

## Views of Final Phase Undergraduate Medical Students' About the Personal & Familial Factors those Influence Their Future Career

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### Abstract

**Background:** The understanding of the medical career decision-making process is important to aid career counseling and thus prevent wrong choices, support medical graduates in their choice and promote faster choices. An understanding of the factors which influence doctors' career choices, and how attitudes vary among doctors who choose different specialties, is important for all those involved in the teaching and training of doctors. **Objectives:** This study was done to explore views of final phase undergraduate medical students of Bangladesh about the personal & familial factors those influence their future career selection. **Methods:** This descriptive type of cross sectional study was conducted on 784 students randomly selected from eight medical colleges of Bangladesh, in the period of January 2019 to December 2019 with a pre tested self-administered questionnaire. **Results:** Study revealed that a total of 784 students responded, out of which 318(40.6%) males and 466(59.4%) females. Among them 726(92.6%) students wanted to do post-graduation after graduation. The leading reasons for selecting future career were personal preference 348(50.6%), self confidence 272(39.1%) and to take care of other family members 223(32.9%). **Conclusion:** Study recommended that orientation and career counseling at different stages in undergraduate medical education may help students and future doctors to choose their specialty for career as per the community healthcare needs.

**Key Words:** Views final Phase Students, Career Choices, Undergraduate medical education.

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### Introduction

Medical careers begin by encompassing a broad range of study, ultimately narrowing down to specialization and sub specialization. Relatively little is known about transition from

the 'medical student' who is a relatively undifferentiated, totipotent 'stem doctor', potentially capable of entering any specialty, through to the final, fully differentiated 'specialist' who is restricted to one specialized area of medicine<sup>1</sup>.

Medical education requires undergraduates to be exposed to a wide range of medical specialties, and most students will have sampled many areas/disciplines by the final year when they start professorial appointments. During undergraduate course students are exposed to a wide range of relatively balanced learning experiences, which may have an impact on forming their preferences, both for and against certain specialties/healthcare settings. Although it is often assumed that students do not make career choices until and after they have finished medical school, there is strong evidence that career choices can be determined during or even before medical school<sup>2</sup>.

Medical career preferences and determinants of medical career choice have been addressed abundantly in the literature, indicating that medical career decision making is a dynamic, complex and multifactorial process. The Bland–Meurer model of medical specialty choice captures the most comprehensive outline of medical student career decision-making to date<sup>3</sup>. This framework, which originates from a non-statistical meta analysis, suggests that medical specialty choice emerges

from the matching of perceptions of specialty characteristics with personal and social needs. Perceptions and needs which, in turn, are expected to be mediated by faculty and student characteristics as well as student values. Although the model was introduced two decades ago, suggested mediating influences and interrelations between hypothesized predictors are seldom explored. Most research only investigates the direct association of career choice with one or a few variables which hamper the interpretation of individual study results in relation to all hypothesized predictive variables<sup>4</sup>. The factors which influence career decisions are multiple, ranging from individuals' characteristics, to the perceived benefits and attractiveness of particular specialties, to factors associated with medical school curricula, such as experience of the chosen specialty. Recently, studies have suggested that quality of life has become a major determinant in why doctors chose a particular specialty (5,6,7); this has been found to be more influential than more traditional specialty-linked motivators, such as remuneration. It is also clear that demographic factors such as gender influence medical career preference. There is little published about how soon medical students formulate careers intentions or how much career preferences change during medical school - and if they do, what the determining factors are.

### Methodology

This descriptive cross sectional study was conducted among 784 undergraduate final phase medical students of eight medical colleges of Bangladesh. The study period was from January 2019 to December 2019. A pre tested self-administered semi-structured

questionnaire was distributed among the participants. Students' participation was voluntary. Confidentiality and anonymity were strictly maintained. All ethical issues were considered and necessary permission was taken from ethical committee of the Centre for

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Medical Education (CME) and respected medical colleges before the data collection.

Collected data were verified, compiled, tabulated and analyzed

### Results

Out of the 784 students of the survey, 466(59.4%) students were female, 318(40.6%) were male (Figure 1). Figure 2 shows that 407(51.9%) of the students were from government medical colleges and 377(48.1%)

of the students from non-government medical colleges (Figure 2). Out of the 784 students 726(92.6%) of the students wanted to do post-graduation after graduation (Figure 3).

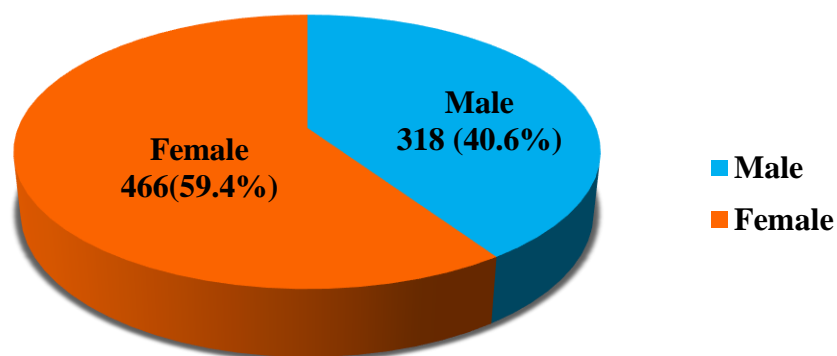
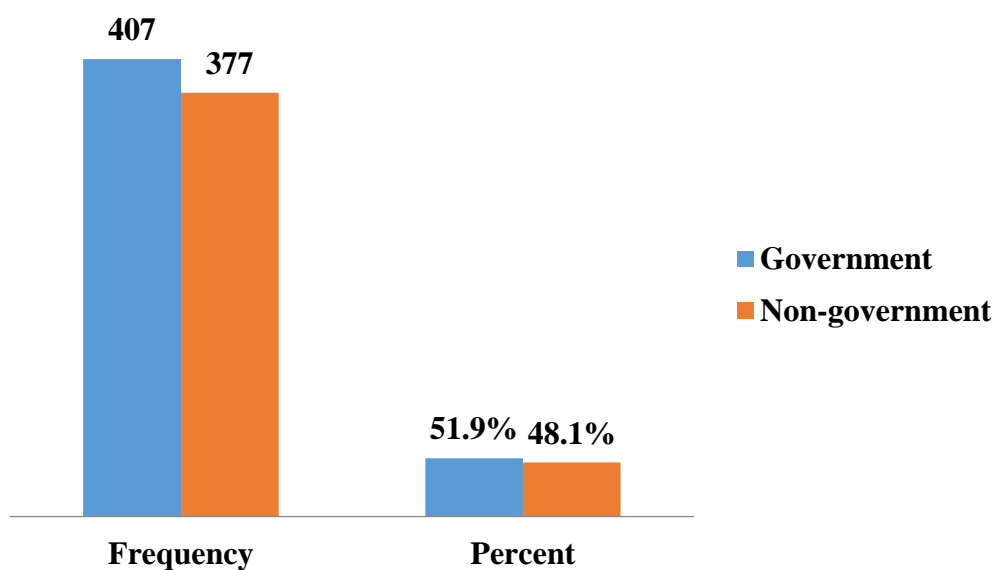
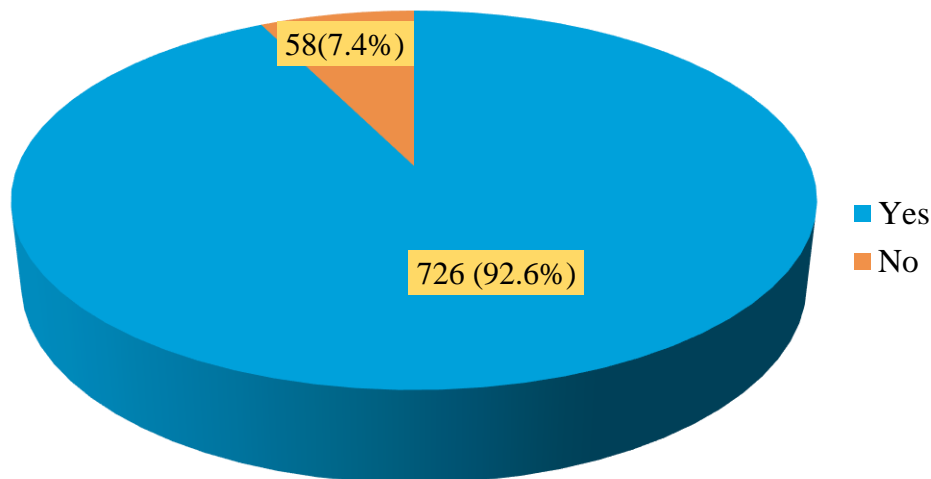


Figure 1: Distribution of the medical students by their gender (n=784)



**Figure 2: Distribution of the medical students by medical colleges (n=784)**



**Figure 3: Distribution of the medical students as per their choice of medical discipline for future career (n=784)**

**Table 1: Distribution of the medical students regarding general views about the Personal factors affecting their career choice.**

Personal factors affecting students career choice	Level of agreement				Total
	Not at all f (%)	Mild f (%)	Moderate f (%)	High f (%)	
Gender	333 (48.4)	100 (14.5)	138 (20.1)	117 (17)	688
Self confidence	50 (7.2)	114 (16.4)	259 (37.3)	272 (39.1)	695
Personal preference	51 (7.4)	88 (12.8)	201 (29.2)	348 (50.6)	688
Marital status	388 (56)	113 (16.3)	119 (17.2)	73 (10.5)	693
Academic performance	124 (18)	161 (23.4)	265 (38.6)	137 (19.9)	687
Research opportunities	176 (25.5)	155 (22.5)	192 (27.9)	166 (24.1)	689
Availability of postgraduate training	116 (17.1)	147 (21.7)	224 (33.1)	190 (28.1)	677

**NB.** Not at all = Not at all agree, Mild = Mildly agree, Moderate = Moderately agree, High = highly agree.

Table 1 shows general views of students about choice. Out of 784 students, maximum (48.4%) the personal factors affecting their career students were “not at all” agreed that “gender” Bangladesh Journal of Medical Education 2023; 14(1); H.M et al., publisher and licensee Association for Medical Education. This is an Open Access article which permits unrestricted non-commercial use, provided the original work is properly cited.

can influence career choice. 39.1% and 50.6% students were “highly” agreed that “self confidence” and “personal preference” influence career choice. Maximum (56%) students were “not at all” agreed with “marital

status” influence their career choice. 38.6% & 33.1% students were “moderately” agreed that “academic performance” and “availability of postgraduate training” influence career choice.

**Table 2: Distribution of the medical students regarding general views about the family factors affecting their career choice.**

Family factors affecting students career choice	Level of agreement				Total
	Not at all f (%)	Mild f (%)	Moderate f (%)	High f (%)	
Parental wishes	238 (34.4)	142 (20.5)	144 (20.8)	167 (24.2)	691
Relative wishes	410 (59.4)	119 (17.2)	89 (12.9)	72 (7.2)	690
Having a relatives in the same field	400 (58.3)	119 (17.3)	98 (14.3)	69 (10.1)	686
Having a relatives/friends with a certain illness	313 (45.6)	146 (21.3)	138 (20.1)	90 (13.1)	687
To take care of other family members	138 (20.4)	124 (18.3)	192 (28.4)	223 (32.9)	677

Table 2 shows general views of students about the family factors affecting their career choice. Out of 784 students, maximum (34.4%, 59.4% & 58.3%) students “not at all” agreed that “parental wishes” , “relative wishes” and

“having a relatives in the same field” can influence career choice. Maximum (32.9%) student “highly agreed” that “to take care of other family members” can influence their career choice.

### Discussion

Career aspirations were explored using a semi-structured questionnaire among 784 students of final phases undergraduate medical students in both government & non- government medical college in Bangladesh.

Study shows that majority (92.6%) of the students wanted to do post-graduation after graduation and only 7.4% could not select a specialty (Figure 3). Similar findings have been reported (8,9), which showed that 80% and 97% students had decided their specialty choices during their undergraduate studies. Similar findings shows that 95.4% of the students wanted to do postgraduation<sup>10</sup>.

Study shows that personal preference had the highest weight (50.6%) from the all personal factors affecting or influencing career choice, followed by self-confidence (39.1%), availability of post graduation (33.1%), academic performance (38.6%) & gender (20.1%), (Table 1). Similar study found that “Personal intelligence/ability preference” had the highest weight of 0.197 of the 14 criteria on the second tier, followed by “career opportunities” and “lifestyle after completion of training”<sup>11</sup>. Nearly 80% of students chose a career based on ‘personal interest’. Other

factors like “career stability, reputation, lifestyle/prestige, career progression, independence and income were rated as important by half the respondents<sup>12</sup>. Furthermore study showed that 117 (53.1%) students chose their major because the specialty “match with the capabilities of students”. Our results illustrate that students were aware of selecting career specialty according to their potential and strengths<sup>13</sup>.

In this study shows majority of the students think that parental wishes(34.4%), relative wishes(59.4%, having a relatives in the same

field(58.3%) not influence their future career choice (Table 2). In contrast other study shows that students (29%) chose the profession because their parents wanted them while (5%) chose it on the advice of their friends or relatives<sup>14</sup>. Another study shows that (21%) students choose career 'to fulfil their parents wishes'<sup>15</sup>. Another study shows that students are the subject of very high expectations on the part of their families and society. They tend to choose specialties that reflect their personal interests and provide opportunities for future development<sup>11</sup>.

### Conclusion

There is a significant amount of medical career decision-making literature that provides the following factors as predictors of medical career decision-making. However, the data synthesis using the Bland–Meurer model as a reference shows that the process of medical career decision-making is not yet fully understood. If the factors that influence medical students to choose specific areas/settings as a preferred career choice can be identified accurately, it may then be

possible to use this information to develop graduates who will pursue jobs in areas/settings which will match the interests of the country as a whole.

There is need for career counselling in the medical colleges career counseling should stimulate students to gain experiences in different specialties, to discover their personal career needs, and the matching of career needs to specialty perceptions.

### Reference

1. Tennakoon H D, Vidanapathirana A K, Sutharsan AL S 1999 batch of students, Faculty of Medicine, University of Colombo, Career preferences and the factors influencing their selection in fourth year medical students in the University of Colombo.
2. Wright B, Scott I, Woloschuk W, Brenneis F, Bradley J. CMAJ 2004. Career choice of new medical students at three Canadian universities: Family medicine versus specialty medicine.
3. Bland CJ, Meurer LN, Maldona G. 1995. Determinants of primary care specialty choice: A non-statistical meta-analysis of the literature. Acad Med 70(7):620–641
4. Querido Sophie J, Vergouw D, Wigersma L, Ronald S. Batenburg, Marlies E. J. DE Rond & Olle T. J. Ten Cate, 2016, Dynamics of career choice among students in vundergraduate medical courses. A BEME systematic review: BEME Guide No. 33.
5. Kiker BF, Zeh M: Relative income expectations, expected malpractice premium costs, and other determinants of physician specialty choice. J

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- Health Soc Behav. 1998, 39: 152-167.View ArticleGoogle Scholar
6. Dorsey ER, Jarjoura D, Rutecki GW: Influence of controllable lifestyle on recent trends in specialty choice by US medical students. *JAMA*. 2003, 290: 1173-1178.View ArticleGoogle Scholar
  7. Dorsey ER, Jarjouram D, Rutecki GW: The influence of controllable lifestyle and sex on the specialty choices of graduating US medical students, 1996–2003. *Acad Med*. 2005, 80: 791-796.View ArticleGoogle Scholar
  8. Mehmood S.I., Kumar A., Al-Binali A., Borleffs J.C, 2012. Specialty preferences: trends and perceptions among Saudi undergraduate medical students.
  9. Avgerinos E.D., Msaouel P., Koussidis G.A., Keramaris,N.C., Bessas Z., Gourgoulianis K., 2006. Greek medical students' career choices indicate strong tendency towards specialization and training abroad.
  10. Sarkar T K, Adhikary M, Vinoth Gnana Chellaiyan D, Jana P K, Rai A, Biswas I,2016, An observational study on career aspiration among students of a medical college in Kolkata
  11. Chang P Y, Hung CY, Wang K, Huang YH ,Chan KJ, Factors Influencing Medical Students' Choice of Specialty. Department of Surgery, Chang Gung Children's Hospital, Chang Gung University, College of Medicine, Tao-Yuan, Institute of Management of Technology, National Chiao Tung University, Department of Surgery, Hsin-Chu General Hospital, Department of Health, Hsin-Chu, and Department of Surgery, National Taiwan University Hospital, Taipei, Taiwan.
  12. Kumar R, Dhaliwal U, 2011.Career choices of undergraduate medical students, *The National Medical Journal of India*.
  13. Salman Y. Guraya, Hamdi H. Almaramhy, Mapping the factors that influence the career specialty preferences by the undergraduate medical students. Department of Surgery, The College of Medicine, Taibah University, Almadinah Almunawwarah, Saudi Arabia.
  14. Shahab F, Hussain H, Inayat A, Shahab A, Attitudes of medical students towards their career — perspective from Khyber-Pukhtunkhwa (*JPMA* 63: 1017; 2013)
  15. McHugh SM, Corrigan MA, Sheikh A, Lehane E, Broe P, Hill AD. A study of the factors influencing school-going students considering medical careers. *Surgeon* 2011; 9: 191-4