Attitudes of participants of master degree in family medicine in Gezira University, Sudan towards Psychiatry: A vision to sustain continuous gain

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ABSTRACT

Introduction: Family medicine physicians are first contact of patients in the community and their role in treating mental health is highly recommended. The aim of the current study is to assess attitudes towards psychiatry among doctors enrolled in master degree in family medicine in Gezira University before and after training in psychiatry. **Methods:** This study was a quantitative cross-sectional study with two stages – pre- and post-psychiatry training. It has included one batch of master students of family medicine at Gezira University, Sudan. The whole master program lasts for 18 months, of which 3 weeks are dedicated to psychiatry training. All students in the batch were invited to participate in both stages – before and after psychiatric training. **Result:** 31 students participated in the study, 35.5% of them were males (N = 11). Mean age was 39.4 (SD \pm 5.34) and mean number of years after graduation was 13.3 (SD \pm 4.96). 26 students (83.9%) earned Attitudes Toward Psychiatry (ATP) scores >90, which indicates a positive attitude. The ATP mean score for all participants was 104.26 (SD \pm 12.56). The least score was 79 while the maximum was 130. Doctors' attitudes toward psychiatry became more positive after psychiatric training and this difference was statistically significant (*P*value = 0.038) and this was found to be statistically significant only among participants below age of 40 years and those who have been graduated less than 15 years ago. **Conclusion:** Psychiatric training for family physicians in training was associated with significant improvement in attitudes towards psychiatry.

Keywords: Attitude, family medicine, psychiatry

Introduction

World Health Organization (WHO) identified psychiatry disorders to be among the global leading causes of disability.^[1] They are amongst the top 10 causes of the economic burden and depression alone is the second.^[2] The demand for psychiatric services is rapidly growing and the burden of psychiatry disorders

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is becoming more significant. In spite of that, the numbers of psychiatrists are insufficient in several countries. ^[3-6] This shortage of qualified psychiatrist is more obvious in developing countries such as Sudan, where the estimated number of psychiatrists is only 0.09 per 100,000. ^[7] This emphasizes the importance of involving other medical practitioners in the management of psychiatric patients at different levels, such as primary health care doctors and family physicians. The family physicians have the advantage that he or she is first point of contact with community in addition to the ability of the family physician to develop therapeutic relationship with his patients. They are responsible for treating and following them or even referring them to other

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specialties, so their knowledge and attitudes towards psychiatry may affect their practice and their patients' outcomes as well.

Considerable numbers of studies have shown positive response and attitudes of medical students and health profession towards psychiatry. [8-14] while others pointing toward a more negative one. [15-18] Interestingly, Sudanese medical students at four different universities appeared to have generally positive attitude toward psychiatry. [19]

Regarding factors that may affect attitudes toward psychiatry, gender was suggested by some studies to be a significant factor. In Arabian Gulf University in Bahrain, female medical students had more positive attitudes toward psychiatry, [10] and in the 1970s, females in the United States had double likelihood to choose psychiatry compared to males, and they were 1.5 times as likely as males in the 1990s. [20] On the contrary, male Malaysian medical students had more positive attitudes compared to females before (but not after) having psychiatry clerkship. [21] However, many other studies, such as in Germany, [22] Thailand [12] and Nigeria [23] did not prove any correlation between attitudes towards psychiatry and students' gender.

Regarding changes in attitudes towards psychiatry after psychiatry training, most of the studies reported significant improvement in attitudes in Ireland, Malaysia, Japan, Portugal and Saudi Arabia.^[24-27] On the other hand, other studies did not prove any significant difference between attitudes before and after psychiatric training e.g. in Germany,^[22] Australia,^[28] Thailand^[12] India,^[29] and in Arabian Gulf University in Bahrain.^[10] Interestingly, there was a different result reported in a Nigerian study where attitude to psychiatry shifted towards negative after posting on psychiatry.^[23] Therefore, the aim of the current study is to assess the attitudes of doctors enrolled in master degree in family medicine in Gezira University before and after training in psychiatry.

Methods

This study was a quantitative cross-sectional study including two stages – pre- and post-psychiatry training. It has included one batch of master students of family medicine at Gezira University, Khartoum center. The whole master program lasted for 18 months of which 3 weeks were dedicated to psychiatry training. All students in the batch were invited to participate in both stages – before and after psychiatric training. They were given a two-part self-reporting instrument which included two parts:

- A socio-demographic questionnaire, which also included other information like; duration since graduation, family history and personal history of psychiatric disorders.
- 2. The other part of the instrument was the Attitudes Toward Psychiatry-30 items (ATP-30) which is a standardized scale designed for measuring attitudes towards psychiatry among medical students, and it has been widely applied on several studies since its validation by Burra in 1982. [30] It consists of 30 statements with 5 Likert options for each. Its total score

should be within 30-150, with a midpoint (90) between positive attitudes (above) and negative attitudes (below).

The statistical package for social sciences (SPSS) program were used in data analysis. Comparisons were done between ATP scores pre and post training in psychiatry, with the socio-demographic factors, and with other studies' findings. X^2 statistic and parametric statistic tests were used to analyze categorical and numerical variables respectively. Means of ATP scores were compared among different groups using ANOVA. The level of significance was set to P value <0.05. Ethical approval was obtained from faculty of medicine, University of Gezira, Sudan. All participants gave consent for the study after explanation of the purpose of the study, voluntary participation, and confidentiality.

Results

31 students participated in the study, 35.5% of them were males (N = 11). Mean age was 39.4 (SD \pm 5.34) and mean number of years after graduation was 13.3 (SD \pm 4.96). Regarding marital status of participants; 21 (67.7%) were married, 4 (12.9%) were single, only one divorced, and 5 (16.1%) did not indicate their marital status. 8 (25.8%) participants reported having a psychiatric patient among their relatives but no one reported having personal history of psychiatric disorders. Only 4 participants have worked in psychiatry before [Table 1].

Attitude towards psychiatry before psychiatric training

26 students (83.9%) had positive attitudes toward psychiatry since they obtained ATP scores more than 90 (the midpoint of the questionnaire), compared to 3 students (9.7%) who obtained less than 90, and only 2 students (6.5%) were neutral; ATP = 90. The ATP mean score for all participants was 104.26 (SD \pm 12.56). The least score was 79 while the maximum was 130.

There was no statistically significant difference in ATP mean scores depending on gender, marital status, or having a relative with psychiatric disorder [Table 2]. ATP mean scores appeared to be higher among those with long duration after graduation, but these differences were not statistically significant when tested by ANOVA [Table 2].

As shown in Table 3, the overall ATP scores became more positive after psychiatric training and this difference was statistically significant (*P* value = 0.038). It is also obvious from the same table that the improvement of ATP scores after having psychiatric training was statistically significant only among participants below age of 40 years and those who have been graduated less than 15 years ago.

Discussion

Despite the fact that psychiatry service in primary care enhance psychiatry care and services in USA, unfortunately the teaching

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Table 1: Distribution of students according to different sociodemographic factors

sociodemographic factors				
	n	0/0		
Gender				
Male	11	35.5		
Female	19	61.3		
Marital status				
Married	21	67.7		
Single	4	12.9		
Divorced	1	3.2		
Widowed	0	0		
Relative with psychiatric disorders				
Yes	8	25.8		
No	22	71.0		
Working in psychiatry before				
Yes	4	13		
No	26	84		
Total	31	100		

Table 2: ATP scores compared according to different factors (before psychiatry training)

factors (before psychiatry training)						
Mean	Std. deviation	P				
103.00	13.499	0.716				
104.89	13.046					
103.68	13.889	0.537				
107.00	11.057					
99.50	9.482	0.535				
105.62	15.463					
107.00	11.057					
105.86	13.679	0.397				
95.25	11.236					
114.00	0					
106.25	14.400	0.864				
103.45	12.405					
103.75	15.840	0.988				
104.27	12.610					
	Mean 103.00 104.89 103.68 107.00 99.50 105.62 107.00 105.86 95.25 114.00 106.25 103.45 103.75	Mean Std. deviation 103.00 13.499 104.89 13.046 103.68 13.889 107.00 11.057 99.50 9.482 105.62 15.463 107.00 11.057 105.86 13.679 95.25 11.236 114.00 0 106.25 14.400 103.45 12.405 103.75 15.840				

Table 3: ATP scores compared pre and post psychiatry training

	Pre		Post		P
	Mean (ATP)	SD	Mean (ATP)	SD	
All participants	104.26	12.559	110.54	9.747	0.038*
Gender					
Male	103.00	13.499	112.90	9.362	0.073
Female	104.89	13.046	107.47	11.192	0.517
Age					
<40 yrs	103.68	13.889	113.76	10.022	0.019*
≥40 yrs	107.00	11.057	105.00	7.826	0.664
Years since graduation					
<15	104.56	13.747	114.85	7.998	0.022*
≥15	105.10	12.032	102.29	9.708	0.616

of psychiatry for primary care physician was inadequate. [31,32] This in agreement with recommendation of McMaster University that further training and experience in psychiatry should be available to all family physician. [33] Qureshi et al. (2006) showed that training in psychiatry for primary care physician can enhance their skills in the early diagnosis and management of common psychiatric disorders and diseases.^[34] Our study showed that the majority of participants of family medicine master's degree have positive attitude towards psychiatry. Gender did not appear to be affecting attitudes and this result agrees with similar results in different countries such as Germany, Thailand and Nigeria.[12,22,23] The overall ATP scores became more positive after psychiatric training and this difference was statistically significant and this was found to be statistically significant only among participants below age of 40 years and those who have been graduated less than 15 years ago. This can be due to the fact that it is possible for relatively young doctors to accept training in psychiatry while in training for family Medicine. Adaji 2018 suggested the need to increase the quality and quantity of psychiatry training for the primary care physician. [32] Importantly, training of family physicians in psychiatry can come with advantage of better communication and collaboration between psychiatrist and family physicians. [30-34] Interestingly, general practitioners in the United Kingdom were happy to teach psychiatry for medical undergraduate and they were also happy to receive further training in psychiatry. [35] Sudan is one of the largest countries in Africa and home for different tribes and peoples from different ethnic's backgrounds. Therefore, the training of family physician in psychiatry is important due to the following reasons: (a) lack of enough specialist and qualified psychiatrist in Sudan, (b) family physician have the chance to develop therapeutic relationship with patients, (c) the therapeutic relationship is not only important to treat and manage patients but also important in preventing patients from going to traditional healers and magicians, (d) family physicians are in front contact with community and their role in health education and explanation of psychiatric illness cannot be over emphasized, (e) family physicians are also expected to play a role in decreasing the stigma associated with psychiatric illness. Despite the fact that the number of participants in this study is relatively small and it only involves one center, we believe this study is novel and it reflect the importance of training family physicians in psychiatry.

Conclusion

Psychiatric training for family physicians in training was associated with significant improvement in attitudes towards psychiatry. This highlights the importance of training programs in psychiatry for non-psychiatry doctors especially those who may participate in detecting or treating psychiatric patients.

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Authors contribution

Both authors contributed equally for the paper.

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Conflicts of interest

There are no conflicts of interest.

References

- World Health Organization. The World Health Report: 2001: Mental Health: New Understanding, New Hope. Geneva: World Health Organization; 2001. Available from: http://www.who.int/whr/2001/en/whr01_en.pdf. [Last accessed on 2019 Jun 07].
- World Health Organization. Investing in Mental Health. Geneva: WHO; 2003. [Last accessed on 2019 Jun 07].
- 3. Harper BL, Roman BJ. The changing landscape of recruitment in psychiatry. Acad Psychiatry 2017;41:221-5.
- 4. Brown T, Ryland H. Recruitment to psychiatry: A global problem. BJPsych Int 2019;16:1-3.
- Goldenberg MN, Williams DK, Spollen JJ. Stability of and factors related to medical student specialty choice of psychiatry. Am J Psychiatry 2017;174:859-66.
- Lyons Z, Janca A. Impact of a psychiatry clerkship on stigma, attitudes towards psychiatry, and psychiatry as a career choice. BMC Med Educ 2015;15:34. doi: 10.1186/ s12909-015-0307-4.
- World Health Organization. Mental Health Atlas 2005. [Last accessed on 2019 Jun 07].
- 8. Koh KB. Medical students' attitudes toward psychiatry in a Korean medical college. Yonsei Med J 1990;31:60-4.
- Ndetei DM, Khasakhala L, Ongecha-Owuor F, Kuria M, Mutiso V, Syanda J, et al. Attitudes toward psychiatry: A survey of medical students at the University of Nairobi, Kenya. Acad Psychiatry 2008;32:154-9.
- 10. Al-Ansari A, Alsadadi A. Attitude of Arabian Gulf University medical students towards psychiatry. Educ Health 2002;15:180-8.
- 11. Yamamoto K, Randall M, Takeda M, Leelamanit W. Attitudes of medical students towards persons with mental disorders: A comparative study between Japan and Thailand. Psychiatry Clin Neurosci 1996;50:171-80.
- 12. Udomratn P, Sangkool J. Attitudes of Thai medical students towards psychiatry: A study at Prince of Songkla University. South Asian J Psychiatry 2003;1:7-20.
- 13. Jiloha RC. Image of psychiatry among medical community. Indian J Psychiatry 1989;31:285-7.
- 14. Kumar A, Goyal U, Ganesh KS, Srivastava MK, Gautam BD, Kumar R. Attitude of postgraduate residents towards psychiatry. Indian J Psychiatry 2001;43:2.
- 15. Jugal K, Mukherjee R, Parashar M, Jiloha RC, Ingle GK. Beliefs and attitudes towards mental health among medical professionals in Delhi. Indian J Community Med 2007;32:198-200.
- 16. Malhi GS, Parker GB, Parker K, Carr VJ, Kirkby KC, Yellowlees P, *et al.* Attitudes toward psychiatry among students entering medical school. Acta Psychiatr Scand 2003;107:424-9.

- 17. Minhas FA, Mubbasher MH. Attitude of medical students towards psychiatry in Pakistan. J Coll Physicians Surg Pak 2003;10:69-72.
- 18. Bruhn JG, Parsons OA. Medical student attitudes toward four medical specialties. J Med Educ 1964;39:40-9.
- 19. Abbas AIA. Sudanese medical students' attitudes towards psychiatry before and after psychiatric clerkship. Sudanese I Psychiatry 2014:4:18-30.
- Sierles FS, Taylor MA. Decline of U.S. medical students' career choice of psychiatry and what to do about it. Am J Psychiatry 1995;152:1416-25.
- 21. Tan SM, Azmi MT, Reddy JP, Shaharom MH, Rosdinom R, Maniam T, *et al.* Does clinical exposure to patients in medical school affect trainee doctors' attitudes towards mental disorders and patients? A pilot study. Med J Malaysia 2005;60:328-37.
- Kuhnigk O, Strebel B, Schilauske J, Jueptner M. Attitude of medical students towards psychiatry. Adv Health Sci Educ Theory Pract 2006;12:87-101.
- 23. Issa BA, Adegunloye OA, Yussuf AD, Oyewole OA, Fatoye FO. Attitudes of medical students to psychiatry at a Nigerian Medical School. Hong Kong J Psychiatry 2009;19:72-7.
- 24. Sloan D, Browne S, Meagher D, Lane A, Larkin C, Casey P, *et al.* Attitudes toward psychiatry among Irish final year medical students. Eur Psychiatry 1996;11:407-11.
- 25. Mino Y, Yasuda N, Kanazawa S, Inoue S. Effects of medical education on attitudes towards mental illness among medical students: A five-year follow-up study. Acta Med Okayama 2000;54:127-32.
- 26. Xavier M, Almeida JC. Impact of clerkship in the attitudes toward psychiatry among Portuguese medical students. BMC Med Educ 2010;10:56.
- Alsughayir M. Saudi medical students' opinion of psychiatry before and after psychiatric clerkship. Arab J Psychiatry 2000;11:60-9.
- 28. Chadirian AM, Engelsmann F. Medical student attitudes towards psychiatry: A ten-year comparison. Med Educ 1982;16:39-43.
- 29. Tharyan P, John T, Tharyan A, Braganza D. Attitudes of 'tomorrow's doctors' towards psychiatry and mental illness. Natl Med J India 2001;14:355-9.
- 30. Burra P, Kalin R, Leichner P, Waldron JJ, Handforth JR, Jarrett FJ, *et al.* The ATP 30-a scale for measuring medical students' attitudes to psychiatry. Med Educ 1982;16:31-8.
- 31. Cerimele JM, Strain JJ. Integrating primary care services into psychiatric care settings: A review of the literature. Prim Care Companion J Clin Psychiatry 2010;12. pii: PCC.10r00971. doi: 10.4088/PCC.10r00971whi.
- 32. Adaji A. Integrated care: A disruptive innovation for extending psychiatric expertise to primary care practices. Mayo Clin Proc Innov Qual Outcomes 2018;2:99-102.
- 33. Kates N, Lesser A, Dawson D, Devine J, Wakefield J. Psychiatry and family medicine: The McMaster approach. Can J Psychiatry 1987;32:170-4.
- 34. Qureshi NA, Van Der Molen HT, Schmidt HG, Al-Habeeb TA, Magzoub ME. Effectiveness of a training programme for primary care physicians directed at the enhancement of their psychiatric knowledge in Saudi Arabia. Educ Health (Abingdon) 2006;19:52-60.
- 35. Thompson C, Dogra N, McKinley R. A survey of general practitioners' opinions and perceived competencies in teaching undergraduate psychiatry. Educ Prim Care 2010;21:20-4.