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 behaviour confirms to medical or health advice (Bruer, 1982). 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 (Razali & Yahya, 1995).

Poor drug compliance is a problem in all areas of medicine, and psychiatry is no exception (Nageotte et al., 1997). 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 (Blackwell, 1976). Estimates of noncompliance ranges between 4% and 92% with average from 30 to 35 percent (Feuerstein et al., 1986).

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 (Demyttenwere, 1997). 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 any more (Stimson, 1974). By its very nature psychiatric illness that impairs judgment, insight and stability places psychiatric patients at increased risk for medication non-compliance (Kane, 1985). Avasthi et al. (1998) 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 (Bebbington, 1995). Patients with schizophrenia are particularly vulnerable to relapse following medication non-compliance (Johnson et al. 1983; Rajkumar & Thara, 1989). In a review Fenton et al. (1997) 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 rehospitalization (Caton et al., 1985; Curson et al., 1985; Adams & Howe, 1993). 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 (Bebbington, 1995). 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 (Nageotte et al., 1997). 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.

Keeping these points in view, to find out reason of poor drug compliance, a prospective exploratory study was conducted at the out-patients department of Ranchi Institute of Neuro-Psychiatry and Allied Sciences (RINPAS).

**Method**

**Sample**

Present study was conducted during November 2002 to January 2003. Sample consisted of 100 subjects. All patients attending RINPAS psychiatry OPD were screened. Consecutive 100 non-compliant patients were selected for the study. For deciding non-compliance definition used by Razali and Yahya (1995) was followed. According to the definition, patient who do not follow the treatment schedule and drug regimens prescribed to them by physician can be described as non compliant or non adherent (Razali & Yahya, 1995). Only those patients were included who were between age range of 18 and 55 years, and came with reliable informants. Majority of subjects (32%) were between the age range of 18-25 years, most of them (72%) were male, 35% were educated up to matric, (35%). Thirty-five percent patients were doing work related to agriculture. Most of the patients (63%) were married. Seventy-one percent patients following Hindu religion. Most of them (62%) belonged to joint family and low socio-economic status. Sixty-eight percent patients did not have family history of mental illness. Majority of the patients (73%) was staying away from the hospital and coming to hospital was inconvenient for them.

**Table 1:** Clinical details

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency in %(N= 100)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Diagnosis</strong></td>
<td></td>
</tr>
<tr>
<td>Bipolar affective disorder</td>
<td>42%</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>32%</td>
</tr>
<tr>
<td>Psychosis</td>
<td>18%</td>
</tr>
<tr>
<td>Epilepsy</td>
<td>5%</td>
</tr>
</tbody>
</table>
Osessive-compulsive disorder 3%

Age of onset
12-17 19%
18-25 51%
26 and above 30%

Duration of illness
Less than one year 18%
1-2 years 26%
3-5 years 18%
5-10 years 14%
10 and above 14%

Type of drug
Antipsychotic 50%
Mood stabilizer 13%
Combination 29%
Anti anxiety 5%
Anti epileptic 3%

Regular follow up
Present 9%
Absent 89%

Regular medication
Present 9%
Absent 91%

Table 1 shows clinical details of patients. Most of the patients were having bipolar affective disorder (42%). In 51% of patients, age at onset of illness ranged between 18 and 25 years. Twenty-six percent patients were having duration of illness between 1-2 years. Most of the patients (50%) were on antipsychotic medicines.

Tools
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 checklist that was prepared after detail interview of 20 patients and their informants. Main areas covered under the checklist were financial difficulties, distance, improvement in previous symptoms, problem related to caregiver (old age of care giver or lack of caregiver), side effects, nature of work (i.e., due to seasonal work related to agriculture patients had problem in coming for medicine), no improvement, and lack of insight/ awareness).

A category named Others was included to cover reasons that were not specified in the checklist. Patients were free to choose more than one reason in each category, if applicable.

Procedure
After screening guardians as well as patients verbal consent were taken before conducting the study. Information regarding socio-demographic and clinical details was collected on socio-demographic and clinical data sheet. After that checklist assessing reason for poor drug compliance was administered.

Results
After recording response on checklist, responses are presented in percentage. Most common reason for poor drug compliance was financial problem (41%). Thirty-five percent patients had poor drug compliance because they were not able to come for medicine due to long distance that was inconvenient. Due to improvement in symptoms 28% patients became irregular in taking medicine. Frequency of other reasons ranged between 15 to 6% (Table 2).

Table 2: Multiple reasons for poor drug compliance and irregular follow-up

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Frequency in % (N=100)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial problem</td>
<td>41%</td>
</tr>
<tr>
<td>Distance</td>
<td>35%</td>
</tr>
<tr>
<td>Improvement in previous symptom</td>
<td>28%</td>
</tr>
<tr>
<td>Side effect (Increased sedation,</td>
<td></td>
</tr>
<tr>
<td>Tremor, Lethargic, Salivation,</td>
<td></td>
</tr>
<tr>
<td>Dry mouth, Memory, Others)</td>
<td>16%</td>
</tr>
<tr>
<td>Old age of caregiver /</td>
<td></td>
</tr>
<tr>
<td>lack of caregiver</td>
<td>15%</td>
</tr>
</tbody>
</table>
Lack of insight into illness 12%
Nature of Job (busy in farming) 15%
No improvement 7%
Lack of awareness about long-term medication 6%

Discussion

From the findings of the present study it is clear that more than one factor is responsible for poor or better compliance of therapeutic regimen. Main reasons of drug non-compliance identified in the present study are financial difficulty, distance from the hospital, improvement or no improvement in symptoms, side effects, lack of insight into the mental illness, and lack of awareness about need of long-term medication etc. Side-effects (Demyttenwere, 1997; Stimson, 1974; Avasthi et al., 1998; Fenton et al., 1997), and lack of insight (Kane, 1985; Fenton et al., 1997) are reported earlier also as factors associated with poor drug compliance.

In the present study, financial difficulty was the commonest cause of poor drug compliance. Although medicine is provided by RINPAS free of cost at OPD level also, patients were having difficulty even in arranging money for transportation. In many patients inconvenient distance was main reason because convenient mode of transportation was not available. Although patients can buy medicine from local shops, main problem is cost of the medicine and/or non-availability of psychiatric medicines in shops of remote areas. These factors are mainly associated with lack of basic infrastructure. If services are within reach of the people, they may avail of more easily. 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. Due to lack of insight 12% patients were non-compliant, and in six percent cases lack of awareness about mental illness was main reason. When patients found improvement (28%), they became careless about medicine, and if they did not find significant improvement (7%) they did not adhere to prescribed medicine. Drug side effect, lack of insight, lack of awareness, and insufficient information about improvement are reasons that emphasize role of counselling in ensuring good drug compliance.

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 counselling 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.

References


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