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Specialty preference and influencing factors for post graduate specialty selection of medical students: a study conducted in west zone of India

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Abstract: Background: The choice and interest of medical students determine availability of specialists in country in future. Therefore it is important to understand factors which influences their specialty selection to make adequate number of specialist available in health care system. By influencing these factors misdistribution of specialists in society can be prevented. Objective of the study: To study preference and influencing factors for specialty selection of medical students. Material & Method: Study was conducted in medical students. Subjects were given predesigned objective questionnaire regarding their choice of specialties. The questionnaire also contain factor influencing their decision for particular specialty. Choice of specialty analyzed in both gender. Data was compiled, analyzed and presented as percentage. Result and Conclusion: Male students are more interested in specialties of surgical work while female students are more interested in specialties having bed side work. Good income potential have more influence in male students. Students also justify for quality of family life parallel with economy. Settlement in city is equally important for both genders. Social prestige is also important factor for selecting specialty. Government and policy makers can attract students in required specialty by proper policies.

Keywords: specialty selection, medical student, high income, family life, interest

Introduction

Medical students are the source of country's future doctors in various specialties. Healthcare system would function with good efficiency if specialists of various branches are available in society. Though all types of specialists are equally important for health care system, medical students seems to have their likings and own criteria for selecting a particular specialty for their carrier choice. Their choices and interest determines the manpower distribution in different medical specialties [1]. The attitudes of medical students towards their later work in the health system is important for current health care planning [2].

In our country there is not only shortage of specialists in society but also there is misdistribution of specialists in society as in rural area it is difficult to find specialists while in urban area patients can get choices to consult specialist doctors. Even today in very interior village people has to travel for certain medical facilities as laboratory testing, operative

procedures. And even for city people, single super specialists is available among four to five cities, in this condition all the patients needs to transfer to one major city where super specialist is available.

For balanced distribution of doctors in all specialties, it is important to know how medical students select their branch of specialty [1]. It is important to know criteria, choices and reasoning for preferences of medical students for selection of various specialty. It is important for health care system to understand and analyze various factors which influences specialty selection of medical students. By properly understanding choice preferences of medical students for specialty, necessary steps to modify it can be designed. This improved understanding of the selection processes should also help health system officials ascertain whether, when, and how to intervene in an attempt to influence these decisions [3]. Study would help policy makers to make doctor friendly policy for their specialty selection and would also help society by providing them good health care professionals. Influencing students' choice of medical specialties may be especially important to prevent misdistribution of physicians among the various specialties [3].

Many students enter medical school with some idea of which medical specialty they wish to pursue [3-6]. While previous studies have analyzed many factors which effects medical students' choice of specialty, the relative importance of each of these factors remains unclear. Without this information, an effective incentive policy cannot be designed.

Material and Methods

Study was conducted at Govt. Medical College, Bhavnagar, Gujarat, India in 100 medical students of first year. Out of 100 medical students 65 were male medical students and 35 were female medical students. Subjects were given predesigned objective questionnaire regarding their choice of specialties. The questionnaire also contain factor influencing their decision for particular specialty as good income potential, social prestige of degree holders, family life quality, settlement in city or metro city, working interest. Data was compiled and analyzed presented as percentage.

Results

Table-1: Medical Student's specialty selection preference by sex (%)			
Specialty	Men (%)	Women (%)	
Medicine	10.77	17.14	
Pediatrics	12.31	20	
Gynecology	6.15	20	
Psychiatry	1.54	11.42	
Skin and dermatology	1.54	20	
Ophthalmology	6.15	2.86	
Anesthesiology	6.15	2.86	
Surgery	27.69	2.86	
Orthopedics	26.15	0	
Others	1.54	2.86	

Table-2: Reason for choosing a particular specialty			
Factor	Men (%)	Women (%)	
High income potential	40	8.57	
Social prestige of degree holders	23.08	5.71	
Quality of family life	9.23	60	
Settlement in city or metro city	21.54	22.86	
Working interest	6.15	2.86	

Discussion

Medical students' choice of specialty is a very complex decision-making process involving multiple interconnected factors [1]. Some findings of present study correlates with past studies. From the present study certain things can be highlighted. Male students are more interested in surgical and operative specialty while female students are more interested in bedside work type specialty or so called non-emergency type specialty as skin or psychiatry. In Indian society female has to take care of home and family after marriage, so specialty which requires less working hours is more preferred by women. More females as compared to male is interested in gynecology.

Gender effect is also seen in selection of gynecology, as in India female patient would prefer to consult lady gynecologist / obstetrician. Female medical students would be more interested in specialties that allow for daytime work only. In other studies this criterion was associated with the emphasis placed by women students on family life and raising children [7]. This was further shown in study where the women students displayed interest in specialties with controllable lifestyles [3]. Alternately, the men were more interested in specialties that were procedure or surgery oriented and were well remunerated, providing opportunities for private practice [3]. Comparable gender associated selection criteria patterns have been reported from other parts of the world [8].

In present study males are mainly concerned about high income potential. This pattern was also demonstrated in study where more men

than women replying that they had chosen specialty because of its economic potential [3]. Previous studies have found that economic factors and amount of future income were uniformly important considerations for medical students selecting a specialty [9-16]. Phelps reported that future income influenced physicians' decision about whether to specialize and their choice of specialty [15]. Medical students also considers quality of family life in future while selecting specialty. this is more seen in female students. It was observed in another study that more than two-thirds of the men and women indicated that they wanted an interesting and challenging bedside specialty that afforded control over their lifestyle and provided a reasonable relationship between salary and lifestyle [3].

This importance given by both men and women medical students to controllable lifestyle and the relationship between remuneration and lifestyle has also been observed among medical students in countries such as the United States and Canada [17]. It has been ascribed to the desire of this generation to lead lifestyles that balance work and family/leisure activities [18]. Compatibility of work and family life has become much more important to both men and women [2]. Importance of residing at city or metro city level is equally important for male and female students. In city level it is easy to find places and facilities for enjoyment. At city level good coaching facilities for children are also easily available. Doctors too are attracted to larger towns and cities [2].

Effect of social prestige of degree holders is more seen in males. In Indian society, main earning person of family is male. The reputation and image of any family is determined by social position of male head of the family. Kiker and Zeh suggests that noneconomic factors such as planned location of practice, type of medical

school attended, predictable working hours, length of residency, and prestige of practice may affect physicians' choice of specialty [13]. Personal interest in particular specialty also is one of influencing factor in specialty selection. In one of the studies it was found that for all respondents, "personal preferences and work achievement" had the highest weight of the three aspects on the first tier, followed by "specialty characteristics" and "specialty training process" [1].

Furthermore, appropriate policies may be needed to correct a perceived misdistribution of physicians among specialties [1]. Policy makers must identify needs and expectations of medical students. Knowledge of student's attitude would help them to form strategies to increase attractiveness of some specialties with problem of manpower [1].

Limitation of study: It is difficult to make large generalization from single study. The limitations of this study are its examining only a limited number of selection criteria, while other factors undoubtedly also play a part in the selection process. However, the factors included in the questionnaires were those deemed important in similar studies performed worldwide.

Conclusion

Criteria to select medical specialty by medical students in India and gender differences found in study parallel with studies on other countries. These included high income parallel with good quality of family life, social prestige and personal interest. The health care officials can concentrate on specialty selection criteria of medical students to plan for providing facilities in form of monetary or other benefits. This can help decrease gap between requirement of specialists and available specialists in certain fields.

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