

Psychiatry Teaching and its Impact on the Attitudes towards Psychiatry, Psychiatry as a Career Choice and Psychiatrists as Role Models on Saudi Medical Students- A Comparative Analysis

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Abstract

Medical students' attitude towards psychiatry is an area of serious concern as it has an impact not only on their career choice but also on the quality of care that the psychiatric patients are going to receive from these future doctors as physicians.

Objectives: To assess and compare the change in the attitudes of medical students before and after six weeks psychiatry clerkship, students' views about quality of teaching and student perception about psychiatrists as good role models along with the effects of psychiatry teaching on choosing psychiatry as a future career.

Materials and Methods: A cross sectional analytical study was carried out by administering Attitude towards psychiatry (ATP)-30 questionnaire along with additional 5 items added to assess medical student's perception regarding psychiatric teaching and teachers in psychiatry. Pre and post clerkship differences were found out using appropriate tests of association through SPSS 23.00 while setting p value < 0.05 using Pearson-Chi Square method.

Results: Study showed significant increase in Attitude towards psychiatry (ATP) scores post teaching. The positive effect of clinical rotation on perception about psychiatrists as role models was found to be statistically significant with a p value equal to 0.000. Similarly, on item regarding perception of students about teaching being valuable, a significant change in attitude was found with an increase from 41.38% to 73.33% with a p value of 0.046.

There was increase in a desire to pursue a career in psychiatry. There were positive views about quality of module taught and psychiatrists were considered as good role models.

Conclusion: Teaching of psychiatry module could improve the attitudes of undergraduate medical students about psychiatry and raise their interest as a possible career choice.

Keywords: Attitudes; Medical Students; Psychiatry Teaching; Psychiatrists as Role Model; Career Choice

Abbreviations

ATP: Attitude Towards Psychiatry; LAMICs: Low and Middle Income Countries; KSA: Kingdom of Saudi Arabia

Introduction

Physicians' attitude towards patient is an important factor in understanding and treating the medical illness and it has a significant impact on the quality of care being provided [1]. Unfortunately, psychiatric patients and mental illness are stigmatized and there is prejudice and negative attitude towards them in society as well as in medical community. This serves as a major obstacle in the provision of required treatment of this patient group by physicians and by hindering the recruitment of young graduates in this field [2]. Saudi Arabia, like other countries has a high prevalence of psychiatric disorders as shown by different studies in adult, geriatric and adolescent populations. About 39% of depressive symptoms were found in elders in a study by Al Shammari, *et al.* [3] whereas about 16% to 59% of secondary school students were found to have significant levels of mental or emotional symptoms in three different local studies [4-6].

There is already a dearth of mental health professionals in low and middle income countries (LAMICs) where the gap between burden of disease and mental health professionals is increasing day by day and Saudi Arabia is no exception. The total number of professionals in government and private psychiatric practice here is 22 per 100,000 population and psychiatrists constitute only 2/100 000 out of this manpower [7]. To cover this gap it is important that students, from the beginning are encouraged to pursue psychiatry as their field of interest and practice. However, barriers like stigma and negative attitude have rendered psychiatry as an unpopular choice amongst medical students as a future career [8].

Medical students' attitude towards psychiatry is an area of serious concern as it has an impact not only on their career choice but also on the quality of care that the psychiatric patients are going to receive from these future doctors as physicians [9].

Hence, there is a dire need to study such attitudes and try to encourage positive changes through teaching and role modeling. This study is an effort towards assessing whether that's possible through a carefully designed teaching module or not.

The objective of the study is to assess and compare the change in the attitudes of medical students before and after six weeks psychiatry clerkship and student views about quality of teaching and student perception about psychiatrists as good role models. Also to assess the effects of psychiatry teaching on choosing psychiatry as a future career.

Materials and Methods

A cross sectional analytical study was conducted on fourth year medical students of College of Medicine, Majmaah University, Kingdom of Saudi Arabia (KSA). A convenience sample of 60 students was recruited in the study who were about to undergo their psychiatry module rotation.

Updated and modified version of psychiatry module was introduced by a team of internal and external reviewers for medical students that comprised of exposure of students to psychiatric patients in outpatient clinics and inpatient wards, involvement in evaluating outcomes of management through case discussions and a set of formal lectures covering basic areas in psychiatry. It expanded over a time period of 6 weeks.

Ethical clearance was obtained from the Ethics committee of College of Medicine, Majmaah University, before approaching the participants. Study was designed as to get the responses before the commencement of module (pre-test), and after the completion of 6 weeks rotation (post-test) and analyzing any differences in pre and post clerkship responses.

Before administering the pretest, study was explained to the participants and informed consent was obtained. Confidentiality and anonymity was assured by not using the identifying markers like names and roll numbers on the forms in order to avoid response bias. It was clearly explained to the students that the responses or outcome will not affect their grades or examinations. Students were discouraged from discussing the survey questions with each other to avoid peer influence.

The questionnaire used was 30 item Attitude towards psychiatry (ATP) scale [10].

ATP measures attitude towards psychiatry using a 5 point Likert scale ranging from strongly agree to strongly disagree and it was first designed and validated for use in medical students. It has questions about attitude towards psychiatry as a discipline, psychiatric patients, psychiatric illness, treatment methods, psychiatrists, psychiatric institutions, psychiatric teaching and psychiatry as a career choice. Half of the statements [15] are positive and half [15] are negative. Positive items are scored from 5 - 1 whereas negative items are inversely coded. ATP generates a total score ranging from 30 - 150. The higher the score, the more positive the attitude towards psychiatry. A score of more than 90 would indicate a positive attitude towards psychiatry [10].

In addition to ATP, demographic details, specific questions about the module, method of teaching and teachers were also inquired in order to serve the study objectives. Demographic data included age, gender, marital status and nationality.

The questionnaire was self-administered and without the presence of teachers in order to provide a comfortable environment.

The data obtained was subjected to descriptive analysis using SPSS version 23.0.

Total score of each student was calculated by adding the score of individual item responses and a mean ATP and standard deviation (SD) were calculated for the pretest and the posttest items. Frequencies and percentages were calculated for each pre and posttest responses.

A comparison was made between the pre and post clerkship mean ATP scores using paired sample t test. Frequencies and percentages of individual items' responses were calculated after adding up the strongly agree and agree responses as one entity (agree) and adding up strongly disagree and disagree responses as another (disagree) for the ease of analysis. Pre and post responses were then compared using Pearson Chi Square test and Fisher Price test for every item to observe the difference between quantitative variables. One way analysis of variance was applied to compare means between more than two group means. An association between Attitude towards psychiatry score and psychiatry as a career choice was found out using Pearson correlation test. All results were considered significant at p value < 0.05.

Results

Total number of students in our study was 60. All of them completed the pre and posttest, achieving a response rate of 100%. However out of these, some responses were deleted due to multiple or incomplete answers.

All of the participants were Saudi male students. Ages ranged from 17 to 28 years with a mean age of 23.81 (± 0.76). Almost one-quarter (25%) were married.

Before the psychiatry rotation, the students had a mean ATP score of 102.03 (± 13.530) while post rotation mean ATP score was 113.087 (± 15.669). The difference was found to be clinically significant with a p value of 0.009. ATP scores ranged from 73 - 148 for both, pre and posttest groups.

The percentage of participants who wanted to choose psychiatry as a career choice in future increased from 14.81% pretest to 25.92% posttest, showing a positive change in attitude towards career choice after rotation however the difference was not statistically significant (0.536). Details are given in table 1.

Questions other than ATP 30	Pre teaching			Post teaching			Pearson-Chi Square
	Agree	Neutral	Disagree	Agree	Neutral	Disagree	
Psychiatrists are good role models	14.8% 8/54	81.4% 44/54	3.7% 2/54	73.33% 44/60	10% 6/60	16.6% 10/60	0.00
I would consider a career in psychiatry after completing my undergraduate studies	14.8% 8/54	40.7% 22/54	44.4% 24/54	25.9% 14/54	40.7% 22/54	33.3% 18/54	0.536
Majority of the students report that there psychiatric undergraduate training has been valuable	41.3% 24/58	44.8% 26/58	13.7% 8/58	73.3% 44/60	20% 12/60	6.6% 4/60	0.046
On average psychiatrists make less money than other specialties	10% 6/60	50% 30/60	40% 24/60	13.3% 8/60	20% 12/60	66.6% 40/60	0.05

Table 1: Questions other than ATP 30 with significant change in response post teaching.

The effect of clinical rotation on perception about psychiatrists as role models changed significantly and increased from 14.8% pretest to 73.33% posttest and the difference was found to be statistically significant with a p value equal to 0.000. Similarly, on item regarding perception of students about teaching being valuable a significant change in attitude was found with an increase from 41.38% to 73.33% with a p value of 0.046.

A strong correlation was found between item about career choice and the ATP score, strengthening the fact that higher the ATP and more positive the attitude of students about psychiatry, more eager they were to choose psychiatry as a future career. The students that had lowest ATP score disagreed strongly on choice of psychiatry as a future career. Using ANOVA the value was found to be 0.031.

The students' views regarding prognosis of psychiatric diseases improved significantly post teaching, with a p value of 0.008 on comparing pre and post test scores. Details are given in table 2.

Questions From ATP 30 with p value < 0.05	Pre Teaching			Post Teaching			Pearson Chi Square
	Agree	Neutral	Disagree	Agree	Neutral	Disagree	
With the form of therapy at hand most psychiatric patients improve	56.6% 34/60	40% 24/60	3.3% 2/60	83.3% 50/60	6.6% 4/60	10% 6/60	0.008
Most of the so called facts in psychiatry are really just vague speculations	26.6% 16/60	60% 36/60	13.3% 8/60	16.6% 10/60	36.6% 22/60	46.6% 28/60	0.019

Table 2: Questions from ATP 30 that showed significant change in response post teaching.

However views about facts in psychiatry being vague speculations also raised significantly posttest as shown by a p value of 0.019.

Discussions

Our study explored the impact of psychiatry teaching on the attitudes of medical students about psychiatry and results found positive impact of such training as not only in improving the attitude about this subject but also about psychiatrists as role model and about psychiatry as a future career choice.

Most of the studies done previously [2,8,10,11,14] also showed positive impact, even though the results were not found to be statistically significant in all of them. In contrast, few studies also found that exposure of students towards any such teaching module has statistically no effect on change of attitude at all [12,13] as summarized in table 3 below.

Year	Study	Attitudes
1982	Burra p., <i>et al.</i> [10]	Positive
1992	Araya., <i>et al.</i> [11]	Positive
2002	Al -Ansari., <i>et al.</i> [12]	No change
2005	Galka., <i>et al.</i> [13]	No change
2012	Raj Konwar., <i>et al.</i> [2]	Positive
2015	Lyons Z., <i>et al.</i> [8]	Positive
2016	Qubtan AA., <i>et al.</i> [14]	Positive

Table 3: Studies showing effect of psychiatry exposure on medical students’ attitude towards the subject.

The baseline result of ATP in our sample was 102.03 which is reflecting a fairly positive attitude of medical students towards the subject before the psychiatry teaching. Similar results were seen in a comparative study of students over time in Ireland by Conner., *et al.* [9] where the authors postulated that it could be due the improvement of general opinion and social image about psychiatry over years and same can be applied here.

Similarly the studies by several researchers from different parts of world showed positive change in attitude after the clerkship however all couldn’t find any statistical significance.

The question about career choice, “I would like to be a psychiatrist” yielded a response of agree in 14.8% individuals pretest that rose to a 25.9% posttest. Interestingly, number of neutral responses remained unaffected i.e. 11/27%. This neutral group might be representing the student group who already have a career choice other than psychiatry or who have not considered any career choice as such till that time. In any case, this group might be a good target to work upon so their interest in this field may grow.

Though there was a positive shift in the attitude towards career choice post teaching, it was not clinically significant. There were a few studies with results in contrast to ours which found no differences in career choice after teaching [15,16]. However, similar results have been found in other studies by Conner., *et al.* [9], Brokingten., *et al.* [17], Bulbena., *et al.* [18], Rodrigo., *et al.* [19] and Lyons., *et al.* [8]. There was difference in percentage change reported amongst studies like Lyons., *et al.* found a raise from 4.6% to 10.5% [8], whereas Mowbray., *et al.* found that 65%, of students choose psychiatry post-graduation [20] which is quiet high as compared to our posttest results.

But these positive results only imply that the clinical module with its emphasis on integrated clinical teaching like this one has capacity to increase the students interest in the specialty for time being however the long term effects need to be studied as these expressed interests are not seen being translated into actual recruitments in psychiatry [9]. So long term effects need to be studied as well.

Students showed positive responses to questions regarding quality of teaching, teachers and curriculum that were added along with ATP 30 questions, in order to assess the students’ views about the effectiveness of reviewed curriculum. It was encouraging that psychiatrists were rated as good role models and the percentage rose from 14.81% pre rotation to 73.33% posttest as teachers are a key factor in influencing a change in attitude and career choice of students [21]. This result was similar to other studies such as the done by Lyons., *et al.* [8].

In answer to question regarding the module being valuable, students responded positively at baseline. 41.38% agreed with the statement which rose to 73.33% after attending the psychiatry rotation and the difference was found to be statistically significant with a value of 0.046. The result was similar to findings by Rodrigo., *et al.* which found that there was an overall increase in the concept of holistic approach and better understanding of the patients by the medical students after completing their psychiatry teaching.

The views of students regarding the increasing choice in therapies and prognosis of psychiatric patients being better also significantly changed post teaching. This was consistent with other studies such as by O'Conner, *et al* [9]. This is an important finding because it may help to nullify the stigma and negative attitude towards psychiatric illness amongst future doctors that they are untreatable or have a poor prognosis.

One important finding was a significant change in students' attitude posttest regarding facts in psychiatry being just vague speculations. This was a negative finding which provides future food for thought as to how the facts and scientific evidence can be presented and taught in a manner that medical students are more conducive to develop their understanding in this area.

Conclusion

The study has found that a well-tailored psychiatric teaching module has made a significant change in the medical students' attitude towards psychiatry. They deem this teaching highly valuable, consider psychiatrists as good role model and their wish to pursue this field in future has increased post teaching. Weather this actually translates into more recruitment in psychiatry in future or not, at least this will result in medical students having a good learning of psychiatry as an integral part of medicine in order to deliver a holistic care to the patient.

The findings of this study are encouraging to other medical colleges as well which have recently introduced psychiatry training in the under graduate years. Replicating this study in other medical colleges can yield useful information that can help in further improvement of under graduate training in psychiatry.

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Conflict of Interest

There is no competing interests and no funding from anywhere.

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