

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 beforeandafterclinical rotationin psychiatry.

# STUDY DESIGN

Cross-sectional design.

# PLACE AND DURATION OF STUDY

Study wasconducted at the Instituteof Psychiatry & WHOCollaborating Centre (IOP),Benazir Bhutto Hospital Rawalpindi, Pakistan from November 2016to October 2017.

# SUBJECTS AND METHODS

212 medical students, who werecompleting their clinical rotationof psychiatry at IOP, wereselected 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 samplettest andindicated no significantchange 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).Resultof the studyrevealed minimum to no impactof 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.

# KEYWORDS

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 specialists'.

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 hasenormousimplications, as these futuredoctors,may be involvedin the careof psychiatricpatients at somepointintheircareer.Moreover,if the recruitment crisis is ever to be reduced, an uptake of students opting for psychiatry is needed. Studies haveshown that stigma against psychiatry asa specialtyand psychiatrists in general,exist not onlyin the general population but withinthe medicalcommunity as well' .

AUKbasedstudystatedthatmedical students did not differ in their attitudetowards psychiatry'.However, one studyconducted in Pakistan, found that female students

had a more positive attitude *as*compared withmales'.Conversely, studieshavealso

reported negative and sometimes, unfavorable attitude towards psychiatry among medical students after completing their psychiatry clinical rotation ''. Studies conducted on medical students of US and Israel, reported no difference in their attitudetowardspsychiatry during theirpsychiatry rotation',.".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 participants".

Approximately 3% of students, select psychiatry *as* a career", in order to improve recruitment numbers within Psychiatry, *we* must focus on the factors affecting the choice of students. As mentionedabove,teaching of psychiatry playsa pivotalrole.

This study aims to explore the change and impact of psychiatric training and education duringpsychiatric rotation,onthe attitude of medicalstudentsregarding psychiatryasa careerchoice.

# 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 hospitalaffilioted with Rawalpindi Medical University (RMU),



Rawalpindi.Usingnon probability convenient sampling,350medical students from RMU, who were in a psychiatric rotation for training and clinical exposure,were Invited to participate in the study. Out of these350students, 212 consentedto participate.



## Instruments

Informed consent forms and demographic sheet containing information regarding name,ageand gender, wereused along with following scale.

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

To measure the anitude of students ATP-30*was*used.It it isa 5-point Likert scaledesignedand validated by Burraet al.The scalecomprises of 30 positively and negatively phrased items that measure the strengthof the respondent'sanitudeto various aspectsof psychiatry. The scoreof each positively phraseditemisconverted by subtracting it from6.The ATP scoreis the sumof the totalscoresfor positively and negatively phrased items. A high score on the scale indicates a positive attitude towards psychiatry (maximum=150, minimum=30, logical neutralpoint=90)".

## Procedure

The study was approved by Research Unit of Rawalpindi Medical University. Afterproviding informed consent,students wereaskedto complete a demographic formandthe 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 dayof the rotation,aftertwo weeks.Datawere collated after receiving all 212 assessment forms. All data were analyzedusingthe IBMStatistic21.0version.

# 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%) were19 years of age,

75 (35.4%) were 20 years of age, 97 (45.8%) were 21 years of ageand 26(12.3%) were22 years of age.

Table 2 described no significantchange in ATP a.t postmeasurement in overalland 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 wasobserved (from 98.76 to 100.46).Thisindicated a trending change in male attitudetowards psychiatry afterreceiving training in psychiatry.

Table I

Psychometric Properties of study variables (n=212)

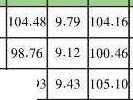
|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Range | | | | | | |
| **Varialll••** | **Noofllem•** | **(l** | **M** | **SD** | **Polenlial** | **Actual** |
| rre-ATl' | 30 | 0.74 | 104.48 | 9.79 | 30-150 | 76-134 |
| Post-ATP | 30 | 08() | 104.16 | 11.57 | 30-150 | 65-134 |



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

**Table 2**

Paired samplet test on pt·e and post romiion scores on attimde toward. psychiatry

(ATP)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Pro (o~212) Post(n~212) | | 95%CI | | | | |
|  | **M SO M** so  11.16  9.20 | ().46  J.23 I.03 | **P**  65  .22  .30 | ***ll***  -1.07  -4.47  -.76 | *UL*  1,71  1.01  2.43 | **Cohen', d**  0.03  0.18  Q.08 |
| ATP |
| Male (n=43) |
| Female (n-169) 105.9 11.44 | |

Table 3

Paired sarnpl t test on pre and post rotation scores on items m asur-ing attim<le towards psychiatric knowledge and reachin.g (n=212).

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Pre (n-212) | | Post (n=212) | | 95%CI | | | | |
| **Item** | **M** | **SD** | **M** | **so** | I | **p** | ***LL*** | ***Ol*** | **Coben'sd** |
| 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 | 3.2$ | 1.02 | 3.17 | .0-0 | .09 | .40 | 0.24 |
| 23 | 3.27 | 1.05 | 327 | I.OJ | 0.06 | .95 | -.14 | **.15** | 0.01 |
| **24** | 3.35 | 0.86 | 3.43 | 0.93 | 1.08 | .28 | -.23 | .07 | 0.09 |
| 26 | J.40 | 0.88 | 3.44 | 0.96 | 0.Sl | .61 | -.21 | **.12** | 0.114 |
| 30 | 3.33 | 099 | 315 | 106 | 2.19 | .03 | -34 | -.02 | 0.IR |

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 postmeasurement 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 verylittlescientific.informationto go on" anditem30: "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, beforeand 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 standardof 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 psychiatry'. 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 attitudesof studentsafterpsychiatricrotationoverall.



Syedet al.(2008) explored the attitudesofPakistanimedicalstudents towards psychiatry as their futurecareer choice.Thestudyfoundthat only 7.6% reported psychiatry to be either their chosen career or a highly likely choice". Compared to the findings in the present study where no significant change in attitude was found,it seems that the popularity of psychi<Jtry as a career choice is decreasing over time. However, this variationcould 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 trendin attitudes reportedin theresults.

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

In astudyalsousingthe ATP-30 conductedby 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 curriculum". This could mean that perhaps the learning curriculum of psychiatry for medical students playsa greater rolein forming and changingattitudesthanatwo weekclinical rotation.

McParland also foundthatstudents who had morepositive attitudes, felt encouraged during their rotation". 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 students". 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 needfor special trainingof medicalstudents for psychiatry which would involve greater exposure to psychiatric patients and more timespent 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 ill". This suggests incorporatinga morepracticalcurriculum fortheeducation 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 overcomethe recruitment crisis withinPakistan in the fieldof mental health. Future studies should focus on influences before and after undergraduate training and the factors supporting sust<Jined psychiatricpractice aftergraduation.

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## COMPETING INTERESTS

This study is not funded by any person or organization. Theauthors declare that they have no competing interests in publication of this research paper.

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