■ *Original Article*

Level of compliance and factors associated with non-compliance to treatment among the mentally ill patients

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Abstract

Background: Mental illnesses are treatable and need medication and other therapies i.e. counseling, psychotherapy etc for the better outcome. Poor adherence to psychiatric medication regimens is a major obstacle to the effective care of persons who have chronic mental illness. **Objectives**: The study aims to identify the level of compliance and factors associated with non-compliance to treatment regimen. **Methods:** This was a hospital based cross sectional study carried out in psychiatric ward and OPD at B.P.Koirala Institute of Health Sciences, Dharan Nepal. A total of 150 patients were included as study samples using purposive sampling technique. Data was collected using self developed, pre tested, semi structured Pro forma by interview method. **Results**: Half of the patients showed average compliance. Thirty seven percentages of patients had good compliance and only 13% showed poor compliance. There was no association between drug compliance and demographic variables ($p > 0.05$). Drug compliance was significantly associated with factors such as drug related aspects, treatment access related factors, quality of interaction with treating team, family support, attitude towards mental illness and relatives' insight towards mental illness ($p<0.05$). **Conclusion:** The findings of the study highlighted the various factors such as drug related, social support, and treatment access related factors are influencing the drug compliance among the mentally ill patients.

Keywords: mentally ill patients, compliance, factors affecting compliance

Introduction

Mental Illness is conceptualized as a clinically significant behavioral or psychological syndrome or pattern that occurs in an individual & that is associated with distress or disability or with a significantly increased risk of suffering, death, pain, or an important loss of freedom.[1]

WHO report estimates 450 million people currently suffer from mental, neurological or behavioral problems, which are the leading causes of morbidity and disability worldwide. Mental illness is currently responsible for 12% of the global burden of disease & expected to reach 15% by the year 2020.

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Mental illnesses are treatable & need medication & other non-pharmacological therapies i. e counseling, psychotherapy for the better outcome. Without treatment the consequences of mentally ill for the individual & society will be an unnecessary disability, suicide, unemployment, substance abuse.[3]

Medication noncompliance occurs among as many as one – third to one- half of all medical & psychiatric out patients. Non compliance has serious consequences for individuals having psychiatric disorders often resulting in higher rates of relapse & re-hospitalization, & poorer community adjustment. Poor adherence to psychiatric medication regimens is a major obstacle to the effective care of persons who have chronic mental illness.[3]

There are other various factors contribute to non-compliance e.g. patient characteristics personal threat factors, drug related factors & interpersonal factors. So the investigation is aimed to find out factors contributing to compliance among the mentally ill clients attending BPKIHS as the number of relapse & re-hospitalization are increasing day by day. Moreover there is paucity of research in this important issue in our context.

Thus the need was felt to conduct the study to investigate the reasons as perceived by patients & relatives about non compliance to treatment regimen so as to take necessary actions to promote compliance & minimize non compliance related complications among mentally ill patients attending BPKIHS.

Methods

This is a hospital based descriptive cross sectional study with purposive sampling.

The subjects for this study consisted those patients who are diagnosed to have major mental illnesses e.g. Psychosis, schizophrenia, Mania, Major Depression for more than six months and are attending Psychiatry OPD for follow up or admitted in Psychiatric ward. Subjects who are accompanied by relatives residing with the patients at least for six months were enrolled for the study. Purpose of the study was explained and informed verbal consent was obtained from the participants. The information was kept confidential.

Data was collected from the identified patients and their accompanied relatives (based on the nature of questions) by interview method using pre-designed, validated, pre-tested Performa. Each interview lasted for about 20-30 minutes. Data were entered into a computer a d analyzed using SPSS. Descriptive and inferential statistics were used appropriately as and when necessitate.

Results

Of total 150 patients 79(52.7%) were female and 83.3% of subjects were Hindus. Patients of age group below & equals to 40 years constituted the largest proportion i.e. 76.7%. Majority of them (87.3%) were literate. Sixty six percentages of subjects were married. Most of the respondents (33.3%) were housewives followed by service/ business (32.7%) and others. Majority of the subjects (85.3%) had monthly income less than Rs 10,000 per month. (Table 1: Sociodemographic characteristics of patients)

Table 1: Socio-demographic characteristics of mentally ill patients

n =150

Characteristic	Categories	f	%
Age in Years	≤ 40	115	76.7
	> 40	35	23.3
Sex	Male	71	47.3
	Female	79	52.7
Religion	Hindu	125	83.3
	Others	25	16.7
Education Status	Illiterate	19	12.7
	Literate	131	87.3
Marital Status	Single	44	29.3
	Married	100	66.7
	Divorced/ Widow	6	4.0
Occupation	Farmer	30	20.0
	Service/ Business	49	32.7
	Student	21	14.0
	Housewife	50	33.3
Family Income per month in NRS	≤ 10000	128	85.3
	> 10000	22	14.7

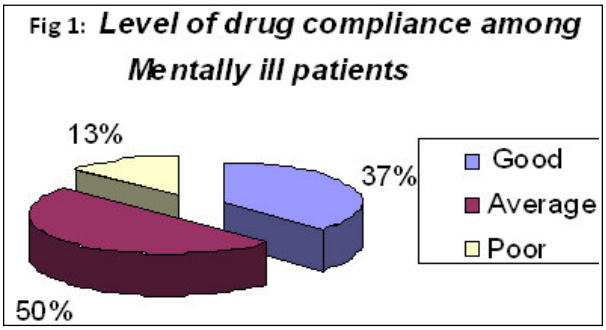
Among the identified subjects 75.3% of the subjects were diagnosed as having affective disorders & 52% of the subjects were having more than 2 year duration of diagnosis. Majority (78.0%) of the respondents had no family history of mental illness & 94.7% respondents visited the hospital for regular follow up visit. (Table 2: Clinical Characteristics of subjects)

Table 2: Clinical characteristics of the sample

n =150

Characteristic	Categories	f	%
Diagnosis	Schizophrenia	37	24.7
	Affective Disorders	113	75.3
Duration of Illness in Years	≤ 2	72	48.0
	> 2	78	52.0
Family History of Mental illness	Present	33	22.0
	Absent	117	78.0
Reason for presents visit	Follow-up	142	94.7
	Exacerbation of Symptoms	8	5.3

Questions (total 12 items) were asked to identify the level of compliance. Items were scored on 4 points Likert scale (3-always; 2-often; 1-sometimes;0-never). Obtainable score is 0-36. Level of compliance is classified based on their obtained score and was classified as 27-36 (75-100%) - Good compliance; 18-26 (50-74%) – Average compliance and 0-17 (0-49%) _ Poor compliance. While assessing as per stated classification it was found that half of the patients showed average compliance; 37% patients had good compliance and only 13% showed poor compliance. (fig 1: level of drug compliance)



Study finding suggested that various relevant factors influence the drug compliance among patients who are on psychotropic. Finding depicted that there is association between compliance level & drug related factors ($P < 0.05$). There is also association between compliance level & treatment access related factors ($P < 0.05$), family/ social support ($P < 0.001$), and attitude toward mental illness & relative's insight toward illness ($P< 0.001$). But there is no association between compliance level & patients insight toward illness. (Table 3: Association between level of compliance and relevant related factors influencing drug compliance)

Table 3: Association between level of compliance and relevant related factors influencing drug compliance

n=150

Factors	Score in percentage	Compliance		p-value
		Good	Average/ poor	
Drugs related	≤ 50	9	29	0.044*
	> 50	47	65	
Treatment Access	≤ 50	17	45	0.035*
	> 50	39	49	
Quality of interaction	≤ 50	41	81	0.049*
	> 50	15	13	
Social support	≤ 50	5	33	0.001*
	> 50	51	61	
Attitude towards mental illness	≤ 50	8	29	0.023*
	> 50	48	65	
Patient's insight toward illness	≤ 50	17	39	0.173
	> 50	39	55	
Relative's insight toward illness	≤ 50	9	54	0.001*
	> 50	47	40	

Discussion

The 'Global Burden of Disease' from psychiatric disorders has been projected to increase from 12% in 1990 to about 15% by 2020.[2] Psychiatric disorders need extensive management which can be divided into pharmacological & psychosocial treatment. Pharmacotherapy is the mainstay of treatment without which most psychosocial treatment would not be possible. Whereas psychosocial intervention seeks to improve the management of mental illness e.g. coping with symptoms, relapse prevention & to enhance functioning.[6]

Although antipsychotic medications have been shown to improve psychopathology, reduce relapse, & improve functioning non-adherence to treatment with antipsychotic is common. Improving adherence to treatment with antipsychotic medication in patients with psychotic disorders is a challenging task. Non-adherence rates among mentally ill seen ranging from 20% to 80% with an average rate of approximately 50%.[5,6]

Poor adherence to psychiatric medication regimens is a major obstacle to the effective care of persons who have chronic mental illnesses. A recent review reported that patient who was receiving antipsychotic or antidepressants took an average of 58% & 65% respectively of the prescribed dosage.[7]

Patient compliance is paramount in the effectiveness of therapeutic regimens. Without compliance therapeutic goals cannot be achieved, resulting in poorer outcomes. Noncompliance is significant problem & a major challenge for the health care team. Patient provider relationship, communication skills & information giving & the mobilization of existing social support networks are essential practical factors expected by health care team.

Literature showed one of the commonest reason cited for discontinuation of medication was poor financial status. [10] But the other study showed in-spite of the

exposed problem related to the need for spending money for medicine the patients were taking medicines regularly as prescribed by the doctors.[8] As result of this study also reported there was no association between level of compliance and selected variables i.e. age, sex, religion, occupation, family income per month. The reality might be the illness naturally the subject of concern for all both patients and family members and they seek the treatment despite of the financial constraints.

The findings of this study also showed that there is no significant association between the extent of compliance & clinical characteristics (i.e. diagnosis, duration of illness & family history of mental illness). Possible reasons for these findings may be due to that the people having major illness i.e. schizophrenia & affective disorders (Depression, mania, BPAD) require long term treatment. Family history of mental illness also may be one of the influencing factors in drug compliance. Family member with history of mental illness and good compliance may positively influence the other member in need of psychiatric treatment. They are generally more aware about mental illness and the importance of treatment compliance.

This study results indicated that there is association between compliance level and perceived drug related factors influencing non compliance ($P < 0.05$). Drug related factors included e.g. multiple drug regimes, side effects, inconvenient timing, quick recovery not noticed, negative attitude toward medicine, feeling fed up of taking medicine. In this category total obtainable score was 13 & cut off score maintained at 50% for the sake of analysis. For other related factors also cut off score is maintained at 50% of total obtainable score.

It is consistent with the literature revealed as poor adherence (over 50%) attributes to illness/ medication related factors i.e. denial of illness & side effect of medications.[9]

Study conducted by Janssen B et al reported that individual who switched from a typical to an atypical antipsychotic drug more compliant was observed; it may be due to lesser side effects[10].They also revealed that perceived benefit from medication proved to be the main reason for patients compliance with neuroleptic treatment.

With regards to association between level of compliance and treatment access related factors, significant association was found ($P<0.05$). This describes as treatment setting i.e. specialty services, inpatient vs. outpatient, cost incurred on travel, cost of medication, inconvenient hospital working hours etc. may influence the patient to adhere to the treatment plan. Thus, this study calls for attention to find out the significance of having medication and doctors or other health professional trained in the management of mentally ill at primary health care level, so as to improve the compliance. Department of Psychiatry and Psychiatric Nursing, BPKIHS is providing outreach services/survey/community campaign which may help to address this issue.

Study findings also indicated that there is significant association between level of compliance and family/ social support and relatives' insight toward mental illness ($P<0.001$). It reveals that if the family support is good and positive toward treatment, takes care of mentally ill; then it enhances to achieve the full compliance. A positive attitude of 'significant others' toward neuroleptic treatment contributed to patients' medication compliance. It is also seen that having someone to give medication on time or monitoring medications may have influence in compliance behavior and more likely to be adherent than those who lived without such support. [6]

In this study quality of interaction with health professional is significantly associated with the level of compliance ($P<0.05$). A positive relationship with the therapist influenced much to patient's medication compliance. This finding is consistent with the finding revealed by Rittamannsberger H. et al as adherence was significantly better among patients in regular contact with their same treating psychiatrist and other mental health professionals. [4, 15]

In order to produce the most positive outcome (i.e. more number of patients in good compliance) mental health professional especially nurses have a responsibility to assess the patients for motivating factors as well as potential barriers to compliance and intervene accordingly.

Limitation

Due to the practical constraints factors such as personality, substance abuse, patterns of relationship among family members, quality of married life could not be assessed, which might have influenced the level of compliance.

Conclusion

There are various factors such as drug related, social support, and treatment access related etc. influencing the level of drug compliance among mentally ill patients. Hence, as described in literature nurses can lead in psycho education for patient and relatives and also can actively participate in various activities to plan and implement interventions to improve the drug compliance among mentally ill patients.

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