

Original Article

Attitudes of MBBS students towards medical profession: A study in a medical school

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ABSTRACT

Background and Objectives: The professional attitude of the Doctor is mainly concerned with his/her feelings, beliefs and behavior towards the patients. The students are admitted to MBBS through a written test (entrance test) in three subjects' viz. Physics, Chemistry, and Biology to qualify for the admission. But, no test is conducted to evaluate the attitudes of students, who seek admission into medical colleges. Hence, this study was undertaken to evaluate the attitudes of medical students i.e., whether they have right/positive attitude for the medical profession.

Material and Methods: A descriptive, cross-sectional study was carried out on 100 MBBS students of 4th and 5th year of Universal College of Medical Sciences, Bhairahawa, Nepal by administering a questionnaire constructed on the lines of Likert's summated rating scale to measure the attitudes of MBBS students towards medical profession. The tool consisted 32 statements, both positive as well as negative. Each statement had four alternative responses against it, namely –

Strongly Agree (SA), Agree (A), Disagree (DA), and Strongly Disagree (SD). The questionnaire in Google form was mailed to all students. The students were asked to read each statement carefully and click on their opinion/response.

Results: This study revealed that the gender, parents' occupational background, and socio-economic status influences the attitudes of 4th and 5th year MBBS students and differ significantly towards their medical profession. Whereas age, locality, and nationality were not influencing factors for the attitudes 4th and 5th year MBBS students towards their medical profession.

Conclusion: The present study on attitudes of MBBS students towards medical profession has several important implications for medical education. The findings of present study could be helpful to the planners, policy makers of medical education, so as to bring changes in entrance test for admission into MBBS course, and helpful to medical colleges and medical teachers so that they can conduct counselling and guidance programs so as to promote a positive attitude among medical students towards medical profession. Research literature of this type will serve as a self-instructional material for MBBS students to understand their medical profession in a scientific manner.

Keywords: Attitudes, MBBS students, Medical profession.

INTRODUCTION

Medical profession is the most noble, dedicated and challenging career with great social responsibilities and commitments.

During medical school, students are taught the knowledge, skills and attitudes required to become competent doctors. The frontline Doctors will have four main roles to play as care-givers, decision makers, communicators, and community leaders. A doctor may be defined as one trained in the principles and practice of medicine, possessing uncommon knowledge of biological science ranging from molecular events to whole organ system physiology, a special appreciation for human life and the needs of suffering people, and a comprehensive perspective of modern society – its influence on our lives and its stress on our social structure. The good physician – the one patients seek – must combine working scientific techniques with compassion and social responsibility and apply them in interaction with patients and their families. The greatest responsibility in medical education is to foster compassion, a complete transformation of behavior and attitudes towards people/patients within the medical and dental students.¹⁻³

The students are admitted to MBBS through a written test (entrance test) in three subjects' viz. Physics, Chemistry, and Biology to qualify for the admission. Thus, the admission into medical course is purely based on the performance of candidate in Biology, Chemistry, and Physics. The purpose of these tests is to provide a good basis for predicting quality performance in medical studies. But, no test is conducted to evaluate the attitudes of students, who seek admission into medical colleges. Hence, it is essential to evaluate the attitudes of medical students i.e., whether they have right attitude for the job, the drive and ambition desired for the medical profession.⁴

This area of study pertaining to the attitudes of MBBS students towards medical profession has not drawn much attention by researchers in the field of Medical Education, particularly in Nepal.^{5,6} This study enables to fill that gap. With this background the present study was undertaken with an objective i) to find out the attitudes of MBBS students towards medical profession, ii) the factors that influence the attitudes of MBBS students on their profession, and iii) to compare the attitudes of MBBS students towards medical profession when they are classified according to their gender, locality, socio-economic status, nationality and occupational background of the parent/family.

MATERIALS AND METHODS

A descriptive, cross-sectional study was conducted on 100 MBBS students of 4th and 5th year of Universal College of Medical Sciences, Bhairahawa, Nepal, during the period 1 October, 2020 to 30 December, 2020, by administering the following tool.

1. General Information Proforma (GIP): It elicits the information regarding the respondent's (MBBS students) name, gender, age, locality of residence (rural/urban), socio-economic status and nationality.

2. Scale of Attitude towards Medical Profession (SAMP): A questionnaire to measure the attitudes of MBBS towards medical profession was constructed on the lines of Likert's summated rating scale. The statements relating to the areas such as social, psychological, academic, administrative, curricular and economic aspects were constructed by collecting from relevant literature and medical students' opinion about medical profession, and screened and validated after thorough scrutiny. Ambiguous statements were

modified or rejected. Thus, the content validity of the tool was assumed.⁷

The final tool was consisting of 32 statements, both positive as well as negative. Each statement has four alternative responses against it, namely – Strongly Agree (SA), Agree (A), Disagree (DA), and Strongly Disagree (SD). The questionnaire in Google form was mailed to all students. The students were asked to read each statement carefully and click on their opinion/response. There were no right or wrong answers. Therefore, students were free to express their response freely as they feel.⁸

The data collected were scored on a 4-point scale. Positive statements favoring a particular point of view were scored as SA-4, A-3, D-2, and SD-1. Similarly, negative statements or statements opposing the point of view scored in the opposing order SA-1, A-2, D-3, and SD-4.

Inclusion criteria: All students of MBBS 4th and 5th year, with the willingness to

participate

Exclusion criteria: Students other than MBBS 4th and 5th year, students who were not willing to participate, and incompletely filled.

In this study “attitudes” of MBBS students towards their medical profession is treated as a dependent variable. The independent variables considered in the present study were age, gender, locality, socio-economic status, parents’ occupation and nationality of MBBS students. Six null hypotheses were formulated in the null form in terms of six independent variables; were tested for their significance at 0.05 level by using t-test.⁹

RESULTS

A total of 100 MBBS of 4th and 5th year, participated in the study. The demographic information of participants pertaining to age, gender, socio-economic status, and nationality are summarized in Table 1.

DISCUSSION

Table 1. Demographic information, mean, SD, and t-value in means of attitudes of MBBS students towards their medical profession

		N=100	Mean	SD	t-value	Significance at 0.05 level
Gender	Male	50	98.38	7.3952	3.0020	Highly significant
	Female	50	99.94	6.1059		
Age	≤ 20 years	59	99.27118	7.11198	0.5108617	Not significant
	> 20 years	41	99	6.3874		
Locality	Rural	25	99.08	7.772	0.1759598	Not significant
	Urban	75	99.186	6.4905		
Parent occupation	White collared	87	99.563	6.7146	3.9761008	Very highly significant
	Agriculture	13	96.4615	6.95959		
Socio-economic status	Middle class family	28	100.107	5.3217	2.4690073	Highly significant
	High income group	72	98.6805	7.265		
Nationality	Nepali	84	99.142	6.807	1.3363768	Not significant
	Indian	16	98.1875	7.12945		

To the best of our knowledge, this is the first study to address the attitudes of MBBS students towards medical profession.⁵ We could not compare and contrast, support or refute our findings, since no literature was available in this area. However, some research has been done on the attitudes of medical students towards post-graduation in Medicine and Surgery, at Manipal College of Medical Sciences, Pokhara, Nepal;¹⁰ towards research in Kerala, India,¹¹ New Zealand,⁵ and Sudanese University;¹² towards clinical communication skills;¹³ and rural health care service among Indian and Malaysian medical students.¹⁴

In the present study a total of 100 MBBS students of 4th and 5th year participated. The major findings revealed in our study were as follows.

Though the sample for present study comprises equal number of male and female students; the number of female students seeking admission into medical colleges is on increase. In our study, we found that majority of students who join MBBS were from urban locality, and high income group and from families with white collared occupational background of the parent; whereas it is low from rural locality and middle class families, and families with parent occupation being agriculture. Most of the female students' hail from middle class families with low socio-economic status, whereas majority of male students were from high income group (high socio-economic status) families.

The gender has an effect on the attitudes of 4th and 5th year MBBS students towards their medical profession, i.e. the attitudes vary with gender. Similar to our study Asha Rani, et al noted gender based choices in choosing post-graduation specialty among males and females, in their cross sectional survey among

undergraduate medical students on medical profession as career - pressure or passion.¹⁵ Nisha RS study on attitude towards research in a Government Medical College, Kerala, India revealed a decline in attitude towards research among 4th semester medical students to 7th semester and house surgeons and no association between gender and attitude towards research.¹¹ Tore Gude, et al found higher levels of positive attitudes among female students towards acquiring communication skills in his study on attitudes of medical students towards clinical communication skills.¹³

In a study by Jyothula KV at Kamineni Institute of Medical Sciences in Hyderabad, India found that self-interest Earning respect in the society making the family members proud were important motivational factors for opting medical profession; one third of the students were having the feeling of regret for opting medical profession and this feeling was significantly higher among females, and 11.8% of students wanted to quit the course.¹⁶

Locality (urban and rural) to which the students belonged has no effect on the attitudes, i.e. the attitudes of 4th and 5th year MBBS students do not vary with locality to which they belong. Age, whether ≤ 20 years or > 20 years has no effect and is not an influencing factor on the attitudes 4th and 5th year MBBS students towards their medical profession. There is no difference in the attitudes among Nepali and Indian students, i.e. nationality is not an influencing factor on attitudes. The occupational background of the family/parent influences the attitudes of 4th and 5th year MBBS students. The students coming from agricultural background and white collared occupation differ greatly towards their medical profession. Socio-economic status is also an influencing factor

for the attitudes 4th and 5th year MBBS students. The students from high income group differ greatly in their attitudes towards medical profession from students of middle class families.

Limitations of the study

1. The study is restricted to only one medical college and smaller sample size of 100 students.
2. The study is limited to only 4th and 5th year MBBS students.
2. The study includes only a few independent variables such as age, gender, locality, socio-economic status, parent's occupation, and nationality; other variables are not included.
3. The study emphasizes only a small component of medical education, i.e., attitudinal aspect of medical students towards medical profession

CONCLUSIONS

Medical profession is the most noble, dedicated and challenging career with great social responsibilities and commitments. The present study on attitudes of MBBS students towards medical profession has the following important implications for medical education. The findings of present study could be helpful to the planners, policy makers of medical education, so as to bring changes in entrance test for admission into MBBS course. The findings of the study could be helpful to medical colleges so that they can conduct counselling and guidance programs so as to promote a positive attitude among medical students towards medical profession. Research literature of this type will serve as a self-instructional material for MBBS students to understand their medical profession in a scientific manner. The research literature may also be helpful to medical teachers to

promote positive attitudes among medical students towards their medical profession.

Recommendations for further research:

This study can be extended by including all medical colleges of Nepal (large sample), and covering all possible variables pertaining to social, psychological, ethical, economic, administrative, care-delivery, curriculum and other areas of medical profession so that results will be more comprehensive and fruitful. A separate study could be taken up to measure the attitudes of students of basic sciences (1st and 2nd year MBBS) and clinical subjects (3rd to 5th year MBBS).

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CONFLICT OF INTEREST: None

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REFERENCES

1. Reddy KR. Evidence based medicine: A paradigm for clinical practice. Journal of Gandaki Medical College 2018; 11(2): 74-81.
2. Reddy KR. Teaching how to teach: Microteaching (A way to build up teaching skills). Journal of Gandaki Medical College 2019; 12(1): 74-80.
3. Rajeshwar Reddy, Laxmi Pathak. Curriculum integration for medical and dental students. Journal of Universal College of Medical Sci 2021; 9(1): 82-86.
4. Reddy KR. Challenges in conducting MBBS program in a Nepalese Medical College. Journal of Gandaki Medical College 2017;10(1): 49-56.
5. Serena J K Park, Charles N J McGhee, Trevor Sherwin. Medical students' attitudes towards research and a career in research: An Auckland, New Zealand study. The New Zealand Medical Journal 2010;123(No 1323):34-42.
6. Kyaw Soe HH, Than NN, Lwin H, Nu Htay MN, Phyu KL, Abas AL. Knowledge, attitudes, and barriers toward research: The perspectives of

- undergraduate medical and dental students. *J Edu Health Promot* 2018;7:23.
7. Jebb AT, Ng V, Tay L. A Review of Key Likert Scale Development Advances: 1995-2019. *Front Psychol* 2021;12:637547.
 8. Joshi, Ankur & Kale, Saket & Chandel, Satish & Pal, Dinesh. Likert scale: Explored and explained. *British Journal of Applied Science and Technology* 2015;7:396-403.
 9. Luis Carlos Silva-Ayçaguer, Patricio Suárez-Gil, Ana Fernández-Somoano. The null hypothesis significance test in health sciences research (1995-2006): statistical analysis and interpretation. *BMC Med Res Methodol* 2010;10:44.
 10. Roy B, Banerjee I, Sathian B, Mondal M, Kumar SS, Saha CG. Attitude of Basic Science Medical Students towards Post Graduation in Medicine and Surgery: A Questionnaire based Cross-sectional Study from Western Region of Nepal. *Nepal Journal of Epidemiology* 2011;1(4): 126-134.
 11. Nisha RS. Attitude towards research among 4th & 7th semester MBBS students and house surgeons in a Government Medical College in Kerala, India. *Public health Rev: Int J Public Health Res* 2019;6(4):161-168.
 12. Tariq Osman. Medical students' perceptions towards research at a Sudanese University. *BMC Medical Education*. 2016;16:253.
 13. Tore Gude, Reidar Tyssen, Tor Anvik, Hilde Grimstad, Are Holen, Anders Baerheim, Per Vaglum, Lise Løvseth. Have medical students' attitudes towards clinical communication skills changed over a 12- year period? A comparative long-term study. *BMC Medical Education*. 2020;20(11):1-7.
 14. Raghavendra Aswini Dutt, Siddharudha Shivali, Manipady Bhima Bhat, Jagadish Rao Padubidri. Attitudes and perceptions toward rural health care service among medical students. *Medical Journal of Dr. D.Y. Patil University* 2014;7(6):703-707.
 15. Asha Rani, Aliya Nusrath, Dhanalakshmi TA. Medical profession as career - pressure or passion: A cross sectional survey among undergraduate medical students. *International Journal of Medical Science and Education* 2016; 3(4): 322-327.
 16. 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(4):1392-1396.