

Socioeconomic and Training Influences on Medical Students' Psychiatry Career Choices

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ABSTRACT

Objective: This study investigates the impact of socioeconomic status and training factors on medical students' preference for psychiatry as a career.

Methodology: Conducted at a tertiary care hospital, the cross-sectional study targeted final and fourth-year undergraduate medical students. Exclusions comprised students without psychiatry ward exposure, or attendance at non-specified universities. Data collection involved a self-structured questionnaire distributed both online and manually, preceded by a pilot study for questionnaire standardization. Independent variables included age, gender, medical college, and study year, with dependent variables focusing on career preferences and psychiatry-related knowledge.

Results: Psychiatry ranked as the third most chosen specialty. Demographic analysis revealed that there was no significance of gender in students' interest in psychiatry, with a nearly equal ratio of male and female participants. Among age groups, 23-year-olds showed the highest preference for psychiatry. Factors significantly influencing psychiatry choice included satisfaction level ($p < 0.001$), exposure to mental illness ($p = 0.013$), clinical exposure through ward rotations ($p = 0.026$), and lectures ($p = 0.012$).

Conclusion: The study highlights a positive attitude towards psychiatry, ranking it third among career choices. Notable associations were found between interest in psychiatry and exposure to mental illness, as well as clinical and educational experiences. These findings underscore the importance of addressing socioeconomic and training factors in shaping medical students' career preferences in psychiatry.

Keywords: Clinical exposure, medical students, mental illness exposure, psychiatry career choices, socioeconomic influences, training factors

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INTRODUCTION

Mental health is as vital as physical health and creates emotional, psychological, and social well-being. The

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mental health of a person defines how they feel and react in different situations.^{1,2} A psychiatrist is a medical doctor who focuses on diagnosis, treatment, and prevention of emotional and mental disorders. In several low-and middle-income countries, negative attitudes towards mental health issues are common, resulting in a preference for traditional healers over psychiatrists because of their cultural and societal acceptance. Another issue is the stigmatizing perception by other health professionals who degrade psychiatry and follow medical specialties typically perceived as glamorous³⁻⁵. Medical educators have identified the economic factors that contribute to the enlistment choices, such as students being attracted to high-paying specialties to repay student loans and living a luxurious life without any societal pressure⁶.

During a period of four years, the percentage of medical school seniors in the US choosing psychiatry rose from 3.9% in the 2012 match to 5.0% in the 2016 match⁷. Although psychiatry accounts for 5% of residency slots

nationally, since 2011 only 50%-62% of these slots have been filled by graduates of allopathic U.S. medical schools⁸. The number of psychiatrists employed in the United Kingdom increased over the period observed from approximately 8.2 thousand in 2000 to 12.3 thousand in 2019⁹. In 2004, the total number of licensed psychiatrists in China was 16,103 (1.24 psychiatrists per 100,000 people), which is significantly lower than the global average of 4.15 psychiatrists per 100,000 people¹⁰. According to the WHO in Pakistan, only 400 psychiatrists and 5 psychiatric hospitals exist within the entire country for a population exceeding 180 million¹¹.

The positive factors which attracted students towards psychiatry as a career were the possibility of making a difference in patients' lives, job contentment and the comprehensive approach to psychiatry and lifestyle variables^{3,12}. A family member or any close one having mental illness also draws people towards a better understanding of this field^{13,14}. The factors involved in the aversion from psychiatry as a career choice include lack of awareness or interest⁵, perception that psychiatry is professionally less rewarding compared to other specialties, and fear of dealing with violent patients³. Short clerkship duration is also one of contributing factors to the decline in choosing psychiatry as a field¹⁵.

In Pakistan, families play a key role in students' career decisions, hence, an element of 'family aversion,' was also found^{16,17}. Psychiatry has been stigmatized and misunderstood by the public for a long time now. Multiple studies suggest that medical students' perspectives of psychiatry improve after their undergraduate experience in this field^{18,19}. Clerkships and opportunities to engage with patients enhance knowledge of psychiatry and cultivate the capacity to converse with individuals with mental illness, optimize mindsets toward psychiatry and mental illness²⁰⁻²².

Availability and quality of postgraduate training in Pakistan could also have an impact on medical students' decisions. Psychiatry training is currently provided by 17 institutes, with 100 trainees at levels 1-4. It is estimated that each year, just five trainees out of around 25 can pass the exit level examination and become psychiatrists²².

The potential benefits of this study include that the institutes will know more about the perception of psychiatry as a career and factors which discourage the students from choosing psychiatry as a field and therefore, they will try to manage them by introducing interventions and opportunities contributing to increase the likelihood of psychiatry being chosen by students as primary choice of career.

METHODOLOGY

IRB/ERC Approval:

All the ethical considerations were observed while seeking permission from the Institutional Review Board of JSMU, Ref. No. JSMU/IRB/2022-600.

This was a quantitative cross-sectional study on final year and fourth year undergraduate medical students, who undertook psychiatry ward clinical rotations as they are expected to make an informed and careful career choice based on their clinical exposure in wards. We included government and private teaching hospitals in Karachi like Jinnah Sindh Medical University along with its affiliated private medical colleges, as Karachi is a culturally and ethnically diverse city with a literacy rate of almost 75%^{23,24}. Students of 1st, 2nd, 3rd, and 4th year MBBS who had not undergone psychiatry ward rotation, students enrolled in programmes other than MBBS, or studying from other than forementioned universities, and students who declined participation were excluded from our study. The duration of this study was 6 months, i.e. from 15th September, 2021 to 15th March, 2022. Using a study by Curtis-Barton in which 20% of students claimed that the 'prognosis of patients in psychiatry' discourages them from pursuing a career in psychiatry²⁵, hence taking a sample proportion of 20%, a confidence level of 95%, and a margin of error of 5%, a sample size of 246 was calculated. To avoid non-responding participants and missing data, the sample size was inflated to 272 responses. The participants were selected through a convenient sampling technique.

Before data collection, written informed consent was taken from each participant. Any research misconduct was avoided, and the rights and wellbeing of research participants were protected and every effort was made to ensure the confidentiality of research data collected from participants in this survey.

The information collected was stored with the principal investigator in the form of de-identified information. Any results that were generated were presented on a collective basis, and did not contain any individual participant's name or any other personal details.

Data was collected by distributing a self-structured questionnaire, which was sent online as a Google Form and also circulated manually. In order to standardize the questionnaire, a pilot study was conducted among participants to examine the content validity.

The study instruments were divided into two sections, including sociodemographic factors and questions measuring the knowledge of participants regarding psychiatry as a career. Age, gender, name of medical

college and year of study were taken as independent variables, followed by dependent variables like primary career choice and leading close-ended questions regarding psychiatry as a career choice assessing their knowledge. In the end, questions catering suggestive measures were included as well.

Data was entered and analysed using SPSS software version 24. SPSS is a software package used for interactive or batched statistical analysis. The interval of confidence was considered to be 95% , while 5% of the error margin was taken and =0.05 of the p-value was considered to be statistically significant.

RESULTS

A total of 272 medical students from four medical institutes with n=271(99.6%) from Karachi while n=1(0.4%) other than Karachi consented to participate in this study. Rate of responses from medical schools varied with n=132 (48.5%) Sindh Medical College, n=125 (46%) Dow Medical College, n=6 (2.2%) Liaquat College of Medicine and Dentistry, n=3 (1.1%) Karachi Medical and Dental College, and n=6 (2.2%) were from various medical institutes. Past experience of psychiatry ward rotation was also enquired via questionnaire with participants having done their rotations in year 2019 n=3(1.1%), 2020 n=22(8.1%), 2021 n=132(48.5%), 2022 n=103(37.9%) and n=12(4.4%) did not attend rotations. Majority of medical students n=260(95.6%) had clinical exposure, hence were making an informed decision regarding psychiatry as a career choice.

Mean age of participants was 22.9 years, extending from 21 years till 26 years. In relation to gender distribution, n=177(65.1%) identified as females, n=94(34.6%) identified as Males whereas n=1(0.4%) did not prefer to be identified on gender basis.

Primary analysis of study was to examine the probability of selecting psychiatry as the final field of choice among medical students. Five fields were given to participants in study questionnaire (General Medicine, Surgery, Obstetrics/gynaecology, Paediatrics, and Psychiatry), our data analysis demonstrated that General Medicine n=116 (42.6%) was most attractive postgraduate specialty followed by Surgery n=80 (29.4%), Psychiatry n=28 (10.3%), Obstetrics/Gynaecology n=27 (9.9%), and Paediatrics n=21 (7.7%). Survey demonstrated that Psychiatry was the third most common field selected by participants, however, the number of participants selecting psychiatry was low in comparison to General Medicine and Surgery, yet its selection proportion was nearly identical to the other two least opted fields with slight variations, i.e. Obstetrics/Gynaecology n=27(9.9%) and Paediatrics n=21(7.7%).

Overall statistical outcome suggested that n=19 (7%) were 'Very satisfied' considering psychiatry as a career choice, another n=73 (26.8%) were 'Satisfied', n=95 (34.9%) were 'Neutral', n=62 (22.8%) were 'Not so satisfied' and n=23 (8.5%) were 'Not at all satisfied'. Therefore, the results suggested a combined proportion of 33.8% medical students having positive mindset towards psychiatry as an eventual field of practice.

Demographic analysis was the first parameter in our study for medical students to associate with the choice of psychiatry. Almost equal number of males and females opted for psychiatry as their eventual field of practice with males n=27 (28.7%) and females n=53 (29.9%). Among all age groups that participated in our study, 23-year-old n=31(38.3%) participants chose psychiatry in the highest number.

Our study also indicated factors that significantly influenced choice of psychiatry as an eventual field of practice among participants. Level of satisfaction among participants to opt for psychiatry ($p<0.001$), and exposure of participants to mental illness within their close contacts ($p=0.013$) were found. No associations were established between student's choice of psychiatry and their mindset regarding psychiatry as a financially rewarding field, participant's financial reasons, and influence of friends and family.

Data analysis suggested statistical association of participants selecting psychiatry as their final field of practice and students having sufficient knowledge about psychiatry ($p=0.013$), around n=81(29.8%) out of 272 participants, opted for psychiatry as their eventual field of practice. N=34 (42%) stated that they had sufficient knowledge about psychiatry and n=47 (58%) indicated that they do not consider themselves to have satisfactory awareness at the moment.

Ward rotations and clinical exposure proved to be significant among medical students in selecting psychiatry as a career option ($p=0.026$). N=81(29.8%) opted for psychiatry as their eventual field of practice with n=68(84%) agreed that clinical experience will help them in making psychiatry as a career option while n=13(16%) disagreed. Majority of participants n=260 (95.6%) had clinical ward rotations with maximum students, n=235 students having done with their ward rotations within two years.

Our study indicated a statistically significant relationship between exposure to psychiatry lectures and career choice ($p=0.012$). n=81(29.8%) selected psychiatry as the ultimate field of training. Among these participants, n=55(67.9%) indicated that theoretical lectures helped them choosing psychiatry as career decision, however n=26 (32.1%) did not agree with it.

We also included one portion for the suggestions of participants through which we can understand the problem in choosing psychiatry as a career. Four options were given to participants, $n=107$ (39.3%). ‘‘Creating opportunities for career guidance’’ was the most popular choice, while $n=72$ (26.5%) chose ‘‘Active efforts by authorities to reduce stigma among students associated with psychiatry as a career’’, $n=71$ (26.1%) opted for ‘‘Providing more clerkship opportunities’’, and $n=22$ (8.1%) selected ‘‘More robust and intense curriculum’’.

DISCUSSION

Our study explored medical students' perceptions of psychiatry as a career option, drawing on data from 272 students across medical institutions in Karachi. Psychiatry was ranked as the third most popular choice among participants, indicating a gradual but promising shift in attitudes compared to other studies globally, which often place psychiatry lower in preference²⁻⁴. Approximately 10.3% of participants selected psychiatry as their preferred field, mirroring trends seen in past studies that suggest a growing interest in the specialty⁶. This local insight offers valuable information for policy makers and educators in Pakistan who are seeking ways to make psychiatry more attractive to medical students.

Interest in psychiatry showed little variation by gender, with similar rates between men (28.7%) and women (29.9%), reflecting findings from other research^{8,9}. Satisfaction with psychiatry as a career option was modest, with 7% of participants reporting being ‘Very satisfied’ and another 26.8% ‘Satisfied,’ resulting in a cumulative satisfaction rate of 33.8%⁷. Additionally, our study highlighted a significant association between personal experiences with mental illness and an interest in psychiatry, underscoring how personal connections to mental health can positively influence career preferences^{10,11}.

Academic exposure, particularly through clinical ward rotations, was a major factor in shaping positive attitudes toward psychiatry. Such rotations provide hands-on experience, reducing stigma and fostering an informed interest, consistent with findings from previous studies¹⁰⁻¹³. Classroom lectures also had a positive impact, showing that structured educational engagement plays a vital role in cultivating an interest in psychiatry^{10,14}.

Participants identified a need for increased career counseling and greater efforts to reduce stigma around psychiatry within medical schools. These recommendations reflect gaps in institutional support for psychiatry, pointing to a need for structural changes within the curriculum to promote the specialty and

address stigma at the college level. Policymakers and academic planners could use these insights to develop strategies that make psychiatry a more accessible and appealing career path, ultimately addressing mental health workforce shortages in Pakistan.

While our study offers important insights, several limitations should be acknowledged. Despite aiming for a multicenter approach, data was collected only from two medical institutions in Karachi, limiting the generalizability of our findings to other regions and institutions across Sindh. Other factors such as socioeconomic differences and access to mental health resources may also influence attitudes and were not fully explored in this study. Furthermore, logistical and resource constraints, particularly in rural areas, limited our outreach and response rate. The study's strength, however, lies in its diverse sample, which includes participants from varied ethnic and socioeconomic backgrounds, offering a well-rounded view of attitudes within the surveyed institutions. This diversity helps to mitigate selection bias and enriches our findings with a more balanced perspective on students' career interests in psychiatry.

CONCLUSION

Our findings indicate a growing interest in psychiatry among medical students, with 10.3% choosing it as their preferred specialty, positioning it as the third most popular field. This positive shift is largely influenced by personal connections to mental health and the impact of clinical clerkships and academic lectures, highlighting the importance of exposure and guidance in making career choices. Participants' suggestions to increase career counseling and reduce stigma toward psychiatry, point to crucial areas for improvement in medical education. By addressing these factors, policymakers and educators can create a supportive environment that encourages more students to consider psychiatry, ultimately strengthening Pakistan's mental health workforce and better meeting the country's growing mental health needs.

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REFERENCES

1. Medical News Today. What is mental health? [Internet]. 2020 Apr 12 [cited 2023 Nov 4]. Available from: <https://www.medicalnewstoday.com/articles/154543>
2. American Psychiatric Association. What Is Psychiatry? [Internet]. 2021 [cited 2023 Nov 4]. Available from: <https://www.psychiatry.org/patients-families/what-is-psychiatry-menu>
3. Hor ESL, Russell V, Vasudevan U, O'Brien F. Changing attitudes to psychiatry and interest in the specialty as a career choice during clinical undergraduate years at a medical school in Penang, Malaysia. *Ir J Med Sci.* 2020;189(1):253–9. doi:10.1007/s11845-019-02064-x
4. Morgan LJ, Finn GM, Tiffin PA. Are efforts to recruit to psychiatry closing the stable door after the horse has bolted? Knowledge and attitudes towards a career in psychiatry amongst secondary (high) school students: a UK-based cross-sectional survey. *J Ment Health.* 2021;1–8. doi:10.1080/09638237.2021.1922638
5. Kumar R, Kumar H, Mustafa K. Medical students' attitudes towards profession of psychiatry: A cross-sectional survey from medical colleges of Sindh, Pakistan. *J Bahria Univ Med Dent Coll.* 2023;13(03):187–91.
6. Ojo E, Hairston D. Recruiting underrepresented minority students into psychiatry residency: a virtual diversity initiative. *Acad Psychiatry.* 2021;45(4):440–4.
7. Goldenberg MN, Williams DK, Spollen JJ. Stability of and factors related to medical student specialty choice of psychiatry. *Am J Psychiatry.* 2017;174(9):859–66.
8. Wilbanks L, Spollen J, Messias E. Factors influencing medical school graduates toward a career in psychiatry: analysis from the 2011–2013 Association of American Medical Colleges Graduation Questionnaire. *Acad Psychiatry.* 2016;40:255–60.
9. Michas F. Number of psychiatrists employed in the United Kingdom (UK) from 2000 to 2018 [Internet]. Statista. 2020 Jul [cited 2023 Nov 4]. Available from: <https://www.statista.com/statistics/301196/psychiatrists-employed-in-the-united-kingdom-uk/>
10. Zhang YJ, Yuan K, Chang SH, Yan W, Que JY, Deng JH, et al. Career choice and influential factors among medical students majoring in psychiatry in China. *BMC Med Educ.* 2021;21(1):1–2.
11. DAWN. Mental illness in Pakistan: The toll of neglect [Internet]. 2014 Sep 20 [cited 2023 Nov 4]. Available from: <https://www.dawn.com/news/1133196>
12. Tang R, Braver TS. Predicting individual preferences in mindfulness techniques using personality traits. *Front Psychol.* 2020;11:541384.
13. Levaillant M, Levaillant L, Lerolle N, Vallet B, Hamel-Broza JF. Factors influencing medical students' choice of specialization: A gender-based systematic review. *EClinicalMedicine.* 2020;28:100654.
14. Kerebih H, Salelew E, Hailesilassie H. Factors associated with medical students' choice of psychiatry as future specialty: a cross-sectional study. *Adv Med Educ Pract.* 2019;10:751–8. doi:10.2147/AMEP.S210286
15. Lyons Z, Janca A. Impact of a psychiatry clerkship on stigma, attitudes towards psychiatry, and psychiatry as a career choice. *BMC Med Educ.* 2015;15:34. doi:10.1186/s12909-015-0307-4
16. Nguemini Tiako MJ, Ray V, South EC. Medical schools as racialized organizations: how race-neutral structures sustain racial inequality in medical education—a narrative review. *J General Internal Medic.* 2022;37(9):2259–66.
17. Rawatlal KV. Priorities in 21st century career counselling: Implications for counselling psychology training. *Afr J Career Development.* 2022;4(1):59.
18. Turana Y, Primatanti PA, Sukarya WS, Wiyanto M, Duarsa AB, Wratsangka R, et al. Impact on medical education and the medical student's attitude, practice, mental health, after one year of the COVID-19 pandemic in Indonesia. *InFrontiers in Education* 2022;7(1):843998
19. Orr CJ, Turner AL, Ritter VS, Gutierrez-Wu J, Leslie LK. Pursuing a career in pediatrics: intersection of educational debt and race/ethnicity. *The J Peds.* 2023;252(3):162–70.
20. Hu S, Hood M, Creed PA, Shen X. The relationship between family socioeconomic status and career outcomes: A life history perspective. *Jf Career Development.* 2022;49(3):600–15.
21. Reed VA, Jernstedt GC, Reber ES. Understanding and improving medical student specialty choice: a synthesis of the literature using decision theory as a referent. *Teach Learn Med.* 2001;13(2):117–29. doi:10.1207/S15328015TLM1302_7
22. Mortlock AM, Puzzo I, Taylor S, Kumari V, Young S, Sengupta S, et al. Enrichment activities in the medical school psychiatry programme—could this be a key to engaging medical students in psychiatry? A study from a high secure forensic psychiatric UK hospital. *BMC Psychiatry.* 2017;17(1):83. doi:10.1186/s12888-017-1236-z
23. DAWN. Honouring diversity [Internet]. 2021 Jun 19 [cited 2023 Nov 4]. Available from: <https://www.dawn.com/news/1630228/honouring-diversity>
24. Rehman A, Jingdong L, Hussain I. The province-wise literacy rate in Pakistan and its impact on the economy. *Pac Sci Rev B: Humanit Soc Sci.* 2015;1(3):140–4. Available from: <https://www.sciencedirect.com/science/article/pii/S2405883116300247>
25. Porfyri GN, Athanasiadou M, Siokas V, Angelopoulos K, Skarpari S, Zagalioti SC, et al. Mental illness through the perspective of undergraduate medical students in Greece: a cross-sectional study at Aristotle University of Thessaloniki. *Frontiers in Psc.* 2023;14:1228539.