



IMPACT OF PSYCHIATRIC EDUCATION AND TRAINING ON ATTITUDE OF MEDICAL STUDENTS TOWARDS PSYCHIATRY AS A CAREER CHOICE BEFORE AND AFTER ROTATION

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ABSTRACT

OBJECTIVE

To determine change in the attitudes of medical students toward psychiatry as a career choice before and after clinical rotation in psychiatry.

STUDY DESIGN

Cross-sectional design.

PLACE AND DURATION OF STUDY

Study was conducted at the Institute of Psychiatry & WHO Collaborating Centre (IOP), Benazir Bhutto Hospital Rawalpindi, Pakistan from November 2016 to October 2017.

SUBJECTS AND METHODS

212 medical students, who were completing their clinical rotation of psychiatry at IOP, were selected using convenient sampling. Pre and post assessment was conducted using the Attitude Towards Psychiatry (ATP)-30-item scale.

RESULTS

The ATP- 30 scores were analyzed using a Paired sample t test and indicated no significant change in attitude towards psychiatry by the end of the study. Cronbach's alpha of the scale was measured twice and was in the acceptable range (0.74- 0.80). Result of the study revealed minimum to no impact of psychiatric education and training on students.

CONCLUSION

The study demonstrated the lack of effect of psychiatric training on the attitudes of medical students regarding psychiatry as a career choice. However, there was a slight trend towards a positive change in the male students regarding their attitude towards psychiatry after their two-week rotation.

KEY WORDS

Psychiatric education and trainings, Attitude towards psychiatry, Psychiatry rotation

INTRODUCTION

The global burden of mental illnesses is underestimated. With approximately 0.2 psychiatrists per 100,000, Pakistan is currently facing a 'recruitment crises'. The mental health burden on the country is causing a strain on both resources and specialists¹.

Although a variety of factors affect a medical students' decision to choose a specialty, our knowledge of these factors is fairly limited. Though studies affecting attitudes of students have been conducted globally, little research exists within Pakistan.

The attitude and perception towards psychiatry among undergraduate medical students has enormous implications, as these future doctors, may be involved in the care of psychiatric patients at some point in their career. Moreover, if the recruitment crisis is ever to be reduced, an uptake of students opting for psychiatry is needed. Studies have shown that stigma against psychiatry as a specialty and psychiatrists in general, exist not only in the general population but within the medical community as well²⁻⁶.

A UK based study stated that medical students did not differ in their attitude towards psychiatry⁷. However, one study conducted in Pakistan, found that female students had a more positive attitude as compared with males⁸. Conversely, studies have also reported negative and sometimes, unfavorable attitude towards psychiatry among medical students after completing their psychiatry clinical rotation⁹⁻¹². Studies conducted on medical students of US and Israel, reported no difference in their attitude towards psychiatry during their psychiatry rotation¹³⁻¹⁵. Farooq, Lydall, Malik and Bhugra (2014) conducted a study on why medical students choose psychiatry and found a positive correlation between teaching placement quality and ATP scores of participants¹⁶.

Approximately 3% of students, select psychiatry as a career¹⁷, in order to improve recruitment numbers within Psychiatry, we must focus on the factors affecting the choice of students. As mentioned above, teaching of psychiatry plays a pivotal role. This study aims to explore the change and impact of psychiatric training and education during psychiatric rotation, on the attitude of medical students regarding psychiatry as a career choice.

SUBJECTS AND METHODS

Participants

This cross sectional study was conducted at Institute of Psychiatry & WHO Collaborating Centre (IOP), Benazir Bhutto Hospital Rawalpindi, Pakistan. IOP is a tertiary care teaching hospital affiliated with Rawalpindi Medical University (RMU),

Rawalpindi. Using non probability convenient sampling, 350 medical students from RMU, who were in a psychiatric rotation for training and clinical exposure, were invited to participate in the study. Out of these 350 students, 212 consented to participate.

Instruments

Informed consent forms and demographic sheet containing information regarding name, age and gender, were used along with following scale.

Attitudes Toward Psychiatry-30 items (ATP-30):

To measure the attitude of students ATP-30 was used. It is a 5-point Likert scale designed and validated by Burra et al. The scale comprises of 30 positively and negatively phrased items that measure the strength of the respondent's attitude to various aspects of psychiatry. The score of each positively phrased item is converted by subtracting it from 6. The ATP score is the sum of the total scores for positively and negatively phrased items. A high score on the scale indicates a positive attitude towards psychiatry (maximum=150, minimum=30, logical neutral point=90)¹⁸.

Procedure

The study was approved by Research Unit of Rawalpindi Medical University. After providing informed consent, students were asked to complete a demographic form and the ATP-30. As it was a pre-post assessment design, pre assessment was conducted on the first day of the students' psychiatric rotation and the post assessment was conducted on the final day of the rotation, after two weeks. Data were collated after receiving all 212 assessment forms. All data were analyzed using the IBM Statistic 21.0 version.

RESULTS

A total of 212 third year medical students responded to the questionnaire. No data were omitted, discarded or found incomplete. The sample comprised of 212 participants, 169 (79.7%) were females, 43 (20.3%) were male. 14 (6.6%) were 19 years of age, 75 (35.4%) were 20 years of age, 97 (45.8%) were 21 years of age and 26 (12.3%) were 22 years of age.

Table 2 described no significant change in ATP at post measurement in overall and gender wise scores on ATP-30. However an interesting trend, albeit insignificant, was seen in the mean scores of the male's attitude towards psychiatry where there was a slight increase in mean was observed (from 98.76 to 100.46). This indicated a trending change in male attitude towards psychiatry after receiving training in psychiatry.

Table 1
Psychometric Properties of study variables (n=212)

Variables	No of Items	α	M	SD	Range	
					Potential	Actual
Pre-ATP	30	0.74	104.48	9.79	30-150	76-134
Post-ATP	30	0.80	104.16	11.57	30-150	65-134

Note= Attitude Towards Psychiatry (ATP)

Table 1 showed alpha coefficient reliability of Attitude towards Psychiatry (ATP) at pre and post rotation. The findings demonstrated that Cronbach's alpha of the scale, both times (pre and post) was within the acceptable range, 0.74 and 0.80.

Table 2
Paired sample t test on pre and post rotation scores on attitude towards psychiatry (ATP)

	Pre (n=212)		Post(n=212)		95% CI				
	M	SD	M	SD	t	P	LL	UL	Cohen's d
ATP	104.48	9.79	104.16	11.16	0.46	.65	-1.07	1.71	0.03
Male (n=43)	98.76	9.12	100.46	9.20	1.23	.22	-4.47	1.07	0.18
Female (n=169)	105.93	9.43	105.10	11.44	1.03	.30	-.76	2.43	0.08

Table 3
Paired sample t test on pre and post rotation scores on items measuring attitude towards psychiatric knowledge and teaching (n=212).

Item	Pre (n=212)		Post (n=212)		95%CI				
	M	SD	M	SD	t	P	LL	UL	Cohen's d
9	3.67	1.07	3.91	0.92	2.66	.01	.06	.42	0.24
10	2.25	0.84	2.44	0.82	2.66	.01	.04	.32	0.23
13	3.52	0.96	3.28	1.02	3.17	.00	.09	.40	0.24
23	3.27	1.05	3.27	1.01	0.06	.95	-.14	.15	0.01
24	3.35	0.86	3.43	0.93	1.08	.28	-.23	.07	0.09
26	3.40	0.88	3.44	0.96	0.51	.61	-.21	.12	0.04
30	3.33	0.99	3.15	1.06	2.19	.03	-.34	-.02	0.18

Table 3 showed paired sample t test on the items that measure attitude towards psychiatric knowledge and teaching. There was a significant change in scores on post measurement on items 9, 10, 13 and 30 (see table 3 for details). The findings indicated that participants had a change in their view on item 9: "Psychiatric teaching increases our understanding of medical and surgical patients", item 10: "The majority of students report that their psychiatric undergraduate training has been valuable", item 13: "Psychiatry has very little scientific information to go on" and item 30: "Psychiatry is so amorphous that it cannot really be taught effectively".

DISCUSSION

This study aimed to explore the attitudes of medical students towards psychiatry, as a career choice and impact of psychiatric education and training on their attitude, before and after psychiatric rotation. To date, few studies have been conducted to explore attitudes towards psychiatry in Pakistan and interpretation of the results of these studies is limited due to the possible differences in students' personality, preferences and conditions of the particular standard of the psychiatric training they were receiving during their rotation. A UK based study revealed that both male and female medical students showed no difference in their attitude towards psychiatry⁷. These results supported our findings. It was seen that although there seemed to be a slightly positive trend amidst some

questions of the questionnaire; there was no significant change in attitudes of students after psychiatric rotation over all.

Syed et al. (2008) explored the attitudes of Pakistani medical students towards psychiatry as their future career choice. The study found that only 7.6% reported psychiatry to be either their chosen career or a highly likely choice¹⁹. Compared to the findings in the present study where no significant change in attitude was found, it seems that the popularity of psychiatry as a career choice is decreasing over time. However, this variation could also be due to different wording of the career choice questions in the studies, and this is an important consideration in interpreting results from questionnaire based studies. As only 212 out of 350 students in the year group participated in the study, it is possible that selection bias towards those students who are more interested in psychiatry may have contributed towards the improvement trend in attitudes reported in the results.

Although other studies such as Kuhnigk O et al. (2007) found positive change in attitude after training and education²⁰, our study found no such effect. It is possible that the amount of time spent exposed to psychiatric training and education may influence students' attitudes. Perhaps the two week rotation may not be enough time to investigate attitude change. Future studies can keep this in mind when investigating attitudes.

In a study also using the ATP-30 conducted by McParland et al. (2003), it was found that changes in students' attitude towards psychiatry and their intention to follow psychiatry as a career choice could be predicted by their experiences during the course with a learning curriculum²¹. This could mean that perhaps the learning curriculum of psychiatry for medical students plays a greater role in forming and changing attitudes than a two week clinical rotation.

McParland also found that students who had more positive attitudes, felt encouraged during their rotation²¹. A study conducted by Asiri Rodrigo et al. (2013) found that the kind of training and trainers of medical students determined whether a change in attitude towards psychiatry would occur. Perhaps the environment of the host hospital used for this study played a role in the lack of change in attitudes of students²². Future studies should, therefore, include students performing rotations in more than one hospital to explore the effects of teaching environment on attitudes. This holds promising potential for improvement in attitudes through psychiatric training and should strongly be recommended to consultants and colleagues in charge of the medical students during rotation.

This study identifies the need for special training of medical students for psychiatry which would involve greater exposure to psychiatric patients and more time spent with consultants in order to increase a positive attitude towards psychiatry. Yadav et al. (2012) found that adequate modifications to existing medical curriculum could help improve attitude of medical students towards the mentally ill²³. This suggests incorporating a more practical curriculum for the education of psychiatry.

CONCLUSION

The present study provides impetus towards taking a deeper look

into the current teaching practices of prospective psychiatrists in Pakistan as to devise innovative teaching strategies. In order to inspire more students to choose psychiatry as a career, closer attention needs to be paid on the psychiatric curriculum. This may overcome the recruitment crisis within Pakistan in the field of mental health. Future studies should focus on influences before and after undergraduate training and the factors supporting sustained psychiatric practice after graduation.

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COMPETING INTERESTS

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