

Gender in Medical Training and Academic Medicine

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There has been an increase in the number of female doctors worldwide. Women now represent half of all medical students, with almost the same numbers of men and women becoming physicians. There is a pool of talented women in our midst, and it is our responsibility as leaders to find those individuals and groom them for progress. However, residency training and academic education still resemble the historical model when there were few women in medicine. Gender differences in medical specialty choices can cause a maldistribution of doctors by specialty and geographical area, which could cause significant problems at the national health care system level. Major challenges facing female physicians include gender discrimination and sexual harassment, and work/family conflicts. Women are largely under-represented in academic medicine and experience discrimination in the academic environments. Recent issues about related to the “feminization of medicine” raise important questions for about how academic medicine deals with gender issues. To better accommodate the needs of female doctors and ensure that they will have successful careers, structural and cultural changes to medical educations are needed.

Keywords: Gender identity, Medical education, Discrimination

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Received: January 7, 2013

Revised: February 8, 2013

Accepted: February 8, 2013

INTRODUCTION

Gender has often been not correctly used in medicine as synonymous with biological sex. Sex is a biological categorization based on reproductive organs, hormones and chromosomes. Gender is a wider concept than sex, a constantly ongoing interactional social construction of what is considered “female” and “male,” based on sociocultural norms and power (Kim & Nafziger, 2000). Gender implies looking at women and men, and their health, from a social, psychological and cultural perspective (West & Zimmerman, 1987). Existing research on gender and academic medicine has examined the role of female physicians, the “feminization of medicine,” (Lorber, 1984). We believe that the goal is not just ensuring equal numbers of men and women but also guaranteeing fairness and justice in the professional opportunity structure and gender equity.

The number of female medical students has increased in the last few decades, and women now represent half of all incoming medical students. Of the 126 United States medical schools, more than 50 schools have a total female enrollment greater than 50% (Magrane et al., 2005). Therefore not only professors of medical school but also school deans, university administrators and politicians

need to pay more attention to the fact that women have become numerous in medicine.

Although women have traditionally preferred specialties like pediatrics and obstetrics–gynecology, it has been supposed that the preferences of a specialty with a controllable lifestyle such as radiology, psychiatry, and rehabilitation medicine are more appealing to women who want to balance work and family responsibilities (Bickel & Ruffin, 1995). The relatively stable work qualities of specialty with a controllable lifestyle in comparison with other medical disciplines would seem likely to appeal to female students or doctors. If we do not change the system to encourage women to contribute to their profession, some specialties can lose a major source of potential talent and the miss match of doctors by specialty can occurred. In order to prevent the miss match of doctors by specialty, factors influencing choice and preference of specialty by doctors and medical students should be identified. One of the purposes of this research is to define the factors most important to medical students in choosing a career and to analyze these data to determine gender difference in specialty preference.

During the last decades the knowledge of gender-related differences and gender bias in many fields of medicine has increased. Female and male physicians differ when comparing time and com-

munication pattern. Female physicians have longer encounters and include more partnership building and emotional support (Roter et al., 2002). Female physicians often work in less prestigious fields than men (Riska, 2001). They are largely under-represented in academic medicine (Nonnemaker, 2000) and experience discrimination in the academic environment (Carr et al., 2000). Harassment and discrimination are reported from medical students, mostly female students (Feldman et al., 1997).

The other purpose of our research is to investigate gender attitudes of physician teachers, expressed as to which extent they give importance to gender in their professional relations. The specific aim of this paper was to explore whether the teaching physician's own gender was related to attitudes towards gender in his/her work.

THE FACTORS THAT DRIVE FEMALE DOCTORS' CAREER CHOICES

The medical specialties chosen by doctors for their careers play an important role in the development of health-care services. There are some recent studies of how different medical specialties are perceived or how choices are made (Dorsey et al., 2005). As shown in Figure 1, we hypothesized that gender and personality traits have an impact on medical specialty choice, and that career motivations as well as life goals have an influence, too. Gender differences in specialty choice can partly be explained as a function of socialization but also by structural operating barriers or closure mechanisms within specific fields (Buddeberg-Fischer et al., 2003).

General factors that drive doctors' career choices have been identified: internal influences and external forces. Internal influences are personality, work and personal values wanting to contribute to community wellbeing, and drives to fulfill financial and

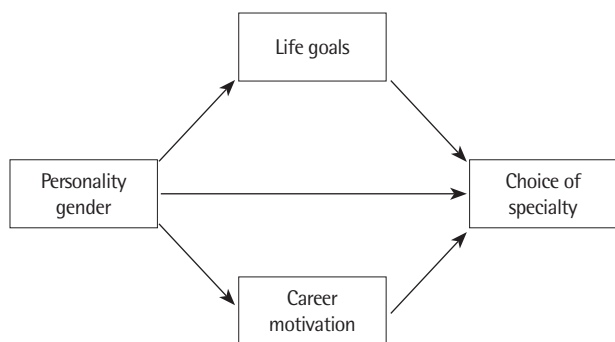


Figure 1. Gender and personality traits have an impact on specialty choice, while career motivations as well as life goals also have an influence.

lifestyle needs. External forces are economic status such as level of debt, family requirement, competition, or length of training (Figure 2). On the other hand the factors that drive female doctors' career choices are gender, lifestyle, status and income, and residency program (Figure 3).

Since the 1990s, more than half of the medical school graduates in Western countries have been women (British Medical Association, 2002; Association of American Medical Colleges, 2003). Women doctors have traditionally preferred specialties such as pediatrics and obstetrics-gynecology, radiology, psychiatry, and rehabilitation medicine. And they have traditionally not preferred such as general surgery and other surgical specialty. Surgical specialty can lose their major source of residents.

Several studies have reported that controllable lifestyle has become a determinant in female doctors' specialty selection criteria (Dorsey et al., 2003). The following characteristics of a controllable lifestyle have been defined: personal time free of practice requirements for leisure, family, and control of total weekly hours spent

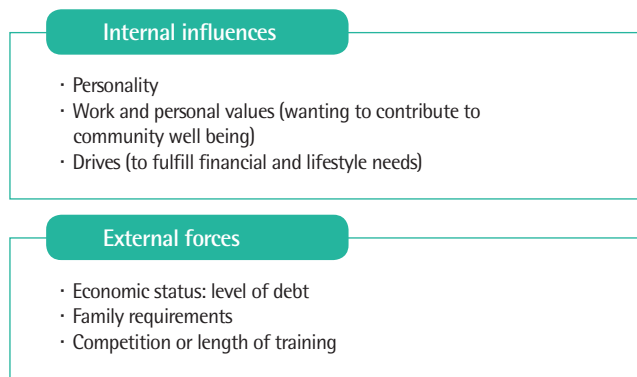


Figure 2. The factors that drive doctors' career choices.

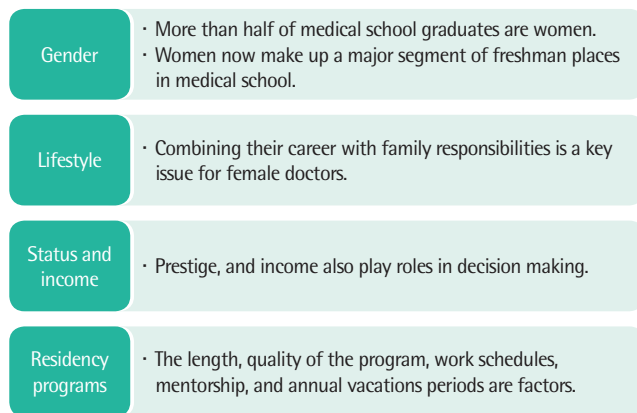


Figure 3. The factors that drive female doctors' career choices.

on professional responsibilities. The prospect of combining their professional career with family responsibilities is a key issue in the process of specialty choice for female doctors (Buddeberg-Fischer et al., 2002).

Prestige within the medical profession, social status, and income also play their role in the decision in favor of a medical specialty (Thornton & Esposto, 2003). In some studies, students reported their student debt as one of the factors influencing their career choices (Weeks & Wallace, 2002). Students with large debts tended to choose surgical specialties more often and were less likely to choose primary care.

The application and selection procedures for residency programs, the length, quality and structure of the program, work schedules, mentorship, vacation periods are also factors which are considered when choosing a specialty (Girard et al., 2006).

GENDER-RELATED PROBLEMS

1. Work/Family Conflict

In general, women doctors tend to accept a larger amount of responsibility for the than do male doctors. Bearing children is still viewed as an indication of a lack of seriousness and commitment on the part of women. The formulation of a second tier of career women with lower pay and lower status has been the response to human reproduction in many fields (Nickerson et al., 1990). Women who have children early in their professional years can lose their chance for tenure if they want to spend time with their children in academia. Most universities require a several number of articles within the first two to five years after becoming a professor. In many areas of medicine, career advancement of women has been slowed because of the absence of policies that extend tenure decisions or otherwise accommodate doctors who become mothers (Levinson et al., 1989).

Informal attitude about women and pregnancy can also negatively impact a women's likelihood of success. Negative attitudes about a woman's effort to combine motherhood with career can create stress for the female doctors (Koshland, 1988). Pregnancy can be a source of bitter anger when a woman's absence creates more work for her colleagues. Young children may make it difficult to pursue her training and studies. Delaying child bearing may result in infertility as a result of old age. Inflexible policies which do not anticipate and accommodate for the possibility of pregnant female doctors can burden others. More flexibility on the part of

medical schools and hospitals would give support to the many men and women who play the dual roles of parent and physician.

2. Gender Disparity in Academic Medicine

Although women now represent almost half of all incoming medical students, their access to positions in academic medicine continues to be hindered. Little difference has been found in the academic performance of men and women in medical school and a large proportion of women choose academic medicine over clinical practice; nevertheless, academic medicine continues to be largely a male preserve (Bickel, 1988). Women generally publish fewer scientific papers, report fewer research efforts than men, and are more likely than men to have had no research training (Bickel, 1988). Women not only finish more slowly academic ranks, they also find it very difficult to reach the highest positions. Only about 3% of all medical school departments are chaired by women and internal medicine has no female department chairs (Schaller, 1990). The inadequate representation of women in academic positions is paralleled by similar representation in medical research (Cole & Zuckerman, 1987). Some of these disparities reflect the poor representation of female doctors in tenure track positions (Nickerson et al., 1990).

GENDER DISCRIMINATION AND BIAS

Broadly speaking, gender discrimination refers to "behaviors, actions, policies, procedures, interactions, etc., that adversely affect a woman's work due to a disparate treatment, disparate impact, or the creation of a hostile or intimidating work or learning environment (Lenhart & Evans, 1991)." Such biases affect the bad relationships between women and their male colleagues. Sexual stereotypes or biases can have a profound influence on a woman's professional experience and impact women negatively, both directly and indirectly. Harmful stereotypes can also influence if women's work is rewarded equally with men's, with commensurate pay and opportunities. It may slow their advancement, keeping them in a lower pay scale, and may also be psychologically damaging enough to lower self-confidence. Discouragement and open hostility against women can force them to quit their specialty or the profession of medicine altogether (Grant, 1988).

Efforts are being made to reduce or curtail gender discrimination. This includes periodic publication by the medical school of its policy against gender discrimination to faculty who are sensi-

tive to gender problems, establishing seminars where the gender issues are discussed, and publishing reports.

SEXUAL HARASSMENT

Sexual harassment is a grave form of gender discrimination which hinders the progress of female doctors. Sexual harassment is characterized by unwelcome sexual advances, and other verbal or physical conduct of a sexual nature where submission to such conduct is made either explicitly or implicitly a term or such conduct has the effect of interfering with an individual's work or academic performance or creating an intimidating or offensive work environment (American Medical Association, 1989).

The clear finding is that women reported sexual harassment as much as four times more often than did men (Baldwin et al., 1991). In a study of residents in an internal medicine training program, 73% of women and 11% of men had been sexually harassed during their training. About half of the reported incidents occurred during medical school and half during residency (Komaromy et al., 1993). Other studies about medical students have indicated that sexual harassment is a very common experience (Baldwin et al., 1991; Cotton, 1992).

Despite the high frequency of sexual harassment, immediate and appropriate responses are rare. The most quoted reasons why women did not respond the sexual harassment were dread of negative influence. Another serious obstacle was the rare existence of any sexual harassment policy at the medical school and hospital. Such a negative environment is not contributive to women doctors' advances, and could be conducting to the lack of women progress to leadership positions. Sexual harassment should not be misinter-

preted to mean mutual flirting or adulatory comments.

CONCLUSION

We are entering a new era in the history of medicine when there are almost same numbers of men and women becoming physicians. There is a pool of capable women, and it is important to find those individuals and groom them for success. To attract women to academic medicine and guard that they will have good careers, we must begin immediately to make thoughtful and even bold changes in academic medical policies that affect work/family balance.

Gender differences and mismatch with real needs were found in women. In addition to traditional gender roles, gender differences and mismatch influence the current and future maldistribution of specialties. Systematic changes in the working environment in medical society are required to solve these problems. There are two solving problems of gender difference and mismatches with real needs. One is changing the preference of female doctors and the other is changing needs of them. For change the preference, improving the working environment with consideration would contribute changing students' and doctors' preferences. The insurance program should sufficiently consider the prestige of specialties, including doctors' fees. The prestige and incentives should be increased to lead students and young doctors into specialties requiring long-term training and a heavy workload (Figure 4).

For changing needs generalists including family doctors and highly skilled paramedical professionals will be expected to have roles supporting. We can also improve the working conditions for female doctors to increase the number of female doctors in male-

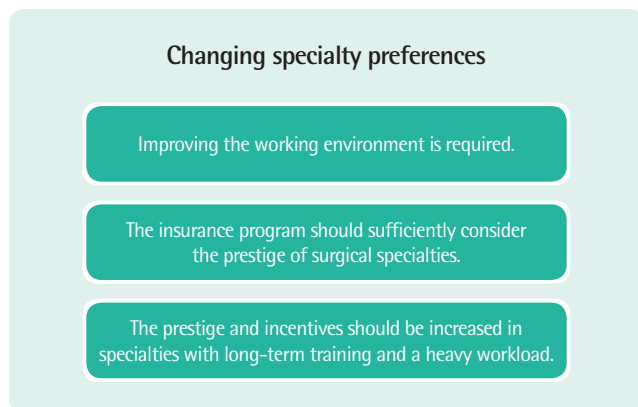


Figure 4. Solving the problems of gender imbalance and mismatch: changing specialty preferences.

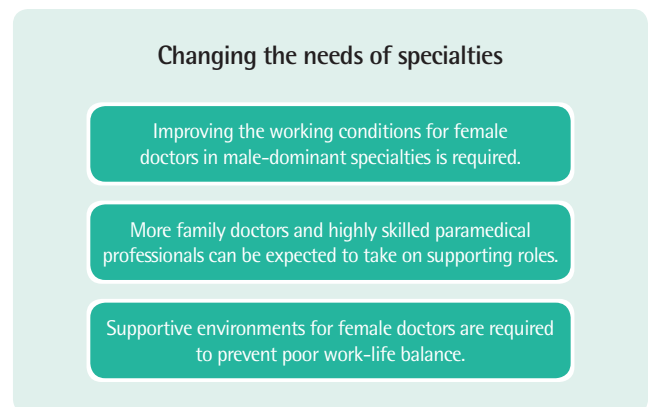


Figure 5. Solving the problem of gender imbalance and mismatch: changing the needs of specialties.

dominant specialties. Supportive environments for female doctors will change the needs of them (Figure 5). They suffered from poor work-family balance and that their retirement and layoff resulted from difficulties with childbirth and child-rearing.

Although there has been advance in recent decades, women in medicine are continuing to encounter subtle and overt forms of discrimination and sexual harassment during their education and training. Academic and medical policies should offer educational programs about gender to physicians in training and students. Such programs would sensitize these groups about stereotype and gender biases and work to prevent gender discrimination and sexual harassment. If sexual harassment is to be removed from the medical school and hospital, good policies must be followed by a willingness to allow women access to high positions as well as a desire to change the traditions of medicine which have been not hospitable to women doctors.

Medicine's future will be greatly influenced by the presence of women, and future success may depend on a fair inclusion and accommodation of both genders in the medical training and academic education. Changing the structures of medical training and academic medicine to better meet the needs of female doctors is a difficult but necessary process. Future research is needed to understand the female doctors and barriers that hinder their progress.

ACKNOWLEDGMENT

This article is supported by Wonkwang University at 2010.

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