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PRACE POGLĄDOWE • REVIEWS

Women Family Physicians: A Career in Academic Family Medicine – an example from Turkey

Kobieta – lekarz medycyny rodzinnej pracownikiem naukowym uniwersytetu medycznego – na przykładzie Turcji

ILHAMI UNLUOGLU[1], ESRA SAATCI[2], ERSIN AKPINAR[2]

[1] Eskisehir Osmangazi University Faculty of Medicine Department of Family Medicine, Eskisehir
[2] Cukurova University Faculty of Medicine Department of Family Medicine, Adana

A – Study Design, **B** – Data Collection, **C** – Statistical Analysis, **D** – Data Interpretation, **E** – Manuscript Preparation, **F** – Literature Search, **G** – Funds Collection

Summary When the first universities opened in Europe in the 12th century, they were, with few exceptions, open for men only. It was not until the 19th century that most European countries opened their academic institutions to female students and female teachers. At present, women occupy approximately one third of the academic posts in Turkey. Medical field is the third preferred area for women in Turkey. It is supposed that 30% of all physicians and almost half of 100,000 academic personnel in Turkey are female. However, the percentage of women decreases as the rank increases. Of residents, 47% are women whereas 35% of assistant professors, 31.6% of associate professors and 27.4% of full professors is women. The first academic tenure in family medicine was in 1994. By 15 March 2012, there are 82 associate professors and 16 full professors in family medicine. Of 82 associate professors, 46% (38) and of 16 full professors, 25% (4) are women. Changing the environment of academic medicine could enhance career satisfaction and success for both women and men. Medical schools should carefully examine their environment for gender equity in promotion and compensation. Educators have an obligation to medical students and residents to develop their knowledge and skills, including those related to career development, for effectively practicing medicine. Best possible care in family medicine requires gender competent professionals who understand the cultural, social and political determinants of health and can respond effectively to them.
Key words: women, physician, academic, family medicine.

Streszczenie W XII w. pierwsze uniwersytety w Europie, z paroma wyjątkami, przyjmowały wyłącznie mężczyzn. Dopiero w XIX w. kobiety mogły zostać studentkami i wykładowcami na większości europejskich uniwersytetów. Obecnie w Turcji kobiety zajmują jedną trzecią stanowisk akademickich. Praca w medycynie jest na trzecim miejscu pod względem częstości wybierania jej przez kobiety. Prawdopodobnie 30% lekarzy rodzinnych i prawie połowa ze 100 000 pracowników naukowych w Turcji jest płci żeńskiej. Odsetek kobiet maleje jednak na wyższych stanowiskach. 47% lekarzy rezydentów, 35% asystentów, 31,6% profesorów nadzwyczajnych i 27,4% profesorów zwyczajnych było kobietami. Pierwszy etat wykładowcy medycyny rodzinnej przyznano w 1994 r. Do 15 marca 2012 r. mianowano 82 profesorów nadzwyczajnych i 16 profesorów zwyczajnych medycyny rodzinnej. Wśród 82 profesorów nadzwyczajnych 46% (38) i 16 profesorów zwyczajnych 25% (4) było kobietami. Zmiana postawy przedstawicieli środowiska akademickiego medycyny rodzinnej może poprawić satysfakcję z wyboru drogi zawodowej i poczucie sukcesu u mężczyzn i kobiet. Szkoły medyczne powinny szczególnie zwracać uwagę na postawy przedstawicieli środowiska akademickiego dotyczące równości płci w udzielaniu awansów i ustalaniu wysokości płac. Dydaktycy muszą tak rozwijać wiedzę i umiejętności studentów medycyny i lekarzy rezydentów, w tym te dotyczące drogi zawodowej, aby mogli skutecznie praktykować swój zawód. Najlepsza możliwa medycyna rodzinna potrzebuje specjalistów znających się na sprawach równości płci, którzy rozumieją kulturalne, społeczne i polityczne wyznaczniki zdrowia i są w stanie zdecydowanie na nie reagować.
Słowa kluczowe: kobiety, lekarz medycyny rodzinnej, uniwersytet, medycyna rodzinna.

Background

When the first universities opened in Europe in the 12th century, they were, with few exceptions, open for men only [1]. It was not until the 19th century that most European countries opened their academic institutions to female students and female teachers. Even today, the medical profession is male-dominated [2]. Although the number of females pursuing careers in medicine is steadily increasing [3], the "bottle neck" for women appears to be primarily at the associate professor and full professor levels in most European countries and in North America [4]. The percentage of female professors in academic settings has remained remarkably stable at 11–12% [3] compared with 30% of men [5]. There are only two member states in the European Union (EU), Finland and Portugal, in which there are more than 2 women for every 10 men among the top university staff. Among full professors within the EU in 2000, women comprised an average of 13.2% [6]. Women occupy only 10% of all department chairs [7].

Being a physician: Country examples

Sweden

Although medical education in Sweden has been open to both women and men since the 1870s, women were not allowed to work in hospitals and, by 1926, could only obtain jobs as private general practitioners [8]. The first Swedish female physician, Karolina Widerström, graduated from medical school in 1888. Since then, the total number as well as the percentage of women among Swedish physicians has increased gradually from 6% in 1930 to 28% in 1980, to 42% in 2004 [8]. For the last 20 years, the number of female

and male students has been approximately equal. The percentage of female professors at this university has increased slowly, and even today, women constitute only 16% of full professors.

Canada

In 1967, 11% of students entering medical school in Canada were female; this percentage increased to 51.1% in 2001 [9, 10]. The majority (59%) of medical students in Canada are women [11]. For the academic year 2002–2003, 49% of medical school applicants and 49% of new entrants were female [12].

United States

The first woman to obtain a medical degree in 1849, Elizabeth Blackwell, was denied admission to the major medical schools [13]. By the end of the 19th century, 19 women's medical colleges and 9 women's hospitals had been established and women constituted 5% of American physicians [14]. The proportion of women entering medical training steadily increased from 5.4% in 1941 to 8.0% in 1945 [15]. In 1967, 9% of the students entering medical schools in the US were women. During the 1980s in the US, women entered academic medicine at higher-than-expected rates [16]. In 1999, a record 45.8% of first-year medical students were women [17], a number that is dramatically higher than the 9% reported only 30 years ago [18]. In 2002, 29% of the entire faculty for all basic sciences and clinical sciences were women; they represented 24% of associate professors and 13% of full professors [19, 20]. As of 2005, women compromised only 15% of all full professors and 11% of all department chairs [21]. A scarcity of women in leadership positions in academic medicine has persisted in the US despite their increasing numbers in medical training [22]. The increasing numbers of women in medicine have resulted in a better distribution of physicians across the US [23]. Today women enter medical school in equal proportions to men [24]. One study found that after roughly 11 years on a medical school faculty, 59% of women had achieved the rank of associate or full professor rank. For men, it was 83 percent. Only 5% of women, compared with 23% of men, had achieved full professor [25]. In medicine, 40% of graduates are women, and, until recently, women have entered academia in higher proportions than males [26].

Latin America

In 1967, women represented 18% of the medical students, while in 1987, 43% of medical students were women, 67.2% of physicians in Brazil were men and 32.8% were women between 1994 and 1996 [27]. In 1998, 65% of the students registered at the Medical School of the Universidad Nacional Autonoma de Mexico, the largest university in the country and in Latin America, were female [28, 29]. In several Latin American countries, the proportion of women entering and graduating from medical schools is higher than 50% [1]. However, among those physicians younger than age 35 years, 50% were women. These percentages have gradually been increasing.

Japan

Women represent only 14.4% of all physicians in Japan. The rate of female medical graduates has increased recently and is now more than 30%. However, leadership positions in medical societies and medical schools are still dominated by an overwhelming majority of male physicians. Women physicians hold an average of 4.1% of faculty positions in the 80 medical schools in Japan. Interestingly, the percentages appear to be lower in clinical specialties than in basic science. Women represented 1.7% of professors in medical schools in Japan [30].

Turkey

The date of beginning midwifery training in Turkey is 1843 and of teacher training is 1869 [31]. Women started to work as workers (blue-collar) in 1897 and as civil servants (white-collar) in 1913. The first female students (10 women) in medicine were accepted in September 1922. Until the foundation of Republic of Turkey, only foreign women physicians were allowed to work. Since the first opening of Istanbul University in 1933, women have been allowed and even encouraged to enter medical school and to practice their profession. The first woman professor in medicine was Kamile Sevki in 1945 [32]. Between 1991 and 2003, the percentage of female students has increased. At present, women occupy approximately one third (37%) of the academic posts in Turkey [33]. Medical field is the third preferred area (35%) after humanities and fine arts for women in Turkey. There has been a 5-fold increase in the number of women at the associate professor rank over five years (from four in 1990 to 26 in 1995). Of 18.336 physicians who are registered to Turkish Medical Association, 14.559 (80%) are male and 3777 (20%) are female [34]. It is supposed that 25–30% of all physicians in Turkey are female. Of 165 university rectors, only nine are women [35]. These women physicians had become specialists in pediatrics, pathology, pediatric surgery, and orthopedics. Of more than 100.000 academic personnel in Turkey almost half are women. However, the percentage of women decreases as the rank increases. Of residents 47% are women whereas 35% of assistant professors, 31.6% of associate professors and 27.4% of full professors is women.

Being a Family Physician

Women choose academic careers because of the quality of life, earnings potential, and organizational rewards [36]. Gender equity is a pressing need for family medicine [37]. Women are highly represented in pediatrics, family medicine, and psychiatry, less represented in surgery or surgical subspecialties [3, 38, 39], tend to practice in urban settings, to be on salary and to work part-time [40]. They have patients with more complicated psychosocial problems and patients described as frustrating with comparable numbers of medically complex patients and fewer elderly patients [41]. Female physicians see 17% more patients per office hour [42]. Women reported being more likely than men to spend fewer hours seeing patients, practicing in the least lucrative settings and choosing lower paying specialties as salaried employees [23]. Women physicians are less likely than their male colleagues to identify role models for professional-personal balance which is a key to success [43, 44].

Women have a higher rate of burnout with the odds increasing by 12% to 15% per 5 hours worked per week over 40 hours [41]. Female physicians earn an average of $22.347 less than their male colleagues [40, 45] and in primary care, report incomes of 60% and 85% less than their male colleagues [42]. Gender pay gap is almost 25% [6]. Men's earnings substantially exceeded women's earnings among physicians with no academic affiliation, in high-income specialties and in general internal medicine [46]. Female physicians in academia report having less control over their work and working too much but they are also less likely to want to change their specialty [45].

Overall, 25% of female physicians are childless compared to 9% of male physicians. These women are more likely to be in surgical specialties, less likely to be in primary

care and more likely to work full-time than their female colleagues with children [47]. Women in academic medicine who have children have fewer publications but the citation rate of their articles is higher [48, 49], they have slower career progress, face greater obstacles in career progression and less career satisfaction than men in academic medicine with children [50, 51]. Women physicians with children under 17 years, spend a median of 24.4 hours per week on childcare [52]. Female physicians respond by separating their identities and developing a "double consciousness" [53]. In other words, these women experience themselves as mother and as physician separately and function psychologically in two separate realms [5]. A third of the women in dual physician families cited limitations in their careers due to their family life [54]. Results from one study showed that approximately one half of 200 female physicians who were polled reported experiencing continual high stress levels because of their multiple roles, 44% felt mentally tired and 17% took antidepressant medications, and 31% indicated that they would not become a physician again or would choose another specialty if given the choice [55].

Female physicians have higher retirement rates than male physicians but due to their lower mortality rates, have work lives nearly as long as male physicians [56]. Female physicians who are at greater risk for depression are more likely to be single, without children, have more stress at home, a household gun, comorbid medical and psychiatric illnesses [5]. Female physicians compared to male physicians, rate close friends, health, success, universalism and ideology as more important [57] and value the psychosocial aspects of medical care more than the business aspects [39].

In a 1997 study of 113 US medical schools with family medicine departments, data collected revealed that faculty in departments of family medicine were more likely to be female, 41% *vs.* 21% compared with all academic medicine disciplines. However, women in full-time positions were less likely than men; to be an associate or full professor [58]. In 2003, women in medical schools constituted only 11% of full professors and 13% of associate professors [7]. Society of Teachers of Family Medicine (STFM) currently has 1037 women physician members [59].

Women doctors face barriers in training, in practice, in medical organizations and in academic medicine [60–62]. Female gender is a negative factor in making a scientific career even in developed countries such as US and UK [63]. There is a list of barriers for women including access to strategic resources and social networks, cultural norms, gender role expectations and attitudes, lack of information about what is required for career advancement, less mentoring from senior faculty, gender stereotyping, social and professional isolation, family responsibilities, and lack of high-ranking female role models or mentors. National US data indicate that women in academic medicine are less likely to attain promotion and tenure than their male colleagues, are significantly underrepresented in leadership positions and are overrepresented in junior faculty ranks [64]. Women were offered fewer academic resources at the time of their initial appointments, spent longer periods at lower ranks, and even after adjustment for productivity factors, were less likely to be promoted to associate or full professor [65].

Female physicians are two-and-a-half times more likely to perceive gender-based discrimination in the academic environment than male faculty, with rates of 47% for younger faculty and 70% for older faculty [66].

The World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians (WONCA) report [67] and Buckley et al. [68] emphasized that women in academic medicine tend to lack confidence and aggression when pushing for higher salaries and promotions and are criticized as being overly aggressive and having a "one-track mind" when they do push for promotions. Many women also cited supportive work environments and availability of mentors as important factors promoting success in academic family medicine [54].

In one large national questionnaire, 47.7% of female physicians reported experiencing gender-based harassment, 36.9% reported experiencing sexual harassment, and 62% of African-American female physicians reported experiencing ethnic harassment [69]. Harassment was reported to occur more commonly during the early training years and in specialties that are traditionally male dominated. Fifty to 75% of medical students report sexual harassment or discrimination [70]. Surgery and Obstetrics & Gynecology have the highest rates and pediatrics, psychiatry, and family medicine have the lowest rates for sexual harassment or discrimination [71]. Experiences of gender discrimination and sexual harassment negatively impact medical student's choice of specialty thus perpetuating the gender divide between the specialties [72].

Results from one study showed increased rates of preterm labor (11% *vs.* 6%) and higher rates of preeclampsia (8.8% *vs.* 3.5%) in pregnant residents when compared with pregnant women who were not residents [73]. Another study showed increased rates of spontaneous and induced abortions among resident physicians [74]. In a study of family practice residents, the average length of maternity leave was eight weeks, and it was derived from multiple sources including vacation, sick leave and home-based electives [75]. Residents reported that after returning to work they experienced sleep deprivation, difficulty arranging child care, guilt about being absent from their children and difficulty continuing breast-feeding.

Development of Academic Family Medicine in Turkey

The first academic tenure in family medicine was in 1994. In the same year, the first applications were done for the exam for being an associate professor [76]. In 1996 two candidates succeeded the exam. By 15 March 2012, there are 82 associate professors and 16 full professors in family medicine. Of 82 associate professors, 46% (n = 38) and of 16 full professors, 25% (n = 4) are women. By 2014 that is the 20th year of academic family medicine, it is expected that the number of full professors will reach to 30 [76]. Of 38 university department chairs, 21 (55%) are male and 17 (45%) female. Of six clinic head physicians of the training & research hospitals (Ministry of Health), four (67%) are male and two (33%) are female. Of 227 jury members for academic promotion in family medicine in 18 years (1994––2012), 144 (63%) are male and 83 (37%) female.

Conclusion

It was suggested that US medical schools should carefully examine their environment for gender equity in promotion and compensation [26]. Strategies designed to retain female faculty in medicine in the US and enhance their professional growth include "mentoring and research relationships developed, creative time planning that includes the consideration of time required for childbearing and child rearing, which would alleviate the pressure of forcing women to decide between career and family and thus potentially decrease the loss of many emerging academicians [65]. The creation of a truly equal environment is warranted. Extended family help and inexpensive child care may be important. Understanding women physicians' choices (a practice option or career path in medicine) to pursue careers in academic medicine in the US will help begin to fill

the gap regarding academic medicine as a practice option, particularly for women physicians [24]. Changing the environment of academic medicine could enhance career satisfaction and success for both women and men [77]. Educators have an obligation to medical students and residents to develop their knowledge and skills, including those related to career development, for effectively practicing medicine [24]. To attract more female physicians to academic medicine and retain them as academicians, women furthermore need stronger support from the medical community, including increased availability of childcare in academic settings, flexibility at work, strong mentors, and decreased "good old boy" cronyism. Although flexibility in training is increasing, more understanding and support is needed for residents and physicians who are pregnant [23]. For Asia Pacific countries, it was stated that the best possible care in family medicine requires gender competent professionals who understand the cultural, social and political determinants of health and can respond effectively to them [78]. For Turkey, increasing number of female residents in family medicine is promising for the increase in number of female academicians in family medicine.

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Address for correspondence:
Esra Saatci
Cukurova University Faculty of Medicine
Department of Family Medicine
Balcali, Adana 01330 Turkey
Phone: (+90) 536-5483904
E-mail: esra.saatci@gmail.com, esaatci@cu.edu.tr

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