

## Original Article

# STUDENT'S SATISFACTION REGARDING UNDERGRADUATE MEDICAL COLLEGE ENTRANCE EXAMINATION AND CAREER CHOICES AFTER MASTERS OF PUBLIC HEALTH DEGREE

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### ABSTRACT

**Background:** Each year a large number of applications are received from students in pursuance to opt for admission into a medical college. It's a career choice for the majority of the young students owing to many social or personal factors but whether this career choice is the ultimate personal choice of the respective students is the area to probe in. This study aims to explore this aspect of individual's life who are enrolled in masters of public health and to understand their satisfaction level regarding medical college entrance examination as pre-requisite for admission and also to assess their career choices after attaining currently enrolled degree.

**Material and Methods:** This cross-sectional study was conducted from March 2020 to August 2020. The study population is mainly comprised of post-graduate students pursuing the master of public health (MPH) in a private sector university in Peshawar, Pakistan. Using a convenient sampling method, a total of 147 students were selected. Ethical approval was sought after which the data was collected which was entered and analyzed in SPSS version 23.

**Results:** A total of 147 students enrolled in a public health degree program were invited to participate in this research. Among total students 52.6% of the students were registered medical practitioners and 47.4% were mainly from non-medical professions including health technology and dental technology with a majority being private employees (62.4%). The average age of students who prepared for the test for medical college admission was  $\leq 18$  years among 78.6% at the time of entry test.

**Conclusion:** Most of the postgraduate students enrolled in public health programs in this study setting were medical doctors. All postgraduate students had future plans for clinical practice, teaching, and research. The students were satisfied with their intermediate examination and entry test results for admission into medical colleges. However; continuing medical professions is a preferred choice among all postgraduate students studying in the university.

**Key Words:** Cross-sectional Study, Public Health, Career choices

## INTRODUCTION

In Pakistan, a large number of students opt and apply for admissions into medical colleges each year for a medical career. Various universities offer medical degree programs specifically Bachelor of Medicine and Bachelor of Surgery (MBBS) which is offered in Pakistan in both the public and private sector.

Admission into a medical college is largely based on the performance of students during their examinations and entry test. Various studies have been conducted to assess the choices of students for selecting a medical career.<sup>1,2</sup> However; it is considered that admissions into medical colleges depend on the results of students which are also influenced by the personal and familial factors including parents' education and social pressures on students.<sup>3</sup> In Pakistan, since 1990 admission criteria in medical education has been changed from gender-based admissions to general admissions according to the merit of students. However; the pragmatic and uniformity in admissions for a medical college in past years have shown that female students have been

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performing well as compared to male students in competing for admissions in a medical college or a medical university.<sup>4</sup> In addition, quantitative studies assessing the success rate for qualifying admissions among medical graduates will be needed in the country. Hence, this study aimed to determine how many of the students studying public health were satisfied with the medical college entrance exam and their career prospects after getting MPH degree.

## MATERIAL AND METHODS

This cross-sectional study was conducted to assess the success rate among students for qualifying admissions into medical colleges from March 2020 to August 2020. The study population is mainly comprised of post-graduate students pursuing the master of public health (MPH) at a private university in Peshawar, Pakistan. A total of 147 students (male and female) were selected who were attending MPH classes at the institute. Their verbal consent for participation in the study was sought prior. A semi-structured study questionnaire was formulated in accordance with our study objectives for data collection. It was pre-tested on 15% of the students which were excluded from the final study. The study questionnaire was self-administered and the data was collected by the principal researcher. Ethical approval was sought from the institutional review board of Sarhad Institute of Health Sciences (SIHS) Peshawar, after which the data collection was initiated. All the data was checked for its completion and accuracy. Data were cross-checked and analyzed in SPSS version 23. The descriptive and inferential results are presented as frequencies and percentages.

## RESULTS

A total of 147 students enrolled in a public health degree program at a private university participated in this study. Male preponderance was higher (n = 82) as compared to female students (n = 65). Among all the students, 50.6% were unmarried and 49.4% were married. Regarding the social classification of

enrolled students, a majority i.e. 63.6% claimed to belong to the low to the middle-income group and almost 36.4% belonged to the high-income group. Approximately, 64.2% had a family size of  $\geq 5$  family members including parents and grandparents; 35.8% had  $\leq 5$  family size. Among total students 52.6% were medical doctors who were registered medical practitioners and 47.4% were mainly from non-medical professions including allied health sciences, health technology, and dental technology. The parents of 62.4% of the respondents were private employees in comparison to parents of 37.6% who were government employees. Among all of the students who prepared for the test for medical college admission, 78.6% were equal to or less than 18 years of age at the time of entry test whereas; 21.4% were of more than 18 years of age. The qualification of 97.4% of the students at the time of admission into the medical college was pre-medical from a higher secondary school and college, whereas 2.6% were graduates at the time of admission.

Almost all of the students who were enrolled in the MPH program were employed. Among these, half of the students 48.2% (n=71) were public sector employees and 41% (n =59) were private-sector employees, 6.7% were working for a non-governmental organization and 4.1% were self-employed or were practicing in clinics. The future-plan of the majority of the students i.e. 58% was clinical profession, 23% wanted to pursue teaching as a career choice and 18.2% wanted to opt for health research as a serious career choice. Only 0.8% were anticipating their future as public health managers.

**Table-1:** Assessment of Satisfaction among Postgraduate Students regarding Examinations

Questions		(%)
Are you satisfied with the intermediate H.S.C examination results?	Yes	85.4%
	No	14.6%
Are you satisfied with the medical college entrance test/exam	Yes	49.8%
	No	51.1%
Was the process of preparing and appearing in the MCAT stressful?	Yes	77.9%
	No	22.1%

As indicated in Table-1, more than 85% of the students were found to be satisfied with the intermediate examination results and 14.6% were not satisfied with their intermediate examination results. Similarly, 73.8% of students were satisfied with the results for the entry test for medical college. 99.2% were strongly in favor of multiple-choice questions for the entrance test at undergraduate admission into medical colleges.

**Table-2:** Socio-demographic characteristics of respondents

Socio-demographic Characteristics		(%)
Gender	Male	55.7%
	Female	44.3%
Marital Status	Unmarried	50.6%
	Married	49.4%
Social Classification	Low – middle Income	63.6%
	High Income	36.4%
Family Size	Less than $\leq 5$	35.8%
	More than $\geq 5$	64.2%
Profession	Medical	52.6%
	Allied Health/ Health technology	47.4%
Father's Occupation	Government Service	37.6%
	Private or Self-employed	62.4%
Age at time of entry into medical college	Less than $\leq 18$ years	78.6%
	More than $\geq 18$ years	21.4%
Any career counseling or pre-test course before appearing for medical college test	Yes	37.1%
	No	62.9%
Qualification at time of seeking admission into medical college	Intermediate (Pre-Medical)	97.4%
	Graduation	2.6%
Type of academic institute from where qualifying examination for entry into professional school & college	Government	100%
	Private	0%
Medical and allied health sciences were your own career choice at the undergraduate level	Yes	43%
	No	57%
Reason for opting MPH Program	Academic progress	43%
	Better career prospects	57%
Future Plans After MPH	Teaching	23%
	Clinical Practice	58%
	Researcher	18.2%
	Public Health Manager	0.8%
Present Appointment Status	Public	48.2%
	Private	41.0%
	NGO	6.7%
	Self-employed	4.1%

## DISCUSSION

This study was conducted to evaluate the students' satisfaction regarding undergraduate medical college entrance exam and their career choices after attaining Masters of Public Health Degree. In Pakistan, the students who have passed the intermediate exam (pre-medical) appear in the medical college entrance exam as a pre-requisite for admission into all medical and dental colleges across the country. This study inducted the postgraduate students enrolled in MPH program. 55.7% of the participants were males and 44.3% were female which slightly corresponds to a study in which there were 56% were female and 44% were males.<sup>5</sup> 77.9% believed that both preparing and appearing for MCAT was stressful which was inconsistent with a study published in 2012 where around 81% students considered undergraduate medical and health sciences entrance exam as stressful.<sup>6</sup>

In this study 37.1% of students responded to had taken pre-test courses before appearing for the actual medical college entrance exam whereas 62.9% didn't take any career counseling and pre-test courses. In another study, 31% of students had taken the university medical admission course prior to seeking actual test.<sup>7</sup> Owing to the circumstance in Pakistan, the pre-test courses offered by various private academies have high admission charges and even if students at the FSC level join these academies, it's not a guarantee to secure a place in actual tests. In a study conducted in Pakistan, 26% of the students had joined the medical profession according to the will of their parents or guardians whereas in this specific study 57% of respondents mentioned it to be the choice of someone else for them.<sup>8</sup> Opting for a specific medical profession on your own will helps the individual to get more motivated to excel in that profession. Although the results of a qualitative study conducted in Malaysia suggested that student's motivation can change over the course of time so are their career choices as 52.6% of the participants in our study directly belonged to the medical profession however, all ended up being

enrolled in MPH degree as a post-graduate option so the choices of students do tend to change.<sup>9</sup> A systematic review to probe into the factor which motivates the students to make medical a career choice revealed that in low- and middle-income countries it's also the societal factors whether parents or peer pressure that decided for career.<sup>10-12</sup>

In this study 52.6% of participants were medical doctors whereas 47.4% were from allied health sciences. In another study, three-quarters of the respondents were not doctors but they opted for the master of public health degree to seek better opportunities to work in the public health domain.<sup>8</sup> This study observed that 18.2% of the participants wanted to opt for research as a potential career choice after attaining the MPH degree which is comparable to the study conducted in India, research was identified as a potential career opportunity after MPH degree.<sup>13</sup> Similarly other studies also reflected benefit and diversity in the future career prospects after MPH.<sup>14,15</sup> Public health, undoubtedly is key to robust initiatives for improvement in the quality of life.<sup>16</sup> Regardless of the health profession any individual has at the time of attaining a master of public health degree, the career dynamics are diverse owing to the domains and diversity of public health in Pakistan. Individuals get opportunities to opt for teaching, research, or administrative positions after attaining the respective degree. Since this study was unique in being retrospective regarding recollecting their events from the intermediate level, the results would have strengthened if we could gather data regarding their intermediate marks and medical college entrance examination scores but since the scope of this study was not that much diverse, it can give a way forward to future studies based on the scores and their reflection in terms of student satisfaction to validate the perception regarding such entrances examination.

## CONCLUSION

The study findings conclude that although the majority of the students were satisfied with

the undergraduate entrance test format and their results, their career choices after attaining a master's of public health degree were diverse. This enhances the need for student counseling at both undergraduate and postgraduate levels so that they should exactly determine the value of getting into that specific degree and its effective utilization for their career progression.

## AUTHOR'S CONTRIBUTION

SA: Supervisor of study and study design

SAK: Data collection

SA: Critically review

SAK: Drafting article

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