Current Position of Family Medicine in Undergraduate Medical Education in Turkey

Türkiye’de Aile Hekimliğinin Mezuniyet Öncesi Tıp Eğitiminin Yeri

ABSTRACT

Aim: There is not a standard for undergraduate medical education in family medicine in Turkey. The aim of this study was; (1) to define the present role of family medicine teachers in undergraduate medical education (2) to analyze the family medicine lectures in Turkey.

Methods: A standard questionnaire comprised of seven questions was administered to the medical teachers in 42 departments of Family Medicine. The questionnaire which was sent by e-mail contained questions about demographic data and an open question demanding the details of the lessons given by the medical teachers.

Results: Of the 122 medical teachers lecturing in 42 departments of Family Medicine, 99 (81%) responded the questionnaire. Forty-seven (47.5%) were male and 52 (52.5%) were female. The mean age±SD was 44.8±6.1. Of the medical teachers, 14 (14%) had no lectures at all, whereas 28 (28%) had lectures 10 hours or less a year. Medical school year distribution of lectures was: 1. year 42 (42%), 2. year 43 (43%), 3. year 49 (49%), 4. year 18 (18%), 5. year 10 (10%), 6. year 20 (20%). The number of teachers, lecturing only one medical year, were 33 (38%). The mean±SD of hours of total lectures was 35.6±58.4 with the maximum hours observed at the third year with 9.9±22.5. The least lecture hours was at the fifth year with 1.4±6.8 (mean±SD) followed by the fourth year 1.9±6.8 (mean±SD).

Conclusion: There is a necessity for defining and implementing the minimum standards for undergraduate medical education in Family Medicine in Turkey.

Keywords: undergraduate medical education, family practice, standards, Turkey

ÖZET

Amaç: Türkiye’de aile hekimliği için mezuniyet öncesi eğitim standartı yoktur. Bu çalışmanın amacı; aile hekimliği öğretim üyesi ve görevlilerinin mezunun öncesi tıp eğitimindeki mevcut rollerini tanımlamak ve Türkiye’nin de aile hekimliği derslerinin analizini yapmaktır.

Yöntemler: Yedi sorudan oluşan standart bir anket 42 aile hekimliği anabilim dalındaki öğretim üyesi ve görevlilerine uygulanmıştır. Elektronik posta ile gönderilen ankette demografik veriler ve öğretim üyesi ve görevlilerinin derslerinin detaylarını hakkında sorular mevcuttu.

Bulgular: Toplam olarak 42 aile hekimliği anabilim dalında ders veren 122 aile hekimliği öğretmeni ve görevlilerinin 99’su (%81) anketi yanıtlamıştır. Kırk yedisi (47.5%) erkek ve 52’si (%52.5) kadındı. Ortalama yaş±SS 44.8±6.1’di. Öğretim üyesi ve görevlilerinin 14’unun (%14) hiç dersi yokken, 28’inin de (%28) yılda 10 saat ve daha az dersi vardı. Derslerin tip fakültesi yıllarına göre dağılımları: 1. yıl 42 (%42), 2. yıl 43 (%43), 3. yıl 49 (%49), 4. yıl 18 (%18), 5. yıl 10 (%10), 6. yıl 20 (%20) şeklindeydi. Sadece belirli bir yıla ders verenler 33 kişi sayı (38%). Toplam ders saatı ortalaması±SS değeri 35.6±58.4 olup en fazla saatin 9.9±22.5 ile üçüncü yılıda olduğu gözlemmiştir. En az ders saatı 1.4±7.6 (ortalama±SS) ile dördüncü sıfırızmektediydi.

Sonuç: Türkiye’de mezunun öncesi tıp eğitimde aile hekimliğinin en az standartının belirlenip uygulanmasını gerektiği olduğu görülmüştür.

Anahtar sözcükler: mezuniyet öncesi tıp eğitimi, aile hekimliği, standartlar, Türkiye

AUTHORS / YAZARLAR

Selcuk Mistik
Department of Family Medicine, Erciyes University Medical Faculty, Kayseri, Turkey

Dilek Toprak
Department of Family Medicine, Sisli Etfal Training and Research Hospital, Istanbul, Turkey

Gulsen Ceyhun Peker
Department of Family Medicine, Ankara University Medical Faculty, Ankara, Turkey

Corresponding Author / İletişim için
Prof. Dr. Selcuk Mistik
Erciyes University Medical Faculty Department of Family Medicine, TR-38039, Kayseri, Turkey
E-mail: smsistik@erciyes.edu.tr
Date of submission: 17.03.2014 / Date of acceptance: 04.06.2014
Introduction

There is no doubt that Family Medicine as a medical specialty has a particular role in the medical systems of many countries of the world. However, it has been stated that in countries where Family Medicine is less a career option, it will not be regarded as a required clinical experience during medical school. In addition, even in countries where a Family Medicine clerkship (undergraduate rotation) has been implemented, there is no standardization in terms of time, length of content of this rotation and these may vary remarkably between medical schools inside one country and between countries (1).

Medical education must change according to the changing healthcare needs of the society, thus primary care in general and family medicine in particular is assuming an expanding role in undergraduate medical education (2,3). There are many reports on the status of Family Medicine clerkship (4-8). However, Family Medicine education is not always available as clerkships. This is as well true for the current Family Medicine education in Turkey.

The first department of Family Medicine in Turkey has been established in 1993 and currently there are 42 departments of Family Medicine in 73 medical schools of Turkey. The number of medical schools and Family Medicine departments are increasing very rapidly. Family Medicine has been supported by the Ministry of Health by Health Reform which started in 2003. Most of the practicing physicians in Turkey are family physicians, with only about 2000 being family medicine specialists. Even with these positive advances, the current position of Family Medicine in undergraduate medical education still requires efforts to make.

The aim of this study was; (1) to define the present role of family medicine teachers in undergraduate medical education (2) to analyze the family medicine lectures in Turkey.

Methods

Subjects:

Teachers in family medicine in Turkey were included in the study. Of the 122 family medicine teachers in Turkey working at 42 departments of Family Medicine, 99 (%81) have completed the questionnaire. The study was performed between June and December 2012. The latest list of Family Medicine Departments of Universities obtained from the Higher Education Council of Turkey was used at the commence of the study.

Teachers in family medicine consist of lecturers, assistant professors, associate professors and professors who work at the departments of Family Medicine, where undergraduate education is available. Family medicine teachers, who work at training and research hospitals and were involved in postgraduate training, were not included in this study.

Erciyes University Medical Faculty Ethical Committee has approved this study.

Questionnaire:

A questionnaire comprised of 11 questions has been administered to teachers in family medicine. The questionnaire included questions about demographic data, which included age, academic service years, gender, marital status, academic title and the name of workplace. A detailed question including the open name of the lectures given, the medical school year, the duration of the lecture and whether the lecture was mandatory or elective was the major source of data used in this study.

Analysis of the lectures:

The lecturers were asked to state the kind of the lecture as: theoretical, practical, whether in a lesson committee or as a particular clerkship. In order to make a detailed analysis of the lectures, 15 themes defined by Tandeter H. et al. has been used. 1 More items are added to make a full coverage of the lectures as follows:

1. Introduction to FM/GP as a specific medical discipline. Principles of Family Medicine: Continuity, comprehensiveness, coordination of care
3. Management of diseases at early, undifferentiated stage. Dealing with uncertainty
4. Communication skills: with patient, with patient’s relatives, and with ‘difficult ’ patients
5. Management of multiple health problems, identifying priorities
6. Decision making based on prevalence and incidence of target
7. Prevention and health promotion, patient education
8. Patient-centeredness
9. Consulting skills — stages of a consultation
10. Chronic care, management of chronic diseases and health problems, diabetes/hypertension/chronic ischaemic heart disease/obesity
11. The family as a source of disease and resource of care; family context; genograms; family life cycle
12. The specific characteristics of healthcare in FM: all ages, male and female, curative care, prophylactic care, emergencies
13. Community orientation; community centred care; community needs assessment
14. Most common presenting symptoms ‘and problems’ in family practice
15. Interface of primary and secondary care: Referrals, gate keeping, advocacy
16. History taking and physical examination
17. Clinical skills laboratory
18. Care of the patient at home
19. Family planning
20. Sexual health
21. Obstetrics and gynaecological diseases
22. Care of the old patient
23. Reading and evaluating articles, evidence based medicine, research
24. Alternative and complementary medicine
25. Use of laboratory in Family Medicine
26. Patient records

Statistical analysis:

The distribution of the data was evaluated by Shapiro-Wilk test. Mann-Whitney test was used to define the differences between academic service years, the duration of the establishment the department and lecturing status. Chi-squared test was used to define the significance between academic title, gender, marital status and having lectures. Kruskal-Wallis test was used to define the difference between academic title and the lecture hours. Spearman correlation analysis was used to define the correlation between academic service years and the lecture hours. P<0.05 was considered statistically significant.

Results

Medical teachers’ characteristics:

Ninety-nine medical teachers out of 122 (81.1%) were enrolled in the study. Of the medical teachers, 52.5% (52) were women and 47.5% (47) were men. The mean age ±SD was 44.8±6.1 (range 33-66) years. Seventy-nine percent (79) were married and 20% (20) were single. Of the medical teachers 14.1% (14) were lecturers, 35.4% (35) were assistant professors, 36.4% (36) were associate professors, and 14.1% (14) were professors. The mean ±SD of academic service years was 8.3±6.7 (range 0.3-44). Of the 42 departments of Family Medicine, 40 (95.2%) were included in the study.

Lecturing status:

Overall, 85 (85.8%) (95% confidence interval (CI)) = (77.4-92.1) medical teachers were lecturing. Of the medical teachers, 14 (14.1%) had no lectures at all, whereas 28 (28.2%) had lectures 10 hours or less a year. Medical school year distributions of lectures were: 1. year 42 (42.4%), 2. year 43 (43.4%), 3. year 49 (49.4%), 4. year 18 (18.1%), 5. year 10 (10.1%), 6. year 20 (20.2%) (Table1). The teachers lecturing only one medical year were 33 (38%). Of these, first year were 5 (5.8%), second year 3 (3.5%), third year 11 (12.9%), forth year 5 (5.8%), fifth year 4 (4.7%) and sixth year 5 (5.8%). The mean±SD of hours of total lectures was 35.6±58.4 with the maximum hours observed at the third year with 9.9±22.5. The least lecture hours was at the fifth year

### Table 1. Distribution of lectures in medical school years

<table>
<thead>
<tr>
<th>Lectures*</th>
<th>n</th>
<th>%</th>
<th>Mean</th>
<th>Median</th>
<th>SD**</th>
<th>Min***</th>
<th>Max****</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. year</td>
<td>42</td>
<td>42.4</td>
<td>25.7</td>
<td>13.5</td>
<td>32.6</td>
<td>1</td>
<td>138</td>
</tr>
<tr>
<td>2. year</td>
<td>43</td>
<td>43.4</td>
<td>17.0</td>
<td>11.0</td>
<td>19.2</td>
<td>1</td>
<td>90</td>
</tr>
<tr>
<td>3. year</td>
<td>49</td>
<td>49.4</td>
<td>20.0</td>
<td>10.0</td>
<td>28.8</td>
<td>2</td>
<td>169</td>
</tr>
<tr>
<td>4. year</td>
<td>18</td>
<td>18.1</td>
<td>10.6</td>
<td>6.0</td>
<td>13.2</td>
<td>1</td>
<td>48</td>
</tr>
<tr>
<td>5. year</td>
<td>10</td>
<td>10.1</td>
<td>14.3</td>
<td>9.0</td>
<td>20.8</td>
<td>1</td>
<td>72</td>
</tr>
<tr>
<td>6. year</td>
<td>20</td>
<td>20.2</td>
<td>20.5</td>
<td>4.0</td>
<td>47.8</td>
<td>2</td>
<td>160</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>85.8</td>
<td>41.5</td>
<td>16.0</td>
<td>61.1</td>
<td>1</td>
<td>274</td>
</tr>
</tbody>
</table>

*Lectures: includes the sum of practical and theoretical lessons, **SD: Standard deviation, ***Min: Minimum, ****Max: Maximum
with 1.4±7.6 (mean±SD) followed by the fourth year 1.9±6.8 (mean±SD). The distributions of the duration of lectures are given at Table 2.

There was no statistical significance between academic service years, the duration of the establishment of the department, academic title, gender, marital status and having lectures (p>0.05). There was a correlation between the total lecture hours at the third year, the total lecture hours and academic service years (p<0.05). Men have more lectures at the sixth year (p<0.05).

Table 2. Duration of total lectures

<table>
<thead>
<tr>
<th>Hours</th>
<th>Frequency</th>
<th>%</th>
<th>Valid %</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 and less</td>
<td>33</td>
<td>33.3</td>
<td>38.8</td>
<td>38.8</td>
</tr>
<tr>
<td>11-20</td>
<td>19</td>
<td>19.2</td>
<td>22.4</td>
<td>61.2</td>
</tr>
<tr>
<td>21-30</td>
<td>5</td>
<td>5.1</td>
<td>5.9</td>
<td>67.1</td>
</tr>
<tr>
<td>31-40</td>
<td>6</td>
<td>6.1</td>
<td>7.1</td>
<td>74.1</td>
</tr>
<tr>
<td>41-50</td>
<td>6</td>
<td>6.1</td>
<td>7.1</td>
<td>81.2</td>
</tr>
<tr>
<td>51-60</td>
<td>1</td>
<td>1.0</td>
<td>1.2</td>
<td>82.4</td>
</tr>
<tr>
<td>More than 60</td>
<td>15</td>
<td>15.2</td>
<td>17.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing</td>
<td>14</td>
<td>14.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Properties of lectures:

The first three years of medical education does not include clerkships. Although the 4th, 5th and 6th years are consisted of clerkships, some of the forth year lectures are not in the form of clerkships. Eighteen teachers (18.1%) were lecturing the 4th year from 6 medical schools, where none of the lectures were in the form of Family Medicine clerkships. At one of the six medical schools where there were lectures for the forth year, the lectures were elective.

When fifth years were evaluated for the presence of Family Medicine clerkships, there were clerkships at 5 medical schools (12.5%) with 10 teachers (10.1%) lecturing. The clerkships were 3 weeks at one medical school, 2 weeks at three and 1 week at the remaining. There were 8 medical schools (20.0%) where Family Medicine clerkship existed at the sixth year. The duration of these clerkships were 2 weeks at two schools, 4 weeks at four medical schools and 6 and 8 weeks at the remaining medical schools. In total, 20 teachers (20.2%) were lecturing at the sixth year.

Analysis of the lectures:

The details of the lectures are given at Table 3. The most common lectures in the first year were principles, communication skills and prevention, followed by consulting skills. In the second year, prevention and principles was followed by the family properties. Prevention was the leading lecture in the third year. Most common symptoms and consulting skills followed prevention. In the forth year, history taking and physical examination lectures were the most commonly observed lectures. Consulting skills and principles followed this. In the fifth year, prevention, principles and preventive care were the commonest lectures. The sixth year’s most common lectures were the family properties followed by principles and most common symptoms. When all of the years are considered, the third year’s lectures of prevention, most common symptoms and consulting skills were the leading lectures.

Discussion

This study is the analysis of all the present lectures of Family Medicine nationwide. Our study demonstrated that: (1) most of the lectures were in the third year of medical school (2) there were few clerkships of Family medicine in medical schools, (3) the majority of medical teachers had lectures 20 hours or less.

This is the first study in the literature reporting the full content and type of lectures in Turkey. The limitation of this study was that it was not able to categorize and compare the lectures in clerkship programs. In contrast, almost all kinds of lectures were scattered to all years of medical education.

The general secretary of WONCA (World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians) Europe has stated in the 11th National Congress of Family Medicine which was held in Turkey that Family Medicine must find a position in the medical school curriculum as much as possible. However, the strong influence of Family Medicine in the medical school’s curriculum has not been obtained in all European countries or around the world. 1 Our study was compliant with these where the lectures were minimal in most medical schools and the lectures were scattered to all medical years.

EURACT (European Academy of Teachers in General Practice and Family Medicine) has suggested that medical schools across Europe include primary care rotations in their undergraduate studies (1).
accordance with the Health Reform Project, The Ministry of Health of Turkey also suggests that the first step training of Family Medicine, which includes the principles of Family Medicine, should be included in the sixth year clerkship in the medical schools. In this context, this study showed that there were clerkships at the sixth year in only 8 (10.9%) of the 73 medical schools in Turkey.

In a study performed in Israel, 51 teaching objectives for the Family Medicine Clerkship in medical schools were generated. The most important objective was stated as ‘common problems in primary care’, followed by ‘recognition of the biopsychosocial model’ and ‘understanding the doctor-patient relationship’ (2). Common problems in primary care have also been placed first by some other authors (9-11). However in our study, common symptoms and problems in primary care was not the most common lectures, but one of the most frequent lectures in the third and sixth years.

The Society of Teachers of Family Medicine stated that at the end of Family Medicine clerkship, each student should be able to; 1. Discuss the value of the provision of primary care by family physicians to any health care system, 2. Assess, formulate a differential diagnosis, and propose initial evaluation and management for patients with common acute presentations, 3. Manage a chronic illness follow up visit for patients with common chronic diseases, 4. Develop an evidence-based health maintenance plan for a patient of any age or either gender, 5. Discuss the major components of family medicine care, 6. Demonstrate competency in advanced history taking, communication, physical examination, and critical thinking skills (5). If we compare the current lecture status with these competencies, yet it may not be able to achieve them in many medical schools in Turkey.

In a survey, the ADFM (Association of Departments of Family Medicine) member departments have stated the necessity of Family Medicine clerkship duration as 4 weeks (32%), 6 weeks (45%) and 8 weeks (11%) (6). These clerkship durations may all be possible with the condition that sixth year clerkships are accepted by the faculty administrations in Turkey.

It has been stated that teaching of medical students in general practice and community settings accounts for up to 15% of the undergraduate medical

Table 3. Classification of total lectures according to items

<table>
<thead>
<tr>
<th>Lecture Items</th>
<th>1. year</th>
<th>2. year</th>
<th>3. year</th>
<th>4. year</th>
<th>5. year</th>
<th>6. year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Principles</td>
<td>18</td>
<td>21</td>
<td>19</td>
<td>3</td>
<td>7</td>
<td>20</td>
</tr>
<tr>
<td>2. Biopsychosocial model</td>
<td>3</td>
<td>3</td>
<td>7</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>3. Management of disease</td>
<td>1</td>
<td>5</td>
<td>9</td>
<td>1</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>4. Communication skills</td>
<td>18</td>
<td>7</td>
<td>7</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>5. Multiple health problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Decision making</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>7. Prevention</td>
<td>16</td>
<td>31</td>
<td>64</td>
<td>11</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>8. Patient centeredness</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Consulting skills</td>
<td>15</td>
<td>9</td>
<td>24</td>
<td>3</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>10. Chronic care</td>
<td>1</td>
<td></td>
<td>12</td>
<td>7</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>11. The family</td>
<td>9</td>
<td>20</td>
<td>22</td>
<td>4</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>12. Characteristics of healthcare</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>13. Community orientation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Most common symptoms</td>
<td>4</td>
<td>5</td>
<td>35</td>
<td>1</td>
<td>7</td>
<td>18</td>
</tr>
<tr>
<td>15. Referrals, gate keeping</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>16. History, physical examinations</td>
<td>7</td>
<td>12</td>
<td>15</td>
<td>13</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>17. Clinical skills</td>
<td>6</td>
<td>10</td>
<td>13</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Home care</td>
<td>1</td>
<td>3</td>
<td>6</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>19. Family planning</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Sexual health</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Obstetrics/gynaecology</td>
<td></td>
<td></td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>22. Geriatric care</td>
<td>1</td>
<td>2</td>
<td>11</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>23. Literature evaluation</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>24. Complementary medicine</td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. Laboratory use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>26. Patient records</td>
<td>6</td>
<td>3</td>
<td>9</td>
<td></td>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>
curriculum in London medical schools, each school working with up to 600 General Practice teachers and 400 teaching general practices (12). This condition may only be a future will for most of the European countries and Turkey.

The current factors defining the status of Family Medicine lectures in medical schools in Turkey are; the gaps in the curriculums, the availability of obtaining clerkships, the priorities and necessities of medical school education determined by the administrators, and the number of Family Medicine teachers in each medical school. This study showed the necessity of both more medical teachers in Family Medicine and more clerkships. A mandatory clerkship in Family Medicine in the sixth year may be the first step in overcoming the barriers.

Conclusion

This study demonstrated that there is a wide range of lectures scattered to all years of medical school rather than in a clerkship program in Turkey. The data of this study suggests that in medical schools where lectures are very few, a clerkship program may overcome this negative situation. There is a necessity for defining and implementing the minimum standards for undergraduate medical education in Family Medicine in Turkey.

Acknowledgement

Authors have no financial or proprietary interest in any instrument or products used in this study. This study has been presented as an oral presentation at the WONCA 2013 Prague 20th World Conference. The authors would like to thank Assistant Professor Ferhan Elmali from Erciyes University Medical Faculty Department of Biostatistics for his assistance in statistical analysis.

References