

# Post Graduate Career Preferences Of Female Medical Students: A Cross Sectional Survey Of 150 Students Of Rawalpindi Medical University

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## Abstract

**Background:** Medical field has experienced a constant rise in the induction of female students in medical colleges across the globe. This makes their future career preferences highly significant as they are ultimately going to shape out the fate of various specialties. Keeping in view the prevailing trend of gender distribution in medical colleges of the whole country, it will not be wrong to say that females have become the stake holders of the future of the health care in Pakistan. Thereby, it is the need of the hour to chalk out the future preferences of these female medical students

**Methods:** This is a descriptive cross-sectional study which was done on 150 female medical students of 3rd, 4th and final year MBBS of Rawalpindi Medical University. Data was collected with the help of a questionnaire on which variables such as age, year of study, parents' occupation, plan and reason of going abroad, plan and reason of studying in Pakistan and preferable field for specialization were entered. Data was analysed by using Statistical Package for Social Sciences (SPSS) version 22.0 respectively are the specialties of choice among female medical students of RMU. Career counselling sessions should be organized and admission policy can be changed to prevent overcrowding of one field and tailor needs of the country.

**Results:** The study showed that among 93.3% of the respondents who were interested in doing post-graduation 61.4% wanted to stay in Pakistan and 38.6% wanted to go abroad. The most frequently opted field of specialty was Medicine (39.3%) followed by Surgery (28%) and Gynaecology and Obstetrics (22%)

**Conclusion:** Our study concluded that medicine, followed by surgery and gynaecology and obstetrics

**Key words:** graduate education, female medical students, career choice

## Introduction

The past few decades have revolutionized the participation of females in almost all dimensions and fields of life and in many fields they have not only marked their presence but have also outnumbered the male counterparts. Following this trend, medical field has also experienced a constant rise in the induction of female students in medical colleges across the globe. This makes their future career preferences highly significant as they are ultimately going to shape out the fate of various specialties. A number of factors such as skill and aptitude, presence of a role model, working hours, personal interest, intellectual challenge, family and social pressures, the advice of relatives and friends, financial benefits, job opportunities and scope, earning of respect and lifestyle associations influence the selection of a specialty.<sup>1, 2</sup> Furthermore, the demands of the personal life of a female also play a significant role in the ultimate decision regarding career.<sup>3</sup> A review of the published medical literature sculpts that the career of a female doctor is not uniform. In a vast majority of cases, there is a peak in the start, a dip in the middle age because of marriage and child bearing and then again a potential to rise in the later years.<sup>4</sup>

Various studies have been done across the globe in this context. A study conducted in Netherlands in 2007 depicted that 34% of all specialists and 40% of all physicians were females and it is highly expected that the number will rise to 66% by 2027.<sup>5</sup> Another study done in Australia, Canada, England and the United States in 2002 showed that women make up 30% of /all practicing physicians and half of all medical students.<sup>6</sup> A study carried out in India delineated

similar statistics by illustrating that 51% female students joined medical colleges in 2014-15 cornering 23,522 seats as compared to 22,934 male students but even then, there is considerable shortage of female doctors in India as many of them do not end up practicing. Bangladesh and Pakistan, however, have a much higher proportion of females in medical colleges i.e. 60% and 70% respectively.<sup>7</sup>

Keeping in view the prevailing trend of gender distribution in medical colleges of the whole country, it will not be wrong to say that females have become the stake holders of the future of the health care in Pakistan. Thereby, it is the need of the hour to chalk out the future preferences of these female medical students. This will not only point out the saturation that might take place in some specialties, leaving the other ones to die out but also the fraction of females which might not be interested in following the career. This, in effect, can generate useful information for higher officials to timely intervene and devise strategies for balancing out the situation. The objectives of this study were to determine the postgraduate career preferences of third, fourth and final year medical students of Rawalpindi medical university and to assess the factors influencing their choices.

## **Materials and methods**

This descriptive cross-sectional study was conducted on 150 female medical students of 3<sup>rd</sup> year, 4<sup>th</sup> year and final year at Rawalpindi Medical University after approval from the institutional research forum and review from ethical committee. Quota sampling was done; 50 female students were taken from each of the three classes non-randomly and then were all pooled together to get a sample of 150. Foreign female medical students were excluded from the study. Data was collected by approaching the students and getting a self-structured questionnaire filled that included Socio demographic characteristics, intention of post graduate study and if yes, specialty of choice, preference for post graduate study lies with country or abroad and reason for both. Informed verbal consent was taken, Anonymity of the response and confidentiality of the information was ensured.

Data was analyzed by using SPSS version 21. Descriptive statistics were used to calculate qualitative and quantitative variables. Frequencies and percentages were calculated for age, occupation of parents, intention of post graduate study after MBBS, reason of not intending to do post graduate study, specialty of choice, preferred option for post graduate

study is own country or going abroad and reasons of both staying in country and going abroad. Cross tabulation was done to find the relationship of specialty of choice with occupation of parents and preference of staying in country or going abroad for post-graduation.

## **Results**

In this study, 150 female medical students were included of which 50 belonged to each of the 3<sup>rd</sup> year, 4<sup>th</sup> year and final year respectively. 140 students (93.3%) wanted to study further of which, 61.4% wanted to stay in country while 38.6% wanted to go abroad for post-graduation. (Table I). The most frequently opted specialty was Medicine (39.3%), followed by Surgery (28%) and Gynecology and Obstetrics (22%). (Figure1). On cross tabulation, a significant relation was found between the choice of specialty and preference for studying abroad/ staying in country ( $p=0.04$ ). It was further revealed that the most frequently opted specialty for going abroad was pediatrics; 66.7% of the students who opted for pediatrics wanted to go abroad while for staying in country it was gynecology and obstetrics as 74.2% of the students who chose gynecology and obstetrics wanted to stay in country. (Table II)

## **Discussion**

Career choice in medical profession for the female medical students has always been a difficult task. The single most important determinant in this context is the flexibility of training and flexible working hours.<sup>8</sup> The current study which aimed at assessing the trend of going abroad and assessing the specialty of choice of female medical students of Rawalpindi Medical University depicted that 38.6% of the female medical students wanted to go abroad. A couple of studies conducted in Karachi at Dow Medical College, Agha Khan University and Baqai University documented the frequency of post-graduation migration at as high as 60%, 95% and 65% respectively. This sharp contrast might be due to the fact that in the studies done in Karachi, both genders were addressed and male medical students might have predominantly opted for going abroad.<sup>9,10</sup>

The gripping aspect of this research was that we also explored the fraction of students who have plans to go abroad and settle there for further studies. The female participants were also asked about their decision to pursue a career after their marriage, and the decision-maker in this respect. Majority of the participants of

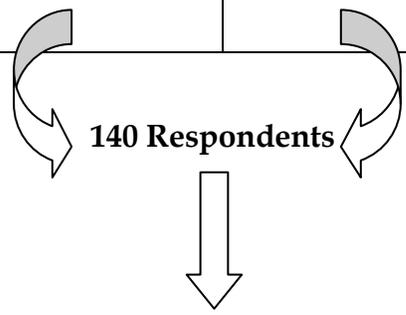
this study wanted to do post-graduation after MBBS followed by those who needed a break and a few students were not interested at all in post-graduation. This is in line with a study conducted in India and the

factor influencing their decision includes the desire to join the civil services, or the job does not pay well enough.<sup>2</sup>

Table 1: preferred place of post graduate training (country/abroad) and reasons of preference

A: Intention of doing/ not doing of post graduate education

VARIABLE	RESPONSE ( FREQUENCY/PERCENTAGE)							
Intention of post graduate education	Yes 131 (87.3%)	Yes, but after a career break 9 (6%)	<b>No</b> $\Rightarrow$ 10 (6.7%) $\Downarrow$	Total 150 (100%)				
					<table border="1"> <thead> <tr> <th>Reason of discontinuation</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>Not interested herself</td> <td>6</td> </tr> <tr> <td>Spouse won't allow</td> <td>2</td> </tr> <tr> <td>Any other</td> <td>2</td> </tr> </tbody> </table>	Reason of discontinuation	Frequency	Not interested herself
Reason of discontinuation	Frequency							
Not interested herself	6							
Spouse won't allow	2							
Any other	2							



B: Preferred place of post graduate education

VARIABLE	RESPONSE (FREQUENCY / PERCENTAGE)																		
Preferred place of post graduate education	<b>Own country</b> <b>86 (61.4%)</b> $\curvearrowright$		<b>Abroad</b> <b>54 (38.6%)</b> $\curvearrowright$																
	<table border="1"> <thead> <tr> <th>Reason of staying in country</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>To serve country</td> <td>35 (40.6%)</td> </tr> <tr> <td>Training satisfactory</td> <td>28 (32.5%)</td> </tr> <tr> <td>Any other</td> <td>23 (26.7%)</td> </tr> </tbody> </table>	Reason of staying in country	Frequency	To serve country	35 (40.6%)	Training satisfactory	28 (32.5%)	Any other	23 (26.7%)	<table border="1"> <thead> <tr> <th>Reason of going abroad</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>For better career</td> <td>32 (59.3%)</td> </tr> <tr> <td>Spouse abroad</td> <td>7 (12.9%)</td> </tr> <tr> <td>Any other</td> <td>15 (27.8%)</td> </tr> </tbody> </table>	Reason of going abroad	Frequency	For better career	32 (59.3%)	Spouse abroad	7 (12.9%)	Any other	15 (27.8%)	Total 140 (100%)
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In response to the speciality choice the field of medicine and allied takes the lead followed by Surgery and other fields. These results are contrary to research conducted in Nigeria 2013 in which 17.5% of females

opted for this specialty<sup>11</sup>. This dominance of medicine might be due to better training opportunities in our setup and the fact that many medical students believe

that their role as a doctor will be truly fulfilled when they will join the force as medical specialists.

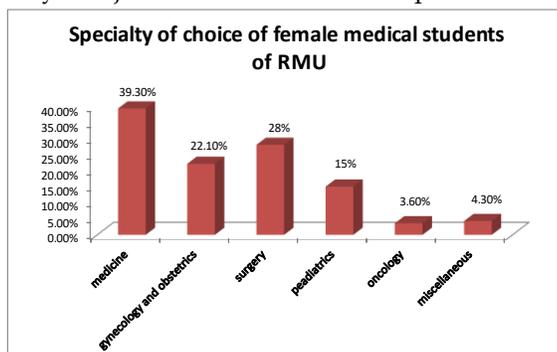


Figure 1: Specialty Of Choice In Female Medical Students Of Rmu

A striking finding in this study was that the large percentage of participants wishes to go abroad for postgraduate studies. This is in contrast with a study conducted in Karachi 6 years ago, which depicted that the majority preferred Pakistan<sup>12</sup>. Majority of the participants interested in going abroad had this plan because of the better career abroad as compared to Pakistan followed by the thinking about less pay packages and less number of seats for postgraduate trainees and other factors like political and economic instability, terrorism, poor government policies.

The soundness of this research lies in the fact that it is amongst the top premier studies in this contexture ever conducted in a public medical college of Pakistan with an ample sample size of study participants. We have to further look into the issues and reasons, utilizing a qualitative approach .i.e. through comprehensive interviews and focus group discussions so that the general perceptions and reasons could be better understood, highlighted, and brought into focus in complete detail. Only then focused and effective interventional steps can be taken to address the issues successfully. The study throws some light on the preferences of the students regarding which future field they would like to opt. The fields which are least fancied by the students calls for the awareness of the authorities, so that in future people can be inspired to choose those so called less preferred fields as well. Regarding the plans of large numbers of students who leave the country for moving abroad, this is really alarming situation. Their motives need to be looked into and incentives should be provided to them to prevent the Brain drain situation grappling our country, so that people are inclined to stay and practice here. The fact that female students do

not pursue their careers after marriage needs to be looked into and demands for some serious reforms, both at governmental and societal level as a whole so that policies pertaining to the aforementioned situation can be made and also the mindset of our nation needs to be shifted for the betterment of our nation.

The cardinal limitation of the study was the narrow geographical area from which the sample was taken which might limit the generalizability of the results to the whole population.

## Conclusion

Our study concluded that 93.3% of the female medical students wanted to continue their education of which, 61.4% wanted to stay in the country while medicine was the most opted for specialty (39.3%) while many important specialties like orthopaedic surgery and urology were completely out of the options list. This suggests that some interventions on the part of government and higher authorities are required which can channelize and facilitate need based recruitment of female medical students into medical colleges as well as different specialties. Furthermore, effective career counselling, flexible working hours and favourable working environment can enhance the entry of women into dying specialties.

## Acknowledgement:

The authors are deeply thankful to all of the students of research batch E, 4<sup>th</sup> year MBBS, for their contribution in data collection.

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