

# BRAIN DRAIN: DOCTORS' CAREER INTENTIONS AND ASSOCIATED FACTORS, A QUESTIONNAIRE SURVEY IN PAKISTAN

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## ABSTRACT

**Objective:** To describe Pakistani doctors' career intentions, future practice locations and their satisfaction with work conditions in home country and also, the factors behind leaving and staying in the country.

**Methodology:** This cross sectional study was conducted on 132 junior doctors of POF Hospital and Wah Medical College, Wah Cantt during November-December, 2015. The self-administered questionnaire was designed after extensive literature review and was distributed. Data was analyzed using SPSS version 19 and p value <0.05 was considered statistically significant.

**Results:** Majority of the participants intended to seek postgraduate training in different specialties of medical field (81.8%). International careers were anticipated by 27.2% of the participants, and UK, Middle East and US was found to be their preferred choices. 72.7% were not satisfied with working conditions in home country. 40.9% reported less likelihood of returning back to Pakistan if opportunity is given to go abroad. Major factors that stood out as reasons for the intention to emigrate included; doctors being paid a high salary, higher educational opportunities, good working conditions abroad and structured career path.

**Conclusion:** Low expected monthly salary, stressful working environment and lack of professional growth were the most important reasons of physician dissatisfaction and migration from developing countries to developed ones.

**Key Words:** Doctors, Career intentions, Work satisfaction, Brain drain

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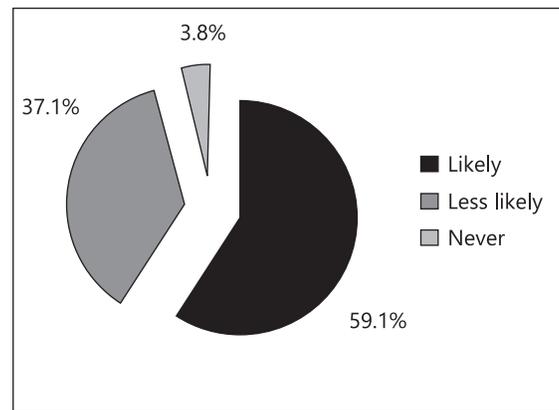
## INTRODUCTION

Medicine is considered to be a noble profession in our society. Doctor's undergo five years of rigorous undergraduate training in Pakistan, which determines their success in careers. Making career isn't that simple as after undergraduate training period, doctors have to do postgraduate training requiring eighty working hours per week. So it is not unusual for the doctors to have high expectations, most of which revolve around high income and a better quality of life<sup>1</sup>.

The increasing rates of migration of doctors from underdeveloped countries to more advanced countries, called "brain drain" has been recognized as a major issue for both the recipient and donor countries. Literature has highlighted four countries as major recipients which includes Australia, Canada, United Kingdom and United States of America where almost 25% of the doctors are international medical graduates (IMG). Pakistan is one of the leading sources of these international medical graduates<sup>2</sup>. Almost all underdeveloped coun-

tries are challenged by worker shortage, salary issues, mal-distribution and unsatisfactory work conditions<sup>3</sup>. Certain push factors of donor countries and pull factors of recipient countries have been found. The two most important push factors in Pakistan were found to be low salary and lack of quality training in home country<sup>4</sup>. Pull factors of the recipient countries such as better training opportunities, higher standards of living, good practice conditions and quality research conditions have been found to be very important<sup>5</sup>. Annually 1150 doctors emigrate and almost 570 stop working for different reasons. Future anticipated shortfall for Pakistan range between 57,900 and 451,102 doctors in 2020<sup>6</sup>, which can have serious consequences. Pakistan being a developing country is already trying to cope with a burden of various serious diseases and loss of intellectual doctors and educational investment will put enormous pressure on already vulnerable system.

The subject of economic migration of doctors has received intensive attention, yet little is known about

**Figure 1: Likelihood of returning back to home country after working abroad**

such migration from Pakistan<sup>7</sup>. This study was conducted to explore doctors' career intentions, future practice locations and their satisfaction with work conditions in home country and also to determine the factors behind leaving and staying in the country.

## METHODOLOGY

The study was conducted at Wah Medical College and POF Hospital, Wah Cantt during November-December, 2015. The population included in the study was house officers, junior medical officers and post graduate trainees. A well-structured, self-administered questionnaire survey was developed after extensive literature review and distributed to those doctors only who were interested to participate in the study. Verbal informed consent was taken. The study included 132 participants who completely answered questionnaire surveys that were distributed to them. The questionnaire was divided into three sections. Section 1 collected doctor's demographic variables which included gender, marital status, perceived social status and designation. Section 2 was about their career choice, preferred area to work as a doctor, satisfaction for work conditions in country and the factors influencing their satisfaction/dissatisfaction, and their intention to return or not to Pakistan if opportunity is given to go abroad. Section 3 was about the factors to stay or leave the home country. The questionnaire was approved by institutional ethics committee.

All questionnaires were analyzed using SPSS version 19. Descriptive statistics were applied and chi square test was used to examine differences in demographic variables. P value <0.05 was considered statistically significant.

## RESULTS

Out of 132 study participants, 40.9% were house officers, 34.1% were postgraduate trainees and 25% were junior medical officers. Majority were females (75.8%) with almost half being single (56.1%). Most of the par-

ticipants belonged to a middle class family (87.9%).

One hundred and eight participants (81.8%) planned to seek postgraduate training in different specialties of medical field, 8.3% didn't plan to do so while 9.8% were not clear about their choice of specialty. When participants' intention to leave the health care sector was evaluated, a significant percentage (9.1%) was found to be interested to leave the health care sector and join either CSS, business or journalism as their future career because of high income, better way of living and interest.

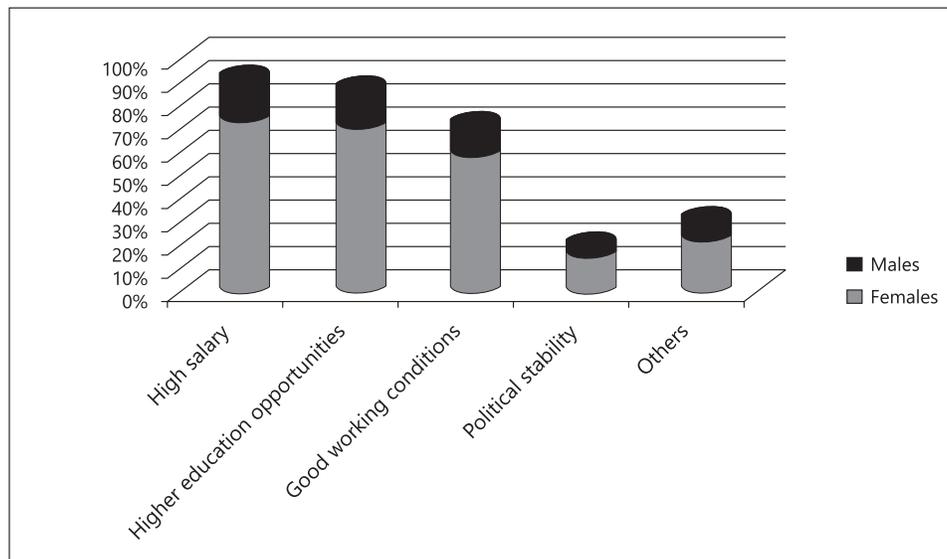
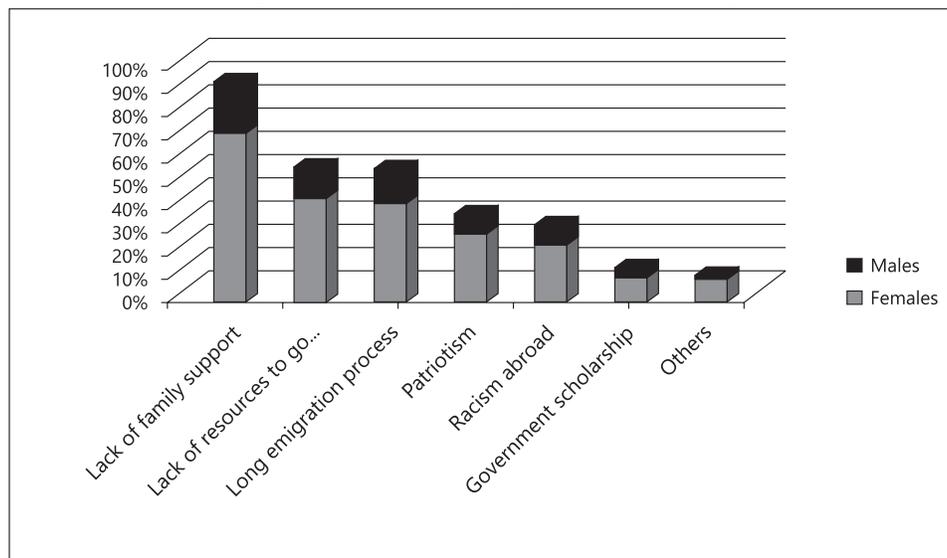
Out of 132 participants, 72.8% wanted to peruse their career in Pakistan with almost three fourth of them intended to work in urban areas of home country (65.2%). International careers were anticipated by 27.2% of the participants, whereas UK, Middle East and US was found to be their preferred choice.

Majority of the participants (72.7%) were not satisfied with work conditions in the home country. Low expected monthly salary, stressful working environment and lack of professional growth were the most important reasons of dissatisfaction (>70%). Inadequate hospital supplies were also cited as factors for dissatisfaction amongst few of the participants.

59.1% participants reported high likelihood of returning back to Pakistan if opportunity would be given to go abroad whereas a significant percentage (40.9%) were less likely or never wanted to return back to the home country (figure 1).

Chi square analysis between demographic variables (gender, marital status, perceived social status and designation) and career choice or preferred area to work as a doctor showed no association between them ( $p > 0.05$ ).

In our study the major pull factors to emigrate abroad were high salary, higher educational opportunities, good working conditions and structured career path. However, political instability contributed least to the decision of participants to emigrate (figure 2). No significant difference between gender and factors to

**Figure 2: Factors to leave the home country****Figure 3: Factors to stay in home country**

leave the country was found in our study ( $p > 0.05$ ).

Lack of family support to go abroad was top rated by majority of the participants as the reason to stay in Pakistan, followed by lack of resources to go abroad, long emigration process, patriotism, racism abroad, government scholarship and others (figure 3). No association between gender and factors to stay in home country was found ( $p > 0.05$ ).

## DISCUSSION

Majority of the participants planned to pursue post graduate training in our study (81.8%). These values were slightly less than the results of Subba et al where 99.2% of the participants had planned to seek post-

graduate training<sup>7</sup>.

We found in our study that 27.2% of the participants wanted to pursue their career abroad. These results were in contrast to the study done in King Edward Medical University (KEMU) at Lahore (2011)<sup>8</sup>. Whereas in a survey conducted on final year Indian medical schools (2004)<sup>9</sup> found that almost 60% of the participants intended to go abroad. Similarly this percentage was far less than that reported in two surveys from Karachi (95% and 65%)<sup>4</sup>, a survey from Lebanon (96%)<sup>10</sup>, and South Africa (50%)<sup>11</sup>. In our opinion, difference may be because the maximum participants in our study belonged to a middle class family and financial constraints are an important reason to stay in country.

The most favorite target countries to emigrate were UK, Middle east and US. The same results were found when compared with data of other studies conducted in Pakistan<sup>4</sup>, Sub-Saharan Africa<sup>12</sup>, Uganda<sup>13</sup> and India<sup>14</sup>. The reason behind this is the fact that these countries have policies which attract the doctors to settle there either temporarily or permanently.

The highly rated reasons for dissatisfaction of the participants to work in the home country were low expected salary and stressful working conditions, similar to the studies conducted in other developing countries<sup>10,12-14</sup>. Previous studies have already highlighted that higher migration rates have been associated with job dissatisfaction.

Among the reasons of pursuing career abroad, maximum participants mentioned high salary followed by higher educational opportunities and good working conditions as a reason to work abroad. Joško et al and Labugo et al have done studies which found greater financial rewards as significant factor for doctors migration<sup>15,16</sup>. Similarly, many other studies mentioned career advancement opportunities and improved working conditions as a push factor<sup>1,4,17</sup>. These results were in contrast to the push factors for the South African physicians who mentioned insecurity, high levels of crime, and racial tension as important determinants of migration instead of salary and working conditions<sup>18</sup>. Push factors found in Ghana and Nigeria were political instability and poor standards of living in home country<sup>19</sup>.

The reality is that everyone wants to migrate to a country where higher standards of living and better job opportunities have been provided. So there is a dire need to improve the standards being provided to the doctors to make them stay in their own country.

Amongst the reasons to stay in country, lack of family support was the most common reason in our study, followed by lack of resources to go abroad and long emigration process. Thus, the doctors who are suffering from financial constraints are compelled to stay in their home country unwillingly and they may also migrate if they get the opportunities to move.

As migration has increasingly been a topic of human rights discussions now a days, so it is not ethical to discourage doctors from migration from countries which don't provide them better quality of life in terms of living and job opportunities but the point to be highlighted is that these underdeveloped countries will be deprived of their own educational investment and will suffer more and more as a result of shortage of work force.

## CONCLUSION

Low expected monthly salary, stressful working envi-

ronment and lack of professional growth were the most important reasons of physician dissatisfaction and migration from developing countries to developed ones.

## RECOMMENDATIONS

The increasing rates of migration of doctors from underdeveloped countries to more advanced countries may be detrimental to the global health systems. Timely intervention should be considered from the concerned authorities regarding measures to reduce this brain drain.

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### CONTRIBUTORS

IS conceived the idea, planned the study, and drafted the manuscript. MH helped acquisition of data and did statistical analysis and critically revised the manuscript. All authors contributed significantly to the submitted manuscript.