

Gender Differences in Medical Students' Interest in Obstetrics/Gynecology

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Abstract

Objectives: The aim of this study is to explore the perceptions and interest of final year Saudi medical students in Obstetrics and Gynecology specialty. **Methods:** A survey based cross-sectional study was made of 140 final year medical students at King Saud bin Abdulaziz University for Health Science, Riyadh. **Results:** The results generally show that male and female students had different perceptions of and interests in obstetrics and gynecology. For female students, their choice of specialty was found to be more influenced by malpractice concerns and the opportunity to deal with female patients than male students ($\alpha = .01$ level). On the other hand, for male students, their choice of specialty was found to be more influenced by the prospect of establishing private practice and opportunity to earn high income than female students ($\alpha = 0.05$ level). **Conclusion:** The study has provided important insight into Saudi male students' perception of as well as interest in obstetrics and gynecology. Their decision was most likely influenced by social acceptance, working hours and income.

Keywords : Gynecology, Medical Students, Obstetrics.

1. Introduction

Over the previous thirteen years, women have flowed into the medical field; United States (US) female medical students represented only 33% of all enrolled medical students in 1982 [1]. In 2003, women became the majority at US medical schools for the first time accounting for 52% of all medical students [1]. Obstetrics and gynecology (OB/GYN) reflects this trend and it is currently one of the professions females have just dominated in many countries of the world [2,3].

The proportion of female staffing OB/GYN in the US has increased considerably in the last 30 years with a percentage of 52% in 2014 compared with 32% and 12% in 2000 and 1980 respectively [2,4,5]. This proportion is expected to rise as female residents are the majority of OB/GYN residency programs and fewer male medical students are opting for OB/GYN [2,6]. In a tertiary hospital in Saudi Arabia, female obstetrics-gynecologist consultants constituted 80% of the department [3]. With fewer males choosing OB/GYN there is failure to fill all the residency positions in Saudi Arabia [7].

According to the Saudi Commission for Health Specialties 2008, the number of vacant positions exceeded the number of OB/GYN residency program applicants [7]. This insufficient number to meet the greater demands as the Saudi population grows may undermine the quality of care and patient satisfaction. In a study by Hammoud et al, two thirds of students who had expressed their interest in obstetrics and gynecology did not pursue their career in OB/GYN [8].

This may suggest the students had adverse perceptions, which impacted their specialty choice decision. In terms of patient preferences, Plunkett et al found 53% of women preferred a female obstetrics-gynecologist [9]. However, the perception of patient's predilection for female physicians had no effect on students' decision process and ultimately no difference between male and female physicians in their ratings of career satisfaction or income [10,11]. The purpose of the study is to

explore the perceptions and interest of final year Saudi medical students in OB/GYN. In order to help us understand why male students are not interested in OB/GYN, part of this study is aimed to determine the differences between perceptions and interests of male and female students in OB/GYN.

2. Method

We conducted a survey based cross-sectional study on final year medical students at King Saud bin Abdulaziz University for Health Sciences (KSAU-HS), Riyadh, Saudi Arabia. KSAU-HS is the only specialized university in health sciences in Saudi Arabia with about 3085 enrolling students. More than 200 male and female students get accepted to study at college of medicine per year. Our inclusion criteria were the students in their penultimate year and ultimate year. A total of 184 males and 72 females were included in the study. This type of study is cost-effective and is suitable for determining the prevalence of students interested in OB/GYN and how they perceive this medical field. An online statistical software was used to find out the sample size.

The confidence level was 95% with a margin of error of 5%. Approximately, 1000 final year medical students and interns work in Riyadh. The software suggests 278 study subjects to be included in the study. We used Convenience sampling of fifth year, final year medical students in Riyadh. Microsoft Excel was used for data entry, while Statistical Package for Social Sciences (SPSS) was used for data management and analysis. Categorical data was demonstrated by frequencies and percentages.

Chi square was used to identify the differences between the two genders. Also, Multivariate regression analysis was used to explore the relationship between the deciding factors and students' interest. Odds ratio with 95% confidence interval was calculated, and a p-value <0.05 was considered statistically significant for all statistical tests.

3. Results

140 students. 84 (60%) male (40%) female

3.1 OBGYN

- 11 students were interested and 15 students were neutral
- 82% of those interested in OBGYN were also interested in pediatrics (P=0.019)
- 63.6% of those interested in OBGYN were also interested in emergency (P=0.004)
- 72.7% of those interested in OBGYN think it is socially accepted (P=0.032)
- 81.8% of those interested in OBGYN think it is a specialty with high income (P=0.032)
- Female students think OBGYN is a specialty with long working hours (P<0.0001) and doesn't permit family time (P=0.001)
- 65.5% of Female students think OBGYN is a socially accepted specialty compared to only 17.9% of male students (P<0.0001)
- More Female students than male students think OBGYN is a stressful specialty (P<0.0001)
- 36.8% of those rotated in OBGYN don't think it is a boring specialty (P=0.005)
- 75% of those rotated in OBGYN think OBGYN is a specialty with long working hours (P=0.004)
- More of those students rotated in OBGYN think it is a specialty with high income and good for private practice (P=0.039) (P=0.034)
- 43.4% of student rotated in OBGYN think it is socially accepted (P=0.012)
- 77.6% of students rotated think it is stressful (P=0.002)

3.2 Orthopedics

- 37 students (26.4%) were interested in orthopedics.
- Students interested in orthopedics were also interested in GS (P=0.007)
- Students interested were also interested in emergency (P=0.023)
- Students interested in orthopedics considered performing procedures as an important factor in deciding their specialty (P=0.002)
- Students interested in orthopedics considered dealing with healthy population as an important factor (P=0.001)
- 75.7% of students interested think orthopedics is an advanced specialty (P=0.018)
- Male think orthopedic is a socially accepted specialty (P<0.0001)

3.3 Gender Differences in deciding factors

- More female students considered malpractice concerns as an important factor in deciding their specialty (P=0.006)
- 26.8% of female consider dealing with female patients as an important factor compared to 4.8% of male (P=0.001)
- More male students than female students considered private practice as an important factor (P=0.011)
- More male students considered high income as an important factor (P=0.024)
- 20.2% of male compared to 7.1% of female were interested in radiology (P=0.034)
- 28.6% of male compared to 7.1% were interested in urology (P=0.002)
- 67.9% of female compared to 34.5% were interested in pediatrics (P<0.0001)

4. Discussion

The main purpose of this study was to explore the perceptions and interests of Saudi medical students in obstetrics and gynecology as well as to determine whether these interests and perceptions differ between male and female students.

The results of the study showed that interest in pediatrics, interest in emergency care, earning associated with obstetrics and gynecology, and perceived social acceptance of obstetrics and gynecology practice significantly influence the interests and perceptions of medical students toward obstetrics and gynecology at 5% level of significance. Specifically, 82% of those interested in obstetrics and gynecology were also interested in pediatrics ($\alpha = 0.05$ level); 63.6% of those interested in obstetrics and gynecology were also interested in emergency care ($\alpha = 0.005$ level); 72.7% of those interested in obstetrics and gynecology thought that the specialty is socially accepted ($\alpha = 0.05$ level); and 81.8% of those interested in obstetrics and gynecology believed that the specialty would lead to high earning ($\alpha = 0.05$ level). On the other hand, perceived stress associated with obstetrics and gynecology specialty, rotation policy, and long working hours were significantly associated with less interest in the specialty at 5% level of significance. 77.6% of medical students who rotated in obstetrics and gynecology thought that obstetrics and gynecology is a stressful specialty ($\alpha = 0.01$). Similarly, 75% of those rotated in obstetrics and gynecology thought that the specialty to be associated with long working hours.

On the contrary, more students who were rotated in obstetrics and gynecology believe that the specialty is associated with high income and is good for private practice ($\alpha = 0.05$ level). When female

and male perceptions on aspects of obstetrics and gynecology specialty were compared, it was noted that significantly higher number of female students believe that obstetrics and gynecology specialty is socially accepted than male students ($\alpha = 0.001$ level). Similarly, significantly more female students were found to believe that obstetrics and gynecology specialty is stressful than male students ($\alpha = 0.001$ level). More female students noted that obstetrics and gynecology specialty is associated with long working hours and does not permit family time ($\alpha = 0.005$ level).

For female students, their choice of specialty was found to be more influenced by malpractice concerns and the opportunity to deal with female patients than male students ($\alpha = .01$ level). On the other hand, for male students, their choice of specialty was found to be more influenced by the prospect of establishing private practice and opportunity to earn high income than female students ($\alpha = 0.05$ level), which is consistent with the findings of Meadus and Twomey (2007) [11]. While interest in pediatrics specialty was found to greatly influence interest in obstetrics and gynecology specialty, female students were more likely to have interest in pediatrics than male students ($\alpha = 0.001$). Male students on the other hand were more likely to be interested in radiology ($\alpha = 0.05$ level) and urology ($\alpha = 0.005$ level) than female students.

The results of this study generally show that the male and female students had different perceptions of and interests in obstetrics and gynecology, which is consistent with the findings of Chang, Odrobina, and McIntyre-Seltman (2010) [12], Gariti, Zollinger, and Look (2005), and McRae (2003) which also found that male students were less likely to report career interest in obstetrics and gynecology [13,14]. In Chang et al.'s (2010) study, male students reported feeling socially excluded from female-dominated clinical teams [12]. Besides, male students were more likely than their female counterparts to experience gender bias from patients when offering obstetrics and gynecology services. These could explain male students' lower interest in this specialty than female students. In addition, Hammoud et al. (2006) observe that pre-existing beliefs and perceptions regarding obstetrics and gynecology held by students before obstetrics and gynecology clerkship could be affecting male students' perception of as well as interest in obstetrics and gynecology specialty [8].

5. Conclusion

The study has provided important insight into Saudi male students' perception of as well as interest in obstetrics and gynecology. The differences between male and female students noted in this study may continue to grow if counter-measures are not taken to avert the situation. Future studies on this issue is needed to investigate ways to manage the situation.

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