

## What's wrong with medical education in Libya?

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### ABSTRACT:

Undergraduate medical education any where determines the skills of future doctors who will offer health care services to the population. It is very important to understand the efficiency and effectiveness of the current functioning system which ultimate goal is promotion of standards of the medical profession and the quality of population's health. In this paper a personal analysis of the current situation of medical education is discussed , in order to outline what is wrong and help in designing a frame for the direction of future reform of medical education in Libya.

### KEY WORDS:

-Medical education, Current state, Libya.

**Health** as defined by (WHO) has a broader scope that goes beyond just absence of a disease to Social, Physical and Mental wellbeing and these goals can only be achieved by good quality medical services which depend on proper undergraduate and postgraduate medical education. Current undergraduate medical education in Libya has traditionally been taught using a Discipline-based, Teacher -centered and Lecture focused approach, with clear demarcation between biomedical sciences and clear demarcation between biomedical and clinical sciences on the other hand (1,2&3). In the early years (1st 4 years) of the course, students undertook discrete subject blocks from pre-clinical departments; Anatomy, Histology, Biochemistry, Physiology, Microbiology (and immunology), Pathology and Pharmacology. Exposure to clinical teaching starts later in the course (last 3 years) and mainly hospital based. The whole system depends on student acquiring (background) knowledge of the basic science (relevant rules and principles) in the early years, apply it in later years to diagnosis and management of clinical situations (1&3).

### **The principles of medical education any where depend on:-**

- A-Strategies of medical education.
- B-Student selection processes.
- C-Curricula.
- D-Teaching staff.
- E-Resources. and
- F- Assessment methods.

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**A-** Strategies of under graduate medical education every where, is to produce good quality doctor who can and be able to solve clinical and community problems with the ability for critical thinking ,critical reading and self-directed continuous medical education to keep with the advances of medicine .

These are the goals of appropriate medical education, world-wide, and these are the outcome of good education every where;

### **Proper cognitive thinking to solve problems encountered during life.**

**B-**Students were accepted in the Faculty of Medicine in Libya according to their grade and total marks in the last year secondary school in the majority of years. The main problem encounter faculty of medicine is the huge number of students wishing or directed to study medicine which exceeds the capacity of the faculty from one hand and some of them may not be able to finish the long years of study which again increase the burden on the faculty resources. More than 80 % of the students in Faculty of Medicine are female, this figure exceeds all reported percentage of females in USA and European faculties of medicine, those females students if get engaged or married may leave the faculty of medicine, if they were successful in the final year may not be able to practice medicine which in a waste of time and money (4&5).

**C-**The system consist of huge curriculum depending on heavy use of lectures and other didactic sessions, research or search activities and community based services are limited with lack of integration between these activities and clinical practice.

**D-**Teaching staff are expected to acquire the quality of medical professionals that will in turn be transmitted to the students. The essential requirements for teaching staff are:-

- i- Academic qualification for biomedical , clinical and

academic qualifications for clinical staff. ii- Experience. iii- Educational skills.

iv- Self satisfaction and motivation through continuous education ,training, national and international meeting and conferences (6). Teaching staff were selected using variable criteria and not all of them have adequate experience and adequate educational skills. They were evaluated on their research activities which is usually of low standards because of lack of resources, and the majority of the research outcomes are non-publishable. Teaching staff are rewarded neither for their educational activities nor for their community based research (if any) (6,7&8). They have very limited chances to attend or participate in international conferences abroad. Their only target is to get promoted to professor-ship status and then relax.

**E** -Resources include:- a- place . b- person . c- equipment. and d-money (6).

Current medical education depends on lectures, the huge number of students entering medical school especially in Tripoli beside the relaxation of rules and regulations which allow the students to stay double or triple years allowed, lead to cumulative number each year.

The current halls or lecture theatres are not enough in quantity and seat-number to accommodate the students, some of the students may sit on the floor or on the stairs, other may bring their own mobile chairs during lecture. Halls are not adequately ventilated, overcrowded, no proper air- condition, light, speaker, over-head and slide projectors, or data-show. Teachers still using the old style of chalk and board and still provide the students with hand-out. Teaching staff are huge in number, especially in Tripoli, they prefer to give lectures to large number of students for a short period of time with no chance for the students to ask or request explanations. Shortage of other facilities, such as proper library , adequate updated books for lent, lack of updated information or inability to access to internet or computer literacy in the medical field are dominating. Lack of creative thinking, teacher and students alike miss the creative vision and are neither able to adopt themselves to the available resources nor to build up their own (9,10&11).

**F**- The students with the current assessment methods, face with an overload of content with lack of appreciation and motivation and only for short term .i.e. to pass the examination rather than acquiring of usable knowledge. The assessment methods focus on knowledge acquired during the whole year (9-12 months ), include written examination, short notes , short essay or multiple choice questions; multiple or single answer, some clinical departments use case management or data interpretation as part of written examination. Laboratory skills are usually tested during written examination. Oral examination (Viva) usually used to examine the depth of the students knowledge rather than his/ her capacity to think and to solve problems . Clinical examination involve, one long case alone (Gyna. &Obst.), long case and few short cases in (Medicine , Surgery and Paediatric) and short cases only in ophthalmology. This part of the examination is the hard section of the

assessment, the student required to score at least 60% to be able to pass, this section involve history taken, examination and arrangement of his / her thoughts about differential diagnosis in 45- 60 minutes, short cases are not really short, they are single system examination rather than spot diagnosis, and the number of cases is usually limited, don't allow assessment of the students in his/ her observational abilities.

**In summary**, the current traditional system of medical education is :-

i-Teacher-directed. ii-One way direction (passive student participation). iii-Lecture-based. iv-Depend on mere memorization of knowledge . v- Disease ( discipline )-orientated . vi- Too science- focused. vii- Not innovative. viii- Neglect community health.

As the old educational truism states that half of what the students learn in medical school will be wrong or outdated by the time they are in practice, and the worse, no one knows which half that is (9,10,11,12&13).

**Disadvantages of the current curricula :-**

1-It create an artificial divide between the (disciplines) sciences and between biomedical and clinical sciences.

2-Time is wasted in acquiring knowledge that is subsequently forgotten or lacks relevance (4&5).

3-Application of the acquired knowledge can be difficult in clinical practice .

4-Over load of pre-clinical details that was exacerbated by unnecessary duplication, can be boring and demoralizing for students. All these are indications for urgent medical educational reform (14,15 &16).

#### REFERENCES:

1-Maddison, B. What's wrong with medical Education? **Med. Educ.1978 ; 12: 97-102 .**

2- Lowry , S . What's wrong with medical education in Britain ? **BMJ .1992 ; 305 : 1277-280 .**

3-Des Marchais, J. E., Bureua , M.A ., Dumais, P. and Pigeon ,G . From traditional to problem - based learning : A case report of complete curriculum reform . **Med Educ . 1992;26:190 -199 .**

4-Finucane , P.M. , Johnson , S.M., and Prideaux , D.J. Problem-based learning , its rationale and efficiency . **Medical journal of Australia 1998 ; 168:445-8 .**

5-Expansion of medical education : Report of the committee on medical schools to the Australian universities commission. **Canberra. AGPS, 1973.**

6-Shawky, S and Soliman NK. Going beyond the curriculum to promote Medical education and practice in Saudi Arabia.(Review). **Saudi Med. J.2001;22(6):477-480.**

7-Megaghie, W.M.C. Professional competence evaluation. **Educational Researcher, 1991 ; 18 (2) : 5-11 .**

8-Eisenberg, L. Science in medicine ; too much or too little and too limited in scope . **Am J Med 1988 ; 84 : 453 -91.**

9-Muller , S. Physician for the twenty first century . Report of the project panel on the general and professional education of the physician . **J Med Educ. 1984;591: 1-208 .**

10-World health organization: Training and preparation of teachers for schools of medicine and allied health sciences. Geneva . **WHO Technical Report .1973 , no 521 .**

11- Tolnai , S. Life long learning habits of physicians trained at an innovative medical school and a more traditional one .**Acad .med .1991 ; 66 :425 -26 .**

12- Newble ,D.I , Hejka ,E.J., and Whelan ,G .The approaches to learning of a specialist physician. **Med Educ. 1990 ; 24 : 101 - 109.**

13-Meyer , H.F, and Watson , R.M. Evaluating the quality of students learning II, study orchestration and the curriculum . **Studies in higher education . 1991 ;16 :251-275 .**

14- The Edinburgh declaration of the world federation for medical education . **Lancet . 1988 ; 464 .**

15- World federation for medical education. First Mediterranean medical meeting . Statement on medical education in Europe.

**Med Educ. 1990 ; 24 : 78 -80 .**

16-World federation for medical education ; proceedings of the world summit on medical education. **Med Educ 1994 , 28 :S1 .**

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