

ORIGINAL ARTICLE

Choice of Specialty Careers among Final Year MBBS StudentsMadiha Sajjad¹, Rehan Ahmed Khan², Shazia Qayyum³**ABSTRACT**

Objective: To explore the different specialty career choices of undergraduate medical students and to identify the factors influencing their career choices.

Study Design: A descriptive cross-sectional survey.

Place and Duration of Study: This study was conducted in Islamic International Medical College in April 2013.

Materials and Methods: Final year students were selected through convenience sampling for this study. A 20 items questionnaire with one open ended and 19 Likert scale based close- ended questions was handed to 100 final year MBBS students, in order to explore their preferred career choices and reasons behind them. Non parametric data analysis was done through SPSS 20.

Results: Response rate of students was 82% of which 49 (60%) were female and 33 (40%) were male. Medicine, surgery and gynecology were the top career choices among students. Family practice was the least chosen specialty. The top 3 reasons to choose a specialty were natural aptitude, better subject comprehension and work enjoyment. Parents in the same field, easy career progression and specialty related illness in the family were the least chosen reasons.

Conclusion: Choice of specialty career in health professions has an impact on the healthcare needs of the country. 'Family practice' is a forgotten domain and its importance needs to be stressed. Medical curricula should emphasize on the importance of family practice as a career choice.

Key Words: *Career Choice, Career Preferences, Influential Factors, Medical Specialties.*

Introduction

Medical sciences have a wide variety of disciplines and specialties. It is a difficult decision for a medical student who is about to graduate from medical school to choose his/ her future career specialty. This decision may depend on a multitude of factors as suggested by various studies. The Bland–Meurer model was presented in an attempt to give an overview of the complex interplay of factors that determine medical students' specialty choice with the conclusion being that students choose a specialty whose characteristics most closely match their own career needs.¹ Some of the common determining variables identified in various studies were gender, interest spurred by practical experience in a particular field during medical years, life style or prestige associated with certain

specialties, better job opportunities and easier routes to specialize etc.^{2,3}

Factors influencing student choices for specialty careers are still unclear and culturally distinct. The decisions made by medical students regarding their specialty career choices do not only effect their own future but also have an impact on the quality of health care system of the country.⁴ If they are not aligned with the health care and societal demands, there is an imbalance between the need and supply of doctors in relation to the needs of the community.^{5,6}

Information regarding medical students' career choices can thus guide restructuring of health care policies in relation to the needs of the society and to ensure provision of workforce according to needs of that community.² Understanding these influences can also aid in curriculum designing and career counselling for students in medical institutes.⁶

This is a descriptive study undertaken to identify the specialty career choices of final year medical students at our medical institute, the gender differences among these choices and the factors which influence their choices.

Materials and Methods

The study design was a descriptive cross-sectional survey, conducted in Islamic International Medical

^{1,3} Department of Pathology/Surgery²
Islamic International Medical College
Riphah International University, Islamabad

Correspondence:

Dr. Madiha Sajjad
Associate Professor, Pathology
Islamic International Medical College
Riphah International University, Islamabad
E-mail: madiha.sajjad@riphah.edu.pk

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College in April 2013. All final year students were selected through convenience sampling. A 20 items questionnaire was distributed among all final year MBBS students (n=100) during their self-study time slot, to identify their future specialty career choices and underlying reasons of their choice. They were briefed about it and their understanding regarding terminology was checked. They were given 45 minutes to fill in the proforma. The questionnaire was collected at the end of the self-study time.

The questionnaire consisted of 20 questions in all, developed after extensive literature review and specialist validation from multiple consultants. The 1st question was open ended, requesting students to either choose from a list of 18 clinical specialties, write their choice if not listed or select the 'not sure' option. Specialties listed were surgery, obstetrics and gynecology, pediatrics, medicine, psychiatry, orthopedics, ophthalmology, dermatology, anesthesiology, radiology, public health, family practice, pathology/ laboratory medicine, basic sciences, urology, cardiology, pulmonology and ear, nose, and throat (ENT). Rest of the 19 were close ended questions based on a Likert scale of 1 to 3. These 19 questions were formed on the most likely reasons for career choices based on multiple specialist opinions. These were related to aptitude of the specialty, specialty related illness in self or close others, respect for specialty in the family members, reputation of the specialty in the community, media related hype of the field, higher anticipated income, work experiences in labs and clerkships, more patient contact, better understanding of the discipline, good teacher/ role model, impressive life style of the specialist in the chosen field, parents already practicing in the specialty, peer pressure or friend in the same specialty, more satisfaction, preference to work with a specific community group or gender, better job opportunities, fewer doctors in the chosen specialty, better/ controllable working hours and alternate easier routes for fellowships.

Non parametric data analysis was done through SPSS 20 and descriptive statistics were derived.

Results

Eighty-two out of 100 final year MBBS students participated in the survey. Medicine (18%), surgery (15%) and gynecology (14%) were the top three

career choices of students, with family practice coming last in the ranking (1%). The distribution of different specialties chosen by the students is given in Fig 1.

The top three reasons to choose a specialty were natural aptitude for it, better subject comprehension and work satisfaction for the specialty. The least attributed factors for their choices were easier perceived career advancement, an illness in the family regarding the particular specialty or parents already practicing in that field. The reasons to choose a specialty in order of preference are given in Table I. Surgery (10%) and medicine (8%) were the top rated specialties in males while females preferred gynecology/obstetrics (14%), medicine (10%) and

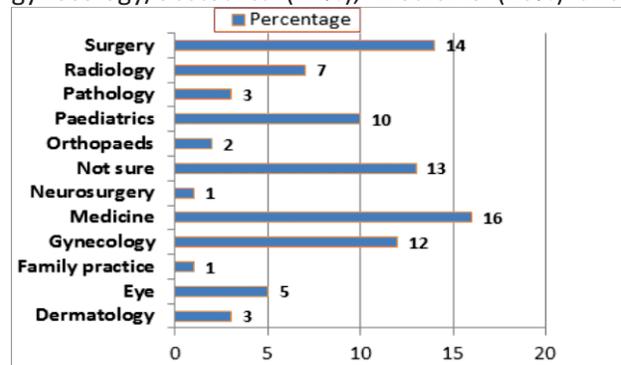


Fig 1: Career choice in MBBS final year students

Table 1: Reasons for choosing a specialty, in descending order of preference

1	Aptitude for the specialty
2	Better understanding of the subject
3	More satisfaction/ Work enjoyment in chosen specialty
4	More patient contact
5	Reputation of the specialty in community
6	Respect for specialty in the family members
7	Good teacher/ Role model of the subject
8	Higher anticipated income in chosen specialty
9	Impressed by the life style of specialist in chosen field
10	Better jobs availability in specialty
11	Controllable life style/ working hours
12	Practical experiences (hands on skills) during study years such as labs and clerkships
13	Few doctors available in the specialty
14	Peer pressure
15	TV/ media related hype for the specialty
16	Preference to work with a specific community-group or gender bias
17	Specialty related illness in self or others
18	Alternate easier routes to specialize available (e.g certificates, minor diplomas)
19	Parents already working in the specialty

surgery (5%) in the descending order. Thirteen per cent of the students were not sure about choosing a career. These included 10% females and 3% males. None of the male students opted for family practice and only 1% of females opted for it as a prospective future career. The gender differences in choice of specialty careers in main specialties is given in Fig 2.

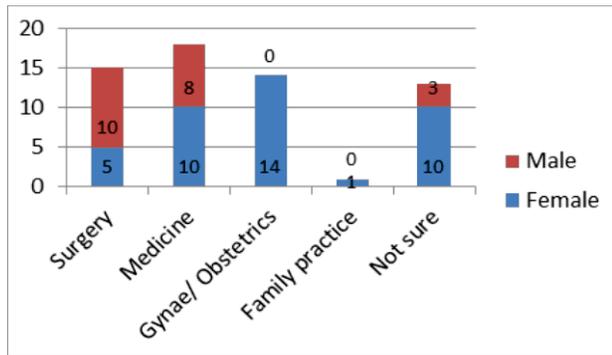


Fig 2: Gender differences in career choice in percentage

Discussion

Choosing a specialty for post graduate training is a major life decision for medical students on which their future career depends, influenced by multiple factors.

In the present study, medicine and surgery were found to be the two top specialties chosen by the students as is the trend noted in many local studies^{2,3} as well as in international studies.⁷ A significant percentage of students (13%) were found to be unsure of their choice. We have reported 19 reasons of choosing a career in a specialty with aptitude, understanding of specialty satisfaction, more patient contact as the top most reasons. The least chosen reasons were parents working in that specialty, easier routes of specialization and illness in a close relative related to the specialty.

Multiple studies are available in literature identifying student preferences in post-graduate medical specialization and their influencing factors.

Several important factors that influence the choice of student include: the emphasis with which the student is taught a particular discipline and as an extension the influence that the teacher of that discipline has. Several studies indicate that the subject specialist teacher can influence the choice of career in a student. Working with a 'generalist' rather than a specialty/ sub-specialty faculty teacher was associated with selection of a primary care career, in

some⁸ but not all studies.⁶ Also, structural changes in the curriculum with more emphasis on primary care^{6,9} experiences encouraged student interest in primary care. Family practice was not found to be a very desirable choice to pursue.^{10,11} This trend was also evident in our study where only 1% of the students showed an interest to pursue career as a general physician.

However other factors like uncontrollable life style and excessive working hours also effected career choice of a specialty. Controllable or uncontrollable life style is one of the major determinants in choosing a career.^{12,13} Life style is influenced by working hours, working in shifts, salaries and job satisfaction.¹⁴ More recently, changes in the workplace environment also influence career choices for example duty-hour limitations designed partly to improve the work satisfaction of residents^{15,16} and rapidly increasing student debts especially in the western societies.¹⁷ Students increasingly prioritize lifestyle issues when choosing careers.¹⁴⁻¹⁶

Male medical students in our study were inclined to choose surgery as their topmost choice followed by medicine whereas female students preferred gynecology/obstetrics followed by medicine as their preferred career choice. Similar results were found in other studies where males preferred surgical specialty and females were inclined towards gynecology and obstetrics.^{18,19} Medicine was equally considered as a prospective specialty choice by both the genders.²⁰ We were not able to correlate our findings exactly to factors that influence career choice in both genders, as generally student satisfaction and understanding of the specialty were the prime reasons of choice in both groups. In literature the two reasons given for variability in male and female students choices was lifestyle controllability and gender biases inherently present in some specialties.^{14,20} Multiple studies reported female students preferring more controllable lifestyle specialties and considering domestic responsibilities and flexible hours as important variables while choosing specialty career as compared to male students.¹⁴ It is also worth noting that males prefer choosing a career that is technically challenging and has more earning potential and would consider residency conditions and leave availability as secondary issues.^{14,20}

A significant percentage of students in our study, 13% were unsure of a future career in any field, 10% of whom were female. This indecision has been regarded by studies to be due to lack of information about specialties, perceived equal interest in multiple specialties, lack of career counselling, conflicting interests etc.¹

Our study also emphasizes the fact that family practice is one of the last career choice of the students. This dilemma has been addressed by multiple local and international studies.^{10,11} However ironically many students in our local context do end up becoming general practitioners by default, due to economic or circumstantial reasons, armed only with an undergraduate degree which becomes a disadvantage for the health care delivery system at large.¹¹

Conclusions and Recommendations

Clinical fields i.e. Medicine, Surgery and Gynaecology/ Obstetrics remain the most popular student choices probably as a reflection of the more clinically oriented curricula. 'Family practice' is a forgotten domain and its importance needs to be stressed. Medical curricula should be made more community oriented and emphasize on the importance of family practice as a career choice for which health policy makers should take appropriate steps.

Our study is limited by a relatively smaller sample size and single institutional data. Additional prospective, qualitative studies are needed for a better insight on factors influencing gender differences in choosing a specialty, as female students now make a significant bulk of the medical students and future doctors.

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