

Opting to Stay in the Pakistan or Abroad; A Cross Sectional Survey of Tow Public and Private Medical Colleges

SHEENA MUSTAFA¹, SADIA RASHID², NAJMA BANO SHAIKH³, SABA KHAN⁴, SAMINA AYAZ⁵, SHAZIA AFTAB⁶

¹Gynecologist, Dr. Ruth K. M. Pfau Civil Hospital Karachi

^{2,6}Associate Professor of Gynae and OBS, Jinnah Medical and dental Hospital Karachi

³Associate Professor of Gynae and OBS, LUMHS/Jamshoro

⁴Assistant Professor of gynae and OBS, JPMC Karachi

⁵Consultant Gynaecologist, Sindh Govt. Hospital Korangi Karachi

Corresponding author: Sheena Mustafa, Email: drsheena_memon@yahoo.com

ABSTRACT

Objective: To determine the reasons of opting to stay in the Pakistan or abroad between students of tow public and private medical colleges.

Materials and Methods: Descriptive cross-sectional, questionnaire-based study was conducted in a Private and Public sector medical college in Karachi from October to November 2018. A sample of 400 medical students 200 from each college, 40 students (20 males; 20 females) from each of first to final (5th) year batches separately were selected randomly. Study protocol was approved by the Ethical Review Committee of DUHS while permission for data collection on a questioner of 16 items was sought from authorities of both Medical Colleges. Data were entered & analyzed into SPSS version 26.

Results: The mean age of students was 22.18 ± 1.788 years. Father of 20.3% (n=81) and the mother of 12.8% (n=51) students were MBBS, or BDS and almost all of them were practicing. It was found that with the increasing age / class year preference of working in Pakistan (and UK) increased (Up to 1.5 times; p value < 0.380). Likewise; females prefer Pakistan, UK and Gulf countries more than males who had Pakistan and USA top preference to medicine career in the future (P value = 0.758). Although abroad preference was statically significant among private university student (P value = 0.001).

Conclusion: Private university medical students were more observed for opting the foreign countries mostly UK and USA compared to the government Medical University students. Financial Reward, life-Style and job Opportunities were observed the commonest reasons. The lack of career counselling and guideline results in health industry losing many future doctors every year as well as loss of potential resources on their training.

Keywords: Medical Education, Motivational factors, Emigration

INTRODUCTION

World's population especially of the developing countries is increasing at a rapid pace. With this emerges a problem of healthcare staff/doctors' shortage.¹ The problem tends to create a more serious and discordant picture in those countries from where there is the emigration of doctors like Pakistan. The USA, UK, Canada and Australia have been the beneficiaries of large-scale immigration of physicians over the past half century. The physician migration is not a new phenomenon but this brain drain leads to long term problems in health system of the contributing country.² This situation recently shows up in an estimated shortage is 17.4 million experienced professionals and 2.6 million doctors globally, with the greatest shortage in the high disease burden countries of South East Asia and African regions.³ Medicine has been regarded as one of the noblest professions throughout the human history. In recent times, choosing medical profession however; depends upon various factors such as interest in the medical field, job security, serve humankind, parental influence, social prestige etc. which geographically vary too much.^{4,5} Simultaneously; continuing medical profession and choosing a specialty is also affected by numerous factors.^{6,7} Doctor's live a rigorous life during and after their professional training much may even require as much as 80 hours work per week. For this it is imperative to have a high level of expectations (of a better salary, recognition and satisfied life) than other jobs. This affects their future scope and usually determined during their student life. High unemployment, training and postgraduate education

quality, overload of work and stressful environments in public sector universities, poor job prospects with the unfavorable salary structures, restricted opportunities of the career, poor status of the research culture, terrorism and bad security situation, sectarian killings and the harassment of doctors, and the favouritism culture are all important "push factors" that contribute to the brain drain of physicians from Pakistan.⁸ The increased migration of health professionals to wealthy countries is not a new phenomena, and it has been discussed in the literature.⁹ The understanding of prospective doctors' motivational factors is essential as it would derive a clearer picture regarding pretending discrepancy of doctor patient ratio in a country.¹⁰ In Pakistan there is very little exploratory research conducted on medical students thus assessing the health manpower and factors influencing their career preferences. The situation of manpower in healthcare industry has long-term consequences of a country. Although the migration of health-care professionals has got a lot of attention in recent years, the cause of this migration has yet to be adequately investigated in Pakistan.¹¹ Several studies demonstrated different reasons regarding country preference among medical students. The current study aimed to investigate the preference to stay in the Pakistan or abroad between students of tow public and private medical colleges.

MATERIAL AND METHODS

This descriptive cross-sectional, questionnaire-based study was conducted in Jinnah Medical & Dental College

(Private) and Dow University (Public) in Karachi from October to November 2018. A sample of 400 medical students 200 from each college, 40 students (20 males; 20 females) from each of first to final (5th) year batches separately were selected randomly. A questionnaire of 16 items was developed using earlier studies conducted elsewhere. The objectives of study were explained and reassured for the confidentiality of information with an informed verbal consent. Students of BDS (Dental Surgery) and who were not agreeing to participate in the study were excluded. Study protocol was approved by the Ethical Review Committee of DUHS while permission for data collection was sought from authorities of both Medical Colleges. All the data regarding age, mother and father educational level, preferred countries and the reasons collected on a pre-approved proforma. Data were entered & analyzed into SPSS version 26. Descriptive analysis was followed by application of chi-square test taking the P value <0.05 as significant. Chi-square test was applied to compare the outcome of Public and Private Medical College Students.

RESULTS

Participating students were enrolled in 1st through 5th year in either of the two medical colleges. Both male and female gender were equally presented in 40 participating students from each class. The mean age of students was 22.18 ± 1.788 years (Minimum 20 years and maximum 26 years). More than half of the students 211(52.7%) preferred the other countries, mostly UK and USA followed by Gulf, Australia and others, while 189(47.3%) preferred their country Pakistan. Furthermore, educational level of fathers and mothers of the students are shown in table.1

The financial Reward, life-Style and job opportunities were found the commonest causes for abroad practices. Tble.2

Table 1: Descriptive statistics of demographic characteristics of medical students. (n=400)

Educational status of Father		Frequency (%)
Average age of students		22.18±1.78 years
Father's education	MBBS	81 (20.3%)
	Engineering	92(23.0%)
	Less than college Level	28(7.0%)
	MA	63(15.8%)
	BDS	20(5.0%)
Mother's education	Other	116(29.0%)
	MBBS	51(12.8%)
	Engineer	22(5.5%)
	Less than College Level	74(18.5%)
	MA	87(21.8%)
Preferred countries	BDS	16(4.0%)
	Other	150(37.5%)
	Pakistan	189(47.3%)
	UK	72(18.0%)
	USA	75(18.8%)
	Gulf	38(9.5%)
Australia	19(4.8%)	
Others	07(1.8%)	

Table 2: Reason for preference to Pakistan or abroad for practice of medicine. (n=400)

Abroad (US, UK, Gulf, Aus.)	Reason	Pakistan
Frequency (%)		Frequency (%)
2(0.95%)	No Response	36(19.0%)
87(41.7%)	Financial Reward	24(12.7%)
46(21.80%)	Life-Style	39(20.6%)
5(2.37%)	Recognition/Fame	1(0.5%)
19(9.0%)	Teaching and Research	9(4.8%)
9(4.27%)	Role-Model	14(7.4%)
26(12.32%)	Job Opportunities	10(5.3%)
5(2.37%)	Social Service	37(19%)
6(2.84%)	Private Practice	7(3.7%)
5(2.37%)	Other	13(6.9%)
210(100.0%)	Total	190(100%)

Table 3: Preference to Pakistan or abroad for practice according to age, gender and private/ public university. (n=400)

Age in years	Preferred country to practice						Total (n)	Statistical analysis	
	Pakistan	UK	USA	Gulf	Australia	Others			
20	35 41.7%	13 15.5%	19 22.6%	8 9.5%	8 9.5%	1 1.2%	84 100.0%	Chi square test statistic = 31.734 P- value = 0.380	
21	47 49.0%	14 14.6%	19 19.8%	9 9.4%	3 3.1%	4 4.2%	96 100.0%		
22	30 51.7%	13 22.4%	7 12.1%	5 8.6%	3 5.2%	0 0.0%	58 100.0%		
23	19 35.8%	13 24.5%	14 26.4%	5 9.4%	1 1.9%	1 1.9%	53 100.0%		
24	27 43.5%	13 21.0%	13 21.0%	7 11.3%	2 3.2%	0 0.0%	62 100.0%		
25	19 67.9%	2 7.1%	2 7.1%	3 10.7%	1 3.6%	1 3.6%	28 100.0%		
26	12 63.2%	4 21.1%	1 5.3%	1 5.3%	1 5.3%	0 0.0%	19 100.0%		
Total	189 47.3%	72 18.0%	75 18.8%	38 9.5%	19 4.8%	7 1.8%	400 100.0%		
Gender									
Male	93 46.5%	35 17.5%	41 20.5%	18 9.0%	8 4.0%	5 2.5%	200 100.0%		Chi square test statistic = 2.621 P =0.758
Female	96 48.0%	37 18.5%	34 17.0%	20 10.0%	11 5.5%	2 1.0%	200 100.0%		
University									
Dow University (Public)	113 56.5%	26 13.0%	31 15.5%	12 6.0%	14 7.0%	4 2.0%	200 100.0%	Chi square test statistic = 24.616 P =0.001	
JMCH (Private)	76 38.0%	46 23.0%	44 22.0%	26 13.0%	5 2.5%	3 1.5%	200 100.0%		

Preferred countries to practice were statistically insignificant according to the age and gender of the students p-values were quite insignificant. Although abroad preference was statically significant among private university student (P=0.001). Table.3

DISCUSSION

It was interesting to note that majority of medical students like to live and practice medicine in Pakistan, which was due to eastern culture life-style and financial soundness. UK, USA were next common preferred places for future. However, these were due to modern lifestyle; better income and more job opportunities. Other research undertaken in Pakistan has yielded similar results. According to a study, the majority of fifth-year students at a private medical institution in Karachi, Pakistan, preferred to work in their country.^{12,13} Another argued that aspirations of a better wage, better training, a mark of achievement, and weak government policies drove fresh medical graduates from Pakistan to seek employment in other wealthy countries.¹⁴ Other developing countries are following a similar pattern. A recent study, such as one conducted in Ireland, found that financial advantages were a statistically significant influence in male students choosing a career over female students; females rather preferred serving ill humanity. Studies from abroad also found effect of gender on preference and continuation of medical career.¹⁵ In this study More than half of the students 211(52.7%) preferred the other countries, the UK and USA were mostly preferred followed by Gulf, Australia and others. These findings were almost similar to the study of Hossain N et al⁸ as; the more than 50% of the study subjects having an interest in traveling abroad and the United States of America (USA), particularly for males, was the most popular destination for migration, followed by Canada, United Kingdom and Middle East. On other hand Imran N et al⁹ reported comparable findings as the 60.4% study subjects planned to study overseas for a specialty (54.9 percent) or the subspecialty (5.5 percent) and the most popular destinations were the USA and UK. Furthermore, they stated that 14.2% expected to return to Pakistan right after training, a substantial number (10%) never intended to return or wished to stay overseas temporarily (37%).⁹

In this study also assessed the medical students' future goals, specialty choice and country preference and the financial Reward, life-Style and job opportunities were seen in the commonest causes for abroad practices. Although in the study of Afzal S et al¹⁶ demonstrated that the disparities in working circumstances, compensation, lack of promotion chances, bad living standards, wanting to gain more experience, professional growth, family background, and household income are all "push and pull" factors for the migration. In the study of Hossain N et al⁸ reported that the biggest pull factors were higher-quality postgraduate education abroad and economic possibilities, whereas the significant push factors included Pakistan's standard health system, insufficient pay scale, safety, and growing religious intolerance. The strength of current study is that it has included students from both the public and private medical college, which the previous studies did

not. The limitation of this study was possible selection bias as the sampling was consecutive therefore; study findings cannot be generalized. Exploration factors influencing choices of countries require further research in future studies to guide the policy makers to improve the current medical infrastructure, which culminates in balance between demand and supply. In the current era of coronavirus (Covid-19) we need to shift the paradigm of our medical education to emphasize more on the Public Health. The intention of a considerable number of health professionals to relocate abroad is concerning since it threatens Pakistan's ability to address the health care demands of its own people.⁹ As migrant movements are expected to increase in the coming years, policy actions are required to mitigate the consequences on the local healthcare system.^{9,17}

CONCLUSION

Private university medical students were more observed for opting the foreign countries mostly UK and USA compared to the government Medical University students. Financial Reward, life-Style and job Opportunities were observed the commonest reasons. The lack of career counseling and guideline results in health industry losing many future doctors every year as well as loss of potential resources on their training.

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