

A comparison of Male and Female Medical Student's Motivation towards Career Choice

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^{1,3,5} Analysis/Interpretation/Discussion

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Abstract

Objective: To compare motivation to become a doctor in both genders

Materials and Methods: This cross-sectional study was conducted in Rawalpindi Medical University in March 2019. I First and second-year M.B.B.S students were included in the study. Age, year of study, and gender were recorded. The questionnaire included 18 questions assessing six motivational dimensions: status and security; nature of the occupation; career opportunities; patient care and working with people; use of personal skills; and interest in science. Responses were recorded as 'agree' or 'disagree' for each question and results were analyzed using SPSS v19.

Results: Out of 350 medical students, 247 (70.6%) were female and 103 (29.4%) were male. Most frequent motivational factors for females were "Opportunity to care for/ help people" (n=240; 97.1%) followed by "responsible job" (n=220; 89%) and "use of mental skills" (n=217; 87.8%). Male students were motivated mostly by "use of mental skills" (n=90; 87.3%) followed by "provides secure career" (n=87; 84.4%) and "challenging field" (n=83; 80.5%). In our study, (n=61; 25%) of females responded in agreement that boosts in marriage perspective was an underlying motivational factor for their choice of studying medicine while (n=41; 40%) males agreed to it. There was a significant difference between both genders with a p-value of 0.005.

Conclusions: We infer that female medical students have more humanitarian grounds for choosing the medical profession and are more motivated than their male counterparts.

Keywords: Motivation, genders, the medical profession, medical students, patient care.

Introduction

Studies from several parts of the world indicate that proportion of females seeking a career in medicine is rising throughout the world.¹ Female medical students make up to 63% of the total medical student intake in some medical schools in the UK, and in 2012, 61% of doctors under the age of 30 on the medical register were women.¹ Nearly half of the medical students in developed countries are female. Pakistan is producing around 14,000 doctors per year, out of whom 70 percent are women.² Till 1990 there was a quota system for admission in medical colleges of Pakistan when 80% seats were reserved for boys. Since the quota rule was lifted, there has been a constant rise in the number of females in medical colleges of Pakistan. In Punjab and Sindh female students are about 70 to 80% of all medical students. Many of these females don't practice medicine due to social pressure to get married, have children and raise them.^{3,4} Recently there was much debate in Pakistan about the implementation of a 50-50 quota for girls and boys in the country's medical and dental colleges.

Motivation is considered as a process that is evoked by a pertinent stimulus leading to extraordinary ability to achieve a goal.⁵ Harder the goal, more motivation is required to achieve it.⁶ Existing literature suggests that several factors influence students' decision to study medicine.^{7,8,9} These include factors on the improvement of one's social and financial status (such as money, fame, and status) or those related to their interest or professional responsibilities (such as interest in the subject, to serve people).

There is limited information available on the motivational pattern of students joining medicine in Pakistan. In this study, we conducted a questionnaire-based survey to explore the motivational factors that first-year medical students consider to study medicine and compared them between male and female students. No study has so far been done in the country to understand the difference in motivation among both genders to pursue a medical career. Whether 'a boost in marriage prospect' is an important motivational factor for females choosing medicine or not has been studied scientifically before. This study was done to compare male and female medical student's motivation towards career choice.

Materials and Methods

This was an observational study conducted at Rawalpindi medical University in March 2019. Students from the first and second years of MBBS were included in the study because, during the initial years, their motivational factors are not much influenced by the environment. A validated semi-structured self-administered questionnaire was prepared based on previous studies done to study motivational factors for choosing the medical profession.¹⁰ Age, year of study, and gender were recorded. Six motivational dimensions were covered in the questionnaire including status and security; the nature of the occupation; career opportunities; patient care and working with people; use of personal skills; and interest in science. There were 18 questions randomly placed covering these six motivational domains. Responses were recorded as 'agree' or 'disagree' for each question. Results of individual questions were analyzed using SPSS V19 and shown in the form of frequencies and percentages. Results were compared in both genders using the Chi-square test. P-value <0.05 was considered significant.

Results

The data were collected from 350 medical students including 247 (70.6%) female and 103 (29.4%) males. Most frequent motivational factors for females were "Opportunity to care for/ help people" (n=240; 97.1%) followed by "responsible job" (n=220; 89%) and "use of mental skills" (n=217; 87.3%). Male students were motivated mostly by "use of mental skills" (n=90; 87.3%) followed by "provides secure career" (n=87; 84.4%) and "challenging field" (n=83; 80.5%). A significant difference in both gender's motivation was observed in "patient care", "responsible job" and "science-based occupation" where girls responded more in agreement while "boost in marriage prospect" was a significant motivational factor in the case of boys. In our study, 25% (n=61) of females responded in agreement that a boost in marriage perspective was an underlying motivational factor for their choice of studying medicine while 40% (n=41) males agreed to it. There was a significant difference between both genders with a p-value of 0.005, as summarized in Table 1.

Table 1: Significant motivational difference between male and female medical students

Motivational factor	Gender	Agree(n)	Disagree(n)	P-Value
Care/help people	Male	89 (86.4%)	14 (13.5%)	0.000
	Female	240 (97.1%)	07 (2.8%)	
Responsible job	Male	82 (79.6%)	21 (20.3%)	0.02
	Female	220 (89.0%)	27 (10.9%)	
Science based occupation	Male	66 (64%)	36 (34.9%)	0.03
	Female	191 (77.3%)	55 (22.2%)	
Boost in marriage prospect	Male	42 (40.7%)	61 (59.2%)	0.005
	Female	62 (25.1%)	185 (74.8%)	

Discussion

Studies in the past have explored different extrinsic as well as intrinsic motivational factors like prestigious profession, job security, financial stability, parents or family's expectations, and altruism (i.e. desire to help people and paying back to society).¹¹

In a study done in Germany by Becker JC et al., "helping patients", "scientific interest" and "good career prospects" were the most frequent study motives indicated by the students.¹¹ In our study, the most frequent motivational factors for females were "opportunity to care for/ help people" followed by "responsible job" and "use of mental skills". Male students were motivated mostly by "use of mental skills" followed by "provides secure career" and "challenging field". In both the studies, the aspect "helping patients" was more important to female than to male students, with a significant p-value, 0.00 in our study. Male students were more inclined to respond in agreement to career-associated motives e. g. income, reputation, etc. as more relevant in both the studies but the results were not significant.

According to a study done in India to ascertain the factors influencing the choice of medical profession among the first year medical students, the three highest-rated motivational items were 'opportunity to serve people', 'to train and be a doctor', and 'study a subject that interests me'.¹² The results were similar to our study as 'opportunity to serve people' was also the most frequently chosen motivational factor in our study but unlike our study, the difference between both genders was not considered in the Indian study.

Geol S et al review all the studies that investigated the motivational factors that underpin students' selection of medical study in recent years.¹³ They analyzed data around the globe by categorizing it into high-income and middle-income countries. The main motivating factors that emerged were scientific (interest in

science/medicine, social interest and academia, flexible work hours and work independence), societal (prestige, job security, financial security) and humanitarian (serving the poor and underprivileged) in high-, upper-middle and lower-middle-income countries, respectively. No study was available from any low-income country. Our results are comparable to lower-middle-income countries with humanitarian and societal being the main motivational factors.

In Pakistan, there is a popular opinion of women entering medical colleges merely to acquire a good matrimonial match.^{14,15} In our study, 25% of females responded in agreement that a boost in marriage perspective was an underlying motivational factor for their choice of studying medicine while 40% of males agreed to it. There was a significant difference between both genders with a p-value of 0.005 which is contradictory to popular belief as more males agreed for having this motivation than females. This aspect has never been scientifically investigated and compared in both genders before nationally or internationally. However, our study has not identified the reasons why many of these highly motivated female doctors are not able to continue working later on. More research is required in Pakistan to identify causes of female doctors quitting their profession to help policymakers addressing this important wastage of highly educated manpower.

Conclusion

We infer that female medical students have more humanitarian grounds for choosing the medical profession and are more motivated than their male counterparts. Caring/ helping people was the most frequent motivational factor for females in our study as compared to males (P-value 0.000). This study offers cues to policymakers and educators to formulate policy to tackle the shortage of health workers

especially female medical doctors. However, more research is needed to find out the reasons for highly motivated altruistic female doctors leaving the medical profession.

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