

ORIGINAL ARTICLE

ASSESSING PREFERENCE OF MEDICAL STUDENTS TOWARDS CLINICAL AND NON-CLINICAL CAREERS

Ahsan Rasool, Yasir Naseem*, Muhammad Waqas*, Sumbal Tariq**, Zeeshan Haroon***, Maleeha Rasool, Adnan Rashid***

Students, Ayub Medical College, Abbottabad, *House Officer, Ayub Teaching Hospital, Abbottabad, **Department of Pharmacology, ***Department of Community Medicine, Ayub Medical College, Abbottabad-Pakistan

Background: Right career choice by medical students has an imperative role in order to crave out optimum benefit from the five year laborious study of MBBS. **Methods:** A Cross-sectional survey was conducted at Ayub Medical College, Abbottabad. Sample size was set at 300. Random sampling technique was used. Self-administered questionnaire was administered. Data was analysed using SPSS. **Results:** A total of 211 medical students responded to the questionnaire with 49.76% males (n=105) and 106 females (50.24%). 57.1% reported clinical career as their preferred future choice. 18.86% female compared to 12.38% male reported being indecisive about their future. 60.75% students from rural areas compared to 54.19% from urban background were aspiring for clinical careers. 19.08% students from urban areas compared to 10.12% from rural areas were indecisive. **Conclusion:** There is a lesser inclination of students towards non-clinical careers. A number of students are indecisive about their future. Steps should be taken in-order to make non-clinical careers more alluring.

Keywords: Career preference. Clinical careers, Non-clinical careers

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INTRODUCTION

Medicine is a rich field with many branches and new emerging sub-disciplines. The students have a number of career choices and it is very important for them to choose the right career for themselves. Right career choice by medical students has an imperative role in order to crave out optimum benefit from the five year laborious study of MBBS.¹

During the initial years, medical students have to face difficult challenges as compared to their school life or those in later medical practice. They have to endure long stressful hours of patient care during clinical rotations and prolonged durations of study which are physically and psychologically very demanding. Therefore, strong motivation is needed to pursue a career in Medicine.²

Various factors affect the choices or preferences of medical students towards a particular career.³ With new clinical exposures and attaining knowledge and new skill, their mind-set towards a particular career becomes clearer. Interaction with doctors, fellow medical students and patients all have role in brightening the ambition of a medical student.⁴ The most common reasons for choosing a particular specialty include reputation of the specialty followed by anticipated income and advice from parents.⁵ Other factors include gender of student, mode of clinical practice, social issues a student faces in his life and the respect among general public towards a certain specialty.⁶ Along with these factors,

personal inclination of a medical student towards a particular field guides his career preference. Thus career preferences are influenced by students' personal inclination as well as the relevant exposure during tenure at medical college.⁷

Along with these factors a major factor affecting the career preference of medical students is influence of society and culture in Pakistan. This particularly affects choice of female medical students. The cultural values in Pakistan restrict females from living a professional life, it is generally presumed that a large number of girls leave their profession and become housewives. These cultural and social beliefs are thought to hinder females to become practicing doctors.⁸

In the context of Pakistan, many studies indicate the medical students' career preference depicting the gender differences in choice, inclination towards clinical specialties and choice of private settings for practice.⁹

Ayub Medical College, Abbottabad, Pakistan has students belonging to diverse cultural, socioeconomic and educational background hailing from different and diverse areas of country. These different student profiles affect student preference for their career very diversely. These different student profiles and their unique role upon the career choice merited this study. This study is aimed at assessing the choice of students towards clinical vs non-clinical career with respect to their background, gender and class.

MATERIAL AND METHODS

In the month of July, 2013 a cross-sectional survey was conducted at Ayub Medical College, Abbottabad. Study included 300 medical students from all five years of the MBBS course. Systemic random sampling was used such that every 4th student starting from first roll number in each class was invited to participate in the study.

Self-administered questionnaire was used. The authors developed a self-administered questionnaire. The questionnaire was designed incorporating important parameters after extensive literature search of PubMed databases. The format of all the responses was in categorical design (yes/no or by choosing appropriate responses from all given options). The questionnaire collected data on gender, year of study, rural or urban background, future plans for specialization. After being pretested and approved by the institutional ethics committee of AMC, the questionnaire was circulated in the college.

The participants were assured of confidentiality of the information provided and had an option of refusal to participate in the survey. The researchers collected the completed questionnaires. The results were compared considering class, gender and background of respondents. The data was analysed using Statistical Package for Social Sciences (SPSS) 16.0

RESULTS

A total of 211 medical students responded to the questionnaire with 49.76% males (n=105) and 106 females (50.24%). Students belonging to rural background accounted for 37.61% (n=70) while 62.38% those from urban background (n=131)

When asked about career preferences, 15.63% (n=33) of medical students reported that they haven't decided their career yet 56.87% (n=120) reported practicing clinician as their career preference while 27.48% (n=58) reported non-clinical careers as their career preference.

Equal percentage of male and female students (57.14% and 56.6% respectively) reported becoming practicing clinician as their career preference. 30.47% males (n=32) compared to 24.52% females (n=26) reported non-clinical careers as their future preference. 18.86% females (n= 20) compared to 12.38% males (n=13) were indecisive about their career preference (Figure-1)

Among non-clinical careers, 8.49% females compared to 4.76% males reported teaching as their career preferences. Amongst male students maximum percentage of student (12 out 32) had

reported health policy making as career preference. Minor number of students reported joining pharmaceutical firm (Table-1). 10.47% Males (n=11) compared to 11.32% females (n=12) reported having a non-clinical career other than teaching, joining pharmaceutical firm or health policy making.

54.19% students from urban background compared to 60.75% from rural background reported becoming a clinician as their career preference. 26.71% and 29.11% students from urban and rural backgrounds respectively reported non-clinical careers as their career preference (Figure-1). Remaining 19.08% and 10.12% students from urban and rural backgrounds respectively were indecisive about their future. Detail of non-clinical careers (teaching, health policy making, joining pharmaceutical firm, any other) in given in Table-1.

54.19% students from urban background (27 males, 44 females) compared to 60.75% from rural background (33 males and 15 females) reported becoming a clinician as their career preference. 19.08% (7 males, 18 females) and 10.12% students (6 males, 2 females) from urban and rural backgrounds respectively were indecisive about their future. In students belonging to rural areas who had reported aiming for teaching, 80% of the respondents were male while in urban background students only 11.11% students were male. Students reporting health policy making as career choice from rural areas included 87.5% males and 12.5% females. While from urban background 71.42% were male. Joining a pharmaceutical firm as career preference was reported by 2.85% (males 3.8%, females 1.9%). 4.58% students (4 males, 2 female) from urban areas reported joining pharmaceutical firm. No student from rural background opted for this career. Any other non-clinical career was reported by 10.95% (10.47% males, 11.42% females). This included 10 students 12.65% from rural areas (7 males, 3 female) compared to 9.92% from urban areas (4 males, 9 female) gave such response (Table-1).

Considering class of respondents, there was an increase in number of students opting for non-clinical careers with 10.34% in 2nd year and 34.37% in final year. Number of indecisive students also kept decreasing with class of respondents in an irregular manner with 19.04% in first year, 24.13% in 2nd year, 8.33% in 3rd year and 3.57% in 4th year. Indecisive students in final year were 20.31%.

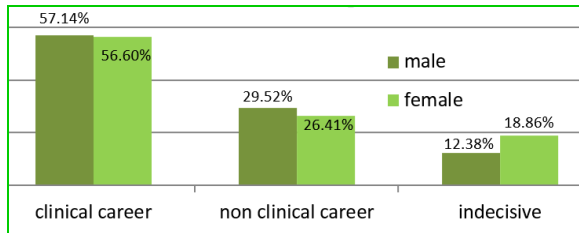


Figure-1: Comparison of career preference with gender of respondents

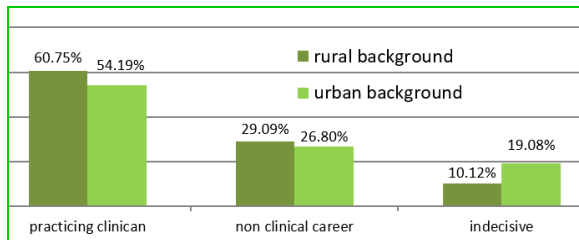


Figure-2: comparison of career preference with background of respondents

Table-1: Comparison of career preference with gender and background of respondents

My Carrier Preference Is			Gender of Respondent		P Value	Total
			Male	Female		
Practicing Clinician	my home is in a/an	rural area	33	15	0.001	48
		urban area	27	44		71
	Total	60	59	119		
Teaching	my home is in a/an	rural area	4	1	0.023	5
		urban area	1	8		9
	Total	5	9	14		
Health Policy Making	my home is in a/an	rural area	7	1	0.569	8
		urban area	5	2		7
	Total	12	3	15		
Joining A Pharmaceutical Firm	my home is in a/an	urban area	4	2	-	6
		Total	4	2		6
	Any Other	my home is in a/an	rural area	7		3
urban area			4	9	13	
Total		11	12	23		
Haven't Decided Yet	my home is in a/an	rural area	6	2	0.035	8
		urban area	7	18		25
	Total	13	20	33		

DISCUSSION

Our results have shown that clinical fields remain the most popular career preferences among students. This popularity is equal in males and female students. This is consistent with report of Kumar R *et al*¹⁰ endorsing the greater interest of medical students towards clinical fields like medicine and surgery. Greater number of female students preferred teaching as a profession as compared to male students. This depicts a greater inclination of female students towards non-clinical jobs as compared to male students mainly due to the fact

that non-clinical careers are less stressful as indicated by Rosenstein AH *et al*.¹¹ This transition also suggests that since medical students are more prone to detrimental effects of stressful medical life, it is in their interest to opt for non-clinical careers as reported by Adam EF.¹² Health policy matters and pharmaceutical firms were a preferred non-clinical choice of male students.

15.63% students reported indecisiveness about their future. This indicates a hike in number of such students as previously indicated at 2.7% by Akhund S *et al*.¹³ More female were indecisive about their future career as compared to male students showing that they remain irresolute about their future aspiration. This can be related to report of Fiazallyas⁸ recording that social norms prevent female medical students from higher education.

Becoming a clinician was the preferred choice of majority of students belonging to rural background. Our results have shown that as many as 60.75% were aimed to become a clinician. This depicts that realization by students from rural background that rural communities experience more health related problems and there is a greater need of clinicians in such areas as indicated by Wilson NW.¹⁴ Clinical careers were also the preferred choice of more than half of students from urban background. Almost one fifth of students from urban background had reported being indecisive about their future. This is in contrast to students from rural areas where the number was one tenth depicting a greater degree of orientation among rural background students. In non-clinical careers, difference was in joining a pharmaceutical firm where no student from rural background reported so; in contrast to 4.58% urban background students. Almost equal percentage of students from rural and urban backgrounds reported aiming for teaching as career. Health policy making was a preferred choice of students from rural areas. Rural background students accounted for twice the number of urban background students in having health policy making as a non-clinical career choice.

Our results have shown that more female than males from urban background opted for clinical careers. This is in contrast with results of students belonging to rural areas where more male students were opting for clinical careers as compared to female students. Less number of females from rural areas opting for clinical careers can to negative impact of social norms on out-door working of females particularly in rural areas as indicated by IlyasF.⁸ Despite this, non-clinical careers such as

teaching remained preferred choice of rural background female students which are better tolerated in such areas. More female from urban background were indecisive about their future career. This is in contrast to results reported by rural background female students.

There was gender based difference in results among rural and urban background students while considering teaching as a career preference. More urban male from urban background and more females from rural background reported teaching as their preferred career choice.

Health policy making was a preferred choice of male student specially those belonging to rural areas. No student from rural background wanted to join pharmaceutical firm.

Our results have shown that with increasing academic levels, response of students changed greatly. There was decrease in number of indecisive students depicting that senior students were more oriented as compared to junior student. Results also showed that there was increase in number of students preferring for non-clinical professions such as teaching etc. with increase in academic level of students. This is consistent with report of Saigal P *et al*⁴ that students' career choice matures with increase in their professional experience and with increase in their knowledge regarding the subject thus coming across more interesting field.

CONCLUSION

Clinical careers remain the preferred choice of students. More female students are indecisive about their future. Students from rural areas prefer clinical jobs as compared to students from urban areas. Also students from urban background are more indecisive regarding their career preference. Among non-clinical careers, teaching is a preferred career for female students from rural areas.

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Correspondence:

Ahsan Rasool, Final year MBBS, Ayub Medical College,
Abbottabad-Pakistan
Cell: +92 301 525 1690
Email: ahsanrasool.dr@gmail.com