

ORIGINAL ARTICLE

Psychiatry as a career: A survey of factors affecting students' interest in Psychiatry as a career

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ABSTRACT: The objectives of this study were to determine the characteristics of medical students and graduates interested in choosing psychiatry as a career and the obstacles in choosing this field of medicine. Two private and two public medical institutes were surveyed from June 2007 to August 2007. A self-administered questionnaire was distributed to third, fourth and final year students and to medical graduates doing their internship in these four medical institutes. A total of 909 medical students and graduates participated in the study. Seventeen percent of participants responded positively regarding their interest in psychiatry as a career. Significantly higher proportion belonged to private medical institutes (14% vs. 24%, P-value =0.001). There was no significant difference in reporting interest for psychiatry in regard to age, sex, year in medical school and whether or not the participant had done a psychiatry ward rotation. However significantly higher proportion of participants (22%, n=43) were reporting their interest in the field of psychiatry who had done more than a month long psychiatry ward rotation as compared to those participants (14%, n=54) with less than a month or no psychiatry rotation (P-value=0.01). More students were reporting their interest in psychiatry with a family history of psychiatric illness as compared to without family history (24% vs 16%, P-value=0.03). In conclusion, students and graduates with more than a month long rotation in psychiatry, studying in private medical colleges and with a family history of psychiatric illness were more interested in choosing psychiatry as a career.

KEYWORDS: Psychiatry in Pakistan, Career in Psychiatry, medical students in Karachi.

INTRODUCTION

Mental health is an ignored subject in the field of medicine and in the area of public health, and less 1% health budget is spent on mental health problems in developing countries (1). This neglect accounts for students' lack of interest in psychiatry and fewer medical students consider psychiatry as a career choice (2) as compared to other medical subspecialties. Furthermore health policy makers and investigators did not give sufficient attention on the issue of students' disinclined attitude towards psychiatry. However since

the 1960s, some educational studies have investigated the phenomenon of medical students' interest in the field of psychiatry and their behavior towards mentally ill patients (3).

Pailhez G et al compared the attitude of Spanish and United States medical students toward psychiatry in a cross sectional study (4), which revealed that Spanish students showed a positive attitude towards Psychiatry as compared to U.S. students. Only 6% of Spanish students were considering psychiatry as a career which was slightly higher than U.S. medical students where only 4.5% students were interested in the field of psychiatry. The most common concerns expressed by the students relate to the lack of scientific rigor in psychiatry, is the non-efficacy of treatment, and the psychiatrists' low social status among physicians.

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Similarly in Pakistan, Psychiatry is not considered a popular field of medicine among students (5), and as such Pakistan is also facing shortage of physicians in this medical subspecialty. Even though a Department of Psychiatry have been established in most of the tertiary care teaching hospitals in the country (6), there are only 250 Psychiatrists in Pakistan and these practice mainly in urban settings (7). Data from population-based studies in urban settings revealed that one third of Pakistan's population have anxiety/depression (8). Even though effective treatments are available for most of these disorders (9), there is a shortage of psychiatrists and other trained professionals like psychologists, nurses, and paramedics. The available one Psychiatrist for 0.64 million Pakistanis are absolutely insufficient; in addition a large proportion of Psychiatrists do not have postgraduate qualifications (1, 10). WHO reported that millions are affected by mental illnesses and the incidence is on the continuous rise. As high as 154 million people faces major depression and 25 million suffer from schizophrenia. In addition addiction and substance abuse also contribute a major burden among mental health problems, as many as 91 million people get disorders which are directly or indirectly alcohol related and 15 million by other addictive drugs (1).

Medical graduates with a good attitude towards psychiatry are sometimes unable to pursue their career in this medical subspecialty. Even though some studies have been done in our part of world regarding psychiatry as a career and most of them have tended to identify only attitude of medical students (11-14), yet hindrances in opting for psychiatry as a career have not been studied. Furthermore, most of the studies included medical students and have overlooked medical graduates and interns, who are at critical point of choosing their medical career in a particular specialty. Therefore the objective of this study was to compare medical students and graduates' perceptions around hindrances in choosing Psychiatry as a specialty in Pakistan.

METHODOLOGY

This cross sectional study was conducted in two public (Dow Medical College and Sindh Medical College) and two private medical institutes (Aga Khan Medical College and Ziauddin Medical College) from June 2007 to August 2007 in Karachi. There are three public medical institutes in Karachi and Dow and Sindh Medical College are the two largest public institutes. Average number of student varied from 200 to 250 for each class in these public medical institutes. Aga Khan and Ziauddin medical college were selected out of six private medical institutes in Karachi. There is a significant difference between public and private

medical institutions as to the technique of teaching. Some private medical institutions are following a problem based learning system (PBL) (15), whereas all the public medical institutions follow a conventional lecture based curriculum (LBL). In addition, there are certain postgraduate specialty training programs, like Family Medicine, which is only offered in private medical institutions (16). In Pakistan, medical schools offer a five (5) year program leading to an M.B.B.S (Bachelor of Medicine; Bachelor of Surgery) degree. Basic health sciences are the primary focus of instruction during the first two years, with gradually increasing exposure to clinical rotations over the next three years (15). After graduation, there is one-year compulsory internship in a teaching hospital in order to obtain medical licensure. Fellowship training starts after completing an internship and passing a postgraduate medical exam (16).

The authors developed a self-administered questionnaire in English as all of these medical institutes have English as an official teaching language. The questionnaire included demographics, undergraduate courses, satisfaction in medical profession, and first, second and third career choices of medical students (questions regarding a particular field of medicine will be reported separately). The questionnaire was kept anonymous to maintain confidentiality of the participants. Pre-testing of questionnaire was done on 30 participants from each of the four medical institutes to determine response rate and applicability of the tool; changes were made in the questionnaire accordingly (unpublished data). The same questionnaire was used for data collection from all four medical institutes.

Only third, fourth and final year medical students and house officers were included in this study. First and second year students were excluded because of little exposure to clinics in beginning years of medical studies and less number of students were able to report their commitment for any particular medical specialty. After seeking verbal consent, data collectors distributed self-administered anonymous questionnaires to medical students after lectures, tutorials and PBL (Problem based learning) in medical colleges and were recollected after few minutes. To target house officers, questionnaires were distributed and collected in different wards of the attached teaching hospitals within these four medical institutes. The department of Community Health Sciences, Sindh Medical College issued study approval. An information sheet was attached with each questionnaire to provide project details, rights of the participants and suggesting that filling the questionnaire implies informed consent.

Data were entered and analyzed in SPSS version 15

(17); categorical variable of self-reporting interest in choosing Psychiatry as a career was the defined outcome. Interested in choosing Psychiatry is defined as “those who find the subject interesting to take as a career however may not actually be taking it as postgraduate specialization field”. Chi-square and t-test were applied for categorical and continuous variables respectively to test the statistical significance at 95% confidence level.

RESULTS

A total of 909 medical students and graduates participated in the study (response rate was 90% of individuals who received questionnaire), of which 285 (31%) belonged to one of the two private medical institute and 624 (69%) participants were part of public medical institute in Karachi. Age of participants ranged from 19 to 28 years (mean=22 years, s.d=1.7). Six hundred and fifty (71%) participants were male. Overall 157 (17%) participants reported their dedication in opting psychiatry as a career including 67 (24%) of individuals from private medical institutes and 90 (14%) from public medical institutes showing that significantly higher proportion of individuals were reporting their interest in psychiatry in private institute as compare to public medical institutes (P-value=0.001). There was no significant difference in reporting interest for Psychiatry with regards to age (mean=22.1±1.8 vs. mean=22.3±1.9, P-value=0.28), sex (15% vs. 18%, P-value=0.38), year of study (3rd yr=22%, 4th yr=17%, 5th yr=14%, Interns=17%, P-value=0.17) and whether or not the participant had done a psychiatry ward rotation (17% vs. 18%, P-value=0.68). However a significantly higher proportion of participants (22%, n=43) were reporting their interest in the field of Psychiatry who had done more than a month long psychiatry ward rotation as compare to those participants (14%, n=54) with less than a month rotations (P-value=0.01). Furthermore it was noticed that 24% (n=27) of participants reported their interest in psychiatry who had a family history of psychiatric illness while only 16% (n=126) were reporting their interest in Psychiatry with no family history revealing a significant difference in two groups (P-value=0.03) [Table 1].

The evaluation of hurdles in choosing psychiatry as a career in private and public institutes demonstrated that mean score of the component “stressful conditions with patients” was highest among the participants of both private (mean=3.4, SD=1.5) and public medical institutes (mean=3.3, SD=1.4). However mean scores of each of the other components was higher among the participants of private institutes as compared to the medical students and graduates in Government medical

institutes given rise to the total sum of mean scores are 13.9 and 14.7 for public and private medical institutes respectively [Table.2].

DISCUSSION

This study results revealed that 17% of medical students and graduates reported interest in choosing Psychiatry as a career. However a much higher proportion of students belonged to private medical education system who were reporting interest in psychiatry. Mandatory undergraduate courses of psychiatry in private medical schools might be the reason for this difference, as it is mostly taken as an optional subject in public medical institute in Karachi. This study also unmasked the finding that is consistent with Walters et al. that the higher proportion of medical students and graduates were reporting positive interest in psychiatry who had taken psychiatry as undergraduate subject (18). Furthermore it has been determined that those participants who had done more than a month of clinical rotation in psychiatry were reporting a significantly positive response towards choosing a career in psychiatry. These results are consistent with other studies including a prospective study to evaluate the effects of a psychiatry rotation on the attitude of medical students towards psychiatry (19-21). Moreover the results regarding a positive association between choosing psychiatry as a career and a family history of mental illness is also consistent with other studies (22). Another study shows that positive educational experiences as well as personal experiences increase the probability of students’ recruitment into the field of psychiatry. Nevertheless it is still ambiguous whether the focus should be on increasing the educational level regarding psychiatry as a subject and clinical rotation, or if it should be on issues which are related to the incentives in this field including career opportunities, income potential and establishment of better structure for the post graduate studies programs in the field of psychiatry (2). Results of Raja Gopal et al. and Olaf et al. revealed that there is no association of gender, age and year of study with higher interest of students in choosing Psychiatry as a career that is consistent with the results of this study but with a larger sample size (2, 22).

Hindrances in choosing Psychiatry as a career were also evaluated in this study as studies have shown that for most of the students, psychiatry is the last choice to be taken as postgraduate training even though students consider it an intellectually challenging field (1). A 5 item Likert questionnaire was used to quantify the major factors responsible for the lower recruitment in psychiatry in our circumstances. Four of the items including “less incentives in the field”, “less popularity

among other medical specialists”, “stressful conditions with patients” and “less career opportunities” were used for evaluation in other studies as well. However a fifth component which was “discouragement from family” was included in this questionnaire because of the local scenario in Asian countries particularly Pakistan, where families also play a crucial role regarding career

decision of students. Most of the medical students were concerned with stress in the field of psychiatry due to prolong contact with Psychiatric patients which was also determined in a study by Cutler JL et al (23).

One of the limitations of this study was that structured items were given in the questionnaire for evaluating hindrances in psychiatry as a career even though there

Variables	Total	Interested for career in Psychiatry				Chi-square	P-value
		Yes		No			
		n	%	n	%		
Gender							
Male	650	116	18	534	82	0.76	0.38
Female	253	39	15	214	85		
Medical institute							
Private	285	67	25	218	75	11.3	0.001*
Public	624	90	14	534	86		
Socioeconomic status							
Lower Middle class	123	22	18	101	82	7.38	0.02*
Upper Middle class	668	106	16	562	84		
Upper class	96	26	27	70	73		
Self Satisfaction							
Satisfied in Medical Profession	715	121	17	594	83	0.33	0.52
Not satisfied	176	33	19	143	81		
Clinical posting in Psychiatry							
Yes	583	97	17	486	83	0.16	0.68
No	282	50	18	232	82		
Months of Psychiatry rotation							
<1 month	383	54	14	329	86	5.6	0.01*
>1 month	197	43	22	154	78		
Studies Psychiatry in undergraduate							
Studied	488	96	20	392	80	4.7	0.01
Not studied	409	58	14	351	86		
Year in Medical School							
Third year	215	47	22	168	78	4.9	0.17
Fourth year	283	47	17	236	83		
Final year	215	30	14	185	86		
House officer	196	33	17	163	83		
Family History							
Psychiatric illness in Family	113	27	24	86	76	4.2	0.03*
No Psychiatric illness	781	126	16	655	84		
*Significant P-values							
Data is shown as number followed by percentage.							

Table 1: Characteristics of Medical students and graduates (participants) in regard to interest in Psychiatry

could be more concerns, which would prevent them from choosing this field. However this can be explained on the basis that response rates were expected to decline if these questions were left open ended because of the time required to write answers. Another limitation was that the outcome variable was self-reported interest in psychiatry as a career so there could be variations in expected and observed responses. Nevertheless the variations were expected to be minimal by obtaining similarity in data from comparable institutes including two private and two public medical institutes. The reason for taking this outcome variable instead of analyzing highly committed students who wrote psychiatry as a first career choice in open ended question, which were estimated to be only 2.5% in total (Data not shown), was that because with a larger sample the characteristic of students interested in psychiatry as a career can grossly be identified which may increase interest towards psychiatry as a career compared to the control population. It was assumed that increasing students interest towards this field could eventually increase the recruitment of students in the field of Psychiatry. Selection bias may have been a factor since more students were reporting interest in psychiatry who had more than a month rotation in the psychiatry ward, however it was not determined whether they had selectively done it or it was a mandatory rotation.

The strength of this study includes having a large sample size and inclusion of house officers (interns) because they are the one who are at a critical stage in deciding about their medical specialty and can better report their interest in and commitment to a particular career.

CONCLUSION

Students and graduates who have had more than a month long rotation in psychiatry, studying in a private medical college and a family history of psychiatric

illness are more interested in choosing psychiatry as a career. Stressful working conditions with patients ranked highest as a hindrance in not choosing psychiatry as a career. In addition appropriate incentives in the field of psychiatry in terms of money and career opportunities are lacking in Pakistan. More structured post graduate programs in psychiatry with better guidelines for the career opportunity in this field may help raise enrollment in psychiatry. Furthermore there is an immediate need to make psychiatry a mandatory undergraduate subject in all of the medical institutes in Pakistan.

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DECLARATION OF INTEREST

Authors declare no conflict of interest with any organization or funding agencies.

CONTRIBUTION OF AUTHORS

Dr Mubashir and Dr Tahir started the initial planning of the project and worked until the final manuscript submission. Dr Ali Abbas, Dr Saad Muzafar, Dr Nasira Badar, Mr Farzan Saeed and Dr Bilal Abid were involved in the collection, entry and analysis of data and helped write the initial draft of the manuscript. Arif Ali supervised data management and all the statistical analysis.

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Rank	Components	Public Institute	Private Institute	P-value*
		M ± SD(n)	M ± SD(n)	
1	Stressful condition with patients	3.4± 1.5 (543)	3.3± 1.4 (263)	0.4
2	Less career opportunities	2.8± 1.4 (525)	3.1± 1.3 (260)	0.02
3	Less popularity among other specialist	2.8± 1.5 (523)	3.0± 1.3 (262)	0.05
4	Discouragement from family	2.7± 1.6 (538)	2.8± 1.6 (258)	0.26
5	Less incentive (money)	2.2± 1.4 (520)	2.5± 1.4 (256)	0.03

Note : Data only for those who had indicated experience (1=least responsible factor and 5 =most responsible factor), * t-test was applied

Table 2: Hindrances in choosing Psychiatry as a career

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