

Career aspirations of medical students- A cross sectional study

Vidhya Wilson¹, Srikanth Shastry²

¹Associate Professor, Department of Community Medicine, ²Associate Professor, Department of Pathology, Prathima Institute of Medical Sciences, Nagunur, Karimnagar, Telangana, India.

Address for correspondence: Dr. Vidhya Wilson, Associate Professor, Department of Community Medicine, Prathima Institute of Medical Sciences, Nagunur, Karimnagar, Telangana, India.

Email: v_burankar@rediffmail.com

ABSTRACT

Background: Many factors influence the students to choose medical profession as their career. These factors may further have an influence on their academic performance, their wellbeing and later on their service to mankind. Information concerning the career aspirations is also important for planning the health care human resource in various specialties as well as in different regions of the country.

Objectives: 1) To assess the career aspirations of medical students 2) To determine the factors influencing the career aspirations

Materials & Methods: A cross sectional study was done among the final year (Part I) medical students in north Telangana during November- December 2016. A self administered semi structured questionnaire was used for collecting the data after obtaining an informed verbal consent. Total 115 students participated in the study. Data was analyzed by calculating the percentages and applying the chi square test.

Results: Out of 115 students, 69 (60%) had chosen the profession with personal interest, whereas 40 (34.8%) to fulfill parents wish. 107 (93.1%) students would like to pursue specialization. 60 (56.1%) preferred clinical subjects. 47 (43.9%) were still undecided regarding the field for specialization. Majority i.e., 69 (60%) would work in urban areas and 26 (22.6%) in rural areas. 46 (40%) have plans to pursue career in other field, even after completing medical education.

Conclusion: Personal interests as well as to fulfill parents wish were the most common reasons for choosing medical profession. Majority of the students prefer specialization in clinical subjects and would like to work in urban areas.

Keywords: Career, aspirations, medical students

INTRODUCTION

There are many factors that influence the students to choose medical profession as their career.¹ These factors may further have an influence on their academic performance, their wellbeing and later on their service to mankind.²

Information concerning the career aspirations especially with regard to the field of specialization, preferred location for work is also important for planning the health care human resource in various specialties as well as in different regions of the country.³ The results from the previous studies reveal that the most preferred options for specialization are the clinical branches. Very few students choose the preclinical and para clinical subjects⁴ and that too by choice or interest. It has also been observed that the medical students prefer to work in private sector and in urban areas. Hence the public sector and the rural areas face the shortage of qualified health professionals.⁵ Corrective measures need to be taken for the effective and equitable distribution of quality healthcare across the country, as well as to deal with the shortage of medical faculties in the preclinical and para clinical branches.³ With this background the study was done among the medical students with the following objectives : 1) To assess the career aspirations of medical students 2) To determine the factors influencing the career aspirations

MATERIALS AND METHODS

A cross sectional study was done among the final year (Part I) medical students in north Telangana during November-December 2016. A self administered semi structured questionnaire was used for collecting the data after obtaining an informed verbal consent. Total 115 students participated in the study. Data was analyzed by calculating the percentages and applying the chi square test.

RESULTS:

A total of 115 students participated in the study. The results were as follows:

Table 1: General characteristics of the study participants:

Characteristics	Number (n=115)	Percentage
Age: ≤ 21 yrs	89	77.4
> 21 yrs	26	22.6
		(Mean age= 21 ± 0.78)

Gender: Female	74	64.3
Male	41	35.7
Residence: Urban	89	77.4
Rural	26	22.6
Schooling: Private	106	92.2
Government	9	7.8

The mean age of the students was 21 ± 0.78 years. Girls were 74 (64.3%) & boys, 41 (35.7%). Majority of the students i.e., 89 (77.4%) belonged to urban area and 106 (92.2%) had done schooling from private schools (Table 1).

Table 2: Career in medical profession- A first choice?

Medical-First choice?	Boys (n=41)	Girls (n=74)	Total (n=115)
Yes	28 (68.3%)	64 (86.5%)	92 (80%)
No	13 (31.7%)	10 (13.5%)	23 (20%)

$\chi^2 = 5.458$; $p = 0.01948$ (significant)

Table 2 shows that for majority of the students, 92 (80%) medical profession was the first choice. A statistically significant difference ($p = 0.01948$) was noted with regard to preference for career in medical field between boys and girls. 64 (86.5%) of the girls and 28 (68.3%) boys preferred medical profession. 13 (31.7%) of the boys as compared to 10 (13.5%) girls wanted to pursue career in some other field.

Table 3: Factors influencing career in medical profession

*Influencing factors	Boys (n=41)	Girls (n=74)	Total (n=115)	P Value
Interest in Medical profession	19 (46.3%)	50 (67.6%)	69 (60%)	0.02605
Fulfill parents wish	13 (31.7%)	27 (36.5%)	40 (34.8%)	0.6063
Serve the community	9 (21.9%)	12 (16.2%)	21 (18.3%)	0.4458
Social status	6 (14.6%)	8 (10.8%)	14 (12.2%)	0.5481
Better earning	7 (17.1%)	5 (6.8%)	12 (10.4%)	0.08305

* multiple response

Interest in medical profession was the major factor that influenced the students to take up medical profession, i.e., 69 (60%) students, followed by desire to fulfill parents wish, 40 (34.8%) and to serve the community, 21 (18.3%). A statistically significant difference ($p = 0.02605$) was noted with regard to interest in medical field between boys and girls. 50 (67.6%) girls as compared to 19 (46.3%) boys had joined the medical profession because of interest in medical profession (Table 3).

Table 4: Career aspirations of medical students:

Career aspirations	Boys (n=41)	Girls (n=74)	Total (n=115)	P Value
Ambition for Specialization	36 (87.8%)	71 (95.9%)	107 (93.1%)	0.1003
Ambition to go abroad	10 (24.4%)	32 (43.2%)	42 (36.5%)	0.04431
Preferred sector for work:				
Government	11 (26.8%)	32 (43.2%)	43 (37.4%)	0.008
Own Clinic	13 (31.7%)	24 (32.4%)	37 (32.2%)	
Private institution	4 (9.8%)	12 (16.2%)	16 (13.9%)	
Not decided	13 (31.7%)	6 (8.1%)	19 (16.5%)	

Majority of the students i.e., 107 (93.1%) wanted to pursue specialization. Out of these 107, 60 (56.1%) preferred clinical subjects. 47 (43.9%) were still undecided regarding the field for specialization. None of the students had preferred the pre clinical or para clinical subjects. The subjects preferred for specialization were as follows: Medicine 19 (17.8%), Surgery 11 (10.3%), Pediatrics 10 (9.4%), followed by 6 (5.7%) Obstetrics & Gynae, 5 (4.6%) Dermatology, 4 (3.7%) Orthopaedics, 2 (1.8%) Psychiatry and 1 (0.9%) each Ophthalmology, Anaesthesia and Radiology.

42 (36.5%) students had the desire to go abroad for higher education and work and majority of them were girls, i.e., 32 (43.2%) as compared to boys, 10 (24.4%) and the difference was statistically significant ($p = 0.04431$).

The most preferred sector for work was government institution, 43 (37.4%) followed by ambition to set up their own clinic, 37 (32.2%). 16 (13.9%) preferred working in private institution. A statistically significant difference ($p = 0.008$) was noted with regard to the preferred sector for work between boys and girls (Table 4).

Table 5: Area of residence and preferred location for work

Preferred location for work	Area of residence		Total (n=115)
	Rural (n=26)	Urban (n=89)	
Rural	12 (46.2%)	14 (15.7%)	26 (22.6%)
Urban	9 (34.6%)	60 (67.4%)	69 (60%)
Both	5 (19.2%)	15 (16.9%)	20 (17.4%)

$\chi^2 = 11.91$; $p = 0.002$ (significant)

Table 5 shows that majority of the students, i.e., 69 (60%) preferred to work in urban area whereas 26 (22.6%) in rural area. Significant difference was noted with regard to area of

residence and preferred location for work. Students belonging to rural area preferred to work in rural area, i.e., 12 (46.2%) and students from urban area preferred to work in urban area, 60 (67.4%).

Table 6: Desire for career in other field

Desire for career in other field	Boys (n=41)	Girls (n=74)	Total (n=115)
Yes	20 (48.8%)	26 (35.1%)	46 (40%)
No	21 (51.2%)	48 (64.9%)	69 (60%)

$\chi^2 = 2.047$; $p=0.1526$

Table 6 reveals that 46 (40%) of the students still had the desire to pursue career in other field even after completing medical education. Out of these 46 students, 21 (45.7%) were interested in civil services, followed by 10 (21.7%) in business. Another 10 (21.7%) wanted to pursue career in other fields like sports, arts, politics, agriculture, fashion designing and social service. 5 (10.9%) students did not respond.

A statistically significant difference ($p=0.02527$) was noted with regard to the reasons for career in other field between boys and girls. The major reason for boys was interest in other field, 14 (70%), followed by for respect/power, 4 (20%). Respect/power was the major reason for girls i.e., for 9 (34.6%) followed by 8 (30.8%) had interest in other field. 2 (10%) boys & 9 (34.6%) girls did not mention the reason.

DISCUSSION

In our study, for majority of the students (80%) medical profession was the first choice. The major reasons for choosing medical profession were interest (60%), followed by desire to fulfill parents wish (34.8%). The other reasons were to serve the community (18.3%), for social status (12.2%) & for earning (10.4%). The findings are comparable with the study conducted at Madhya Pradesh by Diwan V, et al with regard to joining the course for service & social status but their study reported comparatively few students joining the profession because of personal interest, family influence and for earning.⁶ Giri PA & Lal P reported that the major reason was for serving the community (58.5% & 74.6% respectively).^{7,8}

Majority of the students (93.1%) wanted to pursue post graduation. Similar finding was observed in many studies.^{6,9,10}

We observed that 56.1% students preferred clinical subjects for specialization whereas 43.9% were still undecided regarding the field for specialization. None of the students preferred the pre clinical or para clinical subjects. Other studies have also found that clinical subjects are more commonly preferred and preclinical & paraclinical subjects very less preferred.^{4,11,12} Sarkar T K reported that 40.8% students preferred medical specialties and 20.4% students surgical

specialties.¹² These findings are very similar to the findings of our study. But as compared to our study, Rachana K et al and Sarkar TK reported very few students undecided regarding the choice of specialty, i.e., (18.6%) and (15.7%) respectively.^{3,12}

We observed that 36.5% students were interested to go abroad for higher education & service. But comparatively very less number of students i.e., 7.6% and 11.6% were reported to be willing to go abroad by Rachana K and Lal P respectively.^{3,8}

The most preferred sector for work was government institution in case of 37.4% students followed by ambition to set up their own clinic, 32.2%. 13.9% preferred to work in private institution. Working in government institution and establishing private practice was also the preferred option observed in a study by Manish KS et al.¹⁰ But in a study at Kolkata most of the students would like to join private sector (32.9%) as compared to the public sector (16.5%).¹²

We found that 60% of the students would work in urban area whereas 22.6% in rural area. Preference for working in urban area as compared to rural areas was also reported in similar studies.^{3,12}

40% students in our study still had the desire to pursue career in other field even after completing medical education. But Manish KS, et al observed comparatively very less number of students (11.6%) who wished to change over to other field.¹⁰

CONCLUSION

Personal interest in medical profession and to fulfill parents wish were the two major factors that influenced the students to choose medical profession. Majority of the students were ambitious for specialization, preferring mainly clinical subjects. 43.9% students were still undecided about the choice of speciality. One third of the students would prefer to go abroad for higher education and work. Place of residence of the students influences the future location of work place (urban/rural). 40% students still desire to pursue career in another field after completing medical education.

SUGGESTIONS

There is a need for counseling and guidance sessions for parents in high schools regarding the best career options for their children according to their ability and interest so that no student would have to join any profession under pressure but by choice and interest. There is a need for strengthening and advancing the preclinical and para clinical subjects so that these would also be opted by choice and not by compulsion. There is a need to conduct guidance sessions for the undergraduates to help them decide the subject for specialization.

REFERENCES

1. Kumar R, Dhaliwal U. Career choices of undergraduate medical students. *Natl Med J India* 2011 May-June;24(3):166-9. <https://www.ncbi.nlm.nih.gov/pubmed/21786849>
2. R.A.Kusurkar, Th.J.Ten Cate, C.M.P.Vos, P.Westers, G.Croiset. How motivation affects academic performance: a structural equation modelling analysis. www.ncbi.nlm.nih.gov/pmc/articles/PMC3569579/
3. Rachana kapadia, Dhara Prajapati, Pratik Bharucha. Career Choices among medical students: A cross sectional study. *International Journal of Multidisciplinary Research and Development* 2015 Aug; 2(8):604-607.
4. Gour N, Srivastava D, Adhikari P, Shahi A, Sharma MK, Mahajan PC. Specialty preference among medical students and factors affecting it. *Online J Health Allied Scs.*2011;10(2):12. www.ojhas.org/issue38/2011-2-12.htm
5. Srinivas Nallala, Subhashisa Swain, Sanju Das, Shrawan K Kasam, Sanghamitra Pati. Why medical students do not like to join rural health service? An exploratory study in India. *Journal of family and community Medicine* 2015 May-Aug;22(2):111-117.
6. Diwan V, Minj C, Chhari N, De Costa A. Indian Medical Students in public and private sector medical schools: Are motivations and career aspirations different? *Studies from Madhya Pradesh, India.* *BMC Med Educ* 2013;13:127.
7. Giri PA, Sambutwad RC, Kausar HM, Muneshwar SN, Shafee M. Career choices regarding medical education among first year medical students of IIMSR Medical college, Badnapur, Jalna, Maharashtra, India. *Int J Community Med Public Health* 2015;2:620-3.
8. Lal P, Malhotra C, Nath A, Malhotra R, Ingle GK. Career aspirations and apprehensions regarding medical education among first year medical students in Delhi. *Indian J Community Med (serial online)* 2007 (cited 2017 Feb 9);32: 217-8. Available from <http://www.ijcm.org.in/text.asp?2007/32/3/217/36835>
9. Sitanshu Sekhar Kar, Archana Ramalingam, K.C. Premarajan and Gautam Roy. Do medical students prefer a career in community medicine?. *Int J Prev Med.* 2014 Nov; 5(11):1468-1474. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4274555/>
10. Manish Kumar Singh, Arvind Kumar Singh. What to do after MBBS? An analysis of MBBS student's career aspirations and their determinants. *Indian J. Prev. Soc. Med* 2012 April-June;43(2):134-140.
11. Smitha Bhat, Landric D'Souza, Jeffrey Fernandez. Factors influencing the career choices of medical graduates. *Journal of Clinical and Diagnostic Research* 2012 February;6(1):61-64.
12. Sarkar TK, Adhikary M, Chellaiyan DVG, Jana PK, Rai A, Biswas I. An observational study on career aspiration among students of a medical college in Kolkata. *Int J Med Sci Public Health* 2017; 6 (online first). Doi:10.5455/ijmsph.2017.1164815122016

Please cite this article as: Wilson Vidhya, Shastry Srikanth. Career aspirations of medical students- A cross sectional study. *Perspectives in Medical Research* 2017;5(2):45-48.

Sources of Support: Nil, Conflict of interest: None declared.