Original article

Factors associated with non-adherence to psychotropic medication among patients with major psychiatric disorders

Saifun Nahar,[1] Muhammad Sayed Inam Walid,[2] Mohammed Zubayer Miah,[3] Mohammad Muntasir Maruf[4]

[1]Assistant Professor of Psychiatry, National Institute of Mental Health (NIMH), Dhaka, Bangladesh; [2]Assistant Professor, Department of Psychiatry, Sylhet MAG Osmani Medical College, Sylhet, Bangladesh; [3]Assistant Professor, Department of Psychiatry, Shaheed Suhrawardy Medical College, Dhaka, Bangladesh; [4]Assistant Professor of Psychiatry, NIMH, Dhaka, Bangladesh.

Article info

Received : 21 Nov 2021
Accepted : 19 Mar 2022
Number of tabs : 01
Number of figs : 02
Number of refs : 15

Correspondence
Saifun Nahar
Mobile: +8801712119277
E-mail: saifunsumi@gmail.com

Summary

Psychiatric disorders have become a global public health concern with its increasing global disease burden. Non-adherence to psychotropic medication has huge grave consequences for both patients and the overall health care system. However, there is paucity of studies on medication non-adherence in the underdeveloped world. The Objective of the study was to identify the factors associated with non-adherence to psychotropic medication among adult patients with major psychiatric disorders. This was a cross sectional study, conducted at National Institute of Mental Health (NIMH), Sher-E-Bangla Nagar, Dhaka, Bangladesh over the period of 12 months from January 2018 to December 2018. For this purpose, 120 adult patients with the age range of 19-65 years, who had history of non-adherence to psychotropic medications, were selected by convenient sampling method. A semi-structured, self-designed questionnaire containing socio-demographic and clinical variables as well as items related to the factors for non-adherence to psychotropic medication was used for data collection. Data was analysed by using statistical package for social sciences (SPSS) 16. The results showed that, among 120 patients, 58.3% were male and 41.7% were female. Age, education, employment status, religion, major psychiatric diseases were significantly associated with factors related to non-adherence to psychotropic medication. Non adherence to psychotropic medication increases the risk of psychiatric morbidity, mortality and quality of life. So, broad-based efforts must be taken to curb this trend.

Bang J Psychiatry 2022;36(2): 24-26

Introduction

Psychiatric disorders have become a growing public health concern with its increasing global disease burden. Non-adherence is making a significant contribution here.[1,2] The WHO defines adherence as "the extent to which the persons' behaviour (including medication-taking) corresponds with agreed recommendations from a healthcare provider". There are multiple factors leading to poor medication adherence, normally classified into five categories: socioeconomic factors, therapy-related factors, patients-related factors, condition-related factors, and health system/health care team- (HCT-) related factors (WHO).[3] Studies show that between a third and half of medicines that are prescribed for long term conditions are not used as recommended.[4] Medication non-adherence is a common challenge in the treatment of psychiatric disorders.[5,6] Moreover, non-adherence to psychotropic medication has thousand and one grave consequences for both patients and the overall healthcare system. Non-adherence leads to poor clinical outcome, increase in morbidity and death rates, and unnecessary healthcare expenditure.[7,8] Current literature review findings revealed that there is paucity of studies on medication non-adherence in the underdeveloped world.[9] Moreover, in Bangladesh no research evidences are available in this area, so far. So, the findings of this study might provide baseline information for future studies in broad spectrum. Objectives of this study were to identify the factors associated with non-adherence to psychotropic medication among adult patients with major psychiatric disorders.

Materials and methods

This cross sectional study was conducted at National Institute of Mental Health (NIMH), Sher-E-Bangla Nagar, Dhaka, Bangladesh among 120 adult patients with age range of 19-65 years, who had history of non-adherence to psychotropic medication and were interviewed and selected purposively for the study from January 2018 to December 2018. For this purpose, 2000 patients were interviewed initially from both outdoor and indoor departments over a period of four months. Among them 120 patients were selected finally who had history of non-adherence to psychotropic medication. A self-designed structured questionnaire by the researcher for socio-demographic and clinical variables as well as items related to the factors for non-adherence was applied. The data was

analyzed by using the statistical package for social sciences (SPSS) 16 at 5% level of significance and 95% confidence interval. Frequency distribution charts were employed to determine the proportion of non-adherence among various subgroups of psychiatric patients and to see the factors for non-adherence. Chi-square test (p value) was applied to see the associations between non-adherence and socio-demographic factors of the respondents. Informed written consent was taken from the participants (patients or accompanying persons). Participants were assured about the confidentiality of the collected data and that it will be used only by the researcher for the purpose of the current study.

Results

In this study, age range of the respondents was from 19 to 65 years. A total of 120 respondents responded with a response rate of 100%. The results showed that, among 120 patients, 58.3% were male and 41.7% were female. Among the participants, 52.5% were in the age group of 19-40 years and 47.5% of them were in the age group of 41-65 years. Age, gender, education, employment status, religion were significantly associated with the factors for non-adherence to psychotropic medication (Table1). Among the respondents, 25% were affected with schizophrenia, 32% had mood disorders, 16% had anxiety disorders, 19% had substance use disorders and remaining 8% had other major psychiatric disorders (Figure 1).

Table 1: Distribution of frequencies based on socio-demographic characteristics of the respondents (n=120)

Socio demographic characteristics	Frequency (%)	p value
Gender		.000
Male	70 (58.3%)	
Female	50 (41.7%)	
Age		.000
19-40	63 (52.5%)	
41-65	57 (47.5%)	
Employment		.000
Employed	40 (33.3%)	
Unemployed	80 (66.7%)	
Marital status		.148
Single	31 (25.8%)	
Separated/divorced	16 (13.3%)	
Married	72 (60%)	
Widowed	1 (8%)	
Educational status		.000
Illiterate	24 (19.7%)	
Primary education and secondary education	45 (37.5%)	
Graduate and post-graduate	51 (42.8%)	
Religion		.000
Muslim	93 (77.5%)	
Hindu	22 (18.3%)	
Others	5 (4.2%)	
Total	120 (100%)	

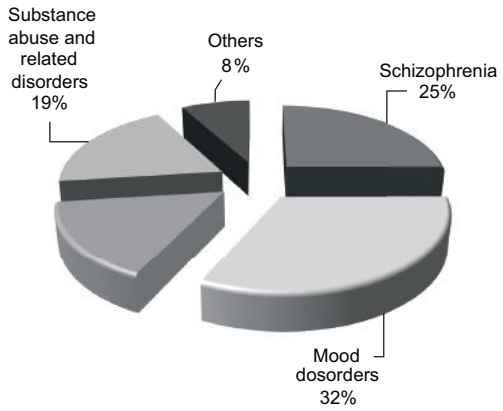

Figure 1: Distribution of frequencies of various diagnostic categories among the respondents (n=120)

Among the factors for non-adherence, 13% had forgetfulness, 10% had co-morbidities, 23% had lack of insight about their illness and treatment, 7% had history of poly-pharmacy, 35% developed side-effects and 12% had complaint of pill-burden and costs (Figure2).

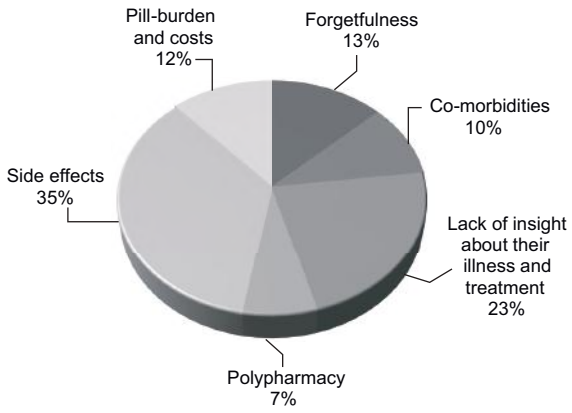

Figure 2: Distribution of frequencies of factors associated with non-adherence to psychotropic medication among the respondents (n=120)

Discussion

One study reported that, young age patients were also more likely to be non-adherent to their medication.[10] In this study, 52.5% of the respondents were in the age group of 19-40 years and 47.5% of them were in the age group of 41-65 years. It was significantly associated with factors for non-adherence. Our study findings were consistent with the study findings mentioned above. In this study, 58.3% of the male and 41.7% of the female were non adherent to psychotropic medication. This difference in gender was significantly associated ($p<.05$) with factors for non-adherence to psychotropic medication. Being male linked to medication non-adherence were also reported in two other studies.[11,12] In this study, 33.3%of the respondents were

employed and 66.7% were unemployed whereas employment status was significantly associated with the factors for psychotropic medication non-adherence and it was in line with 2 more studies.[13,14]

In this study, educational status of the respondents was significantly associated with non-adherence to psychotropic medication which contradicts other study findings where lower education level (lower than secondary education) of the patients were more likely to be associated with medication non-adherence.[14,15] A potential limitation was about generalization, as study sample was taken purposively from one selected institution with relatively small sample size. Another limitation was that, researcher couldn't afford and use any scale to measure non-adherence to medication.

Conclusion

Medication non-adherence is a key hindrance in combating the challenges of public health in both developed and developing countries. For successful pharmacotherapy, healthcare professionals and researchers should utilize all available methods within their limits of practice to improve medication adherence. Larger longitudinal studies needed to design to confirm the correlation between factors associated with medication non-adherence with major psychiatric disorders and consistent efforts should be made to address them. It is necessary to strengthen the guidance and supervision of patient's medication and should emphasize psycho-education to the family members and patients. In case of co-morbid conditions, physicians should simplify the medication regimen. Additionally, focus should be given on rectifying the myths and beliefs held by the patients with scientific information and explanations.

References

1. World Health Organization. Mental disorders fact sheet. Geneva: World Health Organization; 2016.
2. World Bank Group, World Health Organization. Out of the shadows: making mental health a global development priority organized by World Bank Group & WHO, April 13-14. Washington DC; 2016.
3. World Health Organization. Adherence to Long-Term Therapies: Evidence for Action. Geneva: World Health Organization; 2003.
4. Haynes RB, McDonald, Garg AX, Montague P. Interventions for Helping Patients to Follow Prescriptions for Medications. Cochrane Database Syst Rev 2002;2(CD000011).
5. Colom F, Vieta E, Tacchic M, Sanchez-Moreno J, Scott J. Identifying and improving non-adherence in bipolar disorders. Bipolar Disord 2005;7(Suppl 5):24-31.
6. Chapman SCE, Horne R. Medication nonadherence and psychiatry: review. Curr Opin Psychiatry 2013;26(5): 446-52.
7. Brown MT, Bussell JK. Medication adherence: WHO cares? Mayo Clinic Proceedings 2011;86(4):304-14.
8. Johnson MJ, Williams M, Marshall ES. Adherent and nonadherent medication-taking in elderly hypertensive patients. Clin Nurs Res 1999;8(4):318-35.
9. Chukwujekwu DC, Stanley PC. Patterns of Aggression among Psychiatric In-Patients at The Jos University Teaching Hospital. Journal of Medicine in the Tropics 2008;10:7-13.
10. Shigemura J, Ogawa T, Yoshino A, Sato Y, Nomura S. Predictors of antidepressant adherence: results of a Japanese internet-based survey. Psychiatry Clin Neuroscience 2010;64:179-86.
11. Ibrahim AW, Yahya S, Pindar SK,Wakil MA, Garkuwa A, Sale S. Prevalence and predictors of sub-optimal medication adherence among patients with severe mental illnesses in a tertiary psychiatric facility in Maiduguri, North-eastern Nigeria. Pan Afr Med J 2015;21:39.
12. Lacasta-tintorer D, Garcia-Lecina R, Flamarich-zampalo D, Font-canal T, Martin MIF. Do depressed patients comply with treatments prescribed? A cross- sectional study of adherence to the antidepressant treatment. ActasEspPsquiatr 2011;39(5):288-93.
13. Odo HO, AgbonileIO, Ehsan PO, Jeffrey S, BOJ S. Assessment of adherence to psychotropic medications among out-patients at the Pharmacy Department of a Psychiatric Hospital, in Benin City, Nigeria. Asian J Pharm 2014;8:211-5.
14. Mahaye S, Maytime T, Nkosi S, Mahomed FN,Pramlal J, Sethabana O, et al. Medication adherence of psychiatric patientsin an outpatient setting. African J Pharm Pharmacol 2012;6(9):608-12.
15. Sundell KA, Waren M, Petzold M, Gissler M. Socio-economic determinants of early discontinuation of anti-depressant treatment in young adults. EurJ Pub Health 2011;23:1-7.