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Is our medical school socially accountable? The case of Faculty of Medicine, Suez Canal University

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Abstract

Background: Faculty of Medicine, Suez Canal University (FOM/SCU) was established as community oriented school with innovative educational strategies. Social accountability represents the commitment of the medical school towards the community it serves.

Aims: To assess FOM/SCU compliance to social accountability using the “Conceptualization, Production, Usability” (CPU) model.

Methods: FOM/SCU’s practice was reviewed against CPU model parameters. CPU consists of three domains, 11 sections and 31 parameters. Data were collected through unstructured interviews with the main stakeholders and documents review since 2005 to 2013.

Results: FOM/SCU shows general compliance to the three domains of the CPU. Very good compliance was shown to the “P” domain of the model through FOM/SCU’s innovative educational system, students and faculty members. More work is needed on the “C” and “U” domains.

Conclusion: FOM/SCU complies with many parameters of the CPU model; however, more work should be accomplished to comply with some items in the C and U domains so that FOM/SCU can be recognized as a proactive socially accountable school.

Introduction

Several medical schools express interest in the concept of social accountability. However, the task of evaluating and assessing the extent to which medical schools are socially accountable is challenging, due to the fact that the decision of how fit a school is regarding social needs depends on variable factors including social, political and geographical ones (Leinster 2011).

Social accountability of medical schools was defined by World Health Organization (WHO), in 1995, as the “obligation of the medical schools to direct their education, research and service activities towards addressing the priority health concerns of the community, region, and/or nation they have a mandate to serve” (Boelen & Heck 1995).

There are several concepts related to public accountability of the health system and social accountability of medical schools (Lewkonja 2001). They all refer to four basic principles or values of the health system, namely: Relevance, Quality, Cost-effectiveness and Equity (Boelen & Heck 1995). These values should be reflected in medical schools’ activities, namely education, research and service (Rourke 2006), particularly when planning and implementing educational programs; and measuring their impact on the community, graduates and health services (Boelen 1999).

Practice points

- Social accountability of medical schools has gained a great interest worldwide.
- There is a clear need for evaluation of socially accountable medical school.
- FOM/SCU has a long tradition of community engagement.
- FOM/SCU should exert more efforts in assessing the impact of its intervention.
- Exchanging experience in social accountability is an essential step for improvement.

The discrepancy in the level to which schools perform the previous functions depends on the needs of their societies, schools’ facilities and available resources. Consequently, medical schools might be categorized into the following three categories “Neutrality, in which a medical school performs its functions with little concern for adapting them to the changing needs of individuals, families and the community at large. Reactivity, in which a medical school is aware of the health needs of society and reacts accordingly

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and responsibly. Proactivity, in which a medical school continually anticipates new developments. In this last case, the school uses its resources to define future challenges in the health system and work with partners to invent and implement plans to address the expected challenge” (Boelen 1999, 2000).

Ensuring that medical schools and medical education programs respond to the priority health needs of communities is becoming an area for reorganization on a worldwide level (Boelen & Woollard 2009; AFMC 2010; Skochelak 2010).

Attempts towards setting standards for social accountability started three decades ago. In 1986, the report of the WHO expressed concern to modify the accreditation criteria of medical schools to better reflect people’s priority health needs (Declaration of Tokyo 1986). In the mid-nineties, a grid was proposed to help design evaluation outline models (Boelen & Heck 1995). Subsequently, Boelen and Woollard (2009) developed the CPU model, an acronym for “Conceptualization, Production and Usability”, in an attempt to clarify the statement set out by the WHO. This model provided a framework with key parameters in order to define the extent of commitments for a school to be recognized as socially accountable.

In 2010, “Global Consensus on Social Accountability of Medical Schools” was developed. The consensus represents a set of strategic directions and key features, defining socially accountable medical schools. Translating the recommendations into validated standards is still ongoing. In 2011, a group of medical schools under the support of THEnet prepared an evaluation framework inspired by the CPU and its validity is under investigation (The Training for Health Equity Network 2011).

Further effort was elaborated by Boelen and his colleagues (2012) in translating parameters composing the CPU model into specific indicators, as examples, keeping in mind that final indicators should be crafted by medical schools themselves to assess progress toward social accountability (Boelen et al. 2012).

Since its establishment in 1978, the Faculty of Medicine – Suez Canal University (FOM/SCU) attempts to address community health needs and adopts community-based education as one of its main educational strategies (Hosny et al. 2009). The school has a well-planned community program including teaching, research and service taking into consideration the community needs. However, the school hasn’t identified how much it complies with the previously mentioned social accountability standards. Up to our knowledge, the FOM/SCU is the first school that has systemically addressed the entire spectrum of CPU parameters to assess compliance to social accountability. This article reports our internal evaluation, using the CPU model, and discusses where we stand from being a proactive socially accountable school.

Methodology

This research is qualitative and based on the case study type of research. It is aimed at a situation analysis of the FOM/SCU,

concerning social accountability. FOM/SCU’s practice was reviewed against CPU model parameters. Data were collected through interviews and documents review as discussed in following subsections.

In-depth interviews

Unstructured interviews were carried out by a team of two researchers with the dean of the faculty, the interviewees were the vice dean for students and education affairs, vice dean for postgraduate studies, vice dean for environment and community services, chief executive officer of Suez Canal University Hospitals, three phase coordinators (for the three educational phases), three field coordinators, director of training in university hospitals, six experts from the community and family medicine departments. The results of unstructured interviews with another group of interviewees (representatives from the directorate of health affairs and members of parliament from the five governorates, representatives from the local provinces council, students’ parents and community leaders) was added to this study based on the regional survey on Social Accountability of Medical Schools in the Eastern Mediterranean Region conducted in 2013. The main topic of the interviews was social accountability in the school; the questions have been varied according the job of the interviewee.

Document review

Researchers identified the documents that have useful information to cover the indicators of the CPU parameters. Documents that were reviewed are: (1) Undergraduate school bylaw, (2) School educational program, (3) Regional Survey on Social Accountability of Medical Schools in the Eastern Mediterranean Region, this survey was carried out by Group on Social Accountability (GOSA) of the Association of Medical Education in Eastern Mediterranean Region (AMEEMR). Criteria used in the survey were in accordance with the Global Consensus for Social Accountability (GCSA) areas. (4) School self-study (2009), done according to the standards of the National Authority for Quality Assurance and Accreditation of Education in Egypt (NAQAAE). (5) School self-study (2005), done according to the basic standards of WFME. (6) FOM/SCU booklet (Hosny et al. 2009). (7) School students’ guide. (8) School field training manual. (9) Training courses and workshops provided by Center of Research & Development in Medical Education & health services (CRD) and by the clinical epidemiology unit (CEU).

The used CPU model is composed of three domains, 11 sections and 31 parameters (Boelen & Woollard 2009; Boelen et al. 2012): domain C stands for “conceptualization” referring to justifications of actions against society’s needs and challenges, domain P stands for “production” as it relates to process and outcomes of action programs to meet those needs and challenges, and domain U for “usability” as it relates to deployment of “products” and their impact on health” (Appendix 1).

The data presented in the narratives (“Results” section) illustrating the level of compliance of the FOM/SCU for each parameter.

Results

CONCEPTUALIZATION

1. References

1.1. Values

The Faculty of Medicine, Suez Canal University (FOM/SCU) was established in 1978 as one of the faculties of Suez Canal University, which was inaugurated as a community-oriented university to serve the Suez Canal Region and Sinai. One of the main pillars of the school development was to respond to community needs taking into consideration the four values (*Quality, equity, relevance, effectiveness*). These values are made available in the school bylaw and emphasized in the school mission statement, which has been announced to all stakeholders and disseminated in the school website, school booklet, students' guide and posters inside faculty buildings as well as all clinical and academic departments (Hosny et al. 2009).

1.2. Population

The population database is prepared by the ministry of health (MOH) and not the faculty, but there is a consultative mechanism with the MOH to enable us to get the data needed for conducting our educational activities (field training, field projects and faculty research projects). However, this is not a permanent mechanism and we do not have the health map of the country in the executive school offices.

1.3. Health system

The MOH is the responsible body of controlling the health System in the whole country. FOM/SCU is a part of the local health system providers in the Suez Canal and Sinai areas, it offers health service as one of its main functions according to the MOH plan in the primary health care (PHC) units and secondary care hospitals; however, the school has the autonomy to plan its health service activities on the tertiary care level through its university hospital and to conduct researches related to community needs in its catchments' areas.

The school encompasses and manages 10 family medicine PHC centers that work in concordance with governmental directorates of Health Affairs providing health services to underprivileged areas. There is partnership with, the secondary care, Ismailia General Hospital. The university hospital provides tertiary care throughout 22 clinical departments, in addition to working in harmony with the MOH in providing emergency services.

In 2008, the school established a policy for systematically assessing the needs of the community This has been supported by our school membership in the governorate regional health council involving all stakeholders of the health advisory in Ismailia Governorate (province).

1.4. Health personnel

The Suez Canal University encompasses various health profession schools, such as the faculty of medicine, nursing, dentistry, pharmacy, besides two intermediate level institutes of nursing (two academic years after-high school).

The dean of faculty of medicine is also the chairperson (ex officio) of the technical health institute affiliated to MOH. The faculty has intimate partnership with other health profession

schools through participation in their teaching, training and research.

2. Engagements

2.1. Mandate

The mission and objectives of the Faculty were stated to clearly ensure commitment to the community health problems and needs (Appendix 2). Mission and objectives are posted everywhere as described in the section "Values" The school objectives were translated in the school strategic plan. The strategic objectives (Appendix 3) were derived from the University's strategic objectives and directed to fulfill the school's mission.

2.2. Field

The school's membership in the governorate regional health council, helped FOM/SCU to select and run many greatly needed programs, to ensure the implementation of its commitment. Examples for recent programs are: behavioral patterns in relation to Hepatitis C virus (HCV) Endemicity & Prevention Program in the Suez Canal Area, 2012 and: immune-regulatory cytokines as predictors of early response in antiviral treatment of chronic HCV genotype-4 infected Egyptian patients, 2010.

2.3. Partnership

Since the school's establishment, agreement was signed with the MOH which is the main stakeholder of health in Egypt, which allows the utilization of PHC units and MOH hospitals for clinical training of our students. This agreement defines the role of each party in the education process. In 2012, another agreement was signed with the Directorate of Health Affairs in Ismailia, which entails that university hospital and MOH hospitals in Ismailia and North Sinai are responsible for providing health services in the area. It is also stated that the training of health profession personnel will be carried in the university hospital. A new agreement was signed with the MOH in 2014, which emphasized the role of FOM/SCU in training and continuous education of the medical staff under the administration of MOH.

2.4. Expected outcome

FOM/SCU has a list of desired competencies which was translated into well-defined intended learning outcomes (ILOs) of its educational program. General Medical Council, United Kingdom (GMC) reference standards were selected as a benchmark for a comparative study between the Faculty program's outcomes and the GMC graduates' outcomes and competencies to ensure competencies fulfillment. The final report showed that 97% of the knowledge, skills and behaviors that were set by GMC were covered by FOM/SCU curriculum.

3. Governance

3.1. Strategic plan

The current FOM/SCU strategic plan covers priorities of different planned activities; these priorities were set according to needs assessment, foreseen impact of activities and logical sequence when it comes to interdependent activities.

School leadership, teachers, administrative staff, students, non-academic staff, residents and representatives of health

stakeholders were involved in needs determination. The stakeholders represented the five governorates served by FOM/SCU.

The action plan has been evaluated regularly by external reviewers throughout its implementation to cope with any internal or external changes.

3.2. Management

The Faculty strategic plan is managed by the director of the quality assurance unit under the supervision of the dean. The working team consists of the three school vice deans, 31 staff members, 15 assistant staff and 22 non-academic staff. Each member has a predefined responsibility related to one or more activities of the plan. The working team prepares a progress report every three months to monitor the progress toward expected outcomes. The reports are regularly presented to the faculty council. The organizational chart of the school is available, to all people inside and outside the school, in the quality assurance unit and in the faculty report which is presented annually to all faculty members.

3.3. Resources

FOM/SCU is a governmental school, funded by the Ministry of Higher Education. However, the school has full autonomy to seek additional resources. Self-revenues are obtained through applying for projects or getting funds through self-funding units within the school system.

PRODUCTION

4. Field operations

The school conducts sporadic projects in its catchment's areas aiming at improving health services. An example is the program for improving women health services during child bearing period.

5. Educational program

5.1. Objectives and content

As mentioned in the section "Expected outcome" the educational program was designed to meet the expected outcomes and was comparable to those of GMC graduate outcomes. The ILOs of the program cover the three learning domains (cognitive, psychomotor and affective).

The Medical education committee, headed by the vice dean for education, is responsible for maintaining a dynamic curriculum, not only geared towards the health needs of the community but also responsive to contemporary changes and challenges in the health map. The job description of the committee is shown in Appendix 4. Committee members are faculty members from different departments in addition to students from different academic stages.

5.2. Curriculum structure

FOM/SCU has adopted innovative educational strategies since its beginning, including: community-oriented and community-based education (CBE), problem-based learning (PBL), student-centered education, horizontal and vertical integration between basic, social, behavioral and clinical sciences, comprehensive evaluation, and evidence-based medicine (EBM).

The Educational program consists of six years divided into three phases. The first phase, pre-pathogenesis phase,

comprises year 1. The second phase, pathogenesis phase, comprises years 2 and 3. The third phase, clinical clerkship phase, comprises years 4, 5 and 6. Human, public health, basic and clinical sciences are completely integrated in the educational learning modules throughout the six educational years.

Early exposure to clinical encounters is achieved in phase I where students start to understand the health care system and culture, and the uniqueness of the rural and urban communities, they also start to learn basic communication and consultation skills starting from role-play and ending with history taking from real patients. In phase II, students are trained to provide care for the patient as a whole physically, socially and psychologically, and encounter a broader spectrum of patients problems. During phase III, students share actively in the PHC program in urban and rural sites.

5.3. Learning process

In PBL, the students throughout the six years are confronted weekly with an educational priority health problem that may address medical condition or fundamental economic, cultural, political or financial issues. Community based activities and skills lab work go side by side with PBL where students acquire the requested skills and attitude.

5.4. Practical

Field training manual and skills lab guide are handed to all students in phase I and II. The manual and guide contain all the requested competencies and outcomes, besides the instructions that guide students to pursue their activities and the checklists used for evaluating their performance.

6. Students

6.1. Recruitment

The Admission policy is controlled by the Ministry of Higher Education. According to the Government rules, medical schools accept the Egyptian high school certificate or its equivalence (IGCSE, American High School Diploma, etc.) based on students' scores. Geographical distribution is taken into consideration. The number of students recruited is determined annually by the Supreme Council of Universities. This policy gives the chance for underserved communities to be fairly represented.

6.2. Career

FOM/SCU as all other faculties of Medicine in Egypt, is only responsible for providing job opportunities for graduates who will join the school as residents (usually those with high scores in the final exam). An open forum is held annually for those graduates to discuss the recruitment plan of the school based on its needs for different specialties including specialties tailored to community needs, such as family medicine and emergency. The MOH is responsible for recruiting the rest of graduates according to the needs of the health system in Egypt. However, there is no discussion on the variety careers in the health sector to enable graduates to make informed choices regarding their future career plans.

6.3. Evaluation

Our assessment methods are explicit and made known to students annually at the outset of the first year. This is in

addition to its detailed description in the students' booklets and school bylaws.

Assessment of students' achievement in cognitive, psychomotor and affective domains is done through both formative and summative evaluation. Formative evaluation is done regularly for all students' activities. Summative evaluation is done both periodically and at the end of each phase. Grades are assigned based on criterion-referenced scoring. Objective tools are used in all exams.

Students practice technical skills (related to basic sciences) and clinical skills (in preclinical years) in labs equipped with all needed facilities. The training and assessment are done using valid and reliable checklists. In clinical years, students practice (supervised) on real patients. Students receive feedback from their tutors and peers; however, feedback from patient's side is lacking. Feedback of physicians from MOH about student performance in primary and secondary health care settings is also taken into consideration but not included in students' grades.

7. Faculty members

7.1. Source

FOM/SCU, has a core of full-time qualified faculty members. The recruitment policy considers the teaching, professional and research capabilities. Faculty members are adequate in number and qualifications to meet obligations toward achievement of the faculty mission and goals. The faculty members in the family and community medicine departments represent about 10% of the total number of our faculty members, which help the faculty to work in the areas of human sciences, population health and family medicine. However, all faculty members in FOM/SCU interact with the society through working in PHC centers during students' training and through offering services in the university hospital as well as during medical convoys that serve underserved and remote areas.

7.2. Abilities

Since its establishment, FOM/SCU was keen to develop a core of professional staff members to run and maintain the school innovative program. Eleven faculty members hold a Master degree in medical education from the University of Illinois, Chicago, USA. They constitute a trainer's team that has worked along the past years, besides other faculty who have long experience in medical education, in providing training and support for many trainees on the local, national and regional level.

In accordance with the faculty policy, faculty members not only attend workshops, conferences and training courses in their relevant specialties, but also receive periodical training and capacity-building programs in different fields of medical education, such as PBL, class tutoring, research methodology, CBE, student assessment, leadership and management, evidence-based medicine, among others.

Faculty members are also heavily involved in community service and health promotion in the governorate covered by the school, in addition to sharing in community health promotion and health education activities organized in the faculty. They also participate in the family visits program and

medical convoys to underserved areas to provide essential health services.

7.3. Support

Since 1986, the CRD offers regular training courses and workshops as described in the above section "Source" for faculty members involved in student activities at the commencement of each academic year. The number of faculty who receive training in different fields of medical education is about 50 per year. In addition, 10 faculty members are chosen every year to participate in different international workshops held by the CRD. The medical education department, which was established in 2002, developed the JMHE in collaboration with the University of Maastricht. Each year the department offers a grant for a faculty member who is working in a leadership position in the education sector to join the program. Other faculty members can join this program at their own.

Clinical epidemiology unit, which was established in 1988, provides workshops on research methodology and statistics for all demonstrators and residents as well as postgraduate students in order to be able to apply for master degrees in different specialties.

Staff promotion policy in Egypt entails the fulfillment of activities related to teaching, research and community service. However, standards reflecting social accountability activities are not clearly expressed.

8. Research

The faculty research plan is directed to the society's priority health needs in concordance with the MOH plan, and the school has approved some financial and technical facilities for those who conduct their research in the main areas of the plan. The faculty members' involvement in research is not only for the purpose of promotion, but also as a part of their duties in the faculty. They are involved in educational research activities through acting as supervisors, subject matter experts and members of thesis defense committee for the yearly student research projects, as well as the electives and graduation mini-projects. Students' researches are directed toward community needs and problems. Examples of students' researches in the last year are shown in Appendix 5.

9. Service

In addition to the role that they play in education and research, the faculty members are involved in the delivery of clinical services. The school runs 10 PHC centers that provide primary health care services in governorates covered by the school. This is in addition to the MOH primary health care centers, used by our students and faculty as a vehicle for learning and research.

USABILITY

10. Employment

10.1. Job opportunities

Every year the faculty provides job opportunities for 40% of the graduates. The rest of graduates are hired in the MOH facilities through a national distribution system involving all Egyptian medical schools. The school does not have a role in the distribution of jobs in the MOH.

10.2. Settlement

The MOH is responsible for the distribution of graduates all over the country. However, as FOM/SCU was the first school to establish a family medicine department in Egypt in 1981, therefore, beside teaching students in the PHC centers, there are two obligatory months in the internship year for the graduates to serve in the rural and urban PHC units including the underserved areas. The school also encourages its graduates and other medical schools' graduates to obtain the Master's degree in family medicine, and currently more than 137 applicants have obtained the degree from our school in the last five years. The blended Master's degree program offered by our family medicine department in collaboration with Alabama University has helped many physicians get the Master's degree in family medicine; those who will be most needed to provide most required services.

10.3. Quality of services

The university hospital runs a center for training of health professionals. This center provides regular training courses. Examples of this year's provided courses are: Basic and advanced life support, Infection control measures, CORONA infection, Hand Wash and Quality control in health centers.

10.4. Practice

FOM/SCU students work as teams with other professions in community settings, not only to achieve learning outcomes but also to demonstrate the university's social responsibility towards the community. Students begin to encounter patients and are assigned to work with multidisciplinary health teams from their first day in medical school (Hosny et al. 2013).

11. Impact

11.1. Partnership

Representatives from the local health sector are permanent members of our faculty council.

11.2. Effects on health

As the MOH is responsible for measuring the impact on health status, the role of the school in this area is performed through individual research projects.

11.3. Promotion

Many faculty members are working with the National Agency of Quality Assurance and Accreditation in Education (NAQAAE), and some of them have discussed the issue of social accountability with the chairperson of NAQAAE, and after comparison, it was found that many standards cover social accountability. The school is also a member of the Association for Medical Education in the Eastern Mediterranean Region (AMEEMR) and one of its task groups is Group on Social Accountability (GOSA), which has prepared a survey for evaluating the social accountability of medical schools in the Eastern Mediterranean Region.

Discussion

The training in health profession education has greatly changed from producing a graduate who meets a set of profession standards to producing a graduate who meets the needs of the society he/she serves (Larkins et al. 2013). As

FOM/SCU's mission is emphasizing the role of the graduate in serving the community, therefore, after more than three decades from its establishment, it is the time to assess FOM/SCU's compliance with social accountability parameters.

Using the CPU model, we found that FOM/SCU is fully integrated with the national health system. It has the autonomy to organize its health service activities as optimally as possible based on the four cardinal values in the 10 family medicine PHCs and the tertiary care university hospitals besides its ability to suggest activity modifications in the PHC centers and secondary care hospitals affiliated to MOH according to the established agreements. FOM/SCU also encompasses different health profession schools and acts to improve the design and execution of the educational program. In addition, the school runs required health programs with the MOH related to priority health problems, such as HCV, which has become a very common disease in Egypt. Despite this, we still need more involvement with the MOH in identifying the social determinants of health and the strategies of addressing them. In addition, due to the governmental system of health in Egypt, the school does not have a pilot or demonstration area as described by the CPU model to build the consistency between the "Conceptualization" and "Production" parameters which lead to only a partial fulfillment of the "C" domain.

The school is evidently engaged in a process for responding to society's needs mainly via its educational mission, providing ample information related to parameters illustrating the "P" domain ("Production"). The school is quite active in using the most appropriate innovative educational strategies and methods to achieve the required graduate competencies. The comparison done by the school with the GMC ensured that FOM/SCU graduate competencies match international standards. Educational resources as well as evaluation tools are quite enough to ensure acquisition and proper assessment of these competencies. Recruitment policies guarantee student representation from different social levels within the served area. Although all faculty members show interaction with the society during student training and medical convoys, only 10% of the faculty, working in the family and community health departments, oversees activities related to social accountability within the primary health care level. However, the school requires all graduates in the house officer year to practice for two months in the primary health care units, and this is not performed by other medical schools in Egypt. Also, in the period before job assignment in the faculty, which is six months at least, the MOH distributes all medical graduates to the PHC centers as an obligatory period of service. It remains a challenge to have a majority of faculty accepting to work in PHC centers as they regard this as a job for MOH physicians.

Despite the fact that the school has an excellent reputation in health delivery in the five governorates it serves, the true impact on community health has not yet been measured. This may be due to the school's reliance on the MOH in this issue, as it controls the data concerning the population health, number of health workforce needed to be trained, their distribution after graduation and their employment. These findings denote that the "U" domain ("Usability") is not completely fulfilled by the school; however, this fulfillment was not an easy task in the light of the MOH job description.

As previously mentioned, no medical school has used all parameters of the CPU model for evaluating compliance to social accountability; however, few reports exist describing medical schools' experience in social accountability. For example, The Northern Ontario School of Medicine (NOSM), Canada, outlined school development and implementation. They used case-based and e-curriculum and sent students to different communities to work as teams and participate in practical academic rounds. They succeeded in bringing together community groups and organizations from different parts of the country, in addition to hospitals and health services, physicians and other health care providers and two universities, across Northern Ontario. They concluded that this partnership will guarantee their social accountability obligation and provide the source for the delivery of their educational program (Pálsdóttir et al. 2008; Strasser et al. 2009). Their study matches our student practice in different community settings beside involvement of different stakeholders, as of the moment of this writing they have yet to report their impact on the local health improvement as in our situation.

Another study was conducted in Ateneo de Zamboanga University School of Medicine (ADZU SOM) in Philippines. It aimed at proving that a medical school in a low-resource setting can be sustainable and associated with an improvement in medical workforce and population health outcomes. Their results revealed that ADZU SOM appears to fulfill its mission through recruiting students from the local community into a community-based curriculum developed and delivered by local clinicians and community leaders (Cristobal & Worley 2012). They also found that after 14 years of practice, infant mortality rate decreased in Zamboanga by approximately 90% compared to the 50% national decrease. They concluded that their findings support the results of other studies (Martini et al. 1994; Dunbabin & Levitt 2003), which reported that motivating graduates to professions that support public health outcome is influenced by choosing students from the local community. Although our FOM/SCU students are from the community surrounding the school, have worked in a community-based education curriculum, and some projects were conducted and showed health improvements, this was not done to measure the school impact as a whole in a pilot area but in local discrete areas.

FOM/SCU comparison with the CPU model, showed, generally, that we still need to work on the C and U domains of the model according to the our previous findings and, specifically, to identify a pilot area, where a significant proportion of education, research and healthcare activities takes place, to use in measuring the school's impact on health. We hope that the recent agreement between the MOH and FOM/SCU will help achieving this through joint planning, managing and evaluating a comprehensive set of health services in this area in response to needs.

Conclusion

FOM/SCU complies with many parameters of the CPU model, however, it still needs more work on some items in the C and U domains. Due to its long history of community engagement and its strong potential to make that step forward, FOM/SCU

can fulfill a socially accountable mandate in the near future. We also hope that this informative self-evaluation encourages other medical schools, on the national and international level, to give more emphasis to their performance, development and capacity in the direction of social accountability.

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Appendix 1

CPU model

CONCEPTUALIZATION

1. References

- 1.1. Values: explicit reference to values (i.e. quality, equity, relevance, effectiveness)
- 1.2. Population: reference to population features and priority health needs
- 1.3. Health system: reference to health system development for greater coherence and integration
- 1.4. Health personnel: reference to qualitative and quantitative needs

(see Values, Population and Health system)

2- Engagements

- 2.1. Mandate: mission and institutional objectives consistent with References
- 2.2. Field: involvement in health management of a territory and given population
- 2.3. Partnership: institutionalized partnership with key stakeholders, locally and nationally
- 2.4. Expected outcome: definition/justification of profile (list of competencies) (see References)

3- Governance

- 3.1. Strategic planning: engagements incorporated in a widely accepted development plan
- 3.2. Management: validation, co-ordination and evaluation of implementation of plan
- 3.3. Resources: mobilization of internal and external resources consistent with Engagements

PRODUCTION

4- Field operations: education, research and service activities consistent with Engagements

5- Educational program

- 5.1. Objectives and content: consistent with profile of health professional (see Expected outcome)
- 5.2. Curriculum structure: early and longitudinal exposure to priority health issues in the community
- 5.3. Learning process: solving complex health problems, both for individuals and communities
- 5.4. Practicals: sites prioritizing primary health care and linkage with other levels of health service

6- Students

- 6.1. Recruitment: equal opportunity and priority to students from underserved communities
- 6.2. Career: orientation and assistance to access jobs related to priority health issues
- 6.3. Evaluation: reference to the entire spectrum of competencies (see Expected outcome)

7- Teachers

- 7.1. Source: involvement of a variety of teachers from the health and social sectors
- 7.2. Abilities: teachers serving as role models, in reference to the profile (see Expected outcome)
- 7.3. Support: training and incentives to improve abilities in public health and medical education
8. Research: related to health system management (see parameters in References and Usability)

9. Service: excellence in primary healthcare services (see parameters in Usability)

USABILITY

10- Employment

- 10.1. Job opportunities: advocacy and partnership for emergence of priority health professions
- 10.2. Settlement: retention and distribution of graduates according to needs (see Values and Population)
- 10.3. Quality of services: maintenance of competencies of graduates (see Expected outcome)
- 10.4. Practice: improving working conditions at primary healthcare level (see sections Field operations, Service, Employment)

11. Impact

- 11.1. Partnership: relationship with stakeholders for improved management of health system
- 11.2. Effects on health: risk reduction and health promotion in the field (see Field, Partnership, Field operations)
- 11.3. Promotion: dispatching results of usability to decision-making bodies, both local and national

Appendix 2

Mission Statement

Teaching: to offer an educational system aiming at graduating competent physicians able to meet satisfactorily the individual and community health needs at both the national and international levels and capable of lifelong learning and research

Research: Fostering scientifically sound and ethically bound research – at both under and post graduate levels – directed toward solving priority community problems and coping with scientific advances worldwide.

Health care provision: The school is committed to Providing safe, high quality, cost effective health care services at the primary, secondary and tertiary health care levels.

Community participation: Reaching out and partnering with community leaders and health authorities to identify community needs & problems and working toward responding to these needs and tackling these problems.

The school objectives

- (1) To provide high quality educational programs for under and postgraduate students.
- (2) To graduate competent physicians, able to provide health care services within all health care levels, with special emphasis on primary health care.
- (3) To link medical education to community health needs and to the most recent development in the medical field.
- (4) To collaborate with the Ministry of Health and other health care providers, in establishing an integrated health care system as well as a health manpower development system in Suez Canal area, taking into consideration current available and possible future resources.
- (5) To provide high quality, cost effective health care services at the primary, secondary and tertiary health care levels.
- (6) To provide the health manpower with continuous medical education programs.
- (7) To carry out community oriented research programs in accordance with the international advances in the medical field.
- (8) To collaborate with different social institutes for disseminating sound health information and education in the community.

Appendix 3

The schools strategic objectives

- (1) To be nationally accredited by 2010.
- (2) To prepare and qualify high caliber professionals at both undergraduate and postgraduate levels in a variety of

specialization in light of the challenges and opportunities of the globalization era.

- (3) To participate in the improvement of the environment and community standards through developing and increasing the variety, coverage area, effectiveness and efficiency of the offered medical (preventive, diagnostic, therapeutic and rehabilitative) services.
- (4) To promote scientific research in order to enhance economic, social and cultural development in concordance with the university research plan.
- (5) To make the best use of the advancement in the fields of information, communication and education technology to improve and develop the faculty's educational processes.

Appendix 4

Job description of the medical education committee

- (a) Supervising the development of the educational program with integration and approval of the scientific content proposed by subject area experts of different departments to suit the faculty curriculum and teaching methods.
- (b) Supervising the implementation of the educational process, with accountability for proper application and compliance with faculty curriculum.
- (c) Proposing suggestions for improvement of educational process based on continuing evaluation.

Appendix 5

Example of students research projects

- Perception of children weight among mothers attending primary health care units
- Prevalence of obesity among primary school students, Ismailia Governorate
- Exposure to passive smoking among pregnant women attending PHC
- Knowledge and practices of breast feeding among mothers attending primary health care units
- Evaluation of Knowledge, Attitude & Practice of Infection Control Measures among Healthcare Workers at Operation Rooms in Suez Canal University Hospital
- Awareness of parents attending Al Mahsama PHC unit about anemia in children and its complications.
- Prevalence and risk factors of diabetes disease among residents in Abu khalifa village in Ismailia
- Impact of health education program on the improvement of knowledge, attitude, practice of mothers of under five children with diarrhea in Elsalam PHCc