

## Journal of Pharmaceutical Research International

33(37B): 270-276, 2021; Article no.JPRI.71151

ISSN: 2456-9119

(Past name: British Journal of Pharmaceutical Research, Past ISSN: 2231-2919,

NLM ID: 101631759)

# Medical Students Attitude & Knowledge of Psychiatry an Impact of Psychiatry Posting

Prakash B. Behere<sup>1\*</sup>, Debolina Chowdhury<sup>1</sup>, Aniruddh P. Behere<sup>2,3</sup> and Richa Yadav<sup>3,4</sup>

<sup>1</sup>Department of Psychiatry, Jawaharlal Nehru Medical College (JNMC), Datta Meghe Institute of Medical Sciences (DU), India.

<sup>2</sup>Helen Devos Children's Hospital, Department of Pediatrics and Human Development, Michigan State University College of Human Medicine), India.

<sup>3</sup>Adjunct Faculty, Datta Meghe Institute of Medical Sciences (Deemed University), India. <sup>4</sup>Department of Psychiatry and Behavioral Sciences, OU College of Medicine), India.

#### Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

### Article Information

DOI: 10.9734/JPRI/2021/v33i37B32049

Editor(s)

(1) Dr. Sawadogo Wamtinga Richard, Ministry of Higher Education, Scientific Research and Innovation, Burkina Faso.

Reviewers:

(1) Thiago Rafael da Silva Moura, Federal University of Pará, Brazil.

(2) Djoko Priyono, Universitas Tanjungpura, Indonesia.

Complete Peer review History: https://www.sdiarticle4.com/review-history/71151

Original Research Article

Received 15 May 2021 Accepted 19 July 2021 Published 21 July 2021

## **ABSTRACT**

India being a signatory to Alma-Ata declaration, envisaged 'Health for all by the year 2000" and hence should look into training undergraduates in psychiatry. Medical students' attitude towards psychiatry are determined by complex inter lacing variables. Low recruitment is a serious challenge for psychiatry worldwide. Moreover, psychiatry is poorly represented in medical education and undergraduate training in psychiatry and behavioral sciences in most medical colleges in India is unsatisfactory. Keeping these facts in mind, this study was carried out to assess the influence of psychiatry training, including direct patient contact on attitude of medical students towards mental illness. This study was conducted at Department of Psychiatry, Mahatma Gandhi Institute of Medical Science, Sevagram, Wardha, Maharashtra. Second year MBBS students were evaluated with a pre and posttest during their 2 weeks posting in the Psychiatry department. There was some improvement in attitude & knowledge of undergraduate medical students about mental health after

two weeks of psychiatry posting. The improvement in male medical students is more than three times of that seen in female medical students, after two weeks of training. The existing M.C.I. recommendations need serious considerations for implementation in each & every Medical College of India. As per the current curriculum, the introduction to psychiatry is in the 1<sup>st</sup> term during lectures on behavioral sciences following which they not exposed again until the 5<sup>th</sup> semester when the undergraduate students are required to attend 40 hours lectures parallel to 4 weeks clinical posting culminating with compulsory short note questions worth 20 marks included in paper II of the General Medicine exam. Finally, another two weeks of psychiatry posting is mandatory during internship. Female medical students have shown deterioration in their attitudes & knowledge over more questions than male counterparts. Hence it can be deduced that, males tend to learn better by experience.

Keywords: Attitude; undergraduate; psychiatry an impact.

### 1. INTRODUCTION

Health is a state of complete physical, mental and social wellbeing' and not merely the absence of disease or infirmity" [1]. India being a signatory to Alma-Ata declaration, which envisaged 'Health for all by the year 2000" should look into training of undergraduates in psychiatry at this crucial juncture [2-3]. An attitude is relative during organization of emotionally linked, learn beliefs around an object or situation predisposing one to respond in preferential manner [4-5].

Medical students' attitude towards psychiatry are determined by complex inter lacing variables [6-7]. A variety of factors, including opinions formed since childhood, personality, quality of psychiatric education at medical school, difficulty in working with emotionally disturbed patients, attitude of non-psychiatric faculty, perceived career, social rewards & peer pressure etc., can influence medical students attitude towards psychiatry [8-10]. These attitudes are important in determining their career choice in psychiatry [11].

Low recruitment is a serious challenge for psychiatry worldwide. However, this trend has shown some sign of reversal. This problem is much more serious in developing counties like India where current rates of psychiatric specialization are woefully short of community needs and have a very grim chance of fulfilling the community needs in near future.

Moreover, psychiatry is poorly represented in medical education and undergraduate training in psychiatry and behavioral sciences in most medical colleges in India is unsatisfactory [12–14]. Since 'the dawn of psychiatry', as a specialization distinct from medicine and neurology, teaching of psychiatry in our medical colleges has followed a pattern formulated

originally by British with minor modification [15]. It is very important that, amount and content of training in psychiatry should be altered, in such a manner, that newly qualified doctors are able to discharge their responsibility for better health care as a whole, of the community [16].

Most reports on medical students' attitude toward psychiatry have come from western countries [17–19]. There are very few Indian studies in this area [12,16,20,21].

In India, there has been reassessment of medical curriculum for undergraduate students, with medical council of India & various universities attempting to reorganize the whole structure and make it more relevant. With increasing importance being given to psychiatric education, it is surprising that very little attention is being paid towards attitude of medical students in India & the influence of posting in psychiatry.

Keeping these facts in mind, this study was carried out to assess the influence of psychiatry training, including direct patient contact on attitude of medical students towards mental illness.

In our study, we assessed the attitude and knowledge in medical students towards psychiatric problems, before and after psychiatry posting and whether same duration of exposure to the subject is sufficient to favorably influence their attitudes.

## 2. MATERIALS AND METHODS

This study was conducted at Department of Psychiatry, Mahatma Gandhi Institute of Medical Science, Sevagram, Wardha, Maharashtra.

Second year medical students were posted in department of psychiatry for 15 days. During their posting, students were allotted cases, both in-patients and out-patients, which were worked up by them & then discussed with the consultant. The focus during the clinics was on history-taking, mental status examination, diagnosis and treatment of common psychiatric conditions likely to be encountered by the students during their clinical practice.

On the first day of posting, students were given Attitudes Toward Psychiatry (ATP-30) Questionnaire [22]. This questionnaire was

phrased to assess the attitude of medical students towards mental illnesses. The same questionnaire was again given to the students at the end of their psychiatric posting to assess the change over time, of the knowledge during 15 days of psychiatric posting.

It took around 30 minutes for average students to completely solve those questionnaires. It was arbitrarily decided that, students who missed two or more days of posting in psychiatry will be excluded for the study. The data collected, was then subjected to percentage & proportion statistical methods and analyze.

## **Observations:**

Table 1. Percentage of correct responses generated on attitude & knowledge questionnaire

	Male	Female	Total
Part-I	74.62%	71.5%	73.09%
Part-II	87.50%	79.79%	83.64%

Table 2. Comparison of Pre &Past - Training Assessment

	Percentage of correct Responses		
	Male	Female	Total
Pre-training	71.18%	77.01%	74.09%
Post-training	88.14%	82.02%	85.08%

A- Percent increase in overall correct responses after training – 10.99%

Table 3. Percentage of correct responses for questions that showed decline after training

Female         Male           Pre-training         Post training         Pre training         Post train           Q.1         73.68%         52.6%             Q.5         100%         89.47             Q.13         89.47%         78.4%             Q.14         78.94%         68.42%         69.23%         61.53%	Percentage of correct responses generated			
Q.1       73.68%       52.6%           Q.5       100%       89.47           Q.13       89.47%       78.4%				
Q.5 100% 89.47 Q.13 89.47% 78.4%	ning			
Q.13 89.47% 78.4%				
O 14 78 94% 68 42% 69 23% 61 53%				
9.11 10.01/0 00.12/0 00.20/0 01.00/0				
Q.15 89.47% 78.4%				
Q.16 84.62% 61.52%				
Q.27 89.47% 78.9%				

Table 4. Percentage of deterioration for certain variables

<b>Question Number</b>	Male	Female	
1	•••	21.08%	
5	•••	10.06%	
13	•••	11.04%	
14	7.7%	10.52%	
15	•••	11.07%	
16	23.1%		
27	•••	10.57%	

B - Percent increase in correct responses of males after training - 16.96%

C- Percent increase in correct responses of females after training – 5.01%

### 3. RESULTS

All the students had adequate attendance and were included in the study. Scores for correct responses generated on Attitude & Knowledge Questionnaire, percentage of correct responses in male female medical students, pre & post-clinical posting, deterioration and correct responses on certain variable are shown in observations.

It can be easily made out from the study that, there was some improvement in attitude & knowledge of undergraduate medical students about mental health after two weeks of psychiatry posting. The improvement in male medical students is more than three times of that seen in female medical students, after two weeks of training.

Female medical students have shown deterioration in their attitudes & knowledge over more questions than male counterparts. Hence it can be deduced that, males tend to learn better by experience.

It was also seen that, attitude & knowledge of male medical students was better than female medical students, even from the start of posting.

## 4. DISCUSSION

The pre-posting attitude and knowledge of students is much more positive than those reported from studies in Western literature, but because of small number of students in our study, no comparison could be done. The ability of a two-week posting to favorably influence the attitude & knowledge of psychiatry is a matter of consideration.

The overall influence of a 2-week posting in psychiatry with exposure to the practical aspects of the subject has proven to be positive in our study. This result has been replicated in various studies within India and other nations. Tharyan et al evaluated students during their undergraduate training and again during their internship, which showed that although theoretical psychiatry didn't significantly influence the students' attitude towards the subject, a positive change was seen after a 2 or more weeks of training in psychiatry [23-28] and also accepted the field as essential and respected [29], even if the students were not exposed to dedicated anti stigma programs [23] Alternatively, study by Gulati et al revealed that although a change in the students' outlook was

observed, the overall attitude towards the specialty remained negative [30].

This study's results show that the change in the mindset of the students towards this specialty showed greater improvement among the male compared to female students which is incongruous with other study which either revealed the female students to have an increased positive to psychiatric illnesses [25] or the resulted in equivocal positive attitude among both genders [20].

An interesting finding in several studies was that despite the overall attitude of students towards psychiatry being positive after exposure; most students' perspective did not change to consider psychiatry as a future medical career [23,27,31]. While it is evident through this study and multiple others that the lack of exposure and experience with mental illnesses is an obvious and modifiable reason for this, there may be several other causes for this situation. An Indian study isolated a variety of reasons for not choosing psychiatry as a specialization including the stigma with creates a negative experience with the mentally ill patients and makes the specialty less attractive to the medical students [32].

The existing M.C.I. recommendations need serious considerations for implementation in each & every Medical College of India. As per the current curriculum, the introduction to psychiatry is in the 1<sup>st</sup> term during lectures on behavioral sciences following which they not exposed again until the 5<sup>th</sup> semester when the undergraduate students are required to attend 40 hours lectures parallel to 4 weeks clinical posting culminating with compulsory short note questions worth 20 marks included in paper II of the General Medicine exam. Finally, another two weeks of psychiatry posting is mandatory during internship [33,34].

Thus, in view of better scientific understanding of psychiatric illnesses, psychiatry needs to be placed in proper place of education of undergraduate and post graduate medical students [16,26,29,35]. As suggested by Behere et al, with respect to subject of pre and para clinical, psychiatry component should be taught like neuroanatomy in anatomy, neurophysiology in physiology, neuropathology in pathology, community psychiatry in community medicine and so on [36].

These findings need to be replicated using large number of students before major conclusions are drawn. A small sample size is not necessarily a drawback as it provides greater staff-student interaction, supervision & learning [37-40].

### 5. CONCLUSION

Female medical students have shown deterioration in their attitudes & knowledge over more questions than male counterparts. Hence it can be deduced that, males tend to learn better by experience.

### **DECLARATION**

Scientific Responsibility Statement The authors declare that they are responsible for the article's scientific content including study design, data collection, analysis and interpretation, writing, some of the main line, or all of the preparation and scientific review of the contents and approval of the final version of the article.

## **ETHICAL APPROVAL**

The study was approved by the Medical Ethics Committee of Institute of Medical Sciences, Sewagram, Wardha, Maharashtra, India. All procedures performed in this study were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. No animal or human studies were carried out by the authors for this article.

## **CONSENT**

Informed consent was obtained from all individual participants included in the study. Additional informed consent was obtained from Key Relatives of patients.

## **COMPETING INTERESTS**

Authors have declared that no competing interests exist.

## **REFERENCES**

- World Health Organization. Constitution [Internet]. World Health Organization; 2021 [cited 2021 Mar 6].
  - Available: https://www.who.int/about/who-we-are/constitution
- 2. Haider W. Why Health for All by Policy (HFA 2000) failed to achieve its goals?

- Ann King Edw Med Univ [Internet]. 2019; 25(3). [cited 2021 Mar 6] Available:https://annalskemu.org/journal/index.php/annals/article/view/3059
- 3. Kallivayalil RA. The importance of psychiatry in undergraduate medical education in India. Indian J Psychiatry. 2012;54(3):208–16.
- 4. Desai R, Panchal B, Vala A, Ratnani IJ, Vadher S, Khania P. Impact of clinical posting in psychiatry on the attitudes towards psychiatry and mental illness in undergraduate medical students. Gen Psychiatry. 2019;32(3):e100072.
- Rezler AG. Methods of attitude assessment for medical teachers. Med Educ. 1976;10(1):43–51.
- 6. Paddock M, Farooq K, Sarkar SN, Aga T, Lydall G. Why choose psychiatry? Report on a qualitative workshop. The Psychiatrist. 2013;37(4):146–146.
- 7. Buchanan A, Bhugra D. Attitude of the medical profession to psychiatry. Acta Psychiatr Scand. 1992;85(1):1–5.
- Eagle PF, Marcos LR. Factors in medical students' choice of psychiatry. Am J Psychiatry. 1980;137(4):423–7.
- Sadr SS, Nayerifard R, Samimi Ardestani SM, Namjoo M. Factors Affecting the Choice of Psychiatry as a Specialty in Psychiatry Residents in Iran. Iran J Psychiatry. 2016;11(3):185–90.
- Khajeddin N, Riahi F, Salehi Veysi M, Hoseyni H, Izadi Mazidi S. Do medical students' attitudes toward psychiatry and their intention to pursue psychiatry as a career change during psychiatric attachment? Iran J Psychiatry Behav Sci. 2012;6(1):53–61.
- Seow LSE, Chua BY, Mahendran R, Verma S, Ong HL, Samari E, et al. Psychiatry as a career choice among medical students: a cross-sectional study examining school-related and non-school factors. BMJ Open. 2018;8(8):e022201.
- 12. Chawla JM, Balhara YPS, Sagar R, Shivaprakash null. Undergraduate medical students' attitude toward psychiatry: a cross-sectional study. Indian J Psychiatry. 2012;54(1):37–40.
- Bhaskaran K. Undergraduate Training in Psychiatry and Behavioural Sciences-The Need to Train the Trainers. Indian J Psychiatry. 1990;32(1):1.
- 14. Kallivayalil RA, Enara A. Undergraduate Education in Psychiatry in India. Glob Psychiatry. 2020;3(1):9–16.

- 15 Murthy P, Jain S, Chandrasekhar C. History and Milestones - Nimhans. NIMHANS Gold Jubil Commemmorative [Internet]; 2004. [cited 2021 Mar 6]. Available:https://nimhans.ac.in/history-andmilestones/
- Sharma A, Vankar GK, Behere PB, Mishra 16. KK. Does clinical posting in psychiatry change attitude towards psychiatry? A prospective study. J Clin Sci Res. 2018; 7(3):106.
- Hailesilassie H, Kerebih H, Negash A, Girma E, Siebeck M, Tesfave M. Attitude of Medical Students towards Psychiatry: The case of Jimma University, Southwest Ethiopia. Ethiop J Health Sci. 2017; 27(3):207-14.
- 18 Pascucci M, Stella E, La Montagna M, De Angelis A. Parente P. Di Nunzio V. et al. Attitudes toward psychiatry and psychiatric patients in medical students: Can realworld experiences reduce stigma? Eur Psychiatry. 2016;33:S218.
- Warnke I, Gamma A, Buadze M, Schleifer 19. R, Canela C, Strebel B, et al. Predicting Medical Students' Current Attitudes Toward Psychiatry, Interest in Psychiatry, and Estimated Likelihood of Working in Psychiatry: A Cross-Sectional Study in Four European Countries. Front Psychiatry [Internet]. 2018;9. [cited 2021 Mar 6]. Available:https://www.frontiersin.org/article s/10.3389/fpsyt.2018.00049/full
- Desai ND. Chavda PD. Attitudes of 20. undergraduate medical students toward mental illnesses and psychiatry. J Educ Health Promot. 2018;7(1):50.
- Buran, T., Sanem Gökçe Merve Kılınç, & 21. Elmas Kasap, Prevalence of Extraintestinal Manifestations of Ulcerative Colitis Patients in Turkey: Community-Based Monocentric Observational Study. Clinical Medical Medicine and Research. 2020;1(2):39-46. Available:https://doi.org/10.52845/CMMR/2
  - 020v1i2a8
- 22. Kumar MV, Macharapu R, Reddy PK, Babu S. Attitude toward mental illness medical students nonpsychiatric doctors. Arch Ment Health. 2019;20(1):9.
- Burra P, Kalin R, Leichner P, Waldron JJ, 23. Handforth JR, Jarrett FJ, Amara IB. The ATP 30-a scale for measuring medical students' attitudes to psychiatry. Med Educ. 1982;16(1):31-8

- Tharyan P, John T, Tharyan A, Braganza D. Attitudes of "tomorrow's doctors" 24. towards psychiatry and mental illness. Natl Med J India. 2000;14:355-9.
- Daniel V, Daniel K. Perception of Nurses' 25. in Psychiatric Clinic. Clinical Medicine Insights. 2020;1(1):27-33. Available:https://doi.org/10.52845/CMI/20 20v1i1a5
- 26. De Witt C, Smit I, Jordaan E, Koen L, Niehaus DJH, Botha U. The impact of a psychiatry clinical rotation on the attitude of South African final year medical students towards mental illness. BMC Med Educ. 2019;19(1):114.
- Reddy JP, Tan SMK, Azmi MT, Shaharom 27. MH, Rosdinom R, Maniam T, et al. The effect of a clinical posting in psychiatry on the attitudes of medical students towards psychiatry and mental illness in a Malaysian medical school. Ann Acad Med Singapore. 2005;34(8):505-10.
- Simon N, Verdoux H. [Impact of education 28. program and clinical posting in psychiatry on medical students' stigmatizing attitudes psychiatry and towards psychiatric disorders]. L'Encephale. 2018;44(4):329-
- 29. Shen Y, Dong H, Fan X, Zhang Z, Li L, Lv H, et al. What can the medical education for eliminating stigma discrimination associated with mental illness among future doctors? effect of clerkship training on chinese students' attitudes. Int J Psychiatry Med. 2014; 47(3):241-54.
- 30. Daniel V, Daniel K. Diabetic neuropathy: new perspectives on early diagnosis and treatments. Journal of Current Diabetes Reports. 2020;1(1):12-14. Available:https://doi.org/10.52845/JCDR/2 020v1i1a3
- Petkari E, Masedo Gutiérrez AI, Xavier M, 31. Moreno Küstner B. The influence of clerkship on students' stigma towards mental illness: a meta-analysis. Med Educ. 2018;52(7):694-704.
- Kareem O. liaz B. Mehmood Y. Karim M. 32. Riaz J. Attitude of Medical Students Towards Psychiatry in a Tertiary Care Hospital. J Med Physiol Biophys [Internet]; 2020. [cited 2021 Mar 6]; Available:https://www.iiste.org/Journals/ind
  - ex.php/JMPB/article/view/51134
- Gulati P, Das S, Chavan BS. Impact of 33. psychiatry training on attitude of medical students toward mental illness and

- psychiatry. Indian J Psychiatry. 2014; 56(3):271–7.
- 34. Daniel V, Daniel K. Exercises training program: It's Effect on Muscle strength and Activity of daily living among elderly people. Nursing and Midwifery. 2020;1 (01):19-23.
  - Available:https://doi.org/10.52845/NM/202 0v1i1a5
- 35. Praharaj SK, Behere RV, Deora S, Sharma PSVN. Psychiatric specialization as an option for medical students in the Indian context. Int Rev Psychiatry. 2013; 25(4):419–24.
- Sreedaran P, Hegde D. Reasons for pursuing psychiatry as a career: A qualitative study of future psychiatrists from India. Arch Ment Health. 2018; 19(1):30.

- Manohari SM, Johnson PR, Galgali RB. How to Teach Psychiatry to Medical Undergraduates in India?: A Model. Indian J Psychol Med. 2013;35(1):23–8.
- 38. Kallivayalil RA, Enara A. Undergraduate Education in Psychiatry in India. Global Psychiatry. 2020;3(1):9-16.
- Aruna G, Mittal S, Yadiyal MB, Acharya C, Acharya S, Uppulari C. Perception, knowledge, and attitude toward mental disorders and psychiatry among medical undergraduates in Karnataka: A crosssectional study. Indian J Psychiatry. 2016; 58(1):70.
- Behere PB, Bhatt VK, Behere M. Psychiatry in Medical Education-an Appraisal. Andhra Pradesh Journal of Psychological Medicine.1990;3(1):19-23.

© 2021 Behere et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:
The peer review history for this paper can be accessed here:
https://www.sdiarticle4.com/review-history/71151