



## Original Article

# Specialty Preferences among Under Graduate Medical Students in a Private Medical College: A Cross sectional study

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## Abstract

**Background:** Major determinants influence the career choices of under graduate medical students. The aim of our study was to find out future specialization interest among under graduate medical students.

**Materials and Methods:** A Cross sectional study was conducted among undergraduate medical students at Sri Venkateshwaraa Medical College Hospital and Research Centre (SVMCH&RC), Puducherry during January 2017 – June 2017 among 411 under graduate medical students. Universal sampling technique was used to select the study sample. The study subjects were recruited to obtain socio-demographic details, preferences for specialty and determinants influencing their choice of their specific specialties by using validated semi structured proforma. Data were entered in Microsoft Excel 2007 and analyzed in Social Package for the Social Sciences -21(SPSS-21).

**Results:** Out of 411 students who participated in the study, 222(54.10%) were women and 189(45.9%) were men. The mean age of the participants was 20.8+1.120. The most preferred specialties by both the genders were Medicine 81(39.5%) and Pediatrics 66(31.4%). The popular specialties among men were Orthopedics 52(27.5%), Medicine 39(20.6%) and Surgery 34(17.9%). While women students preferred Obstetrics & Gynecology 54(24.3%), Pediatrics 44(19.8%) and Medicine 42(18.9%).

**Conclusion:** Our study found that there is lack of interest in Pre and Para clinical specialties. The reasons for the same could be lack of opportunities and future scope of these specialties. This could create shortage of teachers in these specialties and it would encourage people with non-medical background to be the main group of teachers in these subjects.

**Keywords:** career, under graduate, medical students, specialties.

## Introduction

The evolving landscape of medical field by innovative technology has a great impact on the selection of future specialization among medical students.<sup>1</sup> There are lot of factors that influence medical students to choose their future career. At the time of the admission to the medical college every medical aspirant have a career preference.<sup>2</sup> Major factors that influence the medical students to choose the future specialization are job opportunities, expected income, prestige, life style preferences, risk associated with that specialty, societal appreciation of specialty, gender difference, preclinical and clinical experiences, role models and characteristics of medical college.<sup>3,4,5</sup>

There are deficiencies in certain specialties like Psychiatry, ophthalmology and also non specialist doctors to manage primary health centres.<sup>6,7,8</sup> It is observed in studies done in developed countries that life style factors and student education loans are essential factors for medical students to choose certain specialization after under graduation.<sup>2,9</sup>

The preferences of under graduate Medical students are not only important for their future career but will reflect the availability of future doctors in our country which may eventually affect the health care system of our Nation<sup>10,11</sup>, hence it is vital to find out the career preference of medical students and the factors that influence their career choices. There is limited number of studies assessing the career choices of undergraduate medical students and hence we did this study.

## Materials and Methods

A Cross sectional study was conducted among undergraduate medical students at Sri Venkateshwaraa Medical College Hospital and Research Centre (SVMCH&RC), Puducherry during January 2017 – June 2017. The study population included all under graduate medical students of second, third and final year of academic year of 2016 – 2017. Universal sampling technique was used to select the study

sample. This study was approved by SVMCH & RC Institutional Ethical Committee. After obtaining written informed consent, 411 students were recruited to obtain socio-demographic details, preferences for specialty and determinants influencing their choice of their specific specialties by using validated semi structured proforma. Data were entered in Microsoft Excel 2007 and analyzed in Social Package for the Social Sciences -21(SPSS-21). Mean, Standard Deviation and Proportion were analyzed using data.

## Results

Out of 411 students who participated in the study, 222 (54.10%) were women and 189(45.9%) were men. The mean age of the participants was 20.8+1.120. The proportion of students who wanted to pursue Postgraduate studies was 401(97.5%). Majority of them wanted to do Post graduation in India (95.4%) The reasons given by ten students who did not want to do Post graduation in future are mentioned in [Table-1].

**Table 1:** Reasons for not pursuing Post graduation (n=10)

Reasons	N
Want to take over family business	3
Marriage after Under graduation	3
Satisfied with Under graduation	2
Cannot handle the burden of Post-graduation	1
Confused about my career	1

The most preferred specialties by both the genders were Medicine 81(39.5%) and Pediatrics 66(31.4%). The popular specialties among men were Orthopedics 52(27.5%), Medicine 39(20.6%) and Surgery 34(17.9%). While women students preferred Obstetrics & Gynecology 54(24.3%), Pediatrics 44(19.8%) and Medicine 42(18.9%). (Table-2)

**Table 2:** Distribution of Study subjects based on Gender-wise preference of various specialties (n=411)

Specialty	Men n(%)	Women n(%)	Total n(%)
Medicine	39(20.6)	42(18.9)	81(39.5)
Surgery	34(17.9)	6(2.7)	40(20.6)
Obstetrics & Gynecology	0	54(24.3)	54(24.3)
Pediatrics	22(11.6)	44(19.8)	66(31.4)
Orthopedics	52(27.5)	2(0.9)	54(28.4)
Radiology	11(5.8)	15(6.7)	26(12.5)
Anesthesia	6(3.1)	4(1.8)	10(4.9)
Psychiatry	2(1.0)	2(0.9)	4(1.9)
Dermatology	6(3.1)	26(11.7)	32(14.8)
TB Chest	7(3.7)	6(2.7)	13(6.4)
Ophthalmology	6(3.1)	15(6.7)	21(9.8)
ENT	3(1.5)	2(0.9)	5(2.9)
Pathology	1(0.5)	2(0.9)	3(1.4)
Community Medicine	0	2(0.9)	2(0.9)
Total	189	222	411

**Table 3:** Distribution of Study subjects based on first priority reason for selecting a specialty

Factor	n (%)
Interest in specialty	179(43.5%)
High income potential /Demand	101(24.5%)
Prestige of specialty in society	69(16.7%)
Job satisfaction	9(2.1%)
Working hours	8(1.9%)
Family /Peer pressure	30(7.2%)
Influenced by teachers	6(1.4%)
Job security	3(0.7%)
Matches with my capabilities	4(0.9%)
Focus on community service	2(0.4%)

Undergraduate medical students were asked to reason out their choice for selecting the specialty. About 179(43.5%) reported it as the interest in specialty and 101 (24.5%) as high income potential/ demand for the specialty as the most important reason of their choice followed by prestige of specialty in the society(16.7%) and family /peer pressure(8.2%).[Table3]

### Discussion

The preference of the specialty by undergraduate medical students has an impact on National availability of health care professionals. It is very important to increase the man power in specialties

like Psychiatry, Ophthalmology and non-clinical specialties .It is mandatory for the policy makers to understand the factors that influence medical student's decisions regarding their future career as it would help in taking appropriate measures.

In our study almost all the students (97.5%) wanted to pursue post graduate studies, higher than the study done at Government Medical at Delhi(83%).<sup>12</sup> The difference in the proportion between our study and the study done at Delhi could be because of different study setting (Government vs. Private). Few number of students did not have a plan to pursue Post graduate studies, the reasons being wanting to take over family business among male students, satisfied with UG course and getting married after UG among female students. These finding were different from similar study done by Rajeev Kumar et al<sup>13</sup> where the main reason for not pursuing PG course was wanting to join civil services.

It was observed in our study that the choices of specialty were Orthopedics (27%), Medicine (20.6%) and Surgery (17.9%) among the male students. These findings were similar to the study done in Karnataka by Subba et al<sup>14</sup>(2012). There was a preponderance of female medical students for Obstetrics &Gynecology (24.3%), Pediatrics (19.8%) and Medicine (18.9%).The similar findings were observed in Subba et al<sup>14</sup> study. The first main reason for choosing a particular specialty as their future career was found to be interest in that specialty (43.5%) and followed by high income/Demand (24.5%) and prestige/ respect for the specialty in the society (16.7%).

### Conclusion

Our study found that there is lack of interest in Pre and Para clinical specialties. The reasons for the same could be lack of opportunities and future scope of these specialties. This could create shortage of teachers in these specialties and it would encourage people with non-medical background to be the main group of teachers in these subjects. Our study revealed the common

preferred specialties among both genders were Medicine and Pediatrics; male students preferring Orthopedics and female students preferring Obstetrics & Gynecology compared to other specialties. It is important to create interest among under graduate students in certain specialties which would meet the health care needs of the country.

### References

1. Ibrahim, M., Fanshawe, A., Patel, V., Goswami, K., Chilvers, G., Ting, M., Pilavakis, Y., Rao, C., Athanasiou, T., 2014. What factors influence British medical students' career intentions? *Med. Teach.* 36, 1064–1072.
2. Wright B, Scott I, Woloschuk W, Brenneis F, Bradley J. Career choice of new medical students at three Canadian universities: Family medicine versus specialty medicine. *CMAJ* 2004;170:1920–4.
3. Mutha S, Takayama JI, O'Neil EH. Insights into medical students' career choices based on third- and fourth-year students' focus-group discussions. *Acad Med* 1997;72:635–40.
4. Fincher RM, Lewis LA, Rogers LQ. Classification model that predicts medical students' choices of primary care or non-primary care specialties. *Acad Med* 1992;67:324–7.
5. Kassebaum DG, Szenas PL, Schuchert MK. Determinants of the generalist career intentions of 1995 graduating medical students. *Acad Med* 1996;71:198–209.
6. Kumar R. Ophthalmic manpower in India—need for a serious review. *Int Ophthalmol* 1993;17:269–75.
7. Hospitals sans psychiatrists. *The Tribune Chandigarh online edition*, 2 Mar 2000. Available at <http://www.tribuneindia.com/2000/20000302/haryana.htm#14> (accessed on 19 Mar 2010).
8. Dussault G, Franceschini MC. Not enough there, too many here: Understanding geographical imbalances in the distribution of the health workforce. *Hum Resour Health* 2006;4:12. Available at <http://www.human-resources>
9. Knox KE, Getzin A, Bergum A, McBride P, Rieselbach R, Friedsam D. Short report: Factors that affect specialty choice and career plans of Wisconsin's medical students. *WMJ* 2008;107:369–73. [health.com/content/4/1/12](http://health.com/content/4/1/12) (accessed on 19 Mar 2010).
10. Lambert TW, Goldcare MJ, Edwards C, Parkhouse J. Career preferences of doctors who qualified in the United Kingdom in 1993 compared with those of doctors qualifying in 1974, 1977, 1980 and 1983. *BMJ* 1996; 313:1924.
11. Matorin AA, Venegas-Samuels K, Ruiz P, Butler PM, Abdulla A. U.S. medical students choice of Reasons for Choosing Specialty After Graduation Among Students. *J Health Hum Serv Adm.* 2000; 22(4):495- 509.
12. 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* 2007;32:217–18.
13. Kumar R, Dhaliwal U. Career Choices of Undergraduate Medical Students. *Natl Med J India* 2011;24(3):166-69.
14. Subba SH, Binu VS, Kotian MS, Joseph N, Mahamood AB, Dixit N, George A, Kumar P, Acharya S & Reddy P (2012): Future specialization interests among medical students in southern India. *Natl Med J India* 25, 226-229.