

Factors affecting the decision of students while choosing medical profession as a career

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Abstract-

Background: The decision to opt medical profession is important and depends on many factors. Understanding the motivations for choosing the medical profession can shed light on the aspirations, values, and influences that lead people down this noble path. There are various factors which effects the decision of students while choosing a career. Hence, by identifying them more and more dedicated students should be attracted to this profession. The study was planned to determine the factors affecting the decision of students while choosing the medical profession as a career.

Methodology: It was a cross-sectional survey conducted in May till August 2023 at LMDC (Lahore Medical and Dental College), Lahore, Pakistan. Informed consent was taken, and a structured questionnaire was used. The students were asked to rate the influence of each component in their decision to opt for the medical profession in Likert-scale format having five options scoring from 1 to 5, with score=1 representing strongly disagree to score=5 representing strongly agree. For data analysis, Statistical Package for Social Sciences (SPSS), version 22 was used. For qualitative variables frequency and percentages and for quantitative variables mean scores along with standard deviation was calculated.

Results: Two hundred and forty-six Medical College students participated in the study. The main motivating factors with a mean Likert score >3 were the desire to help patients and save lives, the prestigiousness of the profession, to serve humanity, interest in medical studies, job security, self-employment, and independence opportunities, and the ability to use hi-tech equipment. Social media influences, flexibility in working hours, and belonging to a family of doctors were the least common factors with a mean Likert score <2. The top 3 other professions that the students were interested in are as follows: IT and Computer / Engineer: 19.1% Business and Economics: 15.0% Lawyer: 13.8%.

Conclusion:

Factors like the desire to serve humanity (mean score: 3.88 ± 1.16), the perceived prestige of the profession (mean score: 4.13 ± 1.09), the passion for saving lives (mean score: 4.10 ± 1.08), and the aspiration to help patients (mean score: 4.20 ± 0.93) emerge as strong drivers. Additionally, aspects such as job security (mean score: 2.96), the appeal of self-employment and independence (mean score: 3.74 ± 1.22), and the allure of international job opportunities (mean score: 3.15 ± 1.47) also contribute significantly to the decision-making process. This study will enhance the understanding of policymakers and educators about motivational factors, which is the first step in formulating policies to attract more people to this profession.

Hence dealing with the shortage of health professionals to improve human health across nations.

Index Terms- Career choice, medical profession, motivations, medical education, students

I. INTRODUCTION

There is a worldwide shortage of people in the field of healthcare. More in middle- and lower-income nations, as many doctors migrate to high-income countries, increasing the shortage further.¹ To overcome this scarcity, more students should be encouraged to come into this profession. This leads to the need to explore the primary reasons alluring the students to take admission in medical schools.

The decision to pursue a medical career is important and depends on many factors. Understanding the motivations for choosing the medical profession can shed light on the aspirations, values, and influences that lead people down this noble path. Various factors affect the decision of students while choosing a career. Many studies have been conducted worldwide and in Pakistan to seek the reasons behind choosing the medical profession.^{2,3,4} So that by identifying them more and more dedicated students should be attracted toward this profession.

The desire to heal and help others is life-changing and the most noticeable motive to opt a respectable medical career. The catch of directly impacting lives, reducing suffering, and improving human well-being inclines many aspiring medical professionals. The opportunity to bring about a substantial change in human lives often acts as a strong spark in their decision-making process. Altruism is one of the factors which motivates the students to pursue this profession. The medical profession involves long hours of selfless care of patients. So empathy and compassion for human beings inculcate a desire to be a doctor. Many studies have reported the desire to serve mankind as a leading cause of becoming a doctor.^{4,5,6}

Certain social factors also affect students to plump for the medical profession. It is considered the most prestigious. Doctors usually are highly respected and well thought out. The presence of a healthcare professional in the family also provides an opportunity for earlier exposure to the medical field. Financial benefits and the desire for a high salary also play a role in choosing a profession^{7,8,9}. The present study is planned to determine the factors affecting the decision of students while choosing the medical profession as a career.

This study by determining the factors that affect the decision of students while making career choices, will identify the need for

interventions to be made to attract more students in this profession so that the scarcity of doctors can be overcome.

II. METHODOLOGY

It was a cross-sectional survey conducted in May till August 2023 at LMDC (Lahore Medical and Dental College), Lahore, Pakistan. All registered first-year and fourth-year MBBS students in the year 2023 who agree to participate in the study (N=246). A nonprobability convenient sampling technique was used. A structured-questionnaire, comprising of two sections was

utilized. The background information of the study participants like gender, and age were included in the first section. The second part includes points in a Likert-scale format having five options scoring from 1 to 5, with score=1 representing strongly disagree to score=5 representing strongly agree. The students rated the influence of each component in their decision to opt for the medical profession. For data analysis, Statistical Package for Social Sciences (SPSS), version 22 was used. For qualitative variables frequency and percentages and for quantitative variables mean scores along with standard deviation was calculated.

III. RESULTS

Two hundred and forty-six Medical College students participated in the study out of which 118 (48.0%) were First Year Medical students and 128 (52.0%) were Fourth Year Medical students. 93 students (37.8%) were males whereas 153 students (62.2%) were females. The mean age of the students was 20.76±1.84. 74.4% had done FSc while 25.6% were A Levels / American Board certified. The majority of the parents were non-doctors (figure 1). Frequencies and percentages of other professions students were interested in if they had not chosen medicine as a career are shown in Figure 2. The mean scores of responses of the students regarding factors affecting their decision to choose the medical profession are given in Table 1 along with the standard deviation.

Figure 1: Profession of Parents:

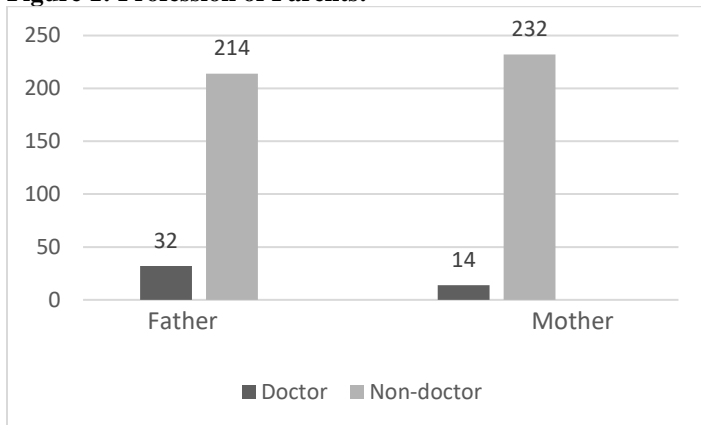
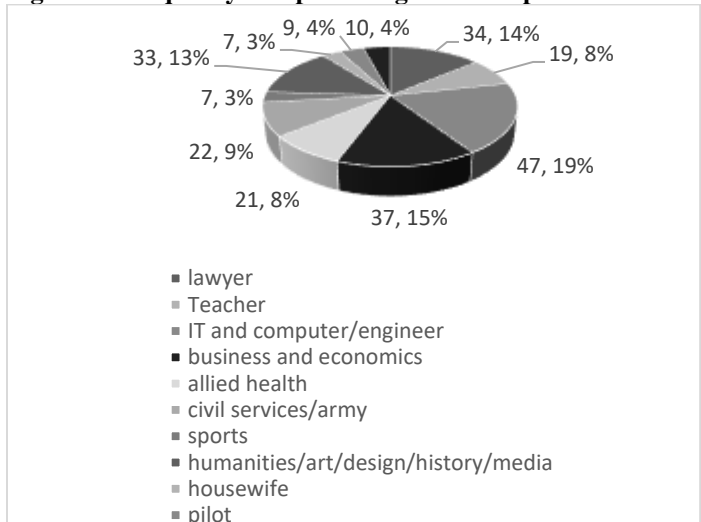


Figure 2: Frequency and percentage of other professions



Question	Mean Score (max=5,min=1)	Std. Deviation
This profession will help me in finding a good life partner/ spouse	2.74	3.44
My interest in health research motivated me	2.9	1.30
This profession guarantees job security	2.96	1.37
Lack of doctors in the family motivated me	2.52	1.55
I wanted to serve humanity by this profession	3.88	1.16
Poor medical facilities in my area/ country/rural background motivated me	2.55	1.40
I was impressed by a particular doctor	2.93	1.55
Flexibility in working hours is a great attraction in this profession	1.84	1.12
It has a wide range of opportunities	3.51	1.22
This profession ensures self-employment and independence	3.74	1.22
Shortage of doctors in our country	2.8	1.4
I always wanted to use latest hi-tech medical equipment	3.31	1.3
Career planning workshops/counselling sessions motivated me to join this profession	2.25	1.24
This is my family profession./ I belong to a family of doctors	1.94	1.43
Social media influenced me to become a doctor	1.83	1.15
I chose this profession to have a better job opportunity in a foreign country	3.15	1.47
If given a chance I will again choose this profession	3.3	1.56
If given a chance I will rather choose some other profession	2.7	1.55
I regret joining this profession	1.99	1.25
I had a strong family pressure to become a doctor	2.24	1.36
It is a very prestigious career	4.13	1.09

Table 1: Mean scores of factors affecting the decision of students while choosing the medical profession

IV. DISCUSSION

Based on the descriptive statistics, it is quite possible that a diverse range of factors must be considered before moving towards an almost life-long decision, particularly one that becomes effective in the long-run, with hard elbow grease. The mean likelihood scores for various factors shed light on the students' motivations and considerations. For instance, factors like the desire to serve humanity (mean score: 3.8±1.16), the perceived prestige of the profession (mean score: 4.13±1.08), the

passion for saving lives (mean score: 4.10 ± 1.08), and the aspiration to help patients (mean score: 4.20 ± 0.93) emerge as strong drivers. The main motivating factors with a mean score >3 were the desire to help patients and save lives, the prestigiousness of the profession, to serve humanity, interest in medical studies, job security, self-employment, and independence, and access to hi-tech equipment. According to a review humanitarian and societal factors like job security and prestige have major impact to join medicine in lower-income countries, while in upper and middle income countries societal and scientific factors like interest in science and research opportunities were reported to have a major impact. In most of the higher income developed countries, scientific factors along with humanitarian factors influenced mainly in choosing a medical career⁹. A willingness to help patients and an interest in the medical field were the most common reasons among the medical students of Saudi Arabia as well¹⁰. According to a Finnish National study interest in people as well as the prestigiousness of the profession remain the main motives to become a doctor from 1988 till 2008.4 Studies on medical students reported that concern to help others has been one of the dominant factors for choosing medicine^{3,4,9,10,11}.

When asked whether the students had a strong family pressure to become a doctor, (mean score 2.24 ± 1.36), indicating they were not forced by their families to join this profession. The expectations of the people around student such as Family play a great deal of role in shaping career choices, especially in various societies where certain careers, including medicine, are valued as the best professions Many individuals are motivated to enter the medical field by parental or family interests and the desire to preserve a family legacy or social status⁷. The majority of the parents of the students were non-doctors, whereas a few were doctors, suggesting that the profession of parents played a minor role in helping the students decide whether they wanted to be doctors or not. Role models, such as family members, physicians, or mentors, can massively impact an individual's career choice. Inspirational figures who embody the values and ideals of the medical profession can ignite a desire to follow in their footsteps. Personal connections with these role models can enhance the decision to pursue a medical career. Studies show that students chose this profession because were impressed by a particular doctor. The support from friends and family and the presence of positive role models are important motivating factors^{7,12}.

The question "I always wanted to be a doctor" evoked a positive response with the majority agreeing with it. (mean score 3.56 ± 1.37) Many children want to be doctors when they grow up, so a seed of desire is planted from which aspirations to achieve the goal of becoming a doctor grow. Choosing medicine at an early age has significance in terms of how young people commit to that choice. Research showed that many clinicians decided to opt for medicine before entering high school^{6,12}.

The table shows that workshops, and counseling sessions (mean score 2.25 ± 1.24) played an average role. Social media had little influence (mean score 1.8). Access to social networks is important for correct guidance and useful information regarding admission. Lacking such guidance and information may lead to self-doubt in career choices¹³.

When asked about job security and earning more money, the answers were divided, mostly being neutral (mean score

2.96 ± 1.37 and 2.83 ± 1.07 respectively). While proper training and education are required for the medical profession, they often provide financial rewards and a safe future. The idea of a bankable career and the promise of financial security push some people to choose medicine as a career path. The esteem associated with the medical profession entices financial stability. The flexibility in working hours and conditions was an important factor in opting for the medical profession but in our study it came out as a minor factor (mean score 1.84 ± 1.12).¹⁴ Job opportunities in a foreign country was also an important factor while choosing this career. (mean score 3.15 ± 1.47). Another study from Pakistan reported overseas consideration to be not an important factor³.

The majority of the students did not regret joining this profession (mean score 1.99 ± 1.25). This is in accordance with Ramya et al. This feeling of regret can be due to stress, lifelong learning, frequent exams, lack of interest, and financial problems associated with medical studies^{3,15}. However if given a chance again many students preferred to choose some other field. (mean score 2.7 ± 1.25). The top 3 other professions that the students were interested in are as follows: IT and Computer / Engineer: 19.1%; Business and Economics: 15.0%; Lawyer: 13.8%.

Limitation of Study: This study population comprised the students of a single private medical college. Also, public-sector colleges were not included. So, the results cannot be generalized. There might be some other motivating factors that were missed in our questionnaire that have played a significant role in career choice.

V. CONCLUSIONS

Factors like the desire to serve humanity (mean score: 3.88 ± 1.16), the perceived prestige of the profession (mean score: 4.13 ± 1.09), the passion for saving lives (mean score: 4.10 ± 1.08), and the aspiration to help patients (mean score: 4.20 ± 0.93) emerge as strong drivers. Additionally, aspects such as job security (mean score: 2.96), the appeal of self-employment and independence (mean score: 3.74 ± 1.22), and the allure of international job opportunities (mean score: 3.15 ± 1.47) also contribute significantly to the decision-making process. This study will enhance the understanding of policymakers and educators about motivational factors, which is the first step in formulating policies to attract more people to this profession. Hence dealing with the shortage of health professionals to improve human health across nations.

Further research is recommended so that effective measures can be taken for the implementation of better health policies globally.

ETHICAL CONSIDERATIONS

A letter of approval was acquired from the College Institutional Review Board (IRB) before the commencement of the study. Informed verbal consent was taken and confidentiality of data was maintained

DISCLOSURES

No conflict of interest is declared. The authors also declare that no funding has been provided by any organization or individual for the study.

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