

# Contemporary Job Trends Among Medical Students in Pakistan

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## ABSTRACT

**Objective:** The purpose of this study was to determine the career preferences of medical students and to identify differences between male and female medical students. These results are helpful in understanding current thinking of medical students and provision of health for all and designing future health policies of the country.

**Study Design:** Cross-sectional study

**Place and Duration of Study:** This study was conducted at Islamic International Medical College Trust (IIMCT), Rawalpindi from January 2014 to April 2014.

**Materials and Methods:** This study was performed at Islamic International Medical College Trust (IIMCT) including 100 students from the first year and 100 students of final year MBBS. The College is a private medical school located in Rawalpindi. Inclusion criteria: All students of 1st year and final year MBBS. Exclusion criteria: Incompletely filled questionnaire excluded from the study

**Results:** Socio demographic: Response rate was 92.5% with 185 questionnaires out of 200 completed and returned. Mean age of the respondents was 21.5 years, ranging between 20 and 25 years.

One hundred eleven (111) (60 %) respondents came from major cities, eighteen (18) (9.7%) lived abroad, whereas 21 (11.4%) came from rural or semi-urban areas of Pakistan. In our sample a large proportion of the students were females.

**Location of practice:** Most of the students preferring to settle in an urban setting. Majority of students want to do post graduation, very few opted for general practice and one third thinking of abroad for post graduation and only a few want to locate their practice in rural areas.

**Conclusion:** Medical graduates prefer clinical specializations over general practice as career. Strategies need to be planned by public and private sector and implemented to stop the brain drain and retain the medical personnel to provide effective health care for all including rural areas.

**Key Words:** medical students, career choices, general practice, post graduation, rural areas.

## INTRODUCTION

Medicine was traditionally considered a male dominated field. The situation has reversed itself and now women form the majority of the medical student body all over the world.<sup>(1-12)</sup>

In Pakistan, same trend is being reflected and vast majority of the female physicians have given up their careers soon after graduation. Major percent of enrolment in medical colleges in Pakistan is females now. Only a few percent actually practice in any field after graduation.<sup>(13)</sup> Today, there are not enough doctors to staff rural health centers and basic health units, which are small clinics that are supposed to fill the gap in the countryside where hospitals do not exist. Balochistan, Gilgit-Baltistan and other conflict zones in the country are also short of medical professionals. The number of registered doctors is 108, 062 while there is one doctor for 1404 person.<sup>(14)</sup>

In many families the prevalent trend is to become a doctor solely to get the title and status. Parents believe that their daughters would get better suitors if they are doctors. Women are not expected to be the head of a family or the bread earner therefore the drive to work progress and attain a better socio economic status is

missing in female physicians. The obvious outcome is that they are not keen to practice medicine afterwards.<sup>(15)</sup>

The private medical colleges in Pakistan are only worried about making a profit instead of ensuring adequate healthcare delivery. "It has become a status symbol for parents to enroll their daughters at private medical colleges, as it makes it easier for them to find a future spouse, it is generally presumed that a large number of girls leave their profession and become housewives.<sup>(15)</sup> These young women graduate but are then reluctant to work in rural areas. They don't even like doing night duty.

That is why female doctors do not appear to be so enthusiastic and motivated to pursue their career in terms described above. In Pakistan girls succeed to get into medical colleges through open merit and in many medical colleges girls are equal if not more in number. Moreover, higher education in public institutions is almost free. Apart from this girls enjoy the privilege of girls' only medical colleges as well. Hence, there are better chances for girls to get into medical colleges than boys; still we do not find more lady doctors than male doctors in hospitals and clinics. It is a difficult challenge both for governments and human resource

management agencies, which look it as total waste of money, time and effort that many women after completing their MBBS degree do not work at all, neither at any public institution nor at any private organization. Pakistan is already ridden with women and child health issues, hence wasting of such an important human resource can never be justified where we are experiencing a shortage of 70000 doctors in the country.<sup>(16)</sup>

The young men are not attracted to the medical profession anymore as women have traditionally outperformed them in academics. They are also worried about financial uncertainty as government healthcare jobs do not have the safety net of salary and promotion rules. “When they graduate, they [feel that they] are far behind their colleagues who choose commerce or any other field. It is no secret that male doctors were moving aboard for better job prospects<sup>(15)</sup>” The Middle East and other countries do not need to spend money to produce their own doctors, “as they are getting them from our country.”

Consequently, studying the process of career choices can provide important information to help in educational planning and administration, assign priorities and plan for provision of proper health care. “Career counseling” as a specialty area has been recognized since the early 1980s with the establishment of career counseling competencies and credentials.<sup>(17)</sup> Thus this study was undertaken to determine the career preferences of medical students and to identify differences between male and female medical students. The results may be helpful in designing policies of the country.

**MATERIALS AND METHODS**

A cross-sectional study was performed at IIMCT including 100 students from the first year and 100 students of final yr MBBS. The College is a private medical school located in Rawalpindi. It was founded in 1997. Each year, the college has the capacity to enroll 100 students following an entrance test examination. Male and female students are instructed in same campus. The college is using a problem based learning (PBL) curriculum in which medical students are trained in a 5-year curriculum for degrees in Bachelor of Medicine and Bachelor of Surgery (MBBS). The main objective of this training program is to educate and train future doctors and surgeons who will render effective and exemplary health care. Inclusion criteria: All students of 1st yr and final yr MBBS

Exclusion criteria: Incompletely filled questionnaire excluded from the study

**Questionnaire:** The questionnaire comprised of queries regarding demographic details, want to choose general practice or post graduation, settle in Pakistan or abroad.

The questionnaire only included the gender of the participant, thus ensuring them to remain anonymous. The questionnaire along with the protocol of the study was approved by the Institutional Ethical Review Committee of Riphah International University of Pakistan. No conflict of interests was encountered in the entire study period. No funding was obtained from any sources.

Descriptive analysis was done to see the socio-demographic characteristics and responses of medical students.

**RESULTS**

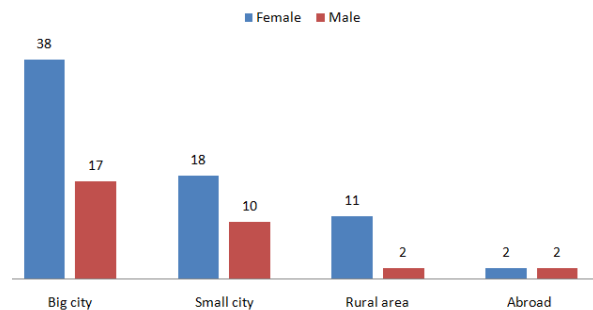
**Socio demographic:** Response rate was 92.5% with 185 questionnaires out of 200 completed and returned. Mean age of the respondents was 21.5 years, ranging between 20 and 25 years.

One hundred eleven (111) (60 %) respondents came from major cities, eighteen (18) (9.7%) lived abroad, whereas 21 (11.4%) came from rural or semi-urban areas of Pakistan. In our sample a large proportion of the students were females as shown in table 1

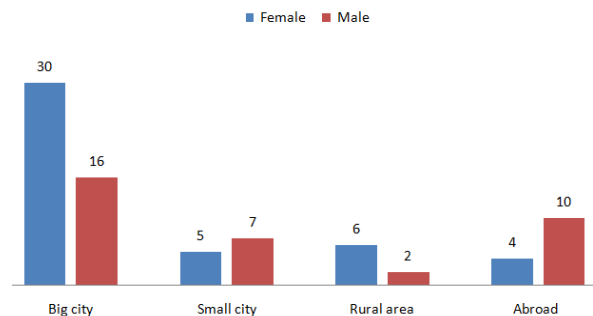
**Location of practice:** Most of the students preferring to settle in an urban setting. Majority of students want to do post graduation, a few opted for general practice and one third will go abroad for post graduation and only a few want to locate their practice in rural areas as shown in figures 1-4.

**Table No.1: Demographics in terms of gender**

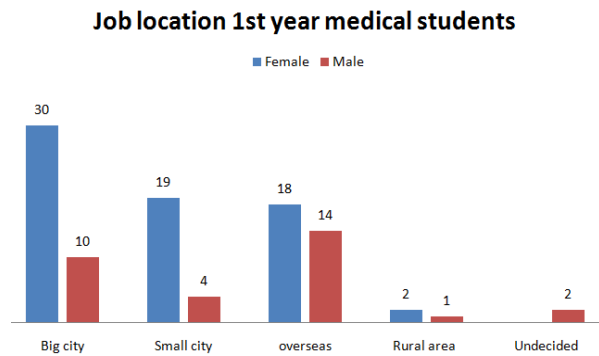
| Gender | Number 1st year | 5th year |
|--------|-----------------|----------|
| Female | 69              | 45       |
| Male   | 31              | 35       |



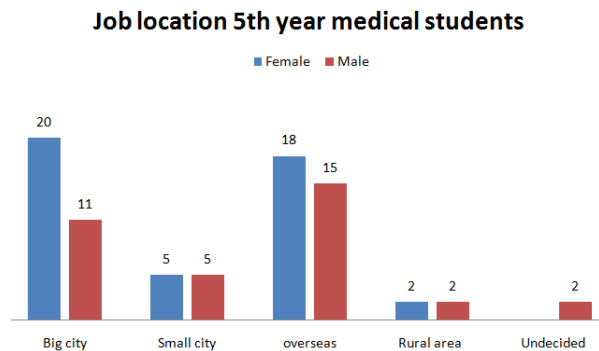
**Figure No.1: 1<sup>st</sup> year demographics in terms of residence**



**Figure No.2: 5th year demographics in terms of residence**



**Figure No.3: Choice of location of practice among 1st year medical students**



**Figure No.4: Choice of location of practice among 5th year medical students**

## DISCUSSION

The study identifies 3 major problem areas with respect to the medical profession: brain drain, lack of intention to work in rural areas, and poor inclination to general practice.

**Brain drain:** Emigration of medical talent in search of green pastures across the borders is, an age old entity, referred to as brain drain.<sup>(18)</sup> Better standards of living and quality of life, higher salaries, access to advanced technology and more stable political conditions in the developed countries are known to attract talent from less developed areas. Underdeveloped countries are able to provide decent undergraduate medical education, but often little beyond.<sup>(19)</sup> International medical graduates constitute between 23 and 28 percent of physicians in the United States, the United Kingdom, Canada, and Australia, and lower-income countries supply between 40 and 75 percent of these international medical graduates. India, Philippines, and Pakistan are the leading sources of international medical graduates.<sup>(20)</sup> Migration of physicians has produced serious shortages in many developing countries.<sup>(21)</sup>

The disadvantages to the source countries in terms of futile investment in the medical education of the emigrants and lack of their contribution to the local health systems, though obvious, are often overlooked. The emigration of high-quality medical professionals adversely affects the health system in a way that cannot

be captured in statistics on the numbers of migrants among medical professionals.<sup>(22)</sup> Variety of social political modifications and policy changes are recommended. The first responsibility for action belongs with each country to “train, retain, and sustain” its workforces through national plans that improve salaries and working conditions.

**General practice:** None of the students in the study have intention to set up their general practice clinic. It is also noteworthy that almost 60% of medical graduates preferred postgraduate medical qualifications rather than proceeding with post-MBBS general practice.

The importance of primary care doctors in the healthcare delivery system of a country cannot be underestimated. They form the base of any healthcare delivery system pyramid of a country and the one with a narrow base is likely to be unstable. Apart from being easily available, acceptable and affordable to most people, primary care doctors also reduce the case burden on tertiary health institutions. This ensures better quality of care and appropriate utilization of resources at the tertiary centers. Coupled with good referral system, general practitioners could really provide effective primary health care as it was anticipated in the goal of ‘Health For All’ by the World Health Organization.<sup>(11)</sup>

Over half of the population of Pakistan is living in rural areas.<sup>(23)</sup> The recruitment and retention of professional health workers in underserved areas is a complex and global issue. The fewest doctors are found in areas where there is the greatest need. Lack of qualified doctors favour many unregulated hospitals run by homeopaths, hakeems, traditional/spiritual healers, Unani (Greco-arab) healers, herbalists, bonesetters and quacks.<sup>(23)</sup>

**Rural areas:** An imbalance exists between offered medical services and needed health care for the people in rural areas of Pakistan. Many studies have found non-availability of health care providers as major contributors to the poor health indicators of the rural areas.<sup>(24)</sup>

This problem of reluctance of doctors to work in rural health facilities is an international phenomenon<sup>(25-27)</sup>, as the same was observed in countries like Brazil, India, Indonesia, and Zambia according to the World Bank, 2000 report. Akbar Zaidi found that only 17% of the medical students interviewed were ready to practice in rural areas after their graduation.<sup>(24, 28)</sup> Majority of the students in medical colleges have an urban background, as they have more chance to get admission due to open merit policy in most of the medical colleges. As a result they prefer to work after their graduation in to areas where they are reared. In medical colleges the MBBS curriculum has no community orientation, the doctors thus produced have no orientation or experience of the rural health in other words the doctors are being trained

to work only in big hospitals with sophisticated equipment. The service structure of the doctors is such that there are no attractions for working in rural health facilities, rather there are disadvantages affecting their social, professional and family life.<sup>(24)</sup> This issue should be addressed through a number of strategies like introduction of compulsory 2 yr service for all medical graduates, rural allowance as incentive and development of academic health service centers. Compulsory service programmes have been used worldwide as a way to deploy and retain a professional health workforce within countries. Other names for these programmes include "obligatory", "mandatory", "required" and "requisite." All these different programme names refer to a country's law or policy that governs the mandatory deployment and retention of a health worker in the underserved and/or rural areas of the country for a certain period of time.<sup>(29, 30)</sup>

This study has several limitations, as it was conducted in one medical college, thus it may not reflect the thinking of medical students of whole country. Further research is highly recommended which should include greater number of institutions, longitudinal design and with open ended questionnaire.

## CONCLUSION

Medical graduates prefer clinical specializations to general practice as career. Strategies need to be planned by public and private sector and implemented to stop the brain drain and retain the medical personnel to provide effective health care in rural areas.

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