

Family Medicine in Pre-clinical Years of Medical School: Fruitful or Futile

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ABSTRACT

Family medicine is the one field that gives you full satisfaction and a sense of being the complete physician because of taking care of the whole person and others around. However it is not fully accepted by the medical students as an admiring medical specialty and different efforts have been made to accept it at different stages of medical schools.

The family medicine introduced currently in different models and different shapes in different parts of the world but mainly existing three models – resident trainings, on job trainings and undergraduate teaching. Family medicine usually started in clinical period of undergraduate medical education in many part of the world and found effective.

Ataturk University is one of those universities, which took a lead and established a family medicine department in 2009. Nevertheless this department entered into curriculum and was able to apply a new model of family medicine in first and second year of teaching. Although the family medicine department is just two years old we are hopeful that it will continue to grow and even will be very fruitful.

In this article, we emphasize the importance of family medicine in undergraduate medical education by presenting the Atatürk University's model as an example.

Key words: undergraduate medical education, medical education, medical curriculum

Introduction

This was a routine to blame or criticize universities in general or medical schools in particular about their way of teaching and not to produce those physicians who respond to the need of population. This was also an argument that the students usually were not prepared to deal the health problems that they most likely to encounter when they will go into practice (1, 2). So far there are several decisions have been made to improve the curriculum at undergraduate level in many medical schools (3).

Nonetheless, the Royal College of General Practitioners (RCGP), who stressed the importance of undergraduate medical education in inspiring, stimulating, supporting, and training future doctors. It reminded us of the key role of the generalist in medical education, and urged medical schools to ensure that all students have good experience of general practice embedded in the curriculum (4).

One of the frequent interventions is to introduce family medicine as part of the curriculum in order to give students the opportunity to get in contact with most frequent problems, to integrate and apply their knowledge (5, 6). Turkey is one of those countries, which tries very hard to produce as much as possible family physicians and in this mission almost all universities that have medical colleges are supporting government.

Some milestones of Medical Education in Turkey

Turkey has 50 Faculties of Medicine located in different areas. Some new medical schools are being expected to develop and establish in the near future however now 46 are accepting students for undergraduate training. There is a 6-year curriculum in

all colleges. Students enter medical school after passing a national entrance examination after finishing their 12 years high school. In almost all schools, the curriculum comprises of 6 years with the distribution of 2 years of basic sciences, 3 years of clinical sciences, and 1 year is devoted to family practice as internship. The specialty of family medicine was created in 1984 (7). In most of the medical schools the problem-based education cannot be implemented so far, if present then programs for faculty development and improving teaching skills are seen as volunteers' activities (8). The Continuous Medical Education (CME) activities are carried out by the Ministry of Health, the Turkish Medical Association and Turkish Association of Family Physicians with the help of some universities (9).

Pre-clinical vs Clinical curriculum

A preclinical/clinical division was firmly established as the norm in medical education a century ago at a time when biomedical science was proving its ability to explain disease and provide a theoretical basis for treatment (10). Now, medical schools in many parts of the world are 'vertically integrating' various types of practical experience. A recently published consensus survey suggested that early experience might orientate medical curricula towards the social context of practice, ease students' transition to the clinical environment, motivate them, make them more confident to approach patients, and make them more aware of themselves and others (11).

Medical curriculum & Family Medicine at Atatürk University

The Atatürk University started in 1957 and faculty of medicine has been developed within 5 years time. It is a government sector university comprised of 19 faculties with a tertiary care 1200 bed hospital. The curriculum is based on committee system (Table 1). Medical students at university need to complete six years and public health, biostatistics and family medicine teaching starts from the first year in phases. The family medicine currently exists in different models and different shapes in different parts of the world but mainly existing three models – resident trainings, on job trainings and undergraduate

teaching (12-14). The family medicine usually started in clinical period and found effective (15).

Ataturk University is one of those universities that took a lead and established a family medicine department in 2009. Nevertheless this department entered into curriculum and able to apply it in first and second year of teaching (Table 2 & 3). Although the family medicine department is just two years old we are hopeful that it will continue growing and even will be very fruitful.

Discussion

The family medicine teaching has gone through several milestones in Turkey. Although the history of family medicine goes back to several centuries (16), however after accepting it as specialist discipline going through many transition periods (17, 18), recently it became a reality and need of health care system in Turkey. So far in medical schools several experiments have to be done to incorporate the family medicine in the curriculum of medical faculty and medical educationist are fully convinced that community-based, comprehensive primary care education given by the primary care team is necessary for medical students (19).

New education models were developed to integrate basic sciences with clinical problem solving and to enable medical students contact with patients in their own environment (20). In many European countries family medicine programs are generally affiliated with primary care centres and are placed in later periods of the medical curriculum (21). However mostly the family medicine training start when clinical rotations start in many countries including Turkey (16, 19, 22).

In our family medicine model we started the curriculum at first and second year (Table 1 & 2) and continue it up third year. We designed the curriculum based on results of many studies concluding that early clinical exposure to primary care has positive impact on the educational quality and career choice (23-26) while so far none of university dares to modify the basic sciences timetable and incorporate the family medicine in early years of medical schools at least in Turkey. The concept of early exposure to patients might be not a new idea but it was debated

Table 1. The six year undergraduate medical curriculum

Study Years	Number of committees / Rotations	Committees/ Rotations
1 st	6-Committees	Cell and Tissue Sciences Course – I Cell and Tissue Sciences Course – II Cell and Tissue Sciences Course – III Cell and Tissue Sciences Course – IV Cell and Tissue Sciences Course – V Cell and Tissue Sciences Course – VI
2 nd	6-Committees	1. Musculoskeletal system 2. Circulatory & Respiratory system 3. Digestive & Metabolism 4. Neurology 5. Endocrinology & Urogenital system 6. Biological bases of diseases
3 rd	9-Committees	1. Public health 2. Biological bases of diseases 3. Circulatory & Respiratory system 4. Digestive & Metabolism 5. Hemopoietic System 6. Locomotors 7. Genitourinary system 8. Neurology & Psychiatry 9. Endocrinology
4 th	4- Rotations	1. Internal medicine 2. General surgery 3. Obstetrics & Gynecology 4. Pediatrics
5 th	17- Rotations	Forensic medicine, Neurosurgery Pediatric surgery, Dermatology Infectious diseases, Physical therapy and rehabilitation, Chest surgery Chest diseases, Eye diseases Cardiovascular surgery, Cardiology ENT, Neurology, Orthopedics Plastic and reconstructive surgery Radiology, Psychiatry, and Urology
6 th (Internship)		Internal medicine Pediatrics Emergency medicine Public health Family medicine Gynecology and obstetrics Psychiatry

Table 2: Family medicine in 1st & 2nd Year

Items	1 st year MBBS	2 nd year MBBS
Number of hours		
Total theory classes (Contents)	13/782	15/686
Total practical classes (Contents)	4/166	0/220
Assessment procedures	Every 6 months MCQs theory papers Class participation Report writing about hospital visit	Every 6 months MCQs theory papers Class participation Report writing about hospital visit

during last whole decade that how it can apply to get a good outcome without disturbing of curriculum of pre-clinical or basic sciences subjects. Our whole curriculum consists of total 948 hours in first year and 906 hours in second year. We not only have theory classes but also expose students to our primary health care units as well as hospitals. Our rationale to expose the students earlier make them more confident, empathic and well oriented about the holistic approach to the patients and will learn the

basic sciences as an application science rather to memorize the facts and expressed through the different methods of assessments and then forget it.

Likewise a study shows that first-year medical students who received structured and supervised interview training with real patients, and followed up a chronically ill patient over time, showed significant increases in objective ratings of their ability to relate to simulated patients in videotaped interviews. Their self-reported ability to relate to patients and

Table 3. Objectives of Family medicine in 1st & 2nd Year

1 st year MBBS	2 nd year MBBS
The students will be able to:	The students will be able to:
<ol style="list-style-type: none"> 1. Describe terms used in primary care and explain stages of a family life cycle and its effects on health. 2. Explain terms related with quality and discuss quality improvement methods 3. Accepts importance of medical records and can discuss types of records 4. Explain types of communication and principles of effective communication 5. Explain features of different health units and list their responsibilities 6. List common diseases encountered in family practice and discuss their effects on health provision 	<ol style="list-style-type: none"> 1. Discuss the basic principles of family medicine such as comprehensive care, contextual care, and coordination of care 2. Related with the base of clinical family medicine, explain consultation principles, shared decision making, and biopsychosocial approach 3. Discuss the evidence base of family practice and how to use this knowledge in giving clinical decisions and prescribing medications 4. Discuss ICD and ICPC coding principles 5. List principles of patient education and factors related with patient adherence

communicate empathy increased greatly (27). Another study portrays that first- and second-year student participants in community interviewing schemes reported improvements in their ability to communicate, and valued being able to explore social and psychological determinants of health and illness through contact with real patients (28). Our experiment is second by so many other studies (23-26) in different other part of the world as well. So far students are not raising any voice instead they are happy and satisfied during class and give a positive feedback. Indeed, in itself, has not been proved to be a sufficient to believe that it is effective because it requires follow up for further for at least up to their workplaces.

In nutshell our hypothesis is that it can help learners attain a number of affective outcomes, including positive attitudes towards practice, build

self-awareness, and make students more satisfied with their curriculum and confident to meet patients, motivate them and reduce the stress of meeting patients. Early experience can also benefit teachers, healthcare organizations, individual patients and population (29) in terms of enhancing skills for handling patients holistically. Of course a successful family medicine incorporation in basic sciences curriculum needs institutional support, structured curriculum, patients, clinical setting, evaluation process, volunteer faculty, preceptors, and financial support (30), which are fully provided by Ataturk University. We suggest that medical schools should renovate their curriculum and should try this model and follow up and assess the effectiveness. We would also recommend some comparative longitudinal studies for assessment of long-term benefits for early intervention of family medicine in medical school.

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