

Factors Responsible for Migration and Training Abroad of Medical Students

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Abstract

Objective: There is an increasing trend among medical students of Pakistan to go abroad for postgraduate training and to settle there, though the country itself is suffering from the shortage of doctors. This research studies the reasons for migration abroad as well as the factors and gender differences related to this phenomenon of medical students and fresh graduates of Dow Medical College.

Method: This study was conducted using a convenience sampling method with an enrollment of 316 students and fresh graduates, out of which (72%) comprised of females and (28%) of males. The data was collected through a structured questionnaire.

Result: There was not a marked difference in response to our main question i.e., 50.6% of students chose to migrate abroad while 49.4% wanted to continue their practice in the home country. However, regarding the reasons for migration, variations were noted in replies. For those who chose to migrate abroad, the most compelling factor came out to be the good quality of training abroad (78.1%), while for those who chose to stay, the desire to settle in their home country turned out to be the most important factor (66.7%).

Conclusion: This study concluded that the percentage of medical students who want to go abroad is slightly higher than those who don't want to. Also, more males are willing to go abroad than females.

Keywords: Career choice; Medical students; Migration; Pakistan

Introduction

Pakistan has a total population of 222 million is the fifth most populous country in the world, a large population requires a greater number of resources and facilities and so does Pakistan [1] According to the recommendation by WHO, the doctor ratio per patient is 2.5. However, in Pakistan, this ratio is 1.4 [2]. As the demands on the health system rapidly rising worldwide, demands on their human resources have also been growing [3]. Many high-income countries responded to them by recruiting health care workers mainly from low-income countries, resulting in a large wave of migration [4]. The sufferings of Pakistan in the health care system are not new. The main factors contributing to this tragic condition mainly include the dearth of quality health professionals.

Pakistan produces approximately 4000 medical graduates per annum which is a commendable figure, being a developing country [5]. Half of these prefer going abroad for better quality and never return. In 2015, around 15813 physicians were doing practice abroad. As estimated in the USA, ¼ of the physicians are international medical graduates, of which the topmost sources are India, the Philippines, and Pakistan [6,7]. Hence, the country has been facing the wrath of migration of its bright minds to HIC (high-income countries) like

the United Kingdom, the United States, Canada, and Australia in the recent past years. Being promised a better future, profound scarcity of doctors in affluent countries, and affordability (favorable recruitment policies and work permit) prove to be the pulling factors for these young minds [8].

Nevertheless, the migration phenomenon is not restricted to Pakistan alone. The movement of doctors began in the 1950s 1960s and 1970s as a post-colonial phenomenon common to India, Sri Lanka, and Pakistan and later expanded in Bangladesh and Nepal [9]. In research, conducted in 2014, final year medical students emphasized international training compared to the early years [10].

Although migration is one of the fundamental humans rights, its increasing practice among medical field practitioners poses a potential threat of destroying the basic standards of health care to the population [8] as the migration of The purpose of this study is to determine the career planning and desire for professional placements of the students and fresh graduates of Dow medical college. We aim to evaluate the increasing number of students going abroad for postgraduate training and the reasons for their decision to do so. In this way, depending on the results we will also be able to propose the required measures that would support to decrease the process of migration and convince the ingenious minds to serve their nation.

Methodology

This is a cross-sectional study that was conducted at Dow medical college, among medical students using a structured questionnaire. The students were also reached through online forms.

Study population: The research was conducted among the medical students of 2nd year to final year, also including the fresh graduates of Dow medical college. Estimating each batch comprises 350 students, therefore a total of 1750 students were included in the study.

Sample size: The sample size was calculated using the Check market online sample size calculator. Considering our population size as 1750 people (approximately 1400 medical students and 350 fresh medical graduates), we decided upon the margin of error 5% and our confidence level 95% to determine the sample size. The number of respondents as ciphered by the calculator was 316.

Sampling technique: Convenience sampling method was chosen based on inclusion and exclusion criteria involving all students who are willing to fill in the questionnaire and participate in research.

Data collection procedure: The data for this study was collected through a structured questionnaire which includes questions from the study conducted by Nadir Ali Syed in 2008(7). The researchers included some additional questions as per the requirements of our social and cultural norms. Data was collected in May 2019 after the approval of IRB, DUHS. (Institutional review board, Dow University of Health Sciences)

Research tool: Questionnaire

Inclusion criteria: The study included all the medical students from 2nd to year final year and fresh medical graduates of Dow Medical College in Karachi.

Exclusion criteria: The study will not include the medical students from 1st year and any other government or private medical colleges in Karachi.

Table-1 Overall response and demographic characteristics of the participants

Characteristics	Frequency	Percentage
Age (mean ±SD)	21.13 ± 1.598	
Gender		
Female	228	72.2
Male	88	27.8
Plan of training abroad		
Yes	160	50.6
No	156	49.4

Results

A total of 316 questionnaires were filled. The mean age of the participants was 21 with a higher proportion of respondents aged 22 and below. The number of students from 2nd, 3rd, 4th, 5th year and fresh graduates was 82, 92, 85, 35, and 22 respectively. Most of the respondents were female medical students i.e., 72% of the total participants, among this 45.6% of the females chose migration

Table 2- Factors responsible for students staying back in Pakistan or moving abroad

REASONS FOR STUDENTS STAYING BACK IN PAKISTAN			
Total Number of respondents (156)	Disagree	Neutral	Agree
Desire to settle in Pakistan	9.6%	23.7%	66.7%
Desire to serve the country	10.9%	25.6%	63.5%
Quality of training in Pakistan	19.2%	56.4%	24.4%
Social and cultural aspects in Pakistan	11.5%	45.5%	42.9%
Professional satisfaction in Pakistan	21.2%	44.9%	34%
Family ties	20.5%	21.8%	57.7%
Parents pressure	52.6%	25%	22.4%
Adequate alternative financial support	28.8%	44.2%	26.9%
Non-affordability	30.8%	37.8%	31.4%
Lack of career counseling regarding studying abroad	35.3%	39.1%	25.6%
Fear of ethical hatred abroad	41%	36.5%	22.4%
REASONS FOR MIGRATION ABROAD			
Total Number of respondents(160)	Disagree	Neutral	Agree
Good quality of training abroad	4.4%	17.5%	78.1%
Gain international experience	6.3%	17.5%	76.3%
Salary during training abroad	11.3%	34.4%	54.4%
Better economic prospects back home after training abroad	14.4%	29.4%	56.3%
Safety and security abroad	15%	26.3%	58.8%
Desire to settle abroad	41.9%	31.9%	26.3%
Peer pressure	72.5%	23.8%	3.8%
Relatives settled abroad	60.6%	23.1%	16.3%
Parents pressure	73.8%	14.4%	11.9%
Abuse and harassment at workplace in Pakistan	40%	36.9%	23.1%
Accompanying or moving with a spouse	43.1%	23.1%	33.8%

Career Preference

In response to our main question, “Do you plan to continue your medical training abroad?” the results were borderline. 49.4% responded with a “NO” while 50.6% of the medical students chose to migrate for the sake of their medical training.

Factors Responsible for Migration:

According to 78.1% of respondents, good quality of training abroad proved to be the leading factor for moving abroad. The second most compelling factor turned out to be 'gaining international; experience' with 76.3% replies.

Factors Responsible for Students Staying Back in Pakistan:

Among the factors that bound the participants to continue their training in Pakistan included 'Desire to settle in Pakistan' as the foremost reason with 66.7% replies.

The second most significant factor with 63.5% of respondents, was the desire to serve the country.

Discussion

Pakistan produces a great number of doctors, but many of them choose to migrate abroad to pursue further education and continue their careers. This creates a shortage of doctors to the general public and a heavy load on the already suffering health care system. The current study figures out factors responsible for this migration and the related gender differences so that these factors can be evaluated in order to control the 'brain drain'. We have found that overall, 50.6% of medical students are keen to go abroad for further training while 49.4 percent are willing to continue their training in Pakistan.

These results are somewhat in line with the previous research conducted in the same medical college in 2015 in which 52.9 % of participants replied in favor of and 44.5% answered against migrating respectively [6]. These results are also supported by research conducted at Ziauddin Medical University in 2006 where 51.7% of final year medical students wanted to continue their practice in the home country [12]. On the Contrary, results were quite different when similar research was conducted in AKU, where 95% of students had definite plans of continuing the training outside the country [7].

In our study, 37.8% of students replied to a lack of affordability as a reason for not choosing to go abroad. We found that among those students, who wish to go abroad 44.3% of students were having an average monthly income of 60-100K while 55.12% of the same income range do not plan to continue for training abroad.

Among our responders, 228 were females and 88 males. Out of them, 45.6% of females and 63.6% of males choose migration. Therefore, a marked difference in priority was observed among male and female students.

In Pakistan, the number of registered doctors is 108062 which makes only one doctor for 1404 patients; hence the country is already suffering from a shortage of doctors [13]. In this instance migration, and particularly the migration of male doctors will intensify the shortage. Although our study results reflected a somewhat better inclination of students to stay in Pakistan, as opposed to the previous research conducted in 2011 where 60% of participants intended to go abroad [8], the current physician to patient ratio is still low, and so the factors influencing student's migration still need to be considered. Still, in a country like Pakistan, which ranked third among low-income countries in exporting the physicians [14], indications with such results can be the flame of hope for scintillating the future of medical sciences here.

According to the results obtained in our study, the important pull factors encouraging healthcare professionals to continue their careers in Pakistan included 'social and cultural aspects'

as evidenced by 42.9 % out of 49.4% of participants strongly favoring this factor. Besides this, 'desire to serve the country' and 'settling in Pakistan' also came as responses by 66.7% of participants. Similar factors were noted as important pull determinants in a research conducted in one of the private medical colleges where 73% of newly inducted medical students preferred staying at home country [15].

On the other hand, the two most unfavorable factors hindering the doctors from training in Pakistan appear to be 'zero empathy' and 'lack of facilities for both fellow doctors and patients'. In this regard, the results were 100%, and all respondents considered it a foremost reason. 'Poor salary and doctor security' contributed as the main factor in 50% of cases for going abroad because doctors in Pakistan are underpaid compared to their working hours and the expertise and skill required in their setup. These results are homogenous with one of the similar researches conducted in Pakistan which pinpointed low pay, violence, and job insecurity as some of the important factors (16). These push factors have no border restrictions as graduates from other developing countries like Nepal, India, and Bangladesh, etc. also contemplate these factors i.e., poor salary structures, poor quality of training, and poor work environment as the cardinal factors for leaving their mother country [17]. The thought of gaining International experience was supported by 76.3% of students. Comparing our study to earlier ones, although the ratio has decreased, brain drain is still a major problem for a third world country like; Pakistan where after spending as much as 35,000 US Dollars on medical students [8], no significant positive outcome related to improvement in health sufferings is seen.

Conclusion

The percentage of medical students who want to go abroad is greater than those who are against it with more males choosing migration as compared to females further deteriorating the health care system. Hence there is a dire need for promoting reforms by the concerned health authorities to stop this migration for the support of already fragile healthcare system.

Recommendations

The history of the Healthcare sector in Pakistan shows that it has never been given its true allocation of funds in the budget. It is high time that the political heirs take some bold steps in this regard. However, this is not only a government responsibility, the medical workforce working in-country should also mobilize and focus their energies on addressing all factors that lead to unwanted migration of their bright students.

References

1. <http://www.worldometers.info/world-population/pakistan-population>.
2. <https://bigthink.com/strange-maps/185-the-patients-per-doctor-map-of-the-world>.
3. Wu Q, Zhao L, Ye X-C. Shortage of healthcare professionals in China. *BMJ*. 2016; 354: i4860.
4. Aluttis C, Bishaw T, Frank MW. The workforce for health in a globalized context--global shortages and international migration. *Glob Health Action*. 2014; 7: 23611-23611
5. Imran N, Azeem Z, Haider II, Bhatti MR. Brain Drain: A Harsh Reality International; Migration of Pakistani Medical Graduates. *J Postgrad Med Inst* 2012; 26(1): 67-72.
6. Sheikh, et al. Physician migration at its roots: a study on the factors contributing towards a career choice abroad among students at a medical school in Pakistan. *Globali-*

- zation and Health 2012; 8: 43.
7. Nadir Ali Syed, Farhad Khimani, Marie Andrades, Syeda Kausar Ali, Rose Paul. Reasons for migration among medical students from Karachi, Medical Education 2008; 42: 61–68.
 8. Nazli Hossain, Nusrat Shah, Tahira Shah, Sidra Binte Lateef. Physicians' Migration: Perceptions of Pakistani Medical Students. Journal of the College of Physicians and Surgeons Pakistan 2016; 26(8): 696-701.
 9. B V Adkoli, Migration of Health Workers: Perspectives from Bangladesh, India, Nepal, Pakistan, and Sri Lanka, Regional Health Forum, 2006; 10.
 10. David M Silvestri. Medical and nursing students' intentions to work abroad or in rural areas: a cross-sectional survey in Asia and Africa, Bulletin of the World Health Organization; Type: Research, Article ID: BLT.14.136051.
 11. Crisp N, Chen L. Global Supply of Health Professionals. New England Journal of Medicine. 2014; 370(10): 950–957
 12. Huda N, Yousuf S. Career preference of final year medical students of Ziauddin Medical University. Education for Health: Change in Learning & Practice. 2006;19(3).
 13. Iltaf, Samina & Siraj, M. Contemporary job trends among medical students in Pakistan. Medical Forum Monthly 2014; 25(10): 26-30.
 14. Imran N, Azeem Z, Haider II, Amjad N, Bhatti MR. Brain Drain: Post Graduation Migration Intentions and the influencing factors among Medical Graduates from Lahore, Pakistan. BMC Res Notes. 2011; 4: 417.
 15. Sohail A Rasool, Shahid Hasan. Early career intentions of newly inducted medical students in a private medical college in Pakistan; Gomal Journal of Medical Sciences oct-dec 2015; 13(4).
 16. Azeem S Sheikh, Samira Yahya. Medical training initiative scheme by UK:What is its worth?, Pak J Med Sci 2011; 27(3).
 17. SM Mosleuddin Ahmed, Md Anwarul Azim; Career choices among medical students in Bangladesh; Advances in Medical Education and Practice 2011; 251(58).