# An observational study on career aspiration among students of a medical college in Kolkata

Tarun Kumar Sarkar<sup>1</sup>, Mrinmoy Adhikary<sup>1</sup>, Vinoth Gnana Chellaiyan D<sup>2</sup>, Pulak Kumar Jana<sup>1</sup>, Akash Rai<sup>3</sup>, Indranil Biswas<sup>1</sup>

<sup>1</sup>Department of Community Medicine, Murshidabad Medical College and Hospital, Berhampore, West Bengal, India, <sup>2</sup>Department of Community Medicine, Chettinad Hospital and Research Institute, Kelambakkam, Tamil Nadu, India, <sup>3</sup>Department of Community Medicine, College of Medicine and Sagor Dutta Hospital, Kolkata, West Bengal, India

Correspondence to: Mrinmoy Adhikary, E-mail: bunty.cnmc02@gmail.com

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# **ABSTRACT**

Background: Medical profession has been the choice of best minds from various family backgrounds as it offers an acclaimed and financially secure career. An undergraduate medical student has to pass through 4½ years of rigorous teaching and training followed by a year of internship before he/she is awarded the Bachelor of Medicine and Bachelor of Surgery (MBBS) degree. After MBBS, it becomes a tough decision to decide the future course of the career. Changing economic and social panorama in India has opened new gates and made this decision a mammoth task. **Objective:** The study was conducted with the objective to study sociodemographic profile of the medical students of College of Medicine and Sagore Dutta Hospital, Kolkata, and to study career aspiration and its determinants among the medical students of College of Medicine and Sagore Dutta Hospital, Kolkata. Materials and Methods: A crosssectional study was carried out among medical students of Sagore Dutta Medical College and Hospital, Kolkata, India, during October and December 2015. A total of 152 final year medical students were included in the study. A pre-tested and pre-designed self-administered questionnaire was used as the study tool. Data were analyzed with SPSS IBM software version 21.0. Means and proportions were calculated. Results: Majority of the students were in the age group of 18-20 years. Two-third of the students were from urban background. Self-interest and passion constituted the major reason (66.5%) to choose MBBS as a career. Nearly 95.4% of the students were willing to pursue their postgraduation. Majority (40.8%) preferred medicine or its allied specialty subjects. Only 16.5% wanted to go for public sector and only 7.9% wanted to work in rural area. Conclusion: Having understood the wants of the current generation of medical graduates, appropriate packages of monetary and non-monetary incentives need to be designed to encourage them to work in rural and remote areas. Only then, the goal of Universal Health Coverage may be achieved.

**KEY WORDS:** Career Aspirations; Career Choices; MBBS; Undergraduates; Medical Education; Post-graduation; Universal Health Coverage

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#### INTRODUCTION

Medical profession has been the choice of best minds from various family backgrounds as it offers an acclaimed and financially secure career. An undergraduate medical student has to pass through 4½ years of rigorous teaching and training followed by a year of internship before he/she is awarded

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the Bachelor of Medicine and Bachelor of Surgery (MBBS) degree. After MBBS, it becomes a tough decision to decide the future course of the career. Changing economic and social panorama in India has opened new gates and made this decision a mammoth task. As per a previous study, most of the medical students from a Chinese university held the traditional view of practicing clinical medicine with or without postgraduation. <sup>[1]</sup> This is true in Indian context as well. A previous Indian study has found that more than 86% of students preferred pursuing postgraduation in a clinical subject after MBBS. <sup>[2]</sup> Postgraduate specialization is perceived as essential for success and there is a tough competition for postgraduate seats, especially in clinical specialties.

Over the past few decades, a lot of new developments in medicine have opened up new less explored fields. In recent years, across all regions and areas of health-care provision, the sector is becoming more consolidated, organized, and corporate. Fortis Health Care Limited established in India in 1993 now claims to be Asia's largest health-care provider. Lesser known specialties and few new specialties such as Masters in Public Health and Masters in Hospital Administration have emerged. Nuclear medicine has become a financially rewarding subject recently.

In this background, we conducted the study with the objectives to study sociodemographic profile of the medical students of College of Medicine and Sagore Dutta hospital, Kolkata, and to study career aspiration and its determinants among the medical students of College of Medicine and Sagore Dutta Hospital, Kolkata.

#### MATERIALS AND METHODS

The study was a cross-sectional, institutional-based study conducted among medical students of Sagore Dutta Medical College and Hospital, Kolkata. The duration of the study was from October to December 2015

# **Study Population**

The study was conducted among 152 medical students who are pursuing their final MBBS in Sagore Dutta Medical College and Hospital, Kolkata.

### Sampling Method and Sample Size

The study was conducted purposively among final year MBBS students assuming that they may have better orientation and view about their future job preferences. All the students of final year MBBS willing to participate in the study were included in the study.

# **Study Tool**

The study tool was a pre-tested and pre-designed selfadministered questionnaire. The questionnaire included details including sociodemographic profile, questions on future preferences on specialty, job, and location.

### **Data Collection and Analysis**

Data were entered in Microsoft Excel spreadsheet and analyzed with SPSS IBM software version 21.0. Means and proportions were calculated.

#### **Ethical Issues**

Approval from the Institutional Ethics Committee was taken before conducting the study. Written informed consent was obtained from all the study participants. Strict confidentiality of the data and privacy of the study participants were maintained at all phases of the study.

#### **RESULTS**

Table 1 depicts the sociodemographic profile of the study population. Majority (86.4) were in the age group of 18-20 years. Nearly 53.3% of the study participants were male and the rest were female. Almost 84.9% were Hindu by religion. Two-third (75%) of the students were from urban and the rest were from rural background. Nearly 48.7% of the students' father and 57.8% of the students' mother were educated up to graduation and above whereas 43.5% of the students' father were in service. About 78.3% were from higher (class I) according to BG Prasad scale.

Table 2 shows the various reasons for choosing MBBS as a career. Self-interest and passion constituted the major reason (66.5%) followed by financial stability which is 18.5%.

Table 3 shows that 95.4% of the students were willing to pursue their postgraduation. Majority (40.8%) prefer Medicine or its allied specialty subjects, 20.4% in Surgery and its allied specialty, and 15.7% not yet decided. Only 9.9% prefer nonclinical subjects.

Regarding their choice of career, majority (32.9%) wanted to adopt private sector, only 16.5% wanted to go for public sector, and 13.8% wanted to involve in research work. Majority (37.5%) of them wanted to settle in urban area whereas only 7.9% wanted to settle in rural area (Table 4).

### **DISCUSSION**

Career aspirations were explored using a semi-structured questionnaire among 152 students of 1<sup>st</sup> and 3<sup>rd</sup> semester batches in a government medical college in Kolkata. Self-interest and passion constituted the major reason (66.5%) for choosing medicine career. Almost everyone preferred to pursue postgraduation, especially in clinical branches.

**Table 1:** Sociodemographic profile of the study participants (n=152)

Age group       4 (2.6)         18-20 years       132 (86.4)         >20 years       16 (10.5)         Gender       81 (53.3)         Male       81 (53.3)         Female       71 (46.7)         Religion       129 (84.9)         Muslim       21 (13.9)         Buddhist       1 (0.6)         Christian       1 (0.6)         Permanent residence       8 (25)         Rural       38 (25)         Urban       114 (75)         Education of father       1114 (75)         Education of father       10 (6.6)         Higher secondary school completed       10 (6.6)         Higher secondary school completed       15 (9.9)         Graduate and above       74 (48.7)         Professional       43 (28.3)         Education of mother	<b>(o)</b>
18-20 years       132 (86.4)         >20 years       16 (10.5)         Gender       81 (53.3)         Female       71 (46.7)         Religion       129 (84.9)         Muslim       21 (13.9)         Buddhist       1 (0.6)         Christian       1 (0.6)         Permanent residence       38 (25)         Urban       114 (75)         Education of father       11literate         Illiterate       2 (1.3)         Primary school completed       8 (5.2)         Secondary school completed       10 (6.6)         Higher secondary school completed       15 (9.9)         Graduate and above       74 (48.7)         Professional       43 (28.3)	
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Religion       129 (84.9)         Muslim       21 (13.9)         Buddhist       1 (0.6)         Christian       1 (0.6)         Permanent residence       38 (25)         Rural       38 (25)         Urban       114 (75)         Education of father       11literate         Illiterate       2 (1.3)         Primary school completed       8 (5.2)         Secondary school completed       10 (6.6)         Higher secondary school completed       15 (9.9)         Graduate and above       74 (48.7)         Professional       43 (28.3)	
Hindu       129 (84.9)         Muslim       21 (13.9)         Buddhist       1 (0.6)         Christian       1 (0.6)         Permanent residence       38 (25)         Rural       38 (25)         Urban       114 (75)         Education of father       2 (1.3)         Primary school completed       8 (5.2)         Secondary school completed       10 (6.6)         Higher secondary school completed       15 (9.9)         Graduate and above       74 (48.7)         Professional       43 (28.3)	
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Buddhist       1 (0.6)         Christian       1 (0.6)         Permanent residence       38 (25)         Rural       38 (25)         Urban       114 (75)         Education of father       2 (1.3)         Illiterate       2 (1.3)         Primary school completed       8 (5.2)         Secondary school completed       10 (6.6)         Higher secondary school completed       15 (9.9)         Graduate and above       74 (48.7)         Professional       43 (28.3)	
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Graduate and above 74 (48.7) Professional 43 (28.3)	
Professional 43 (28.3)	
Education of mother	
Illiterate 13 (8.6)	
Primary school completed 11 (7.3)	
Secondary school completed 16 (10.5)	
Higher secondary school completed 13 (8.5)	
Graduate and above 88 (57.8)	
Professional 11 (7.3)	
Occupation of father	
Doctor 11 (7.2)	
Professor 13 (8.6)	
Service 66 (43.4)	
Teacher 17 (11.2)	
Businessman 29 (19.1)	
Farmer 11 (7.2)	
Laborers and others 5 (3.3)	
Socioeconomic class*	
I 119 (78.3)	
II 15 (9.9)	
III 9 (5.9)	
IV 8 (5.3)	
V 1 (0.6)	

<sup>\*</sup>Modified BG Prasad scale

Working in the public sector is also considered as a secondgrade option with regard to infrastructure, scope of career development, and pay scales.

**Table 2:** Distribution of the study participants according to the reasons for choosing medical career (n=152)

Reason	Number (%)
Self-interest and passion	101 (66.5)
Financial stability	28 (18.5)
Parents' pressure	15 (9.8)
Service to needy	6 (3.9)
Others	2 (1.3)

**Table 3:** Distribution of the study participants according to the preference of postgraduation (n=152)

Variables	Number (%)
Willing to pursue postgraduation	
Yes	145 (95.4)
No	1 (0.7)
Not yet decided	6 (3.9)
Subject of choice for postgraduation	
Medicine and allied	62 (40.8)
Surgery and allied	31 (20.4)
Gynecology and obstetrics	14 (9.2)
Undecided but clinical	6 (3.9)
Paraclinical subjects	15 (9.9)
Not yet decided	24 (15.8)

**Table 4:** Distribution of the study participants according to the future plans (n=152)

Variables	Number (%)
Choice of career in future	
Public sector	25 (16.5)
Private practice	42 (27.6)
Corporate hospital	8 (5.3)
NGOs	12 (7.9)
Research	21 (13.8)
Not decided	44 (28.9)
Prefer to work at	
Rural area	12 (7.9)
Urban area	57 (37.5)
Anywhere	34 (22.4)
Not decided	49 (32.2)

Self-interest and passion for the profession were the most common reasons why the study participants chose MBBS as a career. "Financial security" was another common reason cited for their career choice. Earlier studies from India and abroad<sup>[4-6]</sup> have elicited similar responses. In a study among 1<sup>st</sup> year medical students in Delhi,<sup>[7]</sup> "to serve the needy" was the most common reason quoted for becoming a doctor. In contrast, only 3.9% of the students in the current study had listed "to serve the needy" as a reason for choosing medicine as a career. These findings probably point toward the attitudinal shift among the current generation of doctors vis-à-vis earning

money and serving the needy. Nearly 95.4% of the students wanted to do postgraduation. This is similar to the findings from a recent study in Uttar Pradesh.[8] Majority (73.7%) of the students want to join one or other postgraduation course immediately after graduation. With regard to the students' choices of postgraduation, majority seems to conform to the traditionally preferred choices. Almost 74.3% of the students wish to pursue a postgraduate degree in one of the clinical sciences, of which majority (40.8%) wanted medicine or its allied specialty. Only 9.9% of the students were inclined toward taking up one of the non-clinical fields as a career choice. Similar trends have been reported in various earlier studies from India, [9,10] Pakistan, [11] Japan, [12] Jordon, [13] Trinidad, [14] and Turkey.[15] However, a recent study from China[16] has shown evidence of changing patterns in the traditional genderbased choices in postgraduation. Only 16.5% wanted to work in public sector, 32.9% wanted to work in private sector which includes private practice and corporate hospital, and 13.8% wanted to be involved in research work. Majority wanted to work in urban area. Such low levels of willingness to work in the public sector have been a common finding in many of the earlier Indian studies<sup>[7-11]</sup> too. It was evident from the students' responses that they considered working in the public sector as significantly less attractive than the private sector. Different countries have adopted various measures to retain health-care personnel in rural and remote areas, but have met with limited success.

This study is one of the very few studies conducted among government medical college students. The study was able to explore the choices of medical students and their attitude toward medical career. The study is not without limitations sample size and conduction of study in one medical college limit the external validity of the study.

# CONCLUSION

Having understood the preference of the current generation of medical graduates, appropriate packages of monetary and non-monetary incentives need to be designed to encourage them to choose and pursue various branches without any restriction. As there is an impending need for specialists in all branches in both rural and urban areas, motivation is a mandate for achieving universal health coverage.

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