

Original Research Article

Attitude of MBBS students towards opting for the medical profession in colleges of Uttarakhand

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ABSTRACT

Background: Medical profession is considered as the most highly rated profession. Many students join the medical profession by their own interest but some join under parental or peer pressure. The current study was carried out to find out the reasons for choosing medical profession as career among the medical college students.

Methods: This cross-sectional study was carried out among phase I medical students (batch 2024) from all over the state of Uttarakhand through a predesigned and pre validated questionnaire. Google form was circulated through social media platform to phase-I MBBS students of Uttarakhand. Data entry and analysis were done by using Microsoft Excel and Chi square test of association was used.

Results: Out of 314 students enrolled in the study maximum 85.4% were in the age group of 17-20 years. Majority 79.6% of students have chosen self-interest for their profession as the reason for choosing MBBS as their career. Only female students chose obstetrics and gynecology as their preferred specialty and this association was statistically significant ($p=0.0236$).

Conclusions: Self-interest was the most common reason for choosing the medical profession as career. Most students planned to specialize in surgical and medicine branches. A follow-up study would be useful to identify further trends in career choices as well as in choosing specialties because it is observed that their interests in specialities change due to one reason or another.

Keywords: Career choices, Cross sectional study, MBBS, Medical profession, Self-interest

INTRODUCTION

Medical profession is considered as the most highly rated profession. To become compulsory one-year internship.¹ It has been noted that not all the students who have good academic background gets selection for the medical course but many of the students choose their career because of parental pressure and to fulfill their parents wish. Opting the medical profession depends upon various factors like self interest in the profession, job opportunities, respect in the society, doctors among family members and many more.^{2,3}

Choosing a medical specialty can be a very confusing decision for medical students with an increasing number of specialties and subspecialties available today. For most of them, it is a transition period, meaning what they considered as a career choice at the time of entrance may change completely by the time they graduate.⁴

Objective

Considering all these aspects, the present study was undertaken with the objective of finding out the attitudes of MBBS students towards the medical profession and the factors that influence the attitudes to their profession.

METHODS

This cross-sectional study was carried out among phase I medical students of batch 2024 from all state government and private medical colleges of Uttarakhand. All other MBBS students except phase I were excluded. In this state there are five state government and four private medical colleges.

The study was undertaken from 1st March till 31st March 2025 after obtaining permission from institutional review board (GEIMS/IRB/RP/30/2025 dated 27/02/2025). The questionnaire was designed after reviewing previously published content about a similar topic and after a thorough discussion among the research team members.

A structured and validated questionnaire was prepared and was converted into Google form. The questionnaire comprised of both closed and open-ended questions. Except the name and identity, the close ended questions comprised of socio demographic variables like age, gender, marital status, type of institute etc. Open ended questions were also added so that the participants can give their opinions if there were any. This Google form was circulated through social media platform to phase-I MBBS students of Uttarakhand.

The first part of Google form contained the informed consent of the participants. Those who were willing to participate continued the questionnaire, while those who were not willing were redirected to “submit form” option. Despite frequent reminders to participants through social media, a total of 325 responses were recorded out of which 314 participants consented to fill the form. So, sample size for this study was taken as 314. Data was entered into Microsoft excel and analyzed by using Epi-info software (version:7.2.2.6). Descriptive statistics was used and Chi square test for statistical analysis to find out the association between variables, $p < 0.5$ was considered as statistically significant.

RESULTS

The study enrolled a total of 314 phase I MBBS students from all over Uttarakhand. Maximum students 85.4% were in the age group of 17-20 years. Female participation 58.3% was more in comparison to males 41.7%. The highest number of respondents, 54.1%, were from the government medical colleges in contrast to private. Almost all the students 99.4% were unmarried though the percentage of married and divorcee students were 0.3% each.

Majority 77.4% students belonged to the nuclear family. About 87.6% of the student's residences were from the urban area. Almost half of the students 50.3% cleared NEET exam in their second attempt i.e. after one year of completion of 12th examination (Table 1).

Table 1: Sociodemographic profile of the study participants (n=314).

Characteristics	Frequency	Percentage
Age in years		
17-20	268	85.4
21-23	43	13.7
>23	3	0.9
Gender		
Male	131	41.7
Female	183	58.3
Type of Institute		
Government	170	54.1
Private	144	45.9
Marital status		
Married	1	0.3
Unmarried	312	99.4
Divorced	1	0.3
Type of family		
Nuclear	243	77.4
Joint	71	22.6
Place of residence		
Urban	275	87.6
Rural	39	12.4
Number of attempts for clearing the NEET exam		
with 12 th (1 st attempt)	88	28.0
(2 nd attempt)	158	50.3
(3 rd attempt)	56	17.8
(4 th attempt)	12	3.8

Table 2: Family profile of the study participants (n=314).

Variable	Frequency (%)
Father's education	
Illiterate	4 (1.3)
Up to class 8 th	3 (0.9)
Up to class 10 th	10 (3.2)
Up to class 12 th	26 (8.3)
Graduate	110 (35.0)
Post graduate and above	161 (51.3)
Father's occupation	
Medical doctor	36 (11.5)
Non-medical doctor	38 (12.1)
Others	240 (76.4)
Mother's education	
Illiterate	11 (3.5)
Up to class 8 th	9 (2.9)
Up to class 10 th	11 (3.5)
Up to class 12 th	28 (8.9)
Graduate	115 (36.6)
Post graduate and above	140 (44.6)
Mother's occupation	
Medical doctor	25 (7.9)
Non-medical doctor	13 (4.1)
Others	276 (87.9)

A substantial proportion of students' parents held post graduate degrees, with 51.3% of the fathers and 44.6% of the mothers being postgraduates or higher. However, only a minority of students had parents in the medical field, with 11.5% having fathers and 7.9% having mothers who were medical doctors. Majority 76.4% of the father's occupation and 87.9% of the mother's occupation was from non-medical field like business, lawyer, private job etc. (Table 2).

Table: 3 Motivation to take up medical profession among students (n=314).

Why did you choose medical field	Frequency	Percentage
Self Interest	250	79.6
Parental expectation or pressure	27	8.6
Good remuneration	29	9.2
Family owns and runs a hospital	2	0.6
Others	6	1.9
Inspired by movies		
Munna Bhai MBBS	35	11.1
Kabir Singh	25	7.9
Patch Adams	4	1.3
Anand	6	1.9
Others	63	20.2
None	181	57.6

79.6% of students have chosen self-interest for their profession as the reason for choosing MBBS as their career. Money was the motivation for only 9.2% of the subjects. The majority of 57.6% students were not inspired by any movies/series to become a doctor. Only 20.2% of students were inspired by various movies (Table 3).

Majority, 70% of the students, were satisfied by their decision to opt for the medical profession as their career while 23% were still doubtful about their decision.

Though only 7% of the students were dissatisfied with their decisions (Figure 1).

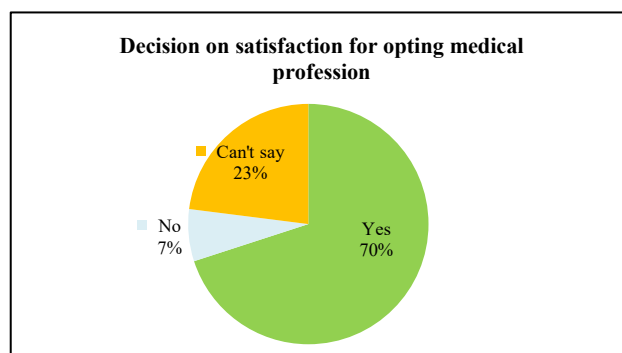


Figure: 1 Decision on satisfaction for opting medical profession.

Regarding students' career choices after MBBS, maximum students 48.72% preferred doing specialization (PG) followed by 23.5% who had not decided yet. The preference of other career choices namely rural service, others, general practitioner, private hospital, seeks opportunities in abroad ranged between 0.95% to 9.55%. There was no statistically significant difference between males and females regarding different career choice except for government service (Table 4).

Out of 48.72% students who preferred doing specialization, surgical and subspecialties was the most 41.17% preferred followed by medicine and subspecialties 29.41%. It is to note that 22.22% of the students have not yet decided on their choice of specialty. The basic medical subjects (anatomy and physiology) were the least 0.65% preferred. None of the students were interested in laboratory medicine and medical administration/hospital management. No statistically significant difference between males and females regarding preference for specialty was found except for obstetrics and gynecology where a higher number of females preferred obstetrics and gynecology ($p=0.0236$) (Table 5).

Table 4: Career choice after MBBS.

What will be your career choice after MBBS?	Overall		Male		Female		Chi square value	P value
	N	%	N	%	N	%		
Government service	23	7.32	5	3.81	18	9.83	4.075	0.0435*
General practitioner	7	2.22	3	2.29	4	2.18	0.004	0.9508
Join private hospital	19	6.05	12	9.16	7	3.82	3.823	0.0506
Rural service	3	0.95	2	1.52	1	0.54	0.775	0.3786
Seek opportunities in abroad	30	9.55	10	7.63	20	10.92	0.959	0.3273
Pursue PG	153	48.7	63	48.09	90	49.18	0.036	0.8491
Not decided	74	23.6	33	25.19	41	22.4	0.329	0.5662
Others	5	1.29	3	2.29	2	1.09	0.698	0.4034

*Statistically significant at 5% level of significance.

Table 5: Preferred specialty for post-graduation (n=153).

Which specialty would you like to join after completing your MBBS	Overall		Male		Female		Chi square value	P value
	N	%	N	%	N	%		
Medicine and subspecialties	45	29.41	20	44.44	25	55.55	0.16	0.6888
Surgical and subspecialties	63	41.17	31	49.2	32	50.79	1.817	0.1777
Obstetrics and gynecology	7	4.57	0	0	7	100	5.125	0.0236*
Basic medical subjects	1	0.65	0	0	1	100	0.718	0.3968
Laboratory medicine	0	0	0	0	0	0	0.003	0.9563
Medical administration/hospital management	0	0	0	0	0	0	0.003	0.9563
Pharmacology	1	0.65	1	100	0	0	1.401	0.2365
Forensic medicine	2	1.31	2	100	0	0	2.812	0.0936
Not yet decided	34	22.22	9	26.47	25	73.52	3.647	0.0562

*Statistically significant at 5% level of significance.

DISCUSSION

The study was conducted among phase 1 undergraduate medical students approximately five months after they commenced the MBBS course. At this early stage, students are less influenced by the medical college environment and tend to express opinions like those people without medical training. In our study, 85.4% of most students were aged between 17 and 20 years. This age distribution is comparable to the findings of Kasarla et al who reported that 59% of students were under 20 years of age.⁵ Conversely, Ramya et al observed a different pattern, with 58.3% of students being older than 20 years and 41.7% younger than 20 years, indicating some variability in the age demographics of medical students across different settings.⁶

In our study, percentage of female students was more 58.3% in comparison to males. Similar findings were observed in the study done by Ramya et al in which 60.3% were females and by Jothula et al in which 72% were female students.^{1,6} The study also showed that, only 11.5% of students' father and 7.9% of students' mother were from medical profession which is aligning with the findings of the study by Ramya et al.⁶ Most of the students' father 51.3% as well as mothers' 44.6% were postgraduates in our study. In contrast to this, Ramya et al, Rani et al and Tiwari et al found that parents of students were mostly graduates.^{2,6,7}

The present study found that the majority 79.6% of the students opted MBBS out of self-interest which goes with the findings of 82.6%, 87.8% and 72.2% by Ramya et al, Radhika et al and Shrivatsam et al respectively.^{6,8,9} The study also revealed that 8.6% students had opted MBBS because of parent's pressure. Ayuob et al identified parental pressure as the factor for choosing a medical career among 5.9% of students, while Jothula et al similarly noted parental influence as a contributing reason for pursuing medicine in 0.66% students.^{1,10}

Majority 50.3% of the participants in our study got admission to medical course in their second attempt and the same was observed by Nilima Shankar et al and Naga Srilatha Bathala et al.^{11,12} Some of the participants had taken more than two attempts 17.8%, which showed their aspiration towards the course.

Media plays a big role in shaping the thought process of a person now a days. Despite of this, it was surprising that the majority 57.6% students were not inspired by any movies/series to become a doctor. Only 20.2% of students were inspired by various movies. Movies are increasingly being used to educate students about many of the essential values of the medical profession. Mass media can be used further to educate medical students on various aspects of humanity and profession. The present study found that the majority 48.72% of the students preferred doing specialization (post-graduation). This agrees with the study by Rashmi et al in which 59.2% students preferred doing specialization although 23.6 % students have still not decided.¹³

The study revealed that surgical and subspecialties were the most 41.17% preferred branches followed by medicine and subspecialties 29.41%. In a similar study, it was highlighted that around 41% of students preferred medicine or its allied specialty subjects. Similar preferences towards clinical branches have been reported from various studies from India and abroad.¹⁴⁻²⁰ Clinical subjects have been popular amongst students as they are often discussed by academic staff in medical college. It could also be because these specialties are generally considered as major branches of the medical field. Another possible explanation is that students make their choice of specialization based on the major specialties that they tended to hear about or come across. Only a handful of our students, 0.65%, considered a career in the basic medical subjects (anatomy and physiology).

The study is limited to only phase I MBBS students and emphasizes only a small component of medical education i.e. attitudinal aspect of medical students.

Relevance of the study

Studying MBBS students' attitude towards choosing the medical profession is highly relevant for improving the medical education, students support and the overall quality of future healthcare professionals.

CONCLUSION

The study reveals that self-interest is the predominant reason for medical students in Uttarakhand choosing the MBBS profession, with a significant majority expressing satisfaction with their decision. Most students plan to pursue specialization, particularly in surgical and medicine branches, while preferences for basic medical sciences remain minimal. Gender differences were noted in specialty choice, notably with female students favoring obstetrics and gynecology.

Recommendations

Implementation should be there through structured counselling sessions at the pre admission and early MBBS stage to help students make informed choice about pursuing medicine as a career. Mentor mentee program as per NMC guidelines should be strengthened in medical colleges to support and guide students for entire MBBS duration for addressing needs of students' mental health issues and wellbeing.

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REFERENCES

- Jothula KY, Ganapa P, Sreeharshika D, Naidu NK, Abhishek P. Study to find out reasons for opting medical profession and regret after joining MBBS course among first year students of a medical college in Telangana. *Int J Community Med Public Health*. 2018;5:1392-6.
- Rani NA, Nusrath A, Dhanalakshmi TA. Medical profession as career- pressure or passion: a cross-sectional survey among undergraduate medical students. *Int J Med Sci Educ*. 2016;3(4): 322-7.
- Anand R, Sankaran PS. Factors influencing the career preferences of medical students and interns: a cross-sectional, questionnaire-based survey from India. *J Educ Eval Health Prof*. 2019;16:12.
- Aisha N, Ameen N, Jassim G. Career choices among medical students and factors influencing their choices. *Glob J Health Sci*. 2019;11(4):132-7.
- Kasarla RR, Verma A, Pathak L. Attitudes of MBBS students towards medical profession: a study in a medical school. *Janaki Med Coll J Med Sci*. 2022;10(3):18-23.
- Ramya MR, Lakshmi N, Balamurugan P, Nambiar S. Reasons for choosing medical profession as the career among medical college students in Kancheepuram district. *Int J Community Med Public Health*. 2021;8(1):412-6.
- Tiwari R, Jain V, Arya R, Dwivedi S, Shrivastava D, Tiwari S. A study to assess the perceptions of first year medical students for choosing medical school as a career. *Int J Res Med Sci*. 2016;4:2649 55.
- Radhika S, Nilofer M. Aptitude evaluation for medical profession in first and final year MBBS students. *PJMS*. 2012;2(2):41-5.
- Shrivatsam P, Yadav PK, Chand PP. Study to find out reasons for opting medical profession and regret after joining MBBS course among first year students of a medical college in Andhra Pradesh. *Int J Community Med Public Health*. 2024;11:2847-51.
- Ayuob NN, Sindi AH, El Deek BS. Medicine as a career a cross-sectional study on undergraduate medical students at King Abdulaziz University. *Int J Res Med Sci*. 2016;4:593-601.
- Shankar N. Motivation and preparedness of first semester medical students for a career in medicine; Indian J Physio Pharmaco. 2013;57(4):432-8.
- Bathala N, Chelamkuri G, Majeti S, Venkateswarlu M. An analysis on aptitude and attitude of newly joined medical students-Medical college based study in South India. *J Educ Tech Health Sci*. 2017;4(3):97-101.
- Rashmi R, Jeevithan S, Sridhar MG, Kalanithi TP. Choice of medical profession-passion or pressure: medical students perspectives. *Int J Pharm Pharm Sci*. 2023.
- Gaikwad V, Sudeepa D, Suwarna M. A study on career preferences and attitude towards the rural health services among the graduating interns of a medical college in Bangalore rural. *Int J Biol Med Res*. 2012;3(2):1577-80.
- 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 Sci*. 2011;10(2):12.
- Rehman A, Rehman T, Shaikh MA, Yasmin H, Asif A, Kafil H. Pakistani medical students' specialty preference and the influencing factors. *J Pak Med Assoc*. 2011;61(7):713-8.
- Saigal P, Takemura Y, Nishiue T, Feters MD. Factors considered by medical students when formulating their specialty preferences in Japan: findings from a qualitative study. *BMC Med Educ*. 2007;7:31.

18. Khader Y, Al-Zoubi D, Amarin Z, Alkafagei A, Khasawneh M, Burgan S. Factors affecting medical students in formulating their specialty preferences in Jordan. *BMC Med Educ*. 2008;8(1):32.
19. Baboolal NS, Hutchinson GA. Factors affecting the future choice of specialty among first-year medical students of the university of the West Indies, Trinidad. *Med Educ*. 2007;41(1):50-6.
20. Dikici MF, Yaris F, Topsever P, Tuncay Muge F, Gurel FS, Cubukcu M. Factors affecting choice of

specialty among first year medical students of four universities in different regions of Turkey. *Croat Med J*. 2008;49(3):415-20.

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