Drug Compliance & Factors affecting it among Patients treated with Oral Psychotropic Drugs in Psychiatric OPD of a selected Tertiary Care Hospital

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Abstract
This study was conducted to assess the drug compliance and factors associated to it among patients treated with oral psychotropic drugs attending Psychiatric outpatient department of a selected Tertiary care hospital, Kolkata.
Methods: *A non-experimental descriptive approach was adopted in this study. 30 samples were selected by purposive sampling from patients attending psychiatric OPD. Study period was for two weeks in the month of May 2019.*
Results: *(57%) of the population under study were females,40% were in the age group of 20-40yrs,36% found to have under graduate level of education. All were taking more than one drug.26% of the sample was case of Depression and 20% were having BPAD. This study brought out that all the patients were drug complained. All the participants (100%) felt that complex medication prescription, delayed onset of effect and non availability of medication were strongly responsible for psychotropic drug non compliance.*
Conclusion: *Improving medication compliance in persons with mentally ill holds the potential for reducing morbidity and suffering of patients and their families.*
Keywords: *Compliance, Psychotropic drugs, Tertiary care hospital, Psychiatric OPD.*

Introduction

Adherence refers to a process, in which the appropriate treatment is decided after a proper discussion with the patient. Compliance, the degree to which patients follow the Clinician`s treatment recommendations.

According to India`s latest National Mental Health Survey 2015-16 there is an overall prevalence for current mental health morbidity at 10.6 percent[1]. In the budget for 2018-1019, the allocation for the Government`s flagship National

Mental Health Programme stood at Rs.50 crore with a small increase of mere 15 crore over 2017-18[2, 3]. Though in India approximately 13.7 percent of the population suffers from mental disorders according to NIMHANS study, these funds are certainly not enough[1]. And now, we have the added problem of drug non-compliance and relapse which again increases the burden on health care.

One of the biggest challenges to the effectiveness of psychotropic medications has been ensuring

treatment adherence, which is defined as "The extent to which the patient follows medical instructions." Patients who are suffering from major psychiatric disorders are most likely to be non-adherent to their medication. Understandably, major psychiatric disorders have an effect on patients' reasoning skills and insight which can negatively affect adherence [4]. Patients with depressive symptoms had not taken almost half of the prescribed doses within 3 months of the therapy. The rates of adherence are low at 50–60% and 35% for schizophrenia and bipolar affective disorders, respectively[5].

Furthermore, patients with major psychiatric disorders specially in Schizophrenia with medication non-adherence can cause exacerbation of their illness and complications which lead to re hospitalization, poor psychosocial outcomes, relapse of symptoms, reduce effectiveness of subsequent treatment, wastage of limited health care resources, increase substance abuse, poor quality of life, and increased suicide. Avasthi et al, found that 93 % of those not fully adhering to the treatment attributed their failure to the ill effects of medicines[6].

There are many factors that lead the patients to skip their medication doses and most of the factors are modifiable. And modifying these factors would help to make effective interventions that bring a change in the drug non compliance and may help in the improvement of quality of patient`s life. Improving medication compliance in persons with mentally ill holds the potential for reducing morbidity and suffering of patients and their families.

In addition it helps in decreasing the cost of re-hospitalization. This improves the health and decreases the burden on government to carry out the expenses for patients. Research findings will help in the development of policies and standards of practice in patient care. Therefore, the study designed with the **Objectives** to assess the drug compliance among patients treated with oral psychotropic drugs, to study the non-compliance with pharmacotherapy in relation to various psychiatric diagnoses & to identify the factors leading to drug compliance among patients treated with psychotropic drugs.

Materials and Methods

This was a cross sectional descriptive study that was conducted in the Psychiatry OPD of a Tertiary care Hospital, Kolkata, West Bengal, India, for a period of 02 weeks in May 2019. Purposive sampling was used. Sample size was 30. All patients visiting psychiatric OPD, on psychotropic drugs, who gave consent for the study, in the age group of 18-60 years & physically fit to answer the questions, were included in the study. Patients on medication for <6 months, in acute psychotic state, required urgent attention for medical problems, without reliable informants & on injectable medication were excluded. The tool consisted of a semi structured questionnaire divided into three parts: Section A: Socio-demographic characteristics of the study subjects according to: Age, academic qualification, gender, number of family members & Per capita income. Section B: The diagnosis, duration of treatment and the compliance and noncompliance percentage of patients. Section C: Factors associated with compliance and non compliance of drugs divided into Individual factors, Family and caregiver factors, Health care provider factors &Treatment factors. For every positive question the score has been distributed as: Always & Most of the times-1, Sometimes & Never-0.For every negative question the score has been distributed as: Never & Sometimes-1, Most of the times- &Always-0.

Permission was taken from the Head of the institutions where the study was conducted. Ethical clearance from IEC obtained. Written Consent from participants taken. No physical or psychological harm to the participants ensured. The data was tabulated, analyzed and interpreted using appropriate descriptive statistics.

Results

This study brought out that all the patients (100%)

were drug complained, as their health team explained the timing, dose, and duration of their medication adequately or completely. The psychiatrists & the psychiatric nurses also adequately explained the benefit of the prescription, possible side effects, time lag before the onset of treatment response, and the consequence of non adherence. Since study setting was a Govt. Tertiary care hospital all the drugs were available to the patients free of cost. That may be another strong factor for compliance. All

of them had a care taker or attendant with them. The participants expressed that difficult working schedule, complex drug regime, delayed onset of effect followed by non availability of medicine and lack of family support are the main factors associated with drug noncompliance. Table 1 shows the distribution of socio demographic variables, Table 2 depicts distribution of the sample according to the psychiatric disorder &Table 3 is the factors associated with drug non compliance.

Table 1: Distribution socio demographic variables in frequency and percentage

n=30

Socio demographic	variable	Criteria Frequency(f)	Percentage (%)
Gender	Male	13	43
	Female	17	57
Age	20-40 yrs	12	40
	40-60	10	33
	>60	8	27
Education	Primary	5	17
	High school	11	36
	Intermediate/Graduates	14	46
Percapita income	<5000	9	30
	5000-10000	16	53
	10000-20000	2	7
	>20000	3	10

Table 2: Distribution of Psychiatric disorder of the samples in frequency and percentage

n=30

Sl.No	Psychiatric disorder	Frequency	Percentage(%)
1	Depression	8	26
2	BPAD	6	20
3	Schezophrenia	4	13.8
4	GAD	3	10
5	OCD	3	10
6	Mixed anxiety	2	6.4
7	Others	4	13.8

Table 3: Factors associated with psychotropic drug non compliance as expressed by the patients

n=30

Sl. No	Factors	Frequency	Percentage (%)
1	Poor Insight	20	66.67
2	Social and cultural belief	24	80
3	Hard Work schedule	29	96.67
4	Distance from health care center	26	86.67
5	Myths	27	90
6	Complex medication prescription	30	100
7	Medication side effects	27	90
8	Delayed onset of effects	30	100
9	Inadequate Family support	28	93.33
10	Absence of care giver	11	36.67
11	Poor relation with patient &Psychiatrist	28	93.33
12	Non availability of drugs	30	100

Discussion

Most of the population under study were (57%) females, 40% were in the age group of 20-40yrs,36% found to have under graduate level of education. There were no illiterate entities in the sample. All were taking more than one drug. 26% of the sample was case of Depression and 20% were having BPAD. All the participants in the present study (100%) felt that complex medication prescription, delayed onset of effect and non availability of medication were strongly responsible for psychotropic drug non compliance. (97%) of the respondents thought working schedule and (93%) considered family support and relationship between the patient and the psychiatrists are main factors affecting the drug compliance. Whereas presence of myths and medication side effects are the other affecting factors in this study reported by 90% of the participants.

A study conducted in the Mental Health Department of JSS Hospital, Mysore, Karnataka, India (2015) by J M Lucca, M Ramesh and D Ramreveals that Incidence of non adherence in psychiatric patients was 43%. Patient-related and drug-relatedreasons were the two most prevalent causes of medication non adherence[7].

In another study conducted by H.N. Ngesh, M.S.Kishore, B.N.Raveesh (2016) adherence to psychotropic medication in psychiatric unit of district hospital shown that adherence varied from low adherence (24.4%) through medium (34%) to high adherence (41.7%) among participants. No statistically significant associations were observed between non-adherence and the socio-demographic characteristics of subjects. Recovery from their illness (21.9%), forgetfulness (19.8%), frequency of drug regimen (17.6%), and adverse effects (16.5%) are major reasons for poor adherence[8].

Whereas a study conducted by department of psychiatry JJM medical college Karnataka by K Nagaraja Rao et al (2017) among 196 complaint and 150 non complaint patients showed compliance was significantly more in females and middle class and high socioeconomic status patients. They had less substance use, less physical co morbidity, high attendance in outpatient department and better remission. Clinician related, family related and medication related domains were contributing more to compliance whereas illness related and economic related domains seemed to have more bearing on Noncompliance[9].

Conclusion

Research evidence on psychotropic medication non compliance and associated factors of major psychiatric disorders among patients is essential to design appropriate intervention, and achieve desired treatment goal for both patients and health care providers.

Conflict of Interest: There are no conflicts of interest.

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