presence of goals and objectives is known to only 54 % of faculty members and 25 % of the students, and 25 % and 5 % of them have read them respectively. (Fig. 1-3)

The mission, goals, and objectives have been written in the student orientation booklet that has been distributed to all first-year students. They have also been illustrated in the school's website.

**Point of Strength:**

The mission, goals, and objectives are comprehensive, well specified, and properly detailed. If achieved they will result in creating a competent graduate.

**Points of Weakness:**

- 1- Research attainment was not adequately reflected in the objectives, although it was an essential part of the mission statement.
- 2-The mission, goals, and objectives are not well known to most of the students and faculty.

**Suggested Corrective Actions:**

- 1- Providing every faculty member and student with a copy of the mission, goals, and objectives.
- 2- Arranging meetings with concerned authorities in the ministry of health and the medical syndicate for the discussion of the mission and objectives.
- 3- Presenting and discussing the mission and goals in all committees of the school.
- 4- Presenting and discussing the mission, goals and objectives in orientation programs organized for newly recruited staff members.
- 5- Updating the objectives emphasizing research conduction.

## **1.2 Participation in the Formation of Mission and Objectives**

- *The mission statement and objectives of a medical school must be defined by its principal stakeholders.*

The school principle stakeholders are the Dean, the Vice Deans, members of the Faculty Council, the University, the Supreme Council for Universities, and the medical syndicate.

In 2001, the school's Medical Education Development Center (MEDC) started the revision of the school's mission and the formulation of new objectives. Faculty members with high experience in education from the Faculty of Dentistry and the Faculty of Nursing participated in the formulation of the mission. The mission and objectives were then presented to the Faculty Council and sent to the departmental councils for feedback. Received feedback from these councils was little and did not alter the original work.

In 2003, the mission was again revised by MEDC. No change was found to be needed. In addition, the objectives were revised by the Curriculum Committee, who made appreciable changes. The dean, the faculty council, and the university finally approved the mission and objectives.

**Points of Strength:**

- 1- The mission and objectives were subjected to reevaluation and improvement.
- 2- Principle stakeholders participated in this reevaluation.

**Point of Weakness:**

*Other stakeholders (the Ministry of Health, the Medical Syndicate, the students, and the faculty) have not participated in the formulation of the mission and the objectives.*

**Suggested Corrective Action:**

Conducting several focus group discussions to get the opinion of the stakeholders who have not participated in the formulation of the mission and the objective.

### **1.3 Academic Autonomy**

- *There must be a policy, for which the administration and faculty/academic staff of the medical school are responsible, within which they have freedom to design the curriculum and allocate the resources necessary for its implementation.*

The governmental law governing Egyptian universities "the Law for Universities Regulation" confers the responsibility for the curriculum and allocation of resources to the medical school. According to this law, it is the duty of the Faculty Council to formulate the general policy for education in the school, to approve the curriculum and individual courses, and to design plans for the allocation of necessary resources (annex 11). Likewise, according to this law, the Departmental Council (the body that includes the academic staff in the department) is responsible for defining various departmental educational policies and for designing its own course. Through this regulation, both the administration and the academic staff are considered responsible for the curriculum.

However, in practice, the faculty staff's actual contribution to curricular matters is hindered by the relatively inadequate performance of departmental councils in this specific task. Actually, only 45% of the staff grade the performance of departmental councils in evaluating and developing the educational program as adequate, and 60% of the staff consider their degree of participation in curricular matters to be inadequate (Fig. 4-5). Further evaluation of the role of departmental councils in this respect is presented in area 8 (Governance and Administration).

**Point of Strength:**

The governmental law confers academic autonomy to the medical school for designing the curriculum and allocating the necessary resources.

**Point of Weakness:**

Inadequate contribution of the staff in curricular matters.

## 1.4 Educational Outcome

- *The medical school must define the competencies that students should exhibit on graduation in relation to their subsequent training and future roles in the health system.*

The competencies that students should exhibit on graduation have been included in our detailed objectives (annex 9) who can practice as primary care physicians and possess an appropriate foundation for postgraduate training as well . Actually, the amount, variety, and depth of the different areas of knowledge, skills, and attitudes involved in our objectives should prepare our students for acquiring further training in any field of medical practice they choose if these objectives are properly reflected in the educational program. Furthermore, readiness for continuing medical education and professional development is addressed through the objectives related to lifelong learning.

The relation between our competencies and the needs of the society is reflected through our objective of achieving student awareness of the social and community contexts of health care. According to this objective, the student upon graduation should be able to understand the health status of the community he/she is serving upon, assess its health needs and problems, and deal appropriately with a specific community problem. The importance of this statement is that many of our graduates start their practice in rural areas, while they were originally living, and received their education in urban areas and vice versa. More to the point, as a developing country with a relatively high sector of the population being poor and illiterate, many of our health problems are related to bad hygienic habits, culture-related practices, and bad environmental and working conditions. Therefore, our objectives stress on the importance of health promotion, disease prevention, and the awareness of cultural, socioeconomic, religious, environmental, legal and working factors that may influence disease causation or management. Furthermore, for better student orientation towards his community resources, one of our objectives was to make students familiar with the Egyptian healthcare system and the community based resources and services and to utilize them properly in order to provide high quality patients and community care.

Despite the fact that our competencies are theoretically sufficient to provide a favourable outcome, only 31% of our students were satisfied with the quality of their medical education (Fig. 6). We believe in this respect that the problem does not lie in the quality of our planned competencies, but it lies partly in the inadequate reflection of these competencies in the curriculum and partly in the improper implementation of the planned curriculum.

Data related to the adequacy of reflection of the outcomes in the curriculum and the quality of actually acquired competencies upon graduation are presented in area 2 (Educational program).

**Point of Strength:**

Our broad competencies relate adequately to the subsequent training of the graduates and to the existing and emergent needs of the society.

**Point of Weakness:**

The educational outcome is not adequately defined through competencies.

**Suggested Corrective Action:**

More clarity of the educational outcome through competencies.

## 2. Educational Program

### 2.1 Curriculum Models and Instructional Methods

- *The medical school must define the curriculum models and instructional methods employed.*

The undergraduate educational program provides general education that prepares students for all career options in medicine. It consists of a six-year curriculum organized by discipline and delivered by basic and clinical science faculty. The graduates then spend twelve months as Pre-Registration House-Officers (PRHO) in the university and community hospitals before being licensed to practice medicine.

The first three years are called "preclinical years", and they cover the basic medical sciences. In the following three years, students start their clinical clerkships where they interact with patients under tutor supervision.

The curriculum utilizes a variety of instructional methods; including lectures, tutorial classes, practical training in the lab and clinical in-patient and out-patient rounds, student and faculty seminars in some courses, and computer assisted learning in only one course (the biochemistry course).

Half of the total contact hours in the preclinical years are spent in activities in the lab, museum and dissection room. On the other hand, two thirds of the contact time in the clinical years is spent in patient related activities, like in-patients and out-patient rounds, emergency rooms and observation in the surgical theatres. All these activities are supervised by tutors, and students are not allowed to participate in patient care during these years. Teaching times are almost always in the morning, and students have enough time for self directed learning.

However, students were dissatisfied with theoretical lectures as a mode of teaching. Eighty eight percent of them thought that lectures did not help them acquire the essential understanding of the subjects taught. They were more positive about practical lessons, as 38% agreed that it is an effective method for learning (Fig.7) .

Although students realize the importance of self-directed learning, they were dissatisfied with the ability of the current curriculum to prepare them to be life long learners. They lack self-evaluation skills and the capacity to use multiple

information resources to follow the advancement in medical science and to solve specific clinical problems. The faculty members share students in their concerns, as over fifty percent have stated that the current curriculum does not help students acquire life long learning skills.

Private tutoring is also a major problem that faces the higher education in Egypt. About 80% of our students attend private lessons. According to them, private lessons help them understand the course and perform better in the exams. Private tutors are popular lecturers and their lectures in the faculty are very highly attended (Fig. 8&9). This fact raises the concern that the students' opinion about lecturing is neither related to lectures as a teaching method nor to the size of the crowd in the lecture halls. It is mostly related to the efficiency and lecturing talent of the instructor.

### **Points of Strength:**

1. The current curriculum prepares students for all career options in medicine.
2. The curriculum format is well defined.
3. It gives enough time for student self-directed learning.

### **Points of Weakness:**

1. Deficient small group of problem-based teaching and computer-assisted learning.
2. The time spent in theoretical didactic lecturing is more than necessary.
3. Lack of curriculum components promoting life-long learning.

### **Suggested Corrective Actions:**

1. Introducing new methods of teaching in different disciplines based on problem solving with the integration of different subjects.
2. Setting up facilities of infrastructure in different departments to support computer-assisted learning.
3. Developing programs for new teaching methods by the faculty staff.
4. Assigning different teaching methods by the faculty members according to their experience and talent.

## **2.2 Scientific Method**

- *The medical school must teach the principles of scientific methods and evidence-based medicine, including analytical and critical thinking, throughout the curriculum.*

The community and public health course introduces students to the principles of scientific methods in the third year. They learn basic study design and the principles of medical statistics in an abstract form. The course is delivered as formal lectures with no practical training. Only 8% of the students rated the course as satisfactory and 10% agreed that the current course helped them acquire critical and analytical

thinking skills (Fig. 10&11). Most of the faculty members see that the current curriculum does not support the teaching of scientific methods or EBM (Fig.12) . Currently, there is no systematic approach towards integrating EBM in the curriculum. Thus, EBM teaching activities are sporadic and depend on the effort of personally interested faculty members.

The Medical Education and Development Centre (MEDC) realized that improving faculty skills and knowledge in EBM is essential before introducing it into the curriculum. EBM faculty development program in the form of two-day workshops introduce the faculty to the principles of study designs and critical appraisal. Moreover, a proposal to attract funds to support EBM education is submitted to the Ministry of Higher Education.

Research conduction was not adequately reflected in our objectives for undergraduate education, although it was an essential part of our mission statement. Right now, there is no policy to engage students in clinical research. Students are very interested in joining research activities as co-workers with their faculty, and 75% percent of them want to share in the preparation of manuscripts for publication. Faculty staff from different specialities also agrees that it would be very beneficial to include research activities in the curriculum (Fig. 13&14) .

#### **Points of Weakness:**

1. Lack of core curriculum for scientific methods and evidence based medicine.
2. Lack of students participation in medical research.

#### **Suggested Corrective Actions:**

1. Intensifying the faculty development program in EBM to prepare an adequate number of EBM tutors.
2. Introducing a critical appraisal course in public health and community medicine, with adequate time for practice.
3. Designing and implementing the EBM core curriculum that allows multiple exposures at different clinical specialities.
4. Introducing research activities in the curriculum.

## **2.3 Basic Biomedical Sciences**

- ***The medical school must identify and incorporate in the curriculum the contributions of the basic biomedical sciences to create understanding of the scientific knowledge, concepts and methods fundamental to acquiring and applying clinical science.***

The following basic science courses contribute to the educational program; physiology, anatomy, biochemistry, (biophysics) histology, pathology, pharmacology, microbiology, immunology and parasitology. They are delivered over a three years period in the preclinical phase of the curriculum with the aim of preparing the students for subsequent clinical studies.

The basic science courses include clinical applications that provide some integration of diseases and conditions related to the taught subject. These applications are planned and prepared and taught by basic science faculty and without sharing from clinical faculty. On the other hand all clinical clerkships provide the students with basic information related to the course, also prepared and delivered by clinical faculty without collaboration with basic science departments.

Most of the students consider the size of the basic science courses appropriate or excessive, however only half of them and 60% of faculty agreed that these courses prepare students adequately for the clinical phase (Fig.15&16). The discrepancy between the size of the course and its ability to prepare students for clerkships is probably due to the presence of excessive knowledge not related to real clinical training needs.

### **Points of Strength:**

1. The basic science courses are diverse and cover all aspects of the human body structure and function.
2. The duration of pre-clinical phase of the curriculum is adequate for student's preparation to their clinical attachments.

### **Points of Weakness:**

1. Lack of sufficient clinical applications in basic science courses.
2. Lack of collaboration between basic and clinical science faculty in preparing (clinical applications of basic science and vice versa. ) curriculum for applied basic sciences.

### **Suggested corrective actions:**

1. Horizontal integration between courses of basic sciences to avoid curriculum overload and redundancy.
2. Vertical integration between basic and clinical sciences to allow better understanding and applicability of acquired knowledge and skills .

## **2.4 Behavioural and Social Sciences and Medical Ethics**

- *The medical school must identify and incorporate in the curriculum the contributions of the behavioural sciences, social sciences, medical ethics and medical jurisprudence that enable effective communication, clinical decision making and ethical practices.*

The behavioural and social science courses contributing to the medical program are: community and public health, forensic medicine and medical psychology. They are taught in the second, third and fourth years of the program. Despite the importance

of the medical psychology course, the students' opinion was that the course did not help them in the future understanding of clinical science. Probably the lecture-based format for course delivery, without integration to patient-related problems is the reason behind students' opinion.

In public health and community courses, students study the basics of health administration and communication. Communicable and non-communicable disease prevention is part of their epidemiology course. Preventive aspects of different diseases are taught by the faculty as a part of any disease management plan. In the paediatric clerkship, students learn the essentials of preventive paediatrics as a separate course. All courses are theoretical, delivered as lectures and do not include practical training, nor are they integrated with other clinical or basic science courses. Despite the extensive epidemiology course, students were dissatisfied with their ability to deal with community related health problems, like investigation of an outbreak. Thirty percent of the students rated their ability to actively participate in health promotion and disease prevention as satisfactory (Fig. 17). Medical ethics and jurisprudence are integrated in the forensic medicine course where students learn the basics of professional secrecy, malpractice and medico legal problems. During clerkships, students interact with different patients, and their tutors serve as role models. From the interaction with different patients in clinical rounds, they learn how to deal with different ethical dilemmas like dealing with terminally ill patients, working with patients unable to pay for service, or communicating with angry patients. Despite the absence of planned activities to foster medical ethics learning in clinical clerks, over 60% of the students agreed that the current educational program helped them acquire the essential ethics needed in dealing with patients and other health care professionals.

### **Points of Weakness:**

1. Lack of applicability of the current medical psychology course.
2. Health promotion, disease prevention and rehabilitation do not have adequate curricular components to support the students' understanding and practical application of their concepts.
3. Inadequate exposure of students to different concepts, dilemmas and applications of medical ethics through the entire curriculum.

### **Suggested Corrective Actions:**

1. Integrating medical psychology and psychiatry courses in more practical case-based learning.
2. Increasing the practical time for community visits and active participation of students in health promotion and disease prevention activities.
3. Incorporating medical ethics teaching in all medical branches through clinical scenario-based group discussion to allow better understanding of ethical issues in medical practice.

## 2.5 Clinical Sciences and Skills

- *The medical school must ensure that students have patient contact and acquire sufficient clinical knowledge and skills to assume appropriate clinical responsibility upon graduation.*

Clinical sciences and their applications are taught (starting from ) over the fourth, fifth, & sixth year of the medical school. Students study otolaryngology, ophthalmology, community medicine and public health, forensic medicine, and they are introduced to general surgery and internal medicine. In the fifth year, they study obstetrics and gynaecology, paediatrics, another course in community medicine, internal medicine, and surgery. The sixth year is spent by students rotating in general surgery and specialties, internal medicine, and specialities. Students are not actively involved in patients' care during this period. They are usually supervised by tutors in their patients' rounds and community visits. Patients' history taking, physical examination, differential diagnosis and management are all discussed with the tutors. Students are allowed to take history from patients and perform physical examination; however, they are not allowed to write in patients' records, prescribe treatment or request any investigations. All their clinical experience during these years is to be acquired "in-campus", in the university hospitals and outpatients clinics. Community practice is part of the public health curriculum, where students visit the Ministry of Health fever hospitals, primary health care centres in urban and rural areas. These visits are only seven visits per year accompanied with tutors and do not involve active participation in service. In-patient rounds are far more frequent than out-patient rounds. Students also attend operating theatres for surgical procedures; however, this activity is not compulsory and is not achieved by all students. In spite of the long curriculum with three years of exposure to patients, students are not happy with their competency as medical graduates. Only 31% are satisfied with their medical education (Fig. 6). Direct patient-care activities beginning in the fourth year are very welcomed by faculty to improve graduate competencies and prepare them for further training. Early patient contact from the first year of the medical school was also rated beneficial by the faculty; however, some were concerned about its applicability (Fig. 18).

### **Points of Strength:**

1. The clinical science courses are diverse and cover all general and special medical and surgical branches.
2. The duration of the clinical phase of the curriculum is adequate for students' preparation to their pre-registration house officer's year.

### **Points of Weakness:**

1. Inadequate student involvement in primary and secondary clinical care settings.
2. Absence of students' direct participation in patients care.
3. Clinical tutoring is deficient in some aspects like prioritisation of patients' problems and discussion of patients' management plans.
4. Inappropriate balance between out-patients and in-patients.
5. Lack of student exposure to emergency cases in some disciplines.

**Suggested Corrective Actions:**

1. The clinical curricula should emphasise and secure adequate student participation in primary and secondary health care activities.
2. Student involvement in direct patients care should start earlier than PRHO year.
3. Extensive tutors' preparation for adequate clinical teaching.
4. Out-patient and emergency clinical rounds should have more time in different courses.
5. Early student exposure to clinical cases during their basic science studies.

**2.6 Curriculum Structure, Composition and Duration**

- *The medical school must describe the content, extent and sequencing of courses and other curriculum elements, including the balance between the core and optional content, and the role of health promotion, preventive medicine and rehabilitation in the curriculum, as well as the interface with unorthodox, traditional or alternative practices.*

The content, extent, and sequencing of courses in the curriculum are attached as (annex 12). The balance between theoretical, practical and clinical lessons is presented in table 1 and 2. The program includes 18 courses distributed over 6 years.

**Table 1 pre-clinical years**

<i>Subject</i>	<b>Year/ duration</b>	<b>Practical /clinical hours</b>	<b>Theoretical hours</b>	<b>Teaching methods</b>
Anatomy	Year one	120	120	Lectures, dissection room and museum
Physiology	Year one	60	150	Lectures, laboratory
Histology	Year one	60	60	Lectures/ laboratory
Biochemistry	Year one	60	75	Lectures/ laboratory/computer assisted class
English	Year one		30	Lectures
Anatomy	Year two	120	120	Lectures, dissection room and museum
Physiology	Year two	60	150	Lectures, laboratory
Histology	Year two	60	60	Lectures/ laboratory
Biochemistry	Year two	60	75	Lectures/ laboratory/computer assisted class
Medical psychology	Year two		30	Lectures
Pathology	Year three	120	120	Lectures, dissection room, museum and lab
Pharmacology	Year three	60	120	Lectures, laboratory
Microbiology	Year three	60	90	Lectures/ laboratory
Parasitology	Year three	60	60	Lectures/ laboratory
Public health	Year three		30	Lectures

Table 2 clinical years

<i>Subject</i>	<b>Year/ duration</b>	<b>Practical/clinical hours</b>	<b>Theoretical hours</b>	<b>Teaching methods</b>
Ophthalmology	Year four	120/eight weeks	80	Lectures, clinical in-patients and out-patients rounds
Otolaryngology	Year four	60/four weeks	64	Lectures, clinical in-patients and out-patients rounds
Forensic medicine and toxicology	Year four	80	80	Lectures/ museum/ seminars/practical
Community and public health	Year four	124	128	Lectures/ seminars/community visits
Paediatrics	Year five	108/eight weeks	72	Lectures, clinical in-patients and out-patients rounds and emergency room
Obstetrics and gynaecology	Year five	108/eight weeks	72	Lectures, clinical in-patients and out-patients rounds
Public health	Year five	124	128	Lectures/ seminars/community visits
Internal medicine	Year five	96/eight weeks	20	Lectures, clinical in-patients and out-patients rounds
Surgery	Year five	96/eight weeks	20	Lectures, clinical in-patients and out-patients rounds
Internal medicine & specialities	Year six	360/twenty weeks	196	Lectures, clinical in-patients and out-patients rounds and emergency room
Surgery and specialities	Year six	360/twenty weeks	196	Lectures, clinical in-patients and out-patients rounds and emergency room

The academic year is thirty six weeks starting in mid-September and ending in mid-June with two weeks for the mid-year vacation in January. In the pre-clinical years, courses are not semester-based but distributed all through the academic year. On the other hand, clinical clerkships are divided as blocks of weeks. All courses are obligatory and there are no elective. Most of the faculty agreed that electives are very beneficial and should be part of the curriculum. The associate dean of education and student affairs formed a committee of educational experts and interested faculty to

study the possibilities of curriculum integration on horizontal and vertical levels through analysing experiences from international medical schools.

**Points of Weakness:**

1. The theoretical part of the curriculum is very big and almost always teacher-based, without of student involvement in active learning.
2. The basic science courses are not semester or block based, putting students under high stress of studying large courses for long times.
3. No electives are available there are no elective courses.
4. Students clinical attachment in internal medicine and surgery is long enough, yet the diversity of studied cases is narrow.

**Suggested Corrective Actions:**

1. Decreasing the theoretical load of the curriculum and putting more time for clinical applications and students directed learning sessions.
2. Dividing basic science courses into semesters to decrease student workload.
3. Planning for elective studies in the curriculum to encourage students for in-depth study of areas of interest and to identify students with specific applications.

## **2.7 Program Management**

- *A curriculum committee must be given the responsibility and authority for planning and implementing the curriculum to secure the objectives of the medical school.*

Based on the medical sector of the Supreme Council of Universities' decisions to reform medical education in Egypt, the faculty curriculum committee (CC) was formed in January 2003. The curriculum committee is the faculty body responsible for the management of the curriculum; it is independent from any department and follows the faculty council. It is headed by the associate dean of student affairs and education. Other CC members include:

1. The director and the vice-director of the medical education and development centre.
2. Four professors from basic science courses.
3. Six professors from clinical clerks.
4. Educational experts .
5. Teacher representatives.

The committee terms of reference are:

- Development and revision of medical school educational objectives.
- Supervision of curriculum planning
- Supervision of curriculum implementation, teaching, and assessment methods.
- Analysis of student assessment results.
- Liaison with course committees for the discussion and evaluation of their recommendations concerning curricular changes.

- Organization of orientation programs for medical school students at the beginning of the school year to inform students about the school mission, educational objectives, curriculum plan, and methods of assessment. In addition, the committee has the right to form ad-hoc committees for specific tasks.

The curriculum committee's recommendations concerning curricular changes are to be submitted to the faculty council, where final decisions are taken.

In spite of the above mentioned CC terms of reference, the actual situation is that departments have the autonomy to define their course contents, teaching and assessment methods within the time frame defined by the faculty regulations and give feed back directly to the faculty council without curriculum committee approval.

**Points of Strength:**

1. The faculty has a curriculum committee with defined responsibilities.
2. The committee terms of reference are sufficient to allow central systematic management of the curriculum.

**Points of Weakness:**

1. The curriculum committee .
2. Departmental curriculum planning activities are not organised or supervised by the curriculum committee.
3. Educational experts involved in the curriculum committee are few.
4. Students, stakeholders and committee in charge of house officers training are not adequately represented in the curriculum committee.

**Suggested Corrective Actions:**

A focus group was conducted at MEDC with professors from different departments. They all agreed that the current situation does not help CC to fulfil its terms. They suggested the following:

1. The CC should have more authorities in planning and directing curriculum changes.
2. Any course structure should be revised and approved by the CC prior to faculty council approval.
3. The CC should involve more educational experts than the current situation.
4. Students and stake holders from the Ministry of Health and the medical syndicate should be members of the committee or at least invited regularly for attendance.
5. There should be adequate links between CC, course directors, and departmental councils:
  - Horizontal links to provide integration between courses taught in the same year. This requires the presence of a year curriculum coordinator who is working with course directors to review course contents discussing matters related to curriculum overload and duplication.
  - Vertical links between basic and clinical sciences to provide early exposure of students to clinical cases and integrate subjects not currently adequately addressed in the curriculum like EBM, medical ethics, disease prevention, health promotion and rehabilitation.

## 2.8 Linkage with Medical Practice and the Health Care System

- *Operational linkage must be assured between the educational program and the subsequent stage of training or practice that the student will enter after graduation.*

The pre-registration house officer (PRHO) year is the linkage between undergraduate medical education and further stages of training. After the students pass the sixth year exam, they must spend twelve months rotating between specialities in Cairo university Hospitals or other Ministry of Health Hospitals. They spend two months in each of paediatrics, surgery, internal medicine, obstetrics and gynaecology, emergency medicine and anaesthesia. They have the right to select two specialties as electives to spend additional two months like ophthalmology, psychiatry, etc. During this year, PRHOs are involved in direct patients care. They admit patients, write patients records, make full examination, request investigations and start management. All these activities are under the supervision of their residents. Each PRHO has a log book with detailed activities and procedures to be fulfilled during the round and signed by the resident or in charge tutor. Adequate performance is essential for the completion of the round. The faculty started a specific training program for PRHO two years ago. The training added skills lab training in surgery, obstetrics and anaesthesia. The house officers spend one week in each lab for training on basic surgical procedures like dressing and suturing, basic life support procedures like cardio-pulmonary resuscitation, endotracheal intubation, and intravenous access. All labs use dummies for illustration. The house officers also spend one week in computer lab to learn the essentials of document writing, spread sheets and presentation preparation. The PRHOs have the opportunity during the year to interact with professors through a twice-a-week meeting in the faculty to discuss recent progress and treatment strategies of different medical conditions. Almost all PRHO agreed that the training year was beneficial. House officers are satisfied with their ability to perform basic procedures; however, they lack the skills to prioritize patients' problem or write a management plan. They are not confident in their communication abilities with patients and families, and they are not sure whether they can start their career as general practitioners. Alumni, on the other hand, were satisfied with the ability of the educational program to prepare them for their subsequent career. They were more positive about the clinical, professional and problem solving skills that they acquired through their undergraduate education. The reason of the discrepancy is not clear; however, there are two explanations. Alumni evaluation is likely to be affected by the experience they acquired after graduation, and students' expectations were more than the program should offer. These data strongly support the necessity of the involvement of students and alumni in program planning in order to get adequate timed feedback.

The committee in charge of house-officers training is not represented in the curriculum committee. They arrange for regular feedback questionnaires for PRHO in different rotations to identify training needs and change training priorities accordingly. These activities are self corrective and are not propagated to other committees or faculty bodies.

### **Points of Strength:**

1. The presence of a separate committee in charge of house officers training activities.
2. The committee seeks regular feedback to identify training needs.
3. The training program organised by the committee enabled important skills acquisition.

### **Points of Weakness:**

1. Graduates are not well prepared to start PRHO activities.
2. PRHO's activities are not adequately organised.
3. PRHO's level of training depends to a great extent on individual graduate's desire to get the best benefit from his rotations.
4. There is no clear definition for sequence of unsatisfactory performance in PRHO year.
5. The six-rotations program though allowing wide exposure does not serve graduate desire to get specific training in certain areas.

### **Suggested Corrective Actions:**

1. Applying clear administrative regulations for PRHO year with adequate measures to prevent reluctance in fulfilling training activities.
2. Encouraging graduates to spend more time in community hospitals and clinics if they are going to work as general practitioners after the end of the year.
3. Reciprocal representation between PRHO committee and other faculty committees.
4. Graduates should have the chance to identify their training needs according to their subsequent attachments and jobs( more time for elective selection)

## **3. Assessment of Students**

### **3.1 Assessment Methods**

- *The medical school must define and state the methods used for assessment of its students, including the criteria for passing examinations.*

Methods of assessment include written, oral, clinical, and practical examinations. Both formative and summative evaluations are used. Marks allocated to formative examinations constitute 20% of the total marks, whereas the final written and final oral (including clinical and practical) examinations are given 40% and 40% of the total marks respectively. Most students feel that the number of formative examinations is not sufficient for promoting student learning. Only 13% of the students and 44% of the staff agree that there is an adequate balance between the number of written and oral examinations. The majority of written examinations are in the form of long and short

essay questions. MCQs are used infrequently in some departments. Most of the students doubt the reliability and objectivity of written examinations (Fig. 19) due to the subjective evaluation of their answers. One third of the staff shares the students' opinion. Almost all of the staff believes that our written examinations test mainly factual knowledge. (Fig. 20) All our assessments depend on criterion referenced judgments. Objectively structured clinical examinations are not used in the school.

The full policy on assessment is detailed in annex 13 and the document provided to students is presented in annex 14.

The assessment policy has been formulated by the Medical Sector of the Supreme Council of Universities. This sector is composed of the deans of all medical schools in state universities and some stakeholders. It is responsible for defining the marks allocated to each course, the distribution of marks between formative and summative assessment, defining methods of assessment (written, oral etc....,) the distribution of marks between these various forms, and defining the criteria for passing examinations. The policy defined by the Supreme Council of University in these areas should be followed by all medical schools in Egypt.

It is each school's right to define policies that do not contradict those defined by the Supreme Council e.g. the type of written examination ( MCQ, essay etc....), the type of oral or clinical examinations ( OSCE or otherwise ). In our school, in theory, this is the responsibility of the Curriculum Committee; however, in practice it is the head of each department who defines the policy and applies it in his department. This latter fact has resulted in different policies among different departments as well as changing policies in one and the same department when the head of the department is changed.

• ***The reliability and validity of assessment methods should be documented and evaluated and new assessment methods developed.***

There is no method by which the medical school monitors the reliability and validity of assessments, and this is one of the school's major problems. Actually, fewer than 40% of the students and fewer than 40% of the staff agree that our current clinical examinations measure what they are supposed to measure, putting the validity of these examinations in doubt. The reliability of oral and clinical examinations is also doubted, as only 15 % of the students and 18% of the staff consider these examinations to be fair. Therefore, half of the students and the majority of staff agree that our assessment policies and methods need to be improved (50% and 80% respectively). (Fig. 19-24)

There is no definite policy for the school for researching, testing, and introducing new assessment methods. Actually, the introduction of any new method depends on the personal decision of staff members responsible for designing the exams provided that these changes do not contradict the general policy of the school.

The Medical Education Development Center in the last years has organized several workshops with the aim of training staff members on various methods of assessment. However, the actual application of this knowledge still depends on personal decisions and does not follow a general policy.

**Points of Strength:**

- 1- The organization of workshops to train faculty in student assessment.
- 2- The majority of our staff believe that our assessment policy needs to be improved

**Points of Weakness:**

- 1- The absence of a body and a policy to monitor the reliability and validity of assessments.
- 2- Oral and clinical examinations are both subjective and unfair.

**Suggested Corrective Actions:**

- 1- An independent assessment committee should be in charge of:
  - Putting a general policy for student assessment that corrects previous concerns
  - Testing reliability and validity of assessment methods
  - Regularly reporting feedback to the faculty council
- 2- The Faculty Council should implement the assessment committee's recommendations
- 3- Methods should be developed to make oral examinations more objective and fair
- 4- Using the OSCE in student clinical evaluation

### **3.2 Relation between Assessments and Learning**

- *Assessment principles, methods and practices must be clearly compatible with educational objectives and must promote learning.*

The assessment methods in our school are mostly compatible with those educational objectives related to factual knowledge. Objectives related to skills and attitudes are not adequately targeted by our examinations. Only 18% of the staff and 7% of the students agree that current examinations test problem solving and analytical thinking skills. (Fig. 25-26) Better rates of satisfaction were given for the skills needed for history taking, physical examination, diagnosis and design of management plans, but they were all in the range between 20-30% for students and 22-40% for staff. Attitudes are also poorly evaluated; fewer than 30% of students think that current examinations test the adequacy of their behavior towards patients. Only 10% of the staff and 20% of the students agree that our examinations promote self learning. (Fig.21-24)

On the whole, our assessment practices are poorly compatible with our educational objectives. Many reasons could be mentioned in this respect:

- 1- Many of our written general objectives are not known to the majority of the staff conducting the oral and clinical examinations making them testing only a narrow

spectrum of objectives (only 25% of the staff has read the general objectives for undergraduate education).

2- Most of our courses do not define specific assessment methods for testing specific learning outcomes (only 9 courses out of 18 have achieved this task).

3- Most of our staff has not been sufficiently trained in student assessment (only 24 % of the staff attended workshops on student assessment in MEDC and 81% of the staff think they need more training in this respect). (Fig. 27-28)

Our assessment practices are also inadequately compatible with our learning methods; 64% of the students and 26% of the staff hold this view.

**Point of Weakness:**

Many educational objectives are not adequately assessed by our current practices.

**Suggested Corrective Actions:**

1- Individual course objectives and intended learning outcomes must be defined for all courses and must be made known to all staff.

2- During course design, the assessment method(s) suitable for each intended learning outcome must be specified, and these methods must be strictly followed by examiners.

3- Adequate training for all staff involved in assessment.

## **4. STUDENTS**

### **4.1 Admission Policy and Selection**

• *The medical school must have an admission policy including a clear statement on the process of selection of students.*

The faculty attracts a huge number of both Egyptian and non Egyptian applicants. The Egyptian applicants reside mainly in Cairo and to a lesser extent in other governorates. The number of admitted students is determined annually by the Supreme Council for Universities.

The process of application, selection and approval for admission in all Egyptian State Universities is carried out through an admission office supervised by the Ministry of Higher Education. Applicants are classified according to their high school degree (Egyptian or international qualification) and they are ranked according to their high school grades. Students with the highest rank are prioritized for acceptance. Ninety five percent of admissions are reserved for those holding the Egyptian high school certificate while the remaining 5% are reserved for recognized international and Arab qualifications (e.g. IGCSE, American High School Diploma, International Baccalaureate, Abitur or Arab High school degree etc.)

Applicants for medical school always have the highest degrees among high school graduates which may be an indication of their high learning capability. However, this method does not really test their suitability or capability of practicing in diverse areas of medicine. Most faculty staff believes that additional selection criteria are needed since some students proved with time that they were not fit for medical education.

Nevertheless, in view of current university regulations, the staff believes that nothing could be done to address this at the present time.

Most students and staff, 54% and 60% respectively, believe that the current selection criteria do not reflect the capability of students to become doctors. (Fig. 29-30)

Except for the increasing number of students joining the medical school each year, which partly matches with the increasing number of population and subsequent demands for health services, the current policy does not comply with social responsibilities and health needs, and it is not reviewed periodically based on societal or professional data.

**Point of Strength:**

Applicants with the highest marks usually have the best scientific background and learning capabilities.

**Points of Weakness:**

The admission policy does test neither the suitability nor the capability of the applicants to study and practice medicine.

**Suggested Corrective Actions:**

1. Regular review of the admission policy and mechanisms to ensure the consideration of faculty resources and social responsibilities, as well as community health needs, when determining the size of student intake by the Supreme Council of Universities
2. Developing methods, supplementing high school grades, for the selection of students for admission. For any selection process, objectivity is of prime concern. Suggested methods include:
  - Setting pre-requisites in high school education e.g. advanced level biology.
  - Development of a nationwide written examination testing language, communication skills, creativity, attitude, and interest in medical education.
  - Personal interview.

However, concerns about objectivity as well as the large number of applicants challenge this option.

## **4.2 Student Intake**

- *The size of student intake must be defined and related to the capacity of the medical school at all stages of education and training.*

The size of student's intake from different types of schools "governmental, private high schools and equivalent certificates" ranges from 1200 to 1400 students every year. Admitted students exhibit a cultural diversity. There are no predetermined percentages

guiding the selection of students from a specific gender, religion, ethnic or social background.

The annual student intake, determined by the Supreme Council for Universities, usually greatly exceeds the suggestions of the relevant stakeholders (faculty council, Ministry of Health and the medical syndicate), which are based on the educational and training resources of the medical school and the community needs. Current student numbers are considered excessive by 99% of faculty staff and 94% of students. (Fig. 31-32)

**Points of strength:**

- 1- The increasing number of accepted students partly matches with the increasing number of population and subsequent demands for health services.
- 2- There is cultural diversity in the admission policy.

**Points of weakness:**

- 1- The huge number of accepted students exceeds the capacity of the faculty making the process of education and training troublesome.
- 2- Stakeholders' opinion is not taken into consideration.

**Suggested Corrective Actions:**

1. Regular review of the admission policy (see above)
2. The faculty council and committees should adapt methods to optimise the use of educational resources in face of the high students' intake:
  - A. Dividing students into smaller groups and distributing the teaching timetable all over the day, extending the current working hours.
  - B. Decreasing the time spent in the morning lectures to be used in small group training.
  - C. Decreasing the duration of each laboratory session in academic departments to two hours instead of three to allow smaller groups to use the lab.

### **4.3 Student Support and Counselling**

- ***A programme of student support, including counselling, must be offered by the medical school.***

A program for student support is offered and conducted through the youth care office, which is supervised by the vice dean for students affairs. It includes social, financial, sports, arts and literature activities. (Annex 15). Health services are available at the students' hospital which is affiliated to Cairo University.

There is no established system for counselling services regarding academic support, career guidance and personal counselling; however, individually based efforts by some faculty members are present.

Students exchange program between Cairo University students and other international universities is well established and conducted by student scientific society.

Eighty five percent of the surveyed students believe that the currently available students' support and services are either unsatisfactory or even not known to them. They also think that the faculty should initiate communication with students and should increase students' awareness about the present activities (Fig. 33).

The only mechanism that currently exists to identify the students in need of support is through the youth care office.

**Points of strength:**

- 1- The availability of many activities inside the faculty.
- 2- Students exchange program with international universities.

**Points of Weakness:**

- 1- Lack of efficient system for academic support.
- 2- No available program that monitors students' progress or their need for support.

**Suggested Corrective Actions:**

1. Motivating staff to share effectively in academic support of students.
2. Allowing students to select their academic support staff.
3. Improving communication between students and staff (office hours, which are organized through different departments, email, etc...).
4. Providing career guidance.

## **4.4 Student Representation**

- *The medical school must have a policy on student representation and appropriate participation in the design, management and evaluation of the curriculum, and in other matters relevant to students.*

Although student representation can be conducted through the student union, 84% of surveyed students do not believe that the student union appropriately represents the student body. Besides the students union, students are not represented in faculty committees. More than 80% of the students believe that their opinion was not considered in curriculum matters, teaching, exam methodology, staff evaluation, educational resources, and even student support and counselling. On the other hand, the administration, faculty staff, and students believe that students should be represented in education committees (Fig. 34).

Other opportunities for developing student contribution and discussing matters relevant to the students include students scientific conferences, regular cultural seminars and student meetings, during student activities as sports competitions, the youth care office, student conferences and students honour forum.

**Points of Weakness:**

- 1- The student union does not represent students appropriately.
- 2- Students' active participation in the decision making policies related to matters of their interests is not achieved.

**Suggested Corrective Action:**

1. Students should be represented in different faculty committees. This representation should be adequate and effective.
2. Better organization of student election for their union.
3. students motivation to participate in elections

## **5. Academic Staff / Faculty**

### **5.1 Recruitment policy**

- *The medical school must have a staff recruitment policy which outlines the type, responsibilities and balance of academic staff required to deliver the curriculum adequately, including the balance between medical and non-medical academic staff, and between full-time and part-time staff, the responsibilities of which must be explicitly specified and monitored.*

The medical school in the staffing process asks the departmental councils about their needs of young staff. Thus, the range and balance of teaching skills required to deliver each course in the curriculum is determined by the departments.

The recruitment of staff is governed by the University law. The medical school determines the number of staff needed. For the pre-clinical stage, staff members are chosen from those who apply for vacant jobs and have the highest grades. The grade of the candidate in the specialty for which he applies is considered in his recruitment as an assistant lecturer. For the clinical staff, the applicants are chosen on the same bases for a 3-year residency training program in the university hospital. After completion of this program some residents who prove scientific and ethical competencies are chosen as assistant lecturers.

Staff promotion in the academic career will then depend on the scientific, ethical and professional activities as considered by the department council.

All the promotion is regulated by the supreme council of Egyptian universities taking in consideration the scientific, ethical, and professional competencies.

75% percent and 52 % of staff members respectively assume that the scientific and ethical bases are highly considered in the recruitment. The responsibilities of each level of staff members are not specified. (Fig. 35)

Approximately 2770 faculty members hold full time appointments in the school in 37 clinical and academic departments. However, most of them get permission to have private medical practice turning them practically part-timers.

There is no fixed time after which the medical school reviews its general priority list for staffing. However, this was lastly considered 3 years ago. The requirements of the clinical and academic departments of young staff are reviewed on a 6-month and a yearly basis respectively by the departmental councils.

**Points of Strength:**

- The department councils are responsible for assessing the department's need for new staff, and this is revised on suitable intervals.
- Ethical, scientific and professional performance is considered in promotion of staff.

**Points of Weakness:**

- There is no system to ensure proper balance between full and part-time staff.
- There is no fixed time policy for reviewing the staff required to deliver each component of the curriculum.

**Suggested Corrective Actions:**

1. Exchange of faculty members between universities may be allowed with certain regulations
2. Students feedback about the staff members should be considered in the promotion.

## **5.2 Staff Policy and Development**

- *The medical school must have a staff policy which addresses a balance of capacity for teaching, research and service functions, and ensures recognition of meritorious academic activities, with appropriate emphasis on both research attainment and teaching qualifications.*

All staff are performing teaching and research activities. The latter is necessary for their promotion. In addition clinical staff have responsibilities in the hospital.

There is no definite policy for recognizing and rewarding outstanding teaching, research, and services contributions. However, on specific occasions, such as the annual faculty and departmental conferences, some faculty members are recognized for their outstanding activities.

Seventy five percent of the staff members do not think that the medical school has a definite policy to recognize and reward their teaching research or service contributions. (Fig. 36) Moreover, 87% think that the poor financial resources represent an important barrier in front of the development of the teaching process. (Fig. 37)

Fifty two percent of the sampled staff had professional training in international centres. Twenty two percent have been awarded degrees from international universities. (Fig. 38-39)

All staff members receive a 3-week workshop at the start of their academic career on teaching methodology. Sixty percent of the staff considered this fruitful. (Fig. 40)

In the last 3 years, the medical education development centre in our faculty held workshops on teaching methodology, curriculum development and evaluation methodology. Seven hundred and fifty staff members have attended these workshops. Sixty percent of the attendants found it beneficial. Eighty percent of the staff members think that they need more training in these fields. (Fig. 28) The administration positively encourages staff members to attend any workshop to increase their teaching skills.

94% of the students and 99% of the staff point to the big number of students as a barrier for development of the teaching process. (Fig. 31- 32) The overall teacher/student ratio in the faculty is 1:4. However, there is no definite relation between the various curricular components and the number of staff responsible for teaching it.

The staff of preclinical departments represent 16% of total staff members although they are responsible for about 50% of the teaching hours (2260 hrs for preclinical and 2680 for clinical). Staff in preclinical departments asked to increase their number to be able to cope with their teaching responsibilities. However, it should be noted that clinical staff in addition to their teaching and research activities have other service duties in the hospital.

There is faculty member representation in all relevant bodies in the medical school as the education committee, research committee, and curriculum committee and hospital board.

#### **Points of Strength:**

- Eighty percent of the staff members believe that they need more training in the field of medical education.
- The administration positively encourages staff members to improve their teaching skills.
- There are staff representatives in all bodies in the faculty
- The total teacher/student ratio is convenient.

#### **Points of Weakness:**

- Distribution of staff members needed to deliver each component of the curriculum is not properly addressed.

#### **Suggested Corrective Plans:**

1. Attending faculty members' skill workshops should be an essential requirement for each promotion every 5 years maximum.
2. Selecting staff with distinct contributions in teaching, research and services and giving them financial and moral rewards. Selecting staff for teaching may be based on students' feedback, for research on internationally publications and for medical services on house – officer and residence feedback.
3. Establishing a 5-year strategic plan for staff recruitment considering the teacher/student ratios in the different curricular components.
4. Participation of clinical staff to teach clinical applications in basic science

courses and vice versa.

## 6. Educational Resources

### 6.1 Physical Facilities

- *The medical school must have sufficient physical facilities for the staff and the student population to ensure that the curriculum can be delivered adequately.*

*The non-clinical facilities available for the undergraduate program of the faculty include:*

Large lecture halls: 14 halls at the main campus (annex 16), with capacities ranging between 300 and 1000 students each, in addition to smaller halls available in departments. Classes for small group sessions and laboratories are located within departments. (Annex 17)

The medical museum contains specimens which are used for teaching Pathology and Surgery courses, in addition to separate departmental museums (e.g. at the Anatomy Forensic and Obstetrics and Gynaecology departments).

The students' library is open from 9.00am – 4.00pm on weekdays, with a capacity of 85 students. It is air-conditioned and has photocopying facilities; however, no computer or internet facilities are available, and recent books and journals are limited. Only 10% of students benefited from the library in their learning. (Fig. 7). It is believed that this relates to the teaching methods in addition to the library itself; however, adopting teaching methods that would demand increased utilisation of the library would require upgrading of its services.

Concerning offices for (non-academic) faculty staff, there are shared offices for staff in academic departments. In clinical departments there is one office for the chair and staff of each hospital unit due to utilisation of most of the space for patients and related activities. Thirty-two percent of the staff has assigned offices.

Annually, each department should evaluate the different facilities. Departments can correct deficiencies through reallocating and optimising the use of their resources. Additional needs are forwarded by the department chair to the dean, who considers the needs of different departments when making decisions (through the faculty council) on allocating financial resources. There are budgets for construction, equipment and education within the faculty budget and the administration can thus respond to deficiencies within budget limits. However, only a few departments regularly review the educational resources systematically against their needs.

Despite the aforementioned policy, a significant proportion of both staff and students (annexes 5 & 6) consider the presence of qualitative and quantitative deficiencies in the teaching sites and facilities. 59% of students indicated their need for study areas within the faculty. (Fig. 41) The staff mentioned deficiency in educational resources as the most common factor interfering with proper teaching (80% of staff) (Fig.42) .

Financial factors seem to play the major role in these deficiencies since 65% of students and 87% (Fig. 37-43) of staff agreed that the budget was low enough to hinder the educational program. It is believed that improving the efficiency of the use of the currently available resources may improve the situation.

***B. The learning environment for the students should be improved by regular updating and extension of the facilities to match developments in educational practices***

The same policy governing assessment of the facilities targets improving them. Departments have been improving teaching methods and aids using new technologies; however, such activities are also limited by the current budget and lack a faculty-level policy.

**Points of Strength:**

1. Lecture halls are adequate despite the large number of students and are equipped with basic facilities.
2. The presence of departmental laboratories and museums.

**Points of Weakness:**

1. Advanced presentation aids (e.g. data show) less than optimal.
2. Inadequate space and teaching facilities in some departments.
3. Students' library is deficient in up-to-date publications and completely lacks electronic facilities.
4. Limited offices for non-administrative faculty staff.
5. Utilization of physical facilities is largely inefficient.
6. Current policy for regular review of facilities by the faculty and departments is not effective and is largely limited by financial constraints.

**Suggested Corrective Actions:**

1. Reinforcing the policy for review and maintenance of teaching facilities. Each department should maintain a record of all educational resources as well as their current utilisation and priorities for correcting deficiencies. This could be done through a staff member assigned by each department to be in charge of the educational resources, and it should be reported to the vice dean of student affairs. The vice dean of student affairs would be responsible for central faculty resources (not affiliated to individual departments) as well as the assessment and development of the educational resources at the faculty level through the faculty council.
2. Allocating student study areas within the faculty.
3. The quality assurance committee should conduct regular assessment of feedback related to facilities from faculty and students using questionnaires, since 76% of students mentioned that their opinion was NOT considered regarding educational resources.
4. Improving the efficiency of use of the current resources; this requires extending the working hours of the teaching sites and laboratories to match the number of students.
5. Enhancing the faculty budget is the more difficult issue. Although 81% of staff agreed that tuition fees should increase, only 38% of students did. Increasing the fees is

currently faced with social and legal obstacles and novel ways of enhancing the budget should be sought.

## 6.2 Clinical Training Resources

- *A. The medical school must ensure adequate clinical experience and the necessary resources, including sufficient patients and clinical training facilities.*

The faculty hosts the largest public hospital complex in Egypt. Cairo University teaching hospitals include the Manial University Hospitals (Northern and Southern), Emergency Hospital, Obstetrics & Gynaecology Hospital and National clinical and environmental toxicology centre; all located within the faculty campus. The internal medicine hospital, two Paediatric Hospitals and Centre of Social and Preventive Medicine are off-campus. Manial specialized hospital, several specialized units (such as the Nuclear Medicine Radiotherapy and Oncology Centre, Critical Care Centre and King Fahd Nephrology and Dialysis Centre), New Kasr El-Aini Teaching Hospital and the National Cancer Institute are affiliated to Cairo University but rarely contribute to undergraduate training.

Cairo University teaching hospitals employ over 10,000 individuals other than the faculty staff and include 4500 patient beds in addition to outpatient clinics for all specialties. Annual outpatient clinic visits mount up to 1,017,000 patients and hospital admissions reach 114,800. Most clinical inpatient units (wards) and outpatient clinics contain teaching rooms for small groups; however, small group teaching areas and equipment are deficient in some departments. In addition to being a tertiary referral centre draining virtually the whole country, the hospitals provide emergency services to as many as 286,700 patients annually; through the Emergency, Internal Medicine, Obstetrics & Gynaecology and Paediatric hospitals. The outpatient clinics serve many primary-care-type patients from the surrounding areas. Furthermore, students are exposed to community-based health facilities outside the university during the Community Medicine Course and PRHOs may take one or two rotations (2 months each) in hospitals outside the university.

The faculty uses the skills lab of Mubarak-Kohl Technical Nursing Institute and that of New Kasr El-Aini Teaching Hospital (both institutions are affiliated to Cairo University) for technical skills training courses for Pre-registration house-officers.

Similar to the non-clinical facilities, departments are primarily responsible for reviewing the adequacy of the clinical facilities and for determining appropriate settings and patients used for clinical training. Departments respond to deficiencies through modifications in the utilisation of current resources or seeking additional resources from the faculty and hospital administrations. Again, regular systematic review of clinical resources is currently done by a few departments. Direct assessment by staff and students is also planned.

About one-third of both students and staff believe that the number of patients seen by students was adequate (Fig.44-45). Most believe that it should increase including 30% of staff and 15% of students who believe it was highly deficient. Alumni provided a

somewhat better opinion (49% adequate and only 11% highly deficient). The number of patients seen during the house-officer year was judged as adequate by 58% of PRHOs. Concerning the variety of patients, responses were almost similar; however, with the exception of the HO year, both staff and students consider exposure to emergency cases less adequate than inpatients or outpatients (annexes 5 & 6).

- ***B. The facilities for clinical training should be developed to ensure clinical training which is adequate to the needs of the population in the geographically relevant area.***

Adjustment of facilities in relation to changing needs is largely departmental and not uniform. Development of more skills labs is a recognized need while the use of affiliated (outside the University) institutions is currently minimal.

**Points of Strength:**

1. Availability of large hospitals with a large number and variety of patients.
2. Efforts to introduce simulated and community settings in clinical teaching.

**Points of weakness:**

1. Not all clinical practice opportunities at Cairo University are utilized for teaching.
2. Actual student-patient contact is suboptimal.
3. Use of skills labs is lacking before the HO year.
4. Regular systematic review of clinical resources is lacking in most departments.

**Suggested Corrective Actions:**

1. Increasing the actual student-patient interaction should be addressed by the curriculum committee and departments. Suggestions include extending working hours and dividing students into smaller groups, increasing clinical components at the expense of theoretical presentations with encouragement of self-reading and self-learning, increasing stress on common clinical problems at the community level, increasing the use of outpatient clinics, using skills labs particularly for procedures and emergency skills as well as considering the use of community based activities. Most of students agree that participation in community-level healthcare should be available as an elective activity. (Annex 6)
2. Development and implementation of a faculty-level policy, involving all departments participating in clinical teaching, for regular systematic evaluation of clinical resources against teaching needs and responding to any deficiencies.
3. Considering the feasibility of using New Kasr El-Aini Teaching Hospital and the National Cancer Institute for training PRHOs, which would provide exposure to a wider variety of patients, diseases and therapeutic modalities.

## 6.3 Information Technology

- *A. The medical school must have a policy which addresses the evaluation and effective use of information and communication technology in the educational programme.*

Although more than 95% of staff believes that the use of ICT (Fig. 46) in teaching is essential and 81% of alumni indicated that they used ICT for self-learning, a formal faculty-level policy on its use is not yet present. The vice-deans and Medical Education Development Centre would be responsible for formulating such policy. The Egyptian government has adopted a program for higher education development; one of the six priority projects of which is the Information and Communication Technology Project (ICTP) addressing the use of ICT in higher education. This project is expected to start in the near future.

Currently, there are two computer labs (20 computers each, with internet connections) in addition to the Internet service of the Medical Education Development Centre. The allocation of resources for ICT is limited by the faculty budget; however, the faculty seeks additional funds through projects, and a project aiming to develop a new centre for e-learning is currently under construction.

- *B. Teachers and students should be enabled to use information and communication technology for self learning, accessing information, managing patients in health care systems.*

Concerning the utilization of ICT in the undergraduate program, current practice varies widely between and within departments. It includes the use of presentation aids, development of learning CDs; computer assisted learning (being initiated through limited efforts by a few departments and the faculty website ([www.kasralaini.edu.eg](http://www.kasralaini.edu.eg))). The latter currently includes sites for five departments as well as educational materials (annex 18) which are currently being developed and expanded. The faculty plans to develop and expand the educational services provided on the website. Utilization of ICT is generally judged as inadequate (by 80% of faculty and 94% of students). Deficient facilities appear to be the major cause (15% of the staff believe they are adequate for teaching), consequent upon financial constraints. Nevertheless, it is encouraging that 80% of staff and 63% of graduating students have rated their computer skills as good or average. (Fig. 46-52)

Thirty percent of the staff and 10% of students regularly use ICT for self-learning, while about 17% of the faculty staff regularly uses ICT for patient-related activities.

Training courses in basic computer skills are now part of the PRHOTP and postgraduate programs, as well as a prerequisite for appointment of lecturers. Furthermore, courses are available at MEDC for an appropriate fee. Nevertheless, only 6% of students and 12% of staff believe there are adequate courses. Some of the courses were recently introduced, knowledge about non-compulsory courses may be deficient and specific advanced courses on the medical applications of ICT may be needed (already proposed in the PRHOTP). The faculty currently plans to introduce a

compulsory course on basic computer skills to be taken during the first two years of the undergraduate program.

**Points of Strength:**

1. Most of faculty and students believe in the importance of ICT in teaching.
2. Governmental and institutional interest and efforts in developing the role of ICT in teaching and patient care.
3. Students and staff have average computer skills

**Points of Weakness:**

1. No defined policy for use of ICT in teaching.
2. Current utilization of ICT in teaching is defective and current facilities are inadequate for its proper use.

**Suggested Corrective Actions:**

1. Formulating a faculty policy on the use of ICT including its introduction in the undergraduate program and allocating the necessary resources.
2. Reinforcing current activities aimed at developing ICT resources and utilisation.
3. Providing advanced training for faculty staff through the MEDC in the use and medical applications of ICT.

## **6.4 Research**

- ***A. The medical school must have a policy that fosters the relationship between research and education and must describe the research facilities and areas of research priorities at the institution.***

With its 37 academic and clinical departments, laboratories, clinical practice sites and the large number and variety of patients in different specialties, the faculty possesses considerable research facilities. Concerning human resources, 3732 postgraduate students and 2773 faculty staff are involved in research. The postgraduate library serves research purposes and is equipped with Internet search and article delivery service (although deficient relative to expected needs); however, up-to-date journal subscriptions are highly deficient and modern indexing of library contents is lacking. Some of the departmental libraries provide a limited deal of additional research services. The MEDC provides writing, printing, presentation design and publishing services. The faculty, as well as the departments, hold an annual congress. The postgraduate studies and research committee is responsible for research activities; however, a documented research policy and plan at the faculty level is lacking and funding for research is far from being adequate. Moreover, there is no current policy to foster interaction between research and undergraduate educational activities.

- *B. The interaction between research and education activities should be reflected in the curriculum and influence current teaching and should encourage and repair students to engagement in medical research and development.*

The current involvement of research activities in the curriculum is negligible, with the exception of limited activities in a few courses (e.g. Biochemistry, Community Medicine and Internal Medicine). Research activities have recently been proposed in the PRHOTP; however, difficulty in assigning supervisors with adequate time commitment is a real challenge. Eleven percent of graduating students believe they have acquired research skills, while 81% believe that supervised research should be available as an elective activity. Currently, there are no initiatives at the faculty level to engage students in medical research.

**Points of Strength:**

1. Large funds for potential research materials and human resources.
2. Regular conferences and scientific journal publications.

**Points of Weakness:**

1. Deficiency in some supporting services such as up-to-date publications, indexing and electronic facilities.
2. Highly deficient funding opportunities.
3. Lack of a research plan and lack of interaction between research and undergraduate educational activities.

**Suggested Corrective action:**

Development of a research policy at the faculty which would address upgrading of libraries and research facilities, development of faculty and departmental research plans with funding opportunities governed by the postgraduate studies and research committee (sources for funds need to be addressed) as well as fostering the interaction between research and undergraduate educational activities.

## **6.5 Educational Expertise**

- *A. The medical school must have a policy on the use of educational expertise in planning medical education and in development of teaching methods.*

At present, department councils are primarily responsible for ensuring the appropriateness of the educational methodologies used. Despite the presence of the MEDC within the faculty, possessing a significant degree of medical education expertise, no faculty-level policy currently exists to imply the optimum use of such expertise.

Concerning practices, the MEDC provides workshops for faculty staff development in curriculum design, teaching methods, examination methods as well as other topics such as EBM. It has started a program for conducting meetings with staff members from individual departments to assist in curriculum design and with senior professors to

discuss examination methodology. Additional plans on the way of implementation include the development of course specifications including intended learning outcomes and teaching methods, the implementation of quality assurance tools such as course reports, faculty and students' feedback and analysis of students' results.

• ***B. There should be an access to educational experts and evidence demonstrated of the use of such expertise for staff development and for research in the discipline of medical education.***

The faculty has a Medical Education Development Centre responsible for planning and coordinating education development activities at the faculty. It is staffed with faculty members who have the knowledge, interest and experience in medical education development, in addition to supporting staff. The centre provides major contributions to education and staff development (see above); however, its utilisation is limited by the available number of experts. The centre also performs other activities such as surveying for faculty and students, organising conferences and scientific events, designing publications, making presentations and websites, producing multimedia containing educational materials.

**Point of Strength:**

The presence, activities and plans of the MEDC

**Points of Weakness:**

1. Use of MEDC is not governed by a faculty policy which ensures its optimum impact.
2. Activities of the MEDC are limited by the number of faculty staff currently participating in these activities.
3. The staff working at MEDC are part timers

**Suggested Corrective Actions:**

1. Faculty policies should encourage the role of the MEDC in program and staff development.
2. Qualitative and quantitative development of the faculty staff working at the MEDC through incentives for recruiting more staff, the use of visiting international experts and specialized journal subscriptions, conducting "Training of Trainers" workshops and cooperation with similar centres at the international level.
3. The establishment of a Medical Education department based on MEDC would work towards enhancing its role within the faculty, development of medical education research and building careers of medical education experts.

## 6.6 Educational Exchanges

- *A. The medical school must have a policy for collaboration with other educational institutions and for the transfer of educational credits.*

The faculty has several protocols for cooperation with other educational institutions. There is a cultural relation office responsible for coordinating activities with other institutions (Annex 19).

Cooperation includes scientific activities such as workshops and conferences, international students exchange program, training programs and opportunities, joint research activities, external examiners, visiting experts and faculty members, conduction of international (egg. MRCP) examinations. The staff, teaching and clinical facilities of the faculty contribute to the undergraduate medical programs of Beny-Sweif and Fayoum faculties of medicine as well as The 6<sup>th</sup> October University faculty of medicine (private university). Nevertheless, many of the current links are based on personal connections and they are still suboptimal in view of the number of faculty members and the perceived role of the faculty in medical education and training in Egypt.

Concerning credit transfer, according to the law, passing students may transfer between different Faculties of Medicine with certain regulations (annex 20) up to the beginning of the fourth year.

- *B. Regional and international exchange of academic staff and students should be facilitated by the provision of appropriate resources.*

Many of the aforementioned links involve international institutions, experts and events. There is a budget for training as well as for attending international conferences by staff with certain limitations (having an accepted presentation at the event once every 2 years)

### **Point of Strength:**

Presence of cooperation with other institutions.

### **Points of Weakness:**

1. Links (especially international) are insufficient in relation to the size and role of the faculty.
2. Funding for international activities for staff is limited.

### **Suggested Corrective Actions:**

1. International cooperation with high ranking institutions needs to be a priority for the faculty, through a well defined policy.

2. Recognition of international links may be one of the parameters used for staff evaluation.
3. Enhancing budgets for international travel and collaborative events.

## **7. Program Evaluation**

### **7-1 Mechanisms For Program Evaluation**

- *The medical school must establish a mechanism for program evaluation that monitors the curriculum and student progress, and ensures that concerns are identified and addressed.*

The individual courses are evaluated through the department council. Only 45% of faculty are satisfied with the efficacy of the department council to evaluate and improve the program. However, there is no specific body that independently monitors performance and outcome data.

#### **Points of Strength:**

- The involvement of the department council in the program evaluation is important.

#### **Points of Weakness:**

- The department council may be suitable for the course evaluation rather than the program evaluation.

#### **Suggested Corrective Plans:**

- The medical school should form another committee for program evaluation which is completely independent. This quality assurance office should be responsible for program evaluation which may include:
  - (a) Internal auditing: through independent audit group from faculty members. We are in the process of submitting a proposal for establishing an internal quality assurance system in the faculty. The system will be based on self assessment as an essential tool. Departments will be asked to submit a course specification and report. The quality assurance committee at medical education development centre will submit an annual program specification report.
  - (b) External auditing: through external peer reviewers. this may be done every 5 years.
- The program evaluation should address:
  - (a) Problems presented to curriculum committee
  - (b) Organization and resources of medical school
  - (c) Course description and student performance

## 7.2 Teacher and Student Feedback

*Both teacher and student feedback must be systematically sought, analyzed, and responded to.*

There are no definite mechanisms by which the students and teachers feedback are systematically sought, analyzed and responded to. The medical education development centre in the faculty has recently performed a questionnaire in which the program was evaluated by the students, staff and alumni. The questionnaire showed that the 60% of staff does not consider themselves involved properly in the evaluation of the program. Only 5-8% of the students consider that their opinion is taken into consideration in the various components of the educational program.

### **Points of Strength:**

1. There is increased awareness of the importance of involvement of teachers and students in program evaluation.
2. The curriculum committee starting from next year will include representatives of the students.

### **Points of Weakness:**

The staff, although involved in program evaluation through the department council, does not consider this sufficient or efficient.

### **Suggested Corrective Plans**

- Including teachers and students in the suggested program evaluation committee.

## 7.3 Student Performance

*Student performance must be analyzed in relation to the curriculum and the mission and objectives of the medical school.*

The student performance including score, pass and failures rates at examination are analyzed by the vice dean of student affair and education. The analysis is shown to the faculty council in order to evaluate the performance of students and exams. This analysis does not relate the student performance to the mission and objectives of the medical school and are not used for curriculum planning and student counselling.

### **Point of Strength:**

There are trials to analyse student performance.

**Points of Weakness:**

- . This analysis is not done by the proper committee.
- . It is insufficient and the results are not used for corrective actions.

**Suggested Corrective Plans**

- Student Performance should include :
  - (i) Average study duration
  - (ii) Scores
  - (iii) Pass and failure rates in exams
  - (iv) Success and dropout rates
  - (v) Student reports about conditions in their course
  - (vi) Time spent by students in areas of special interest
- The analysis should be used for curriculum planning and student counselling.

## **7.4 Involvement of Stakeholders**

*Program evaluation must involve the governance and administration of the medical school, the academic staff and the students.*

The department councils report to the faculty council their suggestions and plans about student education. Some corrective actions need higher authorities' decision. In this case these suggestions are passed to the university council and sometimes the supreme council of universities (SCU). There are no mechanisms that are practiced to communicate the outcomes to other stakeholders.

**Points of Weakness:**

The principal stakeholders of the medical school are only involved in a very small part of the program evaluation.

**Suggested Corrective Plans**

- The results of the program evaluation should be easily transmitted to all stakeholders.

## 8- Governance and Administration:

### 8.1 Governance

*Governance structures and functions of the medical school must be defined, including their relationships within the university.*

The faculty is governed by a dean who is chosen by the president of Cairo University. She is assisted by three associate deans for *education and students affairs, post graduate studies and research* and *community service & development*. The dean reports to the president of Cairo University and she is also a member of Cairo University council. This council reports to the Egyptian Supreme Council for Universities (SCU); which is chaired by the Minister of Higher Education. The dean is also a member of the medical sector committee in the SCU; this medical sector is responsible for the general strategy of medical education and the recognition of medical degrees all over Egyptian universities. At the same time, the dean also chairs the board of Cairo University hospitals; which also includes the directors of the hospitals and the chairs of all the clinical departments.

The governance and structure of the faculty of medicine is well defined and described in (annex 21)

One of the most important committees is the curriculum committee which is composed of the associate dean of student and education, the director and the staff of medical education and development centre in addition to representatives of the main departments involved in the education of undergraduate students. The committee has the authority to design and manage the curriculum with the leaders of every department.

Although this committee has been composed in the year 2003, it has been able to review the objectives for undergraduate learning. The medical education centre is responsible for the development the skills of the staff in designing the curriculum and acts as a catalyst with most of the department to update their curriculum according to the international standards.

The associate deans are members of the *education, postgraduate studies* and *community services and development* committees at the university level. This structure enables the relationship between the university, the medical sector of the SCU, and the faculty to enhance the administrative function of the faculty. The representation of the dean and associate deans in the university council and committees ensure that decisions affecting the academic and clinical mission are considered in concert.

The relationship of the dean, associate deans, and the chairs of the department with the administration of the hospitals ensure the development and allocation of clinical resources into the academic program.

Every department organizes a council composed of all the professors and assistant professors in addition to the most senior 5 lecturers. This council meets monthly and reports to the faculty council. The council is the main administrative body of the department

In general, 90% of the faculty members attend the meeting but only 53% to 68% of them believe that the department council adequately evaluates the instructional methods and student assessment, addresses the problems related to teaching and learning, and contributes to evaluation of the educational program.(Fig. 53-54) Only 45% of them approved on the effectiveness of the council in evaluating the learning process. This ineffectiveness in the opinion of the faculty members was due to the frustration of the faculty members, the large number of the members, the other administrative issues discussed that consume time, the inappropriate frequency and duration of the meeting and the resistance of the faculty members to change and the authoritative personality of the chairs of the departments.

#### **Points of Strength:**

1. The relationship between the university, the medical sector of the SCU and the faculty which enhances the administrative function of the faculty.
2. The representation of the dean and associate deans in the university council and committees ensure that decisions affecting the academic and clinical mission are considered in concert.
3. The relationship of the dean, associate deans and the chair of the department with the administration of the hospitals ensure the development and allocation of clinical resources into the academic program.

#### **Points of Weakness:**

1. The autonomy of the medical school is not complete.
2. The departmental councils do not perform their function adequately.

#### **Suggested Corrective Actions:**

During the interview and the focus group discussing how to solve this problem, the faculty members suggested that we should convey to the higher authority our opinion in changing the structure of the department council so as not to exceed 15 staff members, 50% of whom would be the most senior and the rest would include elected representatives (at least 2 lecturers and 2 assistant professors). Two elected students may be invited if the council will discuss any issue concerning them. Alternatively, The council would remain as it is and form an executive committee (structured as mentioned before) which would report to the council.

## 8.2 Academic leadership

*The responsibilities of the academic leadership of the medical school for the medical educational program must be clearly stated.*

The chair of every department, together with the department council, is responsible for designing and implementing its course curriculum. The curriculum committee and the Medical Education Development Center integrate the whole curriculum at the program level. The turnover of the department chairs is high; compromising the continuity of the plans and implementation processes in the departments.

### **Point of Strength:**

The total responsibility of the department and curriculum committee about the medical education program is important to ensure the autonomy of the faculty.

### **Point of Weakness:**

The turnover of the departmental chair position is high affecting the planning operation in the department.

### **Suggested Corrective Actions:**

1. Based on the opinions expressed at the focus group discussion, this problem can be solved by planning a strategic plan for each department by following the strategic plan of the faculty and university, which will not change by the turnover of chairs. Strategic plans must be based on large scale discussions at the departments so that most faculty staff would adopt and support the plan irrespective of the change in department chairs. Plans should be approved by the faculty council. Most opinions refused the idea of appointing only the chairpersons who can stay in his position for at least 3 years.
2. Leaders and/or committees must be assigned by the faculty council for coordinating and following the progress of different aspects of medical education at the faculty level such as curriculum, student assessment, student services and support, faculty appraisal, research, educational resources, and quality control/auditing. The same structure should have a satellite in every department.

## 8.3 Educational budget and resource allocation

*The medical school must have a clear line of responsibility and authority for the curriculum and its resources, including a dedicated educational budget*

There is no defined budget dedicated for curriculum implementation in the faculty of medicine.

**Suggested Corrective Action:**

During discussions with the focus group all staff members suggested to allocate a special budget to the educational program.

## **8.4 Administrative Staff and Management**

*The administrative staff of the medical school must be appropriate to support the implementation of the school's educational program and other activities and to ensure good management and deployment of its resources.*

The dean of the Faculty of Medicine is assisted by:

- The vice-dean for students and education affairs
- The vice-dean for postgraduate and research affairs
- The vice-dean for community service and development
- The general director of Cairo University Hospitals and the medical directors of individual hospitals
- financial and, legal administrative

The decision making responsibility is vested in the faculty council and committees; including

- Faculty committee for students affair
- Faculty committee for post graduate studies
- Faculty committee for research
- Curriculum committee

The number of administrative non academic staff who should support the program is more than sufficient

The structure at the department level constitutes secretarial staff, technicians and service staff. Most of them are inefficient and need skills training

**Points of Strength:**

1. Administrative staff and committees cover the important aspects involved in implementing the activities of the faculty based on its role in basic and postgraduate medical education, research and provision of medical services through its hospitals.
2. Sufficient number of non academic supporting staff.

**Points of Weakness:**

1. Higher administrative staff need assistance by leaders/coordinators in some areas of medical education (e.g. faculty appraisal, educational resources and quality assurance)
2. Most of the supporting non-academic staff in departments is inefficient and lacks the necessary skills for efficiently supporting the educational process.

**Suggested Corrective Actions:**

1. The assignment of leaders/coordinators for implementing different aspects of the educational process at the faculty level with corresponding structures in departments (standard 8.2).
2. The administration should take active steps to increase the non-academic staff skills in computer and management.

## **8.5 Interaction with Health Sector**

***The medical school must have a constructive interaction with the health and health-related sectors of society and government.***

The interaction with the health sector comes from the representation of the medical syndicate and the army hospitals in the medical sector committee of the Supreme Council for Universities, in which the dean of the faculty is a member.

A considerable number of faculty staff works as part timers or consultants in the different committees and institutions of the Ministry of Health. There are also combined research activities with the national research institutions and other health sectors.

**Point of strength:**

The presence of interaction at the higher administrative (medical sector of the SCU) level and on individual (faculty staff) basis.

**Points of weakness:**

1. Although allowed by the university regulations, no representatives of the health sector are present in the faculty council.
2. A systematic approach for effective joint activities as well as obtaining feedback at the faculty and departmental levels is lacking.

**Suggested Corrective Actions:**

1. Representation of the medical syndicate and Ministry of Health and population in the faculty council.
2. Regular meetings between the faculty administration and representatives of the community health and health-related sectors, with planning and organization of the necessary interaction.

## 9- Continuous Renewal

*The medical school must, as a dynamic institution, initiate procedures for regular reviewing and updating of its structure and functions and must rectify documented deficiencies*

The medical education development center in the medical school reviews its mission and objectives every two years. The mission (annex 8) and objectives and the educational outcome were set for the first time in the year 2001. They were reviewed in 2003; the objectives have been changed (annex 9), but the mission and educational outcome have not. The MEDC invites staff members, students and other stakeholder for a meeting to discuss this issue and report to the curriculum committee and the faculty council

The medical education center has a system for capacity building of the faculty members and has an action plan to develop and update the curriculum and the educational resources in different departments.

This study is expected to be followed by regular systematic reviews of all aspects of basic medical education at the faculty; with plans to correct deficiencies, at 5-year intervals. Other activities of the faculty including postgraduate studies, research and medical services are expected to follow similar evaluation processes.

### **Point of Strength:**

The faculty started to adopt the policy of self-review and renewal.

### **Point of Weakness:**

Activities other than the undergraduate program have not yet been addressed for regular systematic review.

### **Suggested Corrective Actions:**

1. Performing regular 5 yearly strategic reviews of all aspects, programs and services of the faculty, with strategic planning addressing deficiencies and development needs.
2. Establishment of quality assurance systems which enable continuous monitoring and annual reviewing of different processes at the faculty.

## Summary

There is no doubt that this self study has literally served as a learning experience for those involved in it. With the benefit of that experience and because of the commitment we have towards our institute, the task force will summarize here its observations that the self study process has clarified.

We begin with the most important question, what has the faculty learned from its intensive self study?

First and foremost we believe that our faculty is a leading institution that is working hard to fulfil its purpose and what its society asks of it, the faculty is making progress towards its stated mission and the quality of its student, faculty and associated staff is good as well.

Second the self study identified five critical areas of strategic importance that need to be seriously addressed in order to improve learning and graduate competencies in the next few years;

1. The undergraduate curriculum needs major reform as the current curricular components, teaching and assessment methods doesn't adequately fulfil our mission
2. Our faculty staff needs more training in curriculum planning, teaching and assessment methods in order to be able to deal with the forthcoming curriculum changes.
3. The resource allocation process should be adequately revised in order to ensure enough resources for the educational reform process.
4. The educational program needs comprehensive repeated evaluation in order to ensure continuous improvement and self correction.
5. The student admission policy needs to be revised in order to secure validated criteria for selecting students highly efficient and able to cope with medical education and its related stress.

Our most important strengths and weakness are summarized in the following table, together with suggested recommendations on how we can improve our achievements realizing our opportunities and minimizing our threats



	<b>Strength</b>	<b>Weakness</b>	<b>Suggested corrective actions</b>
<b>1.2 Participation in Formation of Mission and Objectives</b>	<ul style="list-style-type: none"> <li>*The mission and objectives were subjected to reevaluation and improvement</li> <li>*Principle stakeholders participated in this reevaluation</li> </ul>	Other stakeholders (the ministry of health, the medical syndicate, students, and faculty) have not participated in the formulation of the mission and the objectives	Conducting several focus group discussions to get the opinion of the stakeholders who have not participated in the formulation of the mission and objectives
<b>1.3 Academic Autonomy</b>	The governmental law confers academic autonomy to the medical school for designing the curriculum and allocating the necessary resources.	Inadequate contribution of the staff in curricular matters	
<b>1.4 Educational Outcome</b>	Our broad competencies relate adequately to the subsequent training of the graduates and to the existing and emergent needs of the society.	The educational outcome is not adequately defined through competencies	More definition of the educational outcome through competencies
<b>2.1 Curriculum models and instructional methods</b>	<ul style="list-style-type: none"> <li>*The current curriculum prepare students for all career options in medicine</li> <li>*It gives enough time for student self directed learning</li> </ul>	<ul style="list-style-type: none"> <li>*Deficient small group problem based teaching and computer assisted learning.</li> <li>*More than needed time is spend in theoretical didactic lecturing.</li> <li>*Lack of curriculum components promoting life-long learning.</li> </ul>	<ul style="list-style-type: none"> <li>*introduction of new methods of teaching in different disciplines based on problem solving, with integration of different subjects</li> <li>*Setting up facilities infrastructure in different departments to support computer assisted learning.</li> <li>*Faculty development programs in new teaching methods.</li> <li>*Assignment of faculty to different teaching methods according to their experience and talent.</li> </ul>

	<b>Strength</b>	<b>Weakness</b>	<b>Suggested corrective actions</b>
<b>2.2 Scientific method</b>		<ul style="list-style-type: none"> <li>*Lack of core curriculum for scientific methods and evidence based medicine.</li> <li>*Lack of students participation in medical research</li> </ul>	<ul style="list-style-type: none"> <li>*Intensification of faculty development program in EBM to prepare adequate number of EBM tutors</li> <li>*Introduction of critical appraisal course in public health and community medicine, with adequate time for practice.</li> <li>*Design and implementation of EBM core curriculum that allow multiple exposures at different clinical specialities.</li> <li>*Introduction of research activities in the curriculum.</li> </ul>
<b>2.3 Basic biomedical sciences</b>	<ul style="list-style-type: none"> <li>*The basic science courses are diverse and cover all aspects of the human body structure and function.</li> <li>*The duration of pre-clinical phase of the curriculum is adequate for student's preparation to their clinical attachments.</li> </ul>	<ul style="list-style-type: none"> <li>*Lack of sufficient clinical applications in basic science courses.</li> <li>*Lack of collaboration between basic and clinical science faculty in preparing clinical applications of basic science and vice versa.</li> </ul>	<ul style="list-style-type: none"> <li>*Horizontal integration between basic sciences course to avoid curriculum overload and redundancy.</li> <li>*Vertical integration between basic and clinical science to allow better understanding and applicability of acquired knowledge and skills at patient's bedside.</li> </ul>
<b>2.4 Behavioural and social sciences and medical ethics</b>		<ul style="list-style-type: none"> <li>*Lack of applicability of the current medical psychology course.</li> <li>*Health promotion, disease prevention and rehabilitation don't have adequate curricular components</li> <li>*Inadequate exposure of students to different concepts, dilemmas and applications of medical ethics through the entire curriculum</li> </ul>	<ul style="list-style-type: none"> <li>*Integration of medical psychology and psychiatry course in more practical case-based learning.</li> <li>*Increase in the practical time for community visits and active participation of students in health promotion, disease prevention activities.</li> <li>*Integration of medical ethics teaching in all medical branches</li> </ul>

	<b>Strength</b>	<b>Weakness</b>	<b>Suggested corrective actions</b>
<b>2.5 Clinical sciences and skills</b>	<p>*The clinical science courses are diverse and cover all general and special medical and surgical branches</p> <p>*The duration of the clinical phase of the curriculum is adequate for student's preparation to their pre-registration house officer's year</p>	<p>*inadequate student involvement in primary and secondary clinical care settings.</p> <p>*Absence of students' direct participation in patients care.</p> <p>clinical tutoring is deficient in some aspects like prioritization of patients problems and discussion of patients management plans</p> <p>Inappropriate balance between out-patients and in-patients.</p> <p>*Lack of student exposure to emergency cases</p>	<p>*The clinical curriculum's should emphasis and secure adequate student participation in primary and secondary health care activities.</p> <p>*Student involvement in direct patients care should start earlier than PRHO year.</p> <p>*Extensive tutors preparation for adequate clinical teaching.</p> <p>*Out-patients and emergency clinical rounds should have more time</p> <p>*Early student exposure to clinical cases during their basic science studies.</p>
<b>2.6 curriculum structure, composition and duration</b>		<p>*The theoretical part of the curriculum is very big and almost always teacher based with lack of student involvement in active learning.</p> <p>*The basic science are not semester or block based, putting students under high stress of studying large courses for long times.</p> <p>*No electives are available.</p> <p>*Students clinical attachments in internal medicine and surgery is long enough, yet the diversity of patients seen is very narrow</p>	<p>*Decrease in the theoretical load of the curriculum and putting more time for clinical applications and students directed learning sessions.</p> <p>*Semestrisation of basic science courses to decrease student workload.</p> <p>*Planning for elective studies in the curriculum to encourage students for in depth study of areas of interest and to identify students with special talents.</p>

	<b>Strength</b>	<b>Weakness</b>	<b>Suggested corrective actions</b>
<b>2.7 Programme management</b>	<ul style="list-style-type: none"> <li>*The faculty has a curriculum committee with defined responsibilities.</li> <li>*The committee terms of reference are enough to allow central systematic management of the curriculum.</li> </ul>	<ul style="list-style-type: none"> <li>*The curriculum committee are not fully activated.</li> <li>*Departmental curriculum planning activities are not organized, nor supervised by the curriculum committee.</li> <li>*Educational experts involved in the curriculum committee are few.</li> <li>*Students, stakeholders and committee in charge of house officers training are not adequately represented in the curriculum committee.</li> </ul>	<ul style="list-style-type: none"> <li>*The CC should have more authorities in planning and directing curriculum changes.</li> <li>*Any course structure should be revised and approved by the CC before faculty council approval.</li> <li>*The CC should involve more educational expert than the current situation.</li> <li>Students and stake holders from the ministry of health and medical syndicate should be members of the committee or at least invited regularly for attendance.</li> <li>*There should be adequate links between CC ,course directors and departmental councils;</li> </ul>
<b>2.8 Linkage with medical practice and the health care system</b>	<ul style="list-style-type: none"> <li>*The presence of separate committee in charge of house officers training activities.</li> <li>*The committee seeks regular feed back to identify training needs.</li> <li>*The training program organized by the committee enabled important skills acquisition.</li> </ul>	<ul style="list-style-type: none"> <li>*Graduates are not well prepared to start PRHO activities</li> <li>*PRHO activities are not adequately organized.</li> <li>*PRHO level of training depends to a great extent on individual graduate desire to get the best benefit from his rotations.</li> <li>*There is no clear definition for sequence of unsatisfactory performance in PRHO year.</li> <li>*The six rotations program though allow wide exposure, don't serve graduate desire to get specific training in certain areas.</li> </ul>	<ul style="list-style-type: none"> <li>*Clear administrative regulations for PRHO year with adequate measures to prevent reluctance in fulfilling training activities.</li> <li>*Graduates should spend more time in community hospitals and clinics if they are going to work as general practitioners after the end of year.</li> <li>*Reciprocal representation between PRHO committee and other faculty committees.</li> <li>*Graduates should have the chance to identify their training needs according to their subsequent attachments and jobs( more time for elective selection)</li> </ul>

	<b>Strength</b>	<b>Weakness</b>	<b>Suggested corrective actions</b>
<b>3.1 Assessment Methods</b>	<p>*The organization of workshops to train faculty in student assessment.</p> <p>*The majority of our staff believe that our assessment policy needs to be improved</p>	<p>*The absence of a body and a policy to monitor the reliability and validity of assessments.</p> <p>*Oral and clinical examinations are both subjective and unfair.</p>	<p>*An independent assessment committee should be in charge of putting a general policy for student assessment.</p> <p>*The Faculty Council should implement the assessment committee's recommendations</p> <p>*Methods should be developed to make oral examinations more objective and fair</p> <p>*Using the OSCE in student clinical evaluation</p>
<b>3.2 Relation between Assessments and Learning</b>		<p>Many educational objectives are not adequately assessed by our current practices</p>	<p>*Individual course objectives and intended learning outcomes must be defined for all courses and must be made known to all staff</p> <p>*During course design, the assessment method(s) suitable for each intended learning outcome must be specified</p> <p>*Adequate training for all staff involved in assessment.</p>
<b>4.1 Admission policy and selection</b>	<p>Applicants with the highest marks usually have the best scientific background and learning capabilities.</p>	<p>The admission policy does test neither the suitability nor the capability of the applicants to study and practice medicine.</p>	<p>*Regular review of the admission policy and mechanisms to ensure the consideration of faculty resources and social responsibilities, as well as community health needs, when determining the size of student intake by the Supreme Council of Universities</p> <p>*Developing methods, to supplement high school grades, for selection of students for admission. For any selection process, objectivity is of prime concern. Suggested methods include</p>

	<b>Strength</b>	<b>Weakness</b>	<b>Suggested corrective actions</b>
<b>4.2 Student intake</b>	<p>*The increasing number of accepted students partly matches with the sin creasing number of population and subsequent demands for health services.</p> <p>*There is cultural diversity in the admission policy.</p>	<p>*The huge number of accepted students exceeds the capacity of the faculty making the process of education and training troublesome.</p> <p>*Stakeholders' opinion is not taken into consideration.</p>	<p>*Regular review of the admission policy.</p> <p>*The faculty council and committees should adapt methods to optimize the use of educational resources in face of the high students' intake:</p>
<b>4.3 Student support and counselling</b>	<p>*The availability of many activities inside the faculty.</p> <p>*Students exchange program with international universities.</p>	<p>*Lack of efficient system for academic support.</p> <p>*No available program that monitors student's progress or their need for support.</p>	<p>*Staff needs motivation to share effectively in academic support.</p> <p>*Allowing students to select their academic support staff.</p> <p>*Improving communication between students and staff *Career guidance is needed.</p>
<b>4.4 Student Representation</b>		<p>*Student union does not represent students appropriately.</p> <p>*Students active participations in the decision making policies related to matters of their interests are not achieved.</p>	<p>*Students should be represented in different faculty committees.</p> <p>*Better organization of student election for their union</p> <p>*motivate all students to go to the election</p>

	<b>Strength</b>	<b>Weakness</b>	<b>Suggested corrective actions</b>
<b>5.1 Recruitment policy</b>	<p>*Staff needs are revised on suitable intervals.</p> <p>*Ethical, scientific and professional performances are considered in promotion.</p>	<p>*There is proper balance between full and part-timer staff.</p> <p>*There is no fixed time policy for reviewing the staff required to deliver each component of the curriculum</p>	<p>*Exchange of faculty members between universities may be allowed with certain regulations</p> <p>*Students feedback about the staff members should be considered in promotion</p> <p>*Financial and non – financial rewards may be given for staff with outstanding efforts in teaching</p>
<b>5.2 Staff Policy and Development</b>	<p>There are staff representatives in all bodies in the faculty. The total teacher/student ratio is convenient.</p>	<p>Distribution of staff members needed to deliver each component of the curriculum is not properly addressed</p>	<p>*Attendance of faculty members skill workshops should be essential requirement for each promotion and every 5 years maximum</p> <p>*A 5 – years strategic plan for staff recruitment considering the teacher/ student ratios in the different curricular components</p>
<b>6.1 Physical facilities</b>	<p>*Lecture halls are adequate despite the large number of students and are equipped with basic facilities.</p> <p>*Presence of departmental laboratories and museums.</p>	<p>*Advanced presentation aids (e.g. data show) less than optimal.</p> <p>*Inadequate space and teaching facilities in some departments.</p> <p>*Students' library is deficient in up to date publications and completely lacks electronic facilities.</p> <p>*Limited offices for non-administrative faculty staff.</p> <p>*Utilization of physical facilities is largely inefficient.</p> <p>*Current policy for regular review of facilities by the faculty and departments is not effective and is largely limited by financial constraints.</p>	<ul style="list-style-type: none"> <li>○ Reinforcing the policy for review and maintenance of teaching facilities.</li> <li>○ The allocation of student study areas within the faculty.</li> <li>○ The quality assurance committee should conduct regular assessment of feedback related to facilities from faculty and students using questionnaires.</li> </ul> <p>Improving the efficiency of use of the current resources; this requires extending the working hours of the teaching sites and laboratories to match the number of students.</p>

	<b>Strength</b>	<b>Weakness</b>	<b>Suggested corrective actions</b>
<b>6.2 Clinical training resources</b>	<ul style="list-style-type: none"> <li>*Availability of large hospitals with a large number and variety of patients.</li> <li>*Efforts to introduce simulated and community settings in clinical teaching.</li> </ul>	<ul style="list-style-type: none"> <li>*Not all clinical practice opportunities at Cairo University are utilized for teaching.</li> <li>*Actual student-patient contact is suboptimal.</li> <li>Use of skills labs is lacking before the HO year.</li> <li>*Regular systematic review of clinical resources is lacking in most departments.</li> </ul>	<ul style="list-style-type: none"> <li>*Increasing the actual student-patient interaction.</li> <li>*Development and implementation of a faculty-level policy; involving all departments participating in clinical teaching, for regular systematic evaluation of clinical resources against teaching needs and responding to any deficiencies.</li> <li>*Considering the feasibility of using New Kasr El-Aini Teaching Hospital and the National Cancer Institute for training PRHOs.</li> </ul>
<b>6.3 Information Technology</b>	<ul style="list-style-type: none"> <li>*Most of faculty and students believe in the importance of ICT in teaching.</li> <li>*Governmental and institutional interest and efforts in developing the role of ICT in teaching and patient care.</li> <li>*Students and staff have an average computer skills</li> </ul>	<ul style="list-style-type: none"> <li>*No defined policy for use of ICT in teaching.</li> <li>*Current utilization of ICT in teaching is defective and current facilities are inadequate for its proper use.</li> </ul>	<ul style="list-style-type: none"> <li>*Formulating a faculty policy on the use of ICT</li> <li>*Reinforcing current activities aimed at developing ICT resources and utilization.</li> <li>*Providing advanced training for faculty staff through the MEDC in the use and medical applications of ICT.</li> </ul>
<b>6.4 Research</b>	<ul style="list-style-type: none"> <li>*Large fund of potential research materials and human resources.</li> <li>*Regular conferences and scientific journal publications.</li> </ul>	<ul style="list-style-type: none"> <li>*Deficiency in some supporting services such as up to date publications, indexing and electronic facilities.</li> <li>*Highly deficient funding opportunities.</li> <li>*Lack of a research plan and lack of interaction between research and undergraduate educational activities.</li> </ul>	<p>Development of a research policy at the faculty which would address upgrading of libraries and research facilities</p>

	<b>Strength</b>	<b>Weakness</b>	<b>Suggested corrective actions</b>
<b>6.5 Educational expertise</b>	The presence, activities and plans of the MEDC	<p>*Use of MEDC is not governed by a faculty policy which ensures its optimum impact.</p> <p>*Activities of the MEDC are limited by the number of faculty staff currently participating in these activities.</p> <p>*The staff working at MEDC are part timers</p>	<ul style="list-style-type: none"> <li>• Faculty policies should encourage the role of the MEDC in program and staff development.</li> <li>• Qualitative and quantitative development of the faculty staff working at the MEDC.</li> <li>• The establishment of a Medical Education department based on MEDC</li> </ul>
<b>6.6 Educational exchanges</b>	Presence of cooperation with other institutions	<p>*Links (especially international) are less than needed relative to the size and role of the faculty.</p> <p>*Funding for international activities for staff is limited.</p>	<p>*International cooperation with high ranking institutions needs to be a priority for the faculty; through a well defined policy.</p> <p>*Recognition of international links may be one of the parameters used for staff evaluation.</p> <p>*Enhancing budgets for international travel and collaborative events.</p>
<b>7-1 Mechanisms For Program Evaluation</b>	The involvement of the department council in the program evaluation is important.	The department council may be suitable for the course evaluation rather than the program evaluation.	The medical school should form another committee for program evaluation which is completely independent.
<b>7.2 TEACHER AND STUDENT FEEDBACK</b>	<p>*There is increased awareness of the importance of involvement of teachers and students in program evaluation.</p> <p>*The curriculum committee starting from next year will include representative of the students</p>	Inefficient staff involvement in program evaluation.	Including teachers and students in the suggested program evaluation committee.

	<b>Strength</b>	<b>Weakness</b>	<b>Suggested corrective actions</b>
<b>7.3 student performance</b>		Inefficient use of student performance data	Analysis of student performance data should be used for curriculum planning and student counseling.
<b>7.4 involvement of stakeholders</b>		The principal stakeholders of the medical school are only involved in a very small part of the program evaluation	The results of the program evaluation should be easily transmitted to all stakeholders
<b>8.1 Governance</b>	<p>*The relationship between the University, the Medical sector of the SCU and the faculty which enhances the administrative function of the faculty.</p> <p>*The representation of the dean and associate deans in the university council and committees ensure that decisions affecting the academic and clinical mission are considered in concert.</p> <p>*The relationship of the dean, associate deans and the chair of the department with the administration of the hospitals ensure the development and allocation of clinical resources into the academic program.</p>	<p>*The autonomy of the medical school is not full.</p> <p>*The departmental councils do not perform their function adequately.</p>	During the interview and the focus group discussing how to solve this problem, the faculty members suggested that we should convey to the higher authority our opinion in changing the structure of the department council so as not to exceed 15 staff members; 50 % of which would be the most senior and the rest would include elected representatives (at least 2 lecturers and 2 assistant professors).

	<b>Strength</b>	<b>Weakness</b>	<b>Suggested corrective actions</b>
<b>8.2 Academic leadership</b>	The total responsibility of the department and curriculum committee about the medical education program is important to ensure the autonomy of the faculty	The turnover of the departmental chair position is high affecting the planning operation in the department.	<p>*Based on the opinions expressed at the focus group discussion, this problem can be solved by planning a strategic plan for each department following the strategic plan of the faculty and university.</p> <p>*Leaders and/or committees must be assigned by the faculty council for coordinating and following the progress of different aspects of medical education at the faculty level.</p>
<b>8.3 Educational budget and resource allocation</b>		During discussions with the focus group they all suggested to allocate a special budget to the educational program.	
<b>8.4 Administrative staff and management:</b>	<p>*Administrative staff and committees cover the important aspects involved in implementing the activities of the faculty based on its role in basic and postgraduate medical education, research and provision of medical services through its hospitals.</p> <p>*Sufficient number of non academic supporting staff.</p>	<p>*Higher administrative staff need assistance by leaders/ coordinators in some areas of medical education (e.g. faculty appraisal, educational resources and quality assurance)</p> <p>*Most of supporting non academic staff in departments are inefficient and lack the necessary skills for efficiently supporting the educational process.</p>	<p>*The assignment of leaders/ coordinators for implementing different aspects of the educational process at the faculty level with corresponding structures in departments (standard 8.2).</p> <p>*The administration should take active steps to increase the non-academic staff skills in computer and management.</p>

	<b>Strength</b>	<b>Weakness</b>	<b>Suggested corrective actions</b>
<b>8.5 Interaction with Health Sector</b>	The presence of interaction at the higher administrative (medical sector of the SCU) level and on individual (faculty staff) basis.	<p>*Although allowed by the university regulations, no representatives of the health sector are present in the faculty council.</p> <p>*A systematic approach for effective joint activities as well as obtaining feedback at the faculty and departmental levels is lacking.</p>	<p>*Performing regular 5 yearly strategic reviews of all aspects, programs and services of the faculty, with strategic planning addressing deficiencies and development needs.</p> <p>*Establishment of quality assurance systems which enable continuous monitoring and annual reviewing of different processes at the faculty.</p>
<b>9- Continuous renewal</b>	The faculty started to adopt the policy of self-review and renewal	Activities other than the undergraduate program have not yet been addressed for regular systematic review.	<p>*Performing regular 5 yearly strategic reviews of all aspects, programs and services of the faculty, with strategic planning addressing deficiencies and development needs.</p> <p>*Establishment of quality assurance systems which enable continuous monitoring and annual reviewing of different processes at the faculty.</p>

## LIST OF ANNEXES

<b>Annex 1</b>	World federation for medical education “WFME” global standards for basic medical education.
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## **Faculty staff contributing to the Self Study**

(in alphabetical order)

### **Dr. Madiha Khattab**

<b>Dr. Abd El Fattah Maraay</b>	<b>Dr. Mohamed El Meligy</b>
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**Contact: Dr. Nadia Badrawi**

**Students contributing to focus group**  
(in alphabetical order)

**Ahmed Essam Mohamed**  
**Ahmed Samir El-Far**  
**Ayman Hany Ahmed**  
**Enas Abd El Moniem El Qattan**  
**Faroq Hassan Yousef**  
**Gehan Shahean**  
**Hany Ibrahiem Saqr**  
**HishamHussien**  
**Mahmoud Abdo Abd El Aleam**  
**Mohamed Abd El Wahab**  
**Mohamed Attia Abbas**  
**Mohamed Fathi Nageib**  
**Mohamed Hisham Mashaly**  
**Sarah El Tatawy**  
**Sherif El Anwary**  
**Sherif Osama Goda**