

The Scope of Medical Education in Egypt

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The World Journal of Medical Education and Research (WJMER) is the online publication of the Doctors Academy Group of Educational Establishments. Published on a quarterly basis, it's aim is to promote academia and research amongst all members of the multi-disciplinary healthcare team including doctors, dentists, scientists, and students of these specialties from all parts of the world. The principal objective of this journal is to encourage the aforementioned from developing countries in particular to publish their work. The journal intends to promote the healthy transfer of knowledge, opinions and expertise between those who have the benefit of cutting edge technology and those who need to innovate within their resource constraints. It is our hope that this will help to develop medical knowledge and to provide optimal clinical care in different settings all over the world. We envisage an incessant stream of information will flow along the channels that WJMER will create and that a surfeit of ideas will be gleaned from this process. We look forward to sharing these experiences with our readers in our subsequent editions. We are honoured to welcome you to WJMER.



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The Scope of Medical Education in Egypt

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"In Egypt, the men are more skilled in medicine than any of human kind". Such was the ancient Greek poet Homer's remark in his epic poem 'Odyssey'. Undoubtedly, the 'Egypt' Homer was alluding to in his masterpiece was that of the Pharaohs; ancient Egypt, the era and civilization of which, to this day, Egyptians remain boastful and proud.

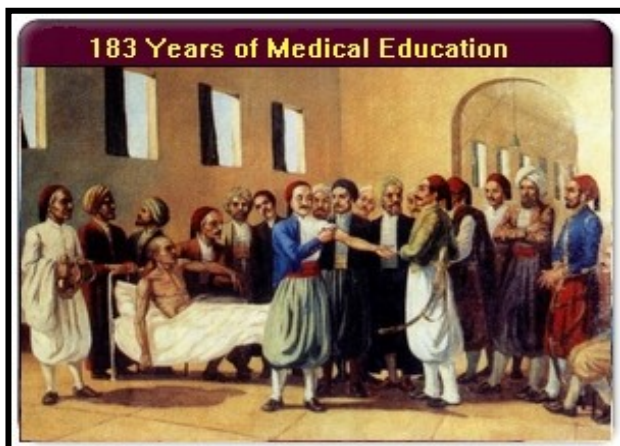


Figure 1: Kasr-Al-Ainy University.

Whether this statement was factual or mythological, it is regretful that in today's world, the practice of medicine and the state of medical education in Egypt have slipped from the summit while the legacy of the 'Odyssey' lives on. The primary purpose of this exposition is to discuss the various opportunities in the industry of medicine that exists in modern Egypt.

Medical Schools

The majority of medical education in Egypt is delivered through public medical schools, that is to say, medical schools that are funded by the government and exist as part of public universities. There are 14 public schools of medicine throughout Egypt; the oldest, largest and most famous of which is Kasr Al-Ainy medical school located in Cairo, the capital city. It was originally founded in 1827 following a French assembly in Paris. The renowned French physician, Clot Bey, was appointed the first president of the school. Kasr Al-Ainy remains to this day

amongst the most prestigious medical schools in the Middle East.¹

The Process of Entry

Matriculating into medical school is no simple matter. In Egyptian culture, a doctor is a highly esteemed, respected and important figure in society and as enumerated



Figure 2: Kasr-Al-Ainy Medical School.

above, a majority of medical schools in Egypt are public. Thus, high school students undertaking 'el Thanaweya el Amma' or national high school examinations vie against fierce competitors to secure a position in medical school. The competition is extremely high. The statistics speak volumes for themselves; last year, the admissions office only accepted students who scored more than 99.1% in their high-school examinations! A limited number of places are reserved to IGSCE, American Diploma students and those with equivalent diplomas from any other country. These facts illustrate that there are major issues that need addressing in the educational system in Egypt.

Medical Education: Challenges and Chances

Medical education in Egypt is six years in duration. The first three years of medical school are concerned with the study of basic medical sciences, whilst the final three years are focused on clinical sciences. There are many challenges faced by medical students in Egypt today. To begin with, a pressing problem is the large number of

students. In my cohort -fourth year at Alexandria University- for instance, there are over 1000 pupils. Even when divided into smaller groups for clinical ward rounds, the number of students is still too large to be able to facilitate effective learning. Also, facilities and resources are scanty, thus the quality of education delivered is not of high standard. In addition, examinations arguably test how much the student was able to memorize rather than inculcating ethical reasoning and speculation (as is the case in many medical schools in the West such as those in the United States). Therefore, following examinations, a large proportion of students sadly forget most of what they had learned.

'Education, 'educational progress', 'improvement of education'... are but some of the phrases oft repeated by students, faculty members, officials... etc for decades without being heralded by any change. However, some medical schools have succeeded in upgrading their teaching systems. For example, Alexandria Faculty of Medicine, to which I belong, has introduced an 'integrated system' of learning as opposed to subject-based learning adopted by most Egyptian medical schools. During the course of their first three years, students now learn their basic medical sciences through studying different body systems. By way of illustration, the 'Cardiovascular System' module would include the anatomy and physiology of the cardiovascular system, the microscopic illustrations of cardiac muscles, different pathological conditions of the heart, drugs used to treat heart failure, hypertension... etc. Those who originally suggested proceeding with this novel method of education argued that in studying Anatomy, Physiology, Pathology...etc as entirely separate entities, students would not be able to interlink the information. The human body is one unit and splitting it up into separate subjects, books and examinations makes it more difficult to understand and grasp its different aspects. Although during the implementation of this new system numerous problems have been encountered, it reflects, certainly in my opinion, a progressive change in medical education in Egypt.

With communication advancement, Egyptian medical schools are now in touch with other universities across the globe and many student exchange programmes have been carried out for a number of years. There are also other societies that coordinate student exchanges such as IFMSA,² a non-governmental organization representing associations of medical students. It embraces 108 national and local organizations in 103 countries on six continents. Needless to say, these exchange programmes bring about benefit not only to medical students themselves, but to their universities and countries as well.

Agreements between universities worldwide have been established evidenced by the fact that Egyptian medical

schools nowadays, accommodate a large number of students of different nationalities and identities. At Alexandria University, Malaysians and Palestinians are among the most common foreign students one would meet.

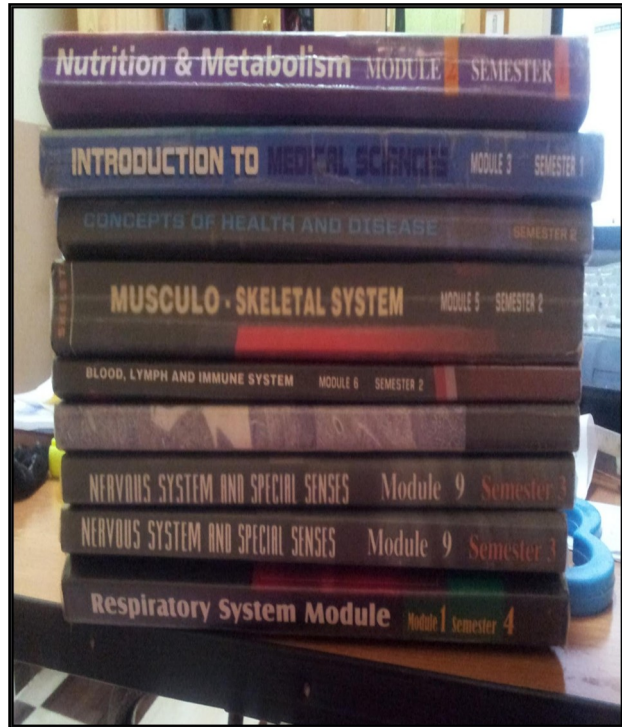


Figure 3: A group of Alexandria University textbooks –organ-system based for first three years of medical study (incomplete series).

The Working World

At the end of the six years of medical school, the student is granted an MB BCH. The medical school graduate then has to spend an obligatory 12-month-long internship at one of the University or Government Teaching hospitals after which a medical license as a General Practitioner (GP) is awarded.

Graduate students have a limited number of options. It is important to bear in mind that what specialty a student is to pursue in his/her career depends on his/ her grades during medical school. This naturally frustrates many good students who were just not able to deal with the educational system and its drawbacks so were not able to achieve enough marks and consequently were denied the freedom to choose the specialty they wished to practise.

To clarify the 'fate' of a medical school graduate, the pattern of health care in Egypt must be alluded to. Health care is provided mainly through the two broad categories; government health care and private health care.

(i) Government Health Care

Government health care constitutes the greater part and is the only option available to low-income residents of which the majority of the Egyptian population is

comprised. It includes primary health care represented by family health units and centres on the one hand and district, general and teaching hospitals on the other hand. A family health unit is a place that provides health care for 'the whole family' as is evident by its name. Within it, details about all members of each family served should be carefully recorded; history of illnesses, investigations, immunizations received... etc. Simple maladies should be diagnosed and treated there; patients are otherwise referred elsewhere with more specialized equipment and personnel. Each family health unit *should* be equipped to serve around 500-3,000 families in rural areas and 5,000 – 10,000 families in urban areas.³



Figure 4: Primary health care unit in Egypt.

After completing their internship year, it is mandatory for doctors who wish to be eventually employed by the Ministry of Health (the majority, to be sure, because there are only limited alternatives as will be subsequently clarified) to spend from six months to a year in rural areas (most likely), in family health centres or public hospitals. This process is named 'el Takleef' or 'the assignment'. Also according to their grades, medics are allocated to one of Egypt's 28 governorates (from nearer their homes to farther away) to work in the public health sector. It must be noted that due to the huge financial problems faced by the country, these doctors end up in secluded areas with extremely low pay, limited facilities and resources.

To make matters worse, fresh-graduates are regretfully not educated or trained well enough to start practising medicine on their own. Their supervisors if any are present (this fresh graduate may find his or herself the only doctor in a family health unit), may or may not be willing to teach them or may be only a couple of years older without much more experience. After their 'Takleef' the doctors are allowed to return to their place of origin to be employed in public hospitals there.

One may ask why - in spite of the six years of medical education in addition to the internship year - do these doctors aren't adept to properly dealing with a patient,

thinking systematically and being able to diagnose common problems...etc? To answer this critical question, we must go back to medical school. The truth of the matter is that what is taught in medical school does not fully prepare the students for actual work in the clinical reality. Theories, text-books, learning information by heart... all this could be sufficient for exams, but to apply that information on human beings is an entirely different story. Not to be misunderstood, during clinical years students do interact with patients and are taught to communicate with them, examine them and so on. However, when there are about fifty students craning their necks to see one patient and at the same time are trying to hear and understand what the consultant is saying, the result is invariably unsatisfactory. Furthermore, a large proportion of patients taught upon are chronic patients whose faces and names are recognized and learnt by every student and who have been in and out of teaching hospitals for years and could describe their own case as well as any doctor (from hearing it explained to students repeatedly) to the extent that they sometimes teach students! Being taught off-the-book simple, straightforward or even complicated cases and told to learn them well because this is what you will find in your clinical exam discourages students from anything other than to fully comprehend that particular case and ignore everything else. This brings us to a huge problem I must refer to. It is the fact that most students care about little other than achieving high marks, full-marks in fact on their every examination... This is their sole ambition. They do want to become good physicians undoubtedly, but get side-tracked on the way. Why this obsession with grades? From high-school throughout university this inborn craving is only intensified. This is because competition is perpetually intense.

Cumulatively, from the first year until the final year, those with the highest examination grades, the top 8% or so from among 1000-1400 students are offered residencies and teaching jobs in the medical school they graduated from as well as training at University hospitals. This is the most fortunate group. They are guaranteed a relatively well-paid job and guaranteed being taught for the rest of their careers by university professors. Of course, the higher your ranking is the more likely the possibility you will be able to pick a residency of your choice before the places run out. This is the reason students fight for high scores.

Others who were not among the top 8% may be offered positions of residency only, without teaching jobs, while the vast majority must acquiesce to being employed by the Ministry of Health in governmental hospitals. The disadvantages of which have already been detailed.

(ii) Private Practice

Why not private practice then? Private practice consists of private hospitals and clinics. Doctors there are

considerably well-paid because the service is much more cost-demanding and generally much better than public health service. Nevertheless, competition is fierce in this sector, so a junior doctor without a lot of experience will seldom find employment in a private hospital.

To set up a private clinic requires financial resources, the pay from government jobs is extremely low so the young doctor has no money to afford it... and so the cycle goes on...



Figure 5: Dar-El-Foad private hospital.

Career Options Abroad

Due to the complicated issues of employment, many students, from the moment they set foot into medical school mindful of what lies ahead, make up their minds to complete their studies and medical careers abroad after graduation. Our bachelor degree is not accredited by most countries especially non-Arab countries.

Consequently, around campus one could frequently see students with USMLE preparation books or hear others chatting about PLAB orientation sessions and the like...

Despite these high aspirations, completing one's studies abroad is no trivial matter. It requires extremely hard work and dedication, adaptation to a foreign educational system without actually knowing how it works (which is difficult), a lot of studying to pass exams that are not similarly structured to the ones found in Egypt... etc. Also, resources are essential; you cannot travel abroad without considerable means. Thus, travelling is not an option for some.

Hence, our problem is complete; students working very hard to get high marks through learning by heart, an educational system that is not well structured and virtually no prospects upon graduation unless you were among the top students or had the means to travel abroad.

Simple Solution?

Does a simple solution exist to these interrelated problems? It is doubtful. In my opinion, the only answer is to raise the country's socio-economic condition. We would then be able to build new universities so students would not have to achieve a 99.1% mark to get into medical school, have more resources and facilities to improve educational methods, upgrade public health care facilities that have reached a shockingly sub-

standard level, raise doctors' salaries...

Until that happens, I believe medical education should be adjusted to become more community-based. The 'products' of medical school should be well oriented about the problems of their community and how best to solve them. This is in part achieved through teaching 'Community Medicine' at medical school. What remains is to apply the theoretical knowledge practically.

The number of students entering medical school each year should be decreased as well. Several attempts to produce that have been made, but each year, high-school students score higher and higher grades so force their way into medical school despite any efforts made to diminish their number. These unnatural grades are as said earlier nothing but a mere reflection of an obsolete high-school educational system which in turn also needs upgrading.

To recapitulate, this inter-woven vicious cycle that exists cannot be broken except with participation of every member of the community through increasing awareness and instigating change that will pave the way to prosperity. It is not the simple matter of learning new techniques or increasing the number of rooms or putting clean curtains up in an examination room that need to be corrected, those are all just pieces of the puzzle. The pieces therefore need to come together for the picture to become complete and a pleasant spectacle to behold...

Silver Lining

On the bright side however, some Egyptian students were and are still able to surpass these tremendous problems and become eminent at what they do. Dr. Magdy Yacoub, the world-renowned cardio-thoracic surgeon was after all once a student at Cairo (Kasr Al-Ainy) University. He is among those who were able to succeed and make their way through the medical career gallantly despite all the obstacles that attempted to thwart them from achieving their goals.

Conclusion

To sum up, it is undeniable that there are numerous problems affecting the state of medical education in Egypt, many seemingly unsolvable. However, to give in to these drawbacks, to let oneself be overwhelmed by their magnitude, to submit to mediocrity, to abandon hope that these issues could, in time, get better is to lose the challenge.

As the Irish playwright George Bernard Shaw once said, "People are always blaming their circumstances for what they are. I don't believe in circumstances. The people who get on in this world are the people who get up and look for the circumstances they want, and if they can't find them, make them."

And 'make them' is the inspiration...

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