Identification of effective reasons for drug Non-Compliance of psychiatric patients

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Abstract: Medication non-compliance is a common problem which can be found in all populations and diseases. Proper insurance of good drug compliance is very important for good prognosis. The present study investigates reasons associated with drug non compliance. 688 of non-compliant patients were randomly studied. Reasons for poor drug-compliance were assessed using questionnaire. Most common reasons were related to fear about the side effects of medicines and lack of proper information about mental illness to patients and caregivers. Non- adherence is a significant barrier to treatment success. Results suggest that there is a need to develop community mental health care facilities, and also to provide adequate information about mental illness to patients and nurses.
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1. Introduction

Non-compliance with prescribed medication is a major issue in medicine. Since anti-depressants must be taken for extended periods of time, in some cases for life, noncompliance may have a significant impact on the individual as well as a broader economic and social impact. In any society, treatment for illness is part of a larger social and cultural universe that includes beliefs about the body, about other people and about the nature and usefulness of substances. Adherence to drug regimen is a very important factor for improvement. Adherence may be defined as the extent to which a person's behavior confirms to medical or health advice (1). Patient who do not follow the treatment schedule and drug regimens prescribed to them by physician can be described as non- compliant or not adherent (2). A meta-analysis revealed that patients suffering from depression are 3 times more likely to exhibit noncompliance with medical recommendations than patients without depression (3) Poor drug compliance is a problem in all areas of medicine, and psychiatry is no exception (4). In a review article that summarized findings of studies from 1961 to 1975 and commented that failures of patients to adherence with the treatment is a major problem in case of psychiatric patients (5). Estimates of noncompliance ranges between 4% and 92% with average from 30 to 35 percent (6). The dropout rate is attributed to various factors, such as, illness and patient's characteristics, side effects, time taken to improve or patient doctor relationship (7). The reason for non compliance may include discomfort resulting from treatment (example medication, side effect), expense of treatment, decision based on personal value, judgment or religious or cultural beliefs about the advantages and disadvantages of the proposed treatment, maladaptive personality, traits or coping style (example, denial of illness), or the presence of a mental disorder. Side effect remains an important issue both on short term and long term basis. Patients may refuse drugs because they believe they are a crutch and that they are taken too often one becomes immune to it and when one really needs them they will not work anymore (8). By its very nature psychiatric illness that impairs judgment, insight and stability places psychiatric patients at increased risk for medication non-compliance (9). Non-compliance apparent itself in several ways, including failure to fill a prescription, failure to take any medication, early discontinuation of medication (dropout), and failure to regularly take prescribed dosages (10). Found that 93 % of those not fully adhering to the treatment attributed their failure to the ill effects of medicines. Other factors were apprehension of habituation, no one cares at home, and non-availability of medicines. Non compliance may occur in up to 50% of patients with schizophrenia who are prescribed neuroleptics (11). Patients with schizophrenia are particularly vulnerable to relapse following medication non-compliance (12,13). In a review Fenton et al.(14) commented that non-adherence among patients with schizophrenia was

consistently associated with severe psychopathology, greater substance use, greater medication side effect, more practical barriers, less family and social support, less insight, and a less positive doctor-patient relationship. Noncompliance contributes to relapse and re-hospitalization (15-17). The cost of poor compliance to sufferers and also to society is considerable and effective ways of improving compliance are a crucial part of good management (11). Gottlieb (18) discussed how complexity of treatment regimens could be responsible for medication non-adherence to a large degree. Patients prescribed one pill per day showed an 81% adherence rate to treatment, while those prescribed 3 pills per day adhered only 77% of the time. An increased level of anxiety about the treatment will result in even less information recall. Patients who write down information they receive from their provider have a greater chance of remembering and adhering to the treatment regimen Therefore, improving medication compliance in persons with mentally ill holds the potential for reducing morbidity and suffering of patients and their families, in addition to decreasing the cost of re- hospitalization (4). One of the ways to improve drug compliance is to know crucial factors responsible for poor drug compliance so that proper management strategies may be planned to improve patients' drug compliance. Knowledge in this field is important because it can potentially lead to the development of interventions to improve compliance. The present study provides an opportunity to describe main reasons for non-compliance with antidepressant prescriptions in a population-based sample of adults in the Private Psychiatry clinics.

2.Method

Sample

Present study was conducted during December 2010 to April 2012. Total numbers of visited people were 832 subjects. All patients attending psychiatry clinic were screened. Consecutive 688 non-compliant patients were selected for the study. Previous studies indicated those patients who do not follow the treatment schedule and drug regimens prescribed to them by physician can be described as non compliant or non adherent (2). Only those patients were included who were between age range of 16 and 60 years, and came with reliable informants. Majority of subjects (30%) were between the age ranges of 30-40 years, most of them (70%) were female, 40% were educated up to high school, (35%). Sixty percent of patients were housewife. Most of the patients (66%) were married.

Tools

The survey was submitted and approved by the Ethics Committee. Participants and/or caregivers gave voluntary consent to their participation in the study. In order to ensure confidentiality, the personal information (*i.e.* name, address) of the participants was taken from the questionnaires and discarded, after which the other information was entered and stored for data-analysis. Socio-demographic and clinical information about the patient and their family were entered on a Performa specifically designed for this study. Reason for poor drug compliance was assessed using a questionnaire that was prepared. Main areas covered under the questionnaire were three main reasons; consumption forgetting, Drug side effects, financial problems, Relative recommendations, No trust to Physician, Lack of insight into illness, Types of Job, The medicine was not helping, Complexity of medication, The problem would get better without more medicine, Want to solve the problem without medication, Lack of knowledge about long-term medication. Patients were free to choose more than one reason in each category. After screening guardians as well as patients oral permission were taken before performing the study. Information regarding socio-demographic and clinical details was collected on socio-demographic and clinical data sheet. After that questionnaire assessing reason for poor drug compliance was administered.

Table 1: Reasons for non-compliance to medication

Reasons	Frequency in percent (N=688)
Consumption forgetting	25%
Financial problems	16%
Drug Side effects	26%
Relative recommendations	7%
No trust to Physician	3%
Lack of insight into illness	3%
Types of Job	3%
The medicine not helping	6%
Complexity of medication	4%
The problem would get better without more medicine	1%
Want to solve the problem without medication	1%
Lack of knowledge about long-term medication	2%
Total percent of frequency	**100%**

3. Results

After recording response on questionnaire, responses are presented in percentage. Most common reasons for non-compliance to medication were drug side effects(26%) because they thought the drugs create another problems for them, also consumption forgetting(25%) was another main problem for them that it may cause by old age or some other individual difficulties, and financial problems(16%) is another main problem which may effects on disease improvement. Recommendations of people especially friends and relatives (7%) were another reason of non-compliance to medication. Also a thinking that drug has not effect on improvement of diseases and so is

not helping (6%) causes non-adherence to medicines. Complexities of medications (4%) also create many problems for patients that lead to discontinuation of medication. Frequency of other reasons ranged between 1 to 3% (Table 1).

4.Discussion and Conclusion

The present study showed several factors is responsible for non-compliance patients to medication. Main reasons of drug non-compliance identified in the present study were drug side effects because they thought the drugs create another problems for them, also consumption forgetting was another main problem for them that it may cause by old age or some other individual difficulties, and financial problems is another main problem which may effects on disease improvement. Recommendations of people especially friends and relatives were another reason of non-compliance to medication. Also a thinking that drug has not effect on improvement of diseases and so is not helping causes non-adherence to medicines. Complexities of medications also create many problems for patients that lead to discontinuation of medication. Other studies also indicated side-effects (7,8, 10,14) and lack of insight (14,19) as factors associated with poor drug adherence. Lowry (20) found that there are a number of factors contributing to patients' medication non-adherence behavior. They include gender, social class, race, and socio-economic status. Lowry also voices a very different opinion concerning the problem of medication non- adherence. He suggests that persons suffering from mental illness are among societies most vulnerable, and these individuals are often forced into accepting treatment. If individuals refuse treatment, they are viewed as uncooperative. He goes on to explain that the patient's ability to refuse treatment should be based upon informed consent. Lowry believes that many healthcare providers develop negative feelings toward patients who are medication non- adherent because of their own social prejudices and the abuse of their power with which they seek to force patients to be compliant with their medication. Another reason for medication non-compliance includes the patient's concept that he or she is not mentally ill and does not need to take medication. Some patients willfully refuse to accept their mental illness. However, some patients have what is called anosognosia, a condition defined as the inability to recognize the presence of a neurological deficit or a mental illness (21). People with anosognosia have no awareness of their illness and can present a significant treatment challenge. Therefore, a prescribed medication regimen may be seen as an unpleasant reminder and not likely to be followed. In the present study, drug side effects were the most cause of poor drug compliance. This reason may occurs due to occurrence of other problems and disease in the patients, for example usage of some drugs may cause increased sedation, tremor, lethargic, salivation, dry mouth, that this effects and other effects may lead the patients to discontinuation of medication and medicine using. Physicians and nurses should be sensitive to prescription of drugs and before that should assess and evaluate the patient's health from different aspects. Another main reason for non-compliance of drugs is consumption forgetting that may occurs mostly in old patients and mentally busy persons that should new schedules should be design for this type of patients; also regular health care can improve their medication. Financial difficulties are another main reasons, main problem is cost of the medicine and/ or non-availability of psychiatric medicines in drugstores. Findings suggest need of community level services related to mental health care. Patients who were not aware about side-effects of medicine left medicine or took it irregularly. Drug side effect, lack of insight, lack of awareness, and insufficient information about improvement are reasons that emphasize role of counseling in ensuring good drug compliance. Atreja et al (22) has suggested that healthcare providers play a unique role in assisting patients' healthy behavior changes and those providers must become more familiar with proven interventions that can enhance patient adherence. A list of interventions were outlined and grouped into categories that can be remembered by the mnemonic "Simple." These are: (S) Simplifying regimen characteristics; (I) Imparting knowledge; (M) Modifying patient beliefs; (P) Patient communication; (L) leaving the bias, and (E) Evaluating adherence. A multidisciplinary approach including the above concepts is needed within the context of the healthcare team and system-related factors. Scientists (23) demonstrated that patients who do not take their medications are likely to require more treatment and support from a greater range of services. In addition, they suggest that medication non-adherence increases the probability of relapse in patients with schizophrenia. Medication non-adherence shows a consistent association with higher healthcare costs. Weiden & Olson (24) estimated that non-adherence accounts for approximately 40% of re-hospitalization costs for patients with schizophrenia in a 2-year period following discharge from in-patient treatment. The purpose of present study was restricted only to explore reasons of poor drug compliance so that proper management of these factors may be planned. Findings suggest that main factors related to poor drug compliance are associated with poor infrastructure in the society and lack of basic information about mental illness. There is a need to provide community level mental health care and proper counseling to patients and their caregivers.

Studies on socio-demographic and clinical correlates of drug non-compliance will add more information into our understanding of non-compliance by psychiatric patients. Results from the clinical trial clearly summarize the extremely high rate of drug discontinuation in psychiatric patient. The need for safer and more effective therapies remains an important area for new research. Data from this study will help healthcare providers in making appropriate decisions concerning treatment for psychiatric patient by supplying complete information about side effects and efficacy profiles in various psychiatric patients for many of the currently used medications.

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References

1. Bruer, J.T. Methodological rigor and citation frequency in patient compliance literature. American Journal of Public Health 1982; 72, 911-1123.
2. Razali, M.S., & Yahya, H. Compliance with treatment in Schizophrenia: A drug intervention program in a developing country. Acta Psychiatrica Scandinavica 1995; 91, 331-335.
3. DiMatteo MR, Lepper HS, Croghan TW. Depression is a risk factor for noncompliance with medical treatment: meta-analysis of the effects of anxiety and depression on patient adherence. Arch Intern Med 2000; 160:2101–7.
4. Nageotte, C, Sulliman, G., Duan, N., & Camp, P.L. Medication compliance among the seriously mentally ill in a public health system. Social Psychiatry and Psychiatric Epidemiology 1997; 32, 49-56.
5. Blackwell, B. Treatment adherence. British Journal of Psychiatry 1976; 126, 512-31.
6. Feuertein, M., E.E. Labbe, & A.R. Kuegmierezyk. Health Psychology: A Psychobiological Perspective. New York: Pleneum Press; 1986.
7. Demyttenwere, K. Compliance during treatment with antidepressants. Journal of Affective Disorder 1997; 43, 27-39.
8. Stimson, G.V. Obeying Doctor's order: A view from the other side. Social Science and Medicine 1974; 8 , 97-104.
9. Kane, J.M. Compliance issues in outpatient treatment. Journalof Clinical Psychopharmacology 1985; 5, 22-27.
10. Avasthi, A., Pershad, D., Jain A., & Nehra, R. A psychosocial study of treatment adherence in psychiatric patients. In V. J. Verma, P. Kulhara, C. M. Masserman, A. Malhotra, & S. C. Malik (Eds.). Social Psychiatry: A Global perspective. Delhi: Macmillan India Limited 1998; 197-202.
11. Bebbington, P.E. The content and context of compliance. International Clinical Psychopharmacology 1995; 9 (5), 41-50.
12. Johnson, D.A.W., Peterski, G., Ludlow, I.M.; St rect, K., & Taylor, R.D.W. The discontinuance of maintenance neuroleptic therapy in chronic Schizophrenic patients: Drug and social consequences. Acta Psychiatrica Scandinavica 1983; 67, 339-352.
13. Rajkumar, S., & Thara, R. Factors affecting relapse in Schizophrenia. Schizophrenic Research 1989; 2, 403-409.
14. Fenton, W.S., Blyler, C.r., & Heinssen, R.K. Determinants of medication compliance in schizophrenia: Empirical and clinical findings. Schizophrenia Bulletin 1997; 23, 637-651.
15. Caton, L.M., Koh, S.P., Fleiss, J.L., Barrow, S, & Goldstein, J.M. Rehospitalization in chronic schizophrenia. Journal of Nervous and Mental Disease 1985; 173, 139-148.
16. Curson, D.A., Barns, T.R.E. Bamber, R.W. Platt, S.D., Hirsch, S.r., & Duggy, J.C. Longterm depot maintenance of chronic schizophrenic outpatients: The seven year follow up of the Medical Research Council fluphenazine/ placebo Trial. British Journal of Psychiatry 1985; 146, 464-480.
17. Adams, S.G. Jr., & Howe, J.T. Predicting medication compliance in a psychotic population. Journal of Nervous and Mental Disease 1993; 181, 558-560.
18. Gottlieb, H. Medication Non-adherence: Finding Solutions to a Costly Medical Problem. Drug Benefit Trends 2000; pp.57-62.
19. Kane, J.M. Compliance issues in outpatient treatment. Journal of Clinical; Psychopharmacology 1985; 5, 22-27.
20. Lowry, D.A. Issues of non-compliance in mental health. Journal of Advanced Nursing 1998; 280-287.
21. Kaplan, H.I. & Sadock, B.J. Synopsis of Psychiatry. Philadelphia: Lippincott, Williams, & Wilkins 2003.
22. Atreja, A., Bellam, N., & Levy, S. Strategies to Enhance Patient Adherence: Making it Simple. Medscape General Medicine 2005.
23. Knapp, M. King, D., Pugner, K., & Lapuerta, P. Non-adherence to antipsychotic medication regiments: Associations with resource use and costs. British Journal of Psychiatry 2004; 509-516.
24. Weiden, P.J. Moving Beyond Symptoms: The Importance of Addressing Cognitive and Affective Symptoms in the Treatment of Schizophrenia. Medscape Psychiatry and Mental Health 2005; 10(2).

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