

Attitude of medical students towards psychiatry and person with psychiatric disorders: A comparative descriptive study from a tertiary health care institution in Puducherry

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ABSTRACT

Background: The inadequacy in knowledge, attitude and skill acquired during undergraduate medical training hinders the primary care physicians to detect and manage mental illnesses. **Objective:** To compare the attitude of medical students towards psychiatry and individuals with mental illnesses based on their exposure to clinical psychiatry postings. **Methodology:** This cross section comparative descriptive study was conducted among medical students of a medical college in Pondicherry. A total of 123 third semester (comparison/unexposed group) and 109 seventh semester MBBS students were self administered the pre-tested study tool. (using OMS-HC). **Results:** Proportionally more participants in unexposed group attributed personal level factors as aetiology of mental illnesses. No significant difference was noted on feeling towards mentally ill patients between the two groups. However, nearly 30% of the total participants reported feeling of nervous, anger, hatred and fear towards mentally ill patients. Higher proportions of exposed students were found to have right knowledge about manageability of patients with psychiatry illnesses. Significantly higher proportion of exposed students were reported to consider psychiatry as career option (48% vs 28%, p <0.05). The exposed group of students were also found to have less stigmatization attitude towards mentally ill patients. **Conclusion:** Most of medical students in our study population have indifference or negative attitude towards psychiatry and mentally ill patients which was found to be improved slightly upon exposure to clinical psychiatry posting. Hence, proper implementation of psychiatry in undergraduate medical curriculum and increasing the duration of exposure to clinical psychiatry posting can change the attitude of medical students towards psychiatry and mentally ill patients, thereby increasing the mental health manpower.

Key Words: attitude, psychiatry, mental illness, medical undergraduates, OMS-HC

INTRODUCTION

Mental illnesses are notable cause of mortality and morbidity worldwide.[1] Globally, about 450 million people are suffering from some kind of mental illnesses which accounts for 14% of global burden of diseases.[2] People tend to have strong belief about mentally ill patients and many of these concepts are based on prevailing local systems of belief. Because of stigma attached with psychiatric disorders, many people have prejudiced attitudes (negative) towards mentally ill individuals.[3,4] This discriminatory attitude prevents patient from disclosing their condition which precludes treatment and recovery. The people's outlook about mental ailments is influenced by their knowledge encounters with patient suffering from mental illness, media portrayal, cultural stereotypes and their personal experience of mental disorders.[1]

Prevalence of psychiatric disorders varies from 9.5 to 370 per 1000 population in India.[5] In contrast, the availability of psychiatrists in India is < 0.5 per 100000 populations.[2]

It is reported that about 20-50% of patients attending primary health centre have some kind of mental illnesses.[2] However, most of the times primary health care physician failed to detect psychiatric illnesses among attending patients and manage them inadequately.[6] Despite increasing burden of mental illness in India, only about 1 in 10 people with mental disorders are thought to receive evidence based treatment due to huge short fall of doctors trained in managing psychiatric illnesses. Available literature have reports negative attitude of medical students towards psychiatry as a career option.[7–9] In view of this, Medical Council of India (MCI) has suggested 2 weeks of clinical psychiatry posting in medical undergraduate curriculum. However, number of hours of lecture is inadequate and clinical exposure is very short to imbibe the concepts of psychiatry. Psychiatry in undergraduate medical curriculum is given little importance and training during internship is option.[10]

Recent studies from India reported that undergraduates' medical students have multiple lacunae in knowledge towards psychiatry, psychiatric disorder (Mental illnesses), psychiatric patient and psychiatric treatment. Though multiple reasons are cited for poor of knowledge on mental illnesses, lack of contact with individuals having mental illness and lack of familiarity are the most important ones.[2,11] Psychiatry as a discipline is felt to be given an inferior value at the undergraduate level, which is reflected in the number of lectures in psychiatry and number of hours of psychiatry clinical posting.[4] Psychiatry is viewed by many medical students as low esteemed profession with poorer career prospects in terms of remuneration compared to other specialties. Many students reported to believe that psychiatric illnesses can be managed by non psychiatric persons and medical personnel have little role.[6]

Exposure and experience in psychiatry play a significant role in changing the attitudes of students towards psychiatry as a medical specialty and individuals with psychiatric disorders.[2] It strengthens student's attitudes about biological and social causes, and community based treatment for mental illness.[12] It enables medical students to recognize the wide range of mental disorders, high prevalence in the community, the availability of variety of interventions (pharmacological and non-pharmacological), and the demonstration of the effectiveness.[7] Earlier studies have reported both positive and negative influence of clinical psychiatry posting on attitudinal change of medical students towards patient with mental illnesses and psychiatry.[7,13–15] Studies from various parts of India have examined the attitude of medical students towards mental illnesses and psychiatry. However, we could not find any study from Pondicherry examining the attitude of undergraduate medical students towards patient with mental illness and psychiatry. In this background this study was planned with the aim to compare the attitude of undergraduate medical students towards psychiatry and individuals with mental illnesses disorders based on their exposure to clinical psychiatry postings.

Material and Methods

Study setting: Pondicherry is located about 150 kilometres South of Chennai on the east coastal line of India. Pondicherry has got nine medical colleges for a population of about 1.2 million population which includes one state government college and one autonomous institution of national importance, and twenty seven primary health care centre, two community health centres and one district general hospital. Despite well established health care system, Pondicherry has got highest number of suicide and attempted suicide cases in India.[16] The study was conducted in a private medical college that admits 150 students into MBBS course every year. The whole MBBS course is divided into 9 semesters of 6 months duration each followed by one year of compulsory rotatory internship. As per the MBBS curriculum and teaching planner of the medical college, a two weeks clinical

psychiatry posting under department of psychiatry is planned during 5th/6th semester of MBBS training. During psychiatry posting, the MBBS students are exposed to the patient with mental disorders and basic interviewing skills. The psychiatry posting involves history taking, physical examination and detecting signs and symptoms of organicity in a person with psychiatric disorders. The theory classes on psychiatry are also taken during the same period by department of psychiatry.

Ethical approval and study period: The study has been approved by Institute Ethics Committee of the Medical College. This study was conducted during the months of July to October 2018 among 3rd and 7th Semester MBBS students.

Study design and participants: This study adopted a cross sectional comparative design with two groups; comparison group (who has never been exposed to psychiatry, 3rd Semester MBBS students) and study group (have been exposed to 2 weeks of psychiatry posting, 7th Semester MBBS students). Students who were chronic absentees and self-reporting under psychiatric medication were excluded from the study.

Study participants, sample size and sampling technique: The minimal sample size was calculated to be 188 (94 each for those who are exposed and those who are not exposed). (Using Open Epi V 2.3, the sample size was calculated for difference in mean attitudinal score (stigmatization)[2] at 80% power and 95% confidence interval) Though we intended to include all the students in both the semesters satisfying inclusion and exclusion criteria, 123 from 3rd semester (Response rate 90%) and 109 from 7th semester (Response rate 83%) gave consent to participate in the study. Non responders included those not willing to participate and not able to contact in two attempts by the investigator for data collection.

Study tool: The study tool, which was anonymous and self-administered, had three sections; a) demographic details b) opinion about psychiatric illness and psychiatry c) stigmatization attitude towards patient with psychiatric illness. First section had a semi-structured proforma to collect general information about the participants. The various information like age, gender, class 12th board, language of class 12th board, residence (urban/rural) and current stay (hostel/day scholar) were collected. Second section had 10 questions and collected information regarding participants opinion about mental illnesses and psychiatry. In the third, information on stigmatization attitude towards mental illness and psychiatry was obtained by using Open Minds Stigma Scale for Health Care Provider (OMS-HC) questionnaire. Though primarily used for health care provider, few earlier studies have applied this tool among medical students.[17,18] This tool has 20 items in a 5-point Likert scale and indicates; 1 – strongly disagree, 2 – disagree, 3 – neutral, 4 – agree and 5 – strongly agree. The OMS-HC scale provides information on stigmatization attitude towards patient with mental

illness in which higher score corresponds to higher level of stigmatization and poor attitude towards mental illnesses. The items 3, 8, 9, 10, 11, 15 and 19 were negatively worded and hence scores reversed before calculating the final score for each participant.[17]

The post hoc analysis of OMS-HC showed poor internal consistency among the study population. (Cronbach alpha 0.42) Hence, final attitude score was not analysed. However, 12 items from the original OMS-HC relevant for medical graduate students were selected for analysis purpose. The 5-point Likert scale was reduced to 3-point Likert scale so as to avoid small numbers in extreme responses of the Likert scale of few items (Disagree, Neutral and Agree)

Study procedure: The students were asked to assemble in a lecture hall after the class hours separate for the two groups. The researchers explained the study procedures and tools, and students giving written informed consent were distributed the self-administered study tool. No discussion and talking among students were ensured.

Statistical analysis: Continuous variables were expressed as mean (standard deviation) or median (inter quartile range) depending upon normality distribution. Categorical variables were expressed as proportion and percentages. Comparison of opinion, belief and attitude towards mental illnesses and psychiatry among participants based on clinical exposure to psychiatry posting was done using chi square test. For all purpose level of statistical significance will be set at p-value less than 0.05.

RESULTS

Socio-demographic details of the participants:The general characteristics of the participants are shown in table 1. Except age, there was no statistically significant difference in general characteristics of participants from both the groups. Majority of the participants in either group were female, belong to urban area, didn't have doctor or patient with psychiatry illnesses in the family.

Opinion about psychiatric illnesses and psychiatry:Only 5% of the participants believed that one episode of abnormal behaviour or brief period of mood swings signify underlying mental illnesses (exposed group = 8.3%, unexposed group = 2.4%). Most common reason for mental illnesses was cited to be personal level factors by both the groups. About 10% of the respondent reported organic origin of mental illnesses. Less than 5% cited addition to smoking, alcohol and drugs as the reason for mental illnesses. (Table 2)

No significant difference among the two groups was recorded in feeling when they talk to mentally ill patients. However, nearly 50% of the students in either group felt sympathy towards mentally ill patients. About 40% of the students had negative feelings like nervous and fear while talking to the psychiatry patients. (Figure 1)

Table 1: Socio-demographic details of the study participants (Unexposed group =123, Exposed group = 109)

Attribute	Classification	Unexposed group	Exposed group	Total
		N (%)	(N (%))	(N (%))
Age (in years)	Mean (SD)	19.1 (0.8)	21.2 (0.7)	20.1 (1.3)
Gender	Female	75 (61.0)	60 (55.0)	135 (58.2)
	Male	48 (39.0)	49 (45.0)	97 (41.8)
Residence	Rural	24 (19.5)	28 (25.7)	52 (22.4)
	Urban	99 (80.5)	81 (74.3)	180 (77.6)
Stay	Day Scholar	62 (50.4)	53 (48.6)	115 (49.6)
	Hostel	61 (49.6)	56 (51.4)	117 (50.4)
Doctor in the Family	No	86 (69.9)	74 (67.9)	160 (69)
	Yes	37 (30.1)	35 (32.1)	72 (31)
Person with psychiatry illness in the family	No	115 (93.5)	98 (89.9)	213 (91.8)
	Yes	8	11	19 (8.2)

Table 2: Aetiology of mental illnesses as reported by participants (Multiple responses)

Etiological factors	Unexposed group	Exposed group	Overall
Personal level factors*	58 (43.9)	46 (35.4)	104 (39.7)
Poor relation with others**	17 (12.9)	17 (13.1)	34 (13.0)
Organic causes	13 (9.9)	14 (10.8)	27 (10.3)
Abuse and bad past experience***	13 (9.9)	13 (10.0)	26 (9.9)
Familial or hereditary	14 (10.6)	10 (7.7)	24 (9.2)
Poor environment	8 (6.1)	10 (7.7)	18 (6.9)
Addition to smoking, alcohol and drugs	4 (3.0)	5 (3.8)	9 (3.4)
Idiopathic	5 (3.7)	15 (11.5)	20 (7.6)
Total	132 (100)	130 (100)	262 (100)

Significantly higher proportion of students in exposed group knew mental illnesses are treatable compare to unexposed group (93.6% Vs 82.1%, p=0.008). As per the knowledge of participants, the various individuals in priority order who can treat mentally ill patients are doctors (90%) followed by family member/community members (28.5%), counsellor/psychologist (10%) and other health personnel like nurse (1.5%). However, no significant difference on who can treat mentally ill patients was noted between the two groups. As per the participants most

common modalities of treatment of mentally ill patients are drugs (44.1%) and counselling (37.2%) followed by good surrounding environment (6.1%), yoga (5.3%), electroconvulsive therapy (3.7%) and behavioural therapy (3.5%). (Figure 2)

Figure 1: Feeling of MBBS students while talking to mentally ill patients (Exposed group=109, Unexposed group =123, Total=232)

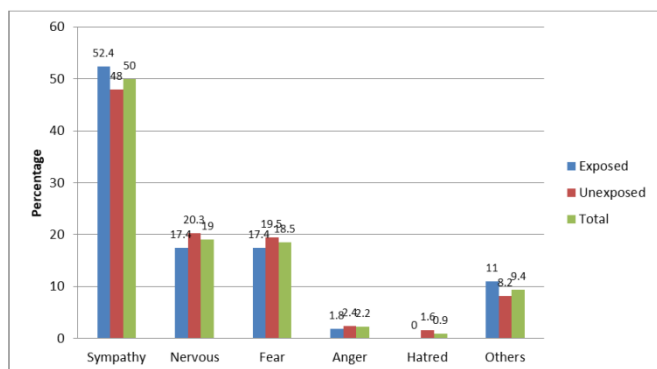
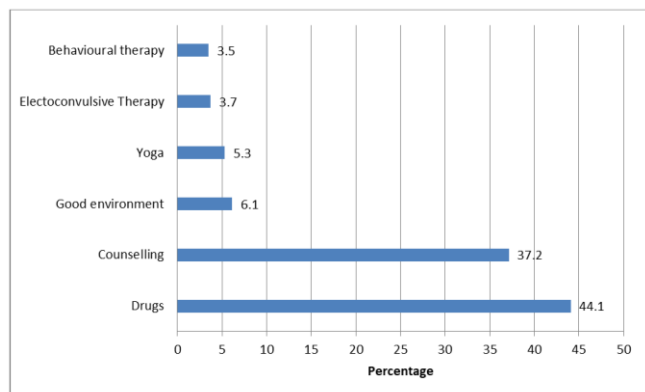


Figure 2: Various modalities of treatment available for mentally ill patients as opined by participants (N=376, Multiple responses)



About 85% of the participants believed that managing psychiatry patient is difficult (unexposed group: 87%, exposed group: 83.5%, $p = 0.451$). Significantly higher proportion of participants in exposed group compared to unexposed group believe that the psychiatric illnesses is showing increasing trend in India (83.5% Vs 68.3%, $p = 0.013$). Only about 37% of the participants could consider psychiatry as a career option. The common reasons for not choosing psychiatry as a career option are “difficult to manage psychiatry patients” and “not interested”. Nearly 48% of the exposed group participants reported to take consider psychiatry as a career option compared to 28% in the unexposed group ($p=0.002$). (Figure 3)

Attitude especially stigmatization towards patients with psychiatry illnesses: Though exposed group had lower median [inter quartile range (IQR)] attitude score compared to unexposed group, it was not found to be statistically significant. [Exposed group = 59 (54-63), unexposed group = 60 (55-62); p value = 0.751] Nearly half of the participants who have not been exposed to psychiatry posting would feel more comfortable helping a person with physical illness than mental illness compared to one third

Table 3: Attitude of medical students towards mentally ill patients

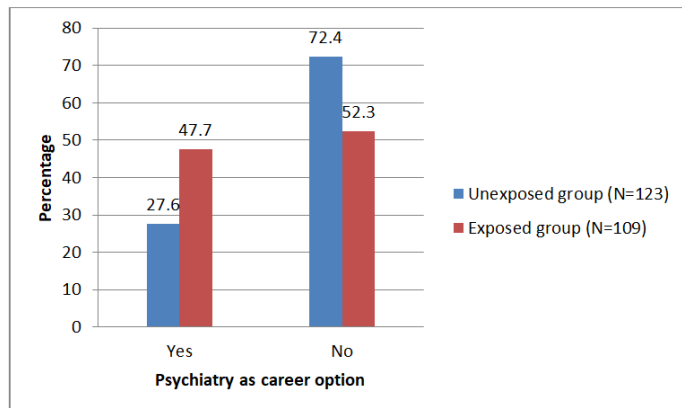
Items	Unexposed (N=123)			Exposed (N=109)		
	Disagree	Neutral	Agree	Disagree	Neutral	Agree
I am more comfortable helping a person who has a physical illness than I am helping a person who has a mental illness*	34 (27.7)	28 (22.8)	61 (49.6)	45 (41.3)	30 (20.7)	34 (31.2)
If I were under treatment for a mental illness I would not disclose this to any of my colleagues.	35 (28.5)	31 (25.2)	57 (46.3)	26 (23.9)	27 (24.8)	56 (52.3)
I would be reluctant to seek help if I had a mental illness.	59 (47.9)	23 (18.7)	41 (33.3)	47 (42.7)	23 (21.1)	39 (35.8)
Employers should hire a person with a managed mental illness if he/she is the best person for a job.	19 (15.4)	30 (24.4)	74 (60.1)	15 (13.8)	29 (26.6)	65 (59.6)
If I had a mental illness, I would tell my friends	32 (26)	30 (24.4)	61 (49.6)	34 (31.2)	17 (15.6)	58 (53.2)
It is the responsibility of the healthcare providers to inspire hope in people with mental illness.	8 (6.5)	13 (10.6)	102 (82.9)	6 (5.5)	9 (8.3)	94 (86.3)
Despite my professional beliefs, I have negative reactions towards people who have mental illness.	84 (68.3)	21 (17.1)	18 (14.6)	69 (63.6)	19 (17.4)	21 (19.3)
There is little I can do to help people with mental illness	31 (25.2)	17 (13.8)	75 (61)	23 (21.1)	19 (17.4)	67 (61.5)
People with mental illness seldom pose a risk to the public.	32 (26)	40 (32.5)	51 (41.5)	41 (37.3)	35 (32.1)	33 (30.3)
Healthcare providers do not need to be advocates for people with mental illness	49 (39.8)	45 (32.6)	29 (23.3)	46 (42.2)	30 (20.7)	33 (30.3)
I would not mind if a person with mental illness lived next door to me.*	29 (23.6)	27 (22)	67 (54.5)	16 (14.7)	22 (20.2)	71 (65.2)
I struggle to feel compassion for a person with mental illness.	36 (29.2)	40 (32.5)	47 (38.2)	38 (44.9)	39 (35.8)	32 (29.4)

*statistically significant (p value <0.05)

of the participants who have been exposed to psychiatry posting ($p = 0.048$). About 42% and 30% of the participants from exposed and unexposed group feel that mentally ill patients seldom pose a threat to public. Majority of the participants from both exposed (65%) and

unexposed (55%) groups would not mind living next door to a mentally ill person ($p = 0.037$). About 29% and 45% of the participants reported to feel compassion for mentally ill person from unexposed and exposed group respectively. (Table 3)

Figure 3: Consideration of psychiatry as a career option among participants (N=232)



DISCUSSION

Indian medical graduates are expected to be trained in providing basic mental health care in primary care setting in the context of deficient specialist mental health care providers. The deficiency of mental health care specialist indicates low priority of psychiatry as a career option among medical graduates. This low priority could be due to lack of knowledge, poor orientation or negative attitude towards mental illnesses and psychiatry.

Various studies have been conducted to assess the attitude towards mental illness and psychiatry. We used a semi-structured questionnaire to assess the opinion about psychiatry and mental illnesses and the OMS-HC was used for assessing the stigmatization attitude towards patient with mental illnesses. The OMS-HC has been used among medical students in the earlier studies albeit in different population and has shown high internal consistency.[17]

Even after exposure to psychiatry posting less than 10% participants were aware that a brief period of mood swings can indicate underlying mental illness. Maximum number of participants attributed personal level factors as the cause of mental illnesses. Only about 10% of the participants attributed organic causes as the aetiology of mental illnesses. In earlier studies also medical students have cited personal level factors as the aetiology of mental illness.[4] The knowledge about aetiology of mental illnesses didn't show any difference between to exposed and unexposed group. This implies that the students have not understood the bio- psychosocial aetiology of mental illness. This signifies the importance of changing the strategies of teaching clinical psychiatry to medical graduates. The duration of clinical psychiatry posting may be increased.[8]

The participating students have good level of knowledge regarding treatability of mental illnesses, who can treat and different modalities of treatment. Similar results have been reported by Chawla et al from Delhi.[4] In contrast to other

studies, none of the students in our study reported role of faith healer. However, knowledge is not translated into attitude towards mentally ill patients. Only 50% of the participants reported sympathy towards patients with mental illnesses. More than 40% of the participants reported fear, nervousness, anger and hatred. Earlier studies also have reported fear, anger and hatred towards mentally ill patients.[4] There is no significant difference noted in feeling towards patients with mental illnesses between the unexposed and exposed group. Few studies have reported increase in negative attitude towards mentally ill patients after psychiatry rotation among medical students.[18] This implies that medical students have not understood the concepts in psychiatry and accept mental illness as any other physical illness.[4] More than 80% of the participants believed that managing psychiatry patients is difficult and that has not changed even after 2 weeks of clinical psychiatry posting. This implies that the current strategy of clinical psychiatry posting is not able to bring in positive change of behaviour of medical students towards patients with psychiatric illnesses. Studies from other parts of the country also have reported similar findings.[2,8,19,20] Studies across the world have reported both negative[13,14,21,22] and positive [7,15,23,24] attitudinal change towards psychiatry after clinical rotations.

Overall only one third of the medical students reported to consider psychiatry as career option and it has increased significantly after clinical psychiatry posting (From 28% (unexposed group) to 48% (exposed group). About 40% of the students from a medical college in Delhi have been reported to consider psychiatry as a career option.[4] The most common reasons for not considering psychiatry as career option are "difficult to manage cases" and "not interested". Other reasons cited were "lack of patience for long duration of treatment", "like other clinical subjects", "fear of getting harmed by the patients", "getting psychosis after contact with mental illnesses" and "difficulty in understanding the subject". Chawla et al also have reported fear of contracting psychiatric illnesses as one of the reason for not choosing psychiatry as a career option among medical students.[4] This indicates that the medical students have some sort of inhibition and wrong notion about psychiatry as a career option. This could be due to inadequate exposure to the basic concepts of psychiatry and management of patients with psychiatric illnesses. Other studies also have shown low preference for taking psychiatry as a career option among medical students.[9, 24-28]

Stigma, attached to mental illnesses and patients with mental illness, negatively influence the health seeking behaviour of patient with mental illnesses in our society.[30] The National Mental Health Program is implemented in India to provide mental health care across the country. One of the objectives is to eliminate/reduce the stigma attached to mental illness and mainstream the mental health care services in to general health care services.[31] The elimination of stigma starts with the mental health care provider itself. We applied the OMS-HC

to assess the stigmatization behaviour of medical students towards patient with mental illnesses. The exposed group was found to have low OMS-HC score compared to unexposed group indicating less stigmatization behaviour among exposed group towards patients with mental illnesses. However, it was not found to be statistically significant. We found that proportionately more students in exposed group would feel comfortable in helping a mentally ill patients, would not mind living next door to a patient with mental illness, show compassion for mentally ill person and think that mentally ill person seldom pose threat to others. Similarly improvement in benevolence towards psychiatry patients was reported among medical students from Karnataka.[2] However, a significant proportion of students in both the group still feel otherwise. A study from Pakistan as well revealed prevalence of stigma attached to patients with mental illness among health care provider.[1] Similar results have been reported among medical students from Nigerian.[11] This indicates that adequate exposure and imparting skilful training can change the behaviours of medical students towards patients with mental illnesses.

Strength and limitation: This study used a comparison group to assess the attitude towards psychiatry and mentally ill patients. Longitudinal, before and after, study design would have given better information on attitudinal change. Considering the time constraint and feasibility, we adopted two group descriptive comparative study design. Generalizability can't be done as findings are from a single medical college. Also, psychiatry being an allied medicine subjects at undergraduate level the strict implementation and execution of clinical psychiatry posting varies from one medical college to other. Despite our effort to minimise bias through maintaining anonymity and confidentiality, wish bias could not have been completely avoided.

Conclusion: Despite the limitations, the study revealed unfavourable attitude of medical students towards psychiatry and patient with mental illnesses. However, higher proportion students having been undergone clinical psychiatry posting showed favourable attitude towards psychiatry and patients with mental illnesses compared to others. Students exposed to clinical psychiatry posting are more likely to consider psychiatry as career option and less likely to have stigmatization behaviours towards patient with mental illnesses.

Recommendation

In the context of inadequacy of mental health man power to address the increasing trend of mental illnesses, it is highly important that the current medical graduates be adequately trained and appropriately skilled to provide mental health care in primary care setting. This can be achieved by favourably changing the attitude of undergraduate medical students towards psychiatry and patient with mental illnesses. Different teaching learning strategies focusing more on clinical psychiatry and increasing the duration of exposure[32] (from current 2 weeks clinical psychiatry

posting) may be evaluated for incorporation into undergraduate medical curriculum.

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