

## Factors affecting compliance with psychotropic drugs for psychiatric patients: descriptive study

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### Abstract

**Background:** Poor compliance to psychotropic drugs regimens is a major obstacle to the effective care of persons who have chronic mental illness

**Objective:** The aim of this study was to identify the factors affecting compliance with psychotropic drugs for psychiatric patients.

**Materials and Methods:** A hospital-based, cross-sectional study design was carried-out in psychiatric outpatient department of Taha Basher Hospital, Khartoum State.

**Sample:** A total of 120 psychiatric patients were included and a purposive sampling technique was used. Data were collected by using face-to-face interview questionnaire.

**Results:** Seventy-one percent of studied patients were non-compliant with psychotropic drugs; compliance was significantly more in male patients (34.3%), single (35, 4%), and literate (33.3%). The major factors affecting compliance with psychotropic drugs and leading to non-compliance were: feeling better (45.0%), followed by high cost of drugs (25.0%), forgetfulness and fear from drugs side- effect (24.2% & 23.3%) respectively.

**Conclusion:** Non-compliance with psychotropic drugs was high in psychiatric patients. All efforts should be exerted to improve the compliance of psychiatric patients by eliminating the effects leading to non-compliance.

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### Introduction:

Patient compliance refers to the willingness and ability of an individual to follow health-related advice properly, to take a drug as prescribed, to attend scheduled clinic appointments, as well as to complete recommended follow-ups<sup>(1)</sup>. The use of drugs to treat psychiatric disorders is often the foundation for a successful treatment approach that can also include other types of interventions such as :psychotherapy or behavioral therapy<sup>(2)</sup>. Medication non-compliance is defined as a “discontinuation or failure of proper medication intake without prior approval from the treating physician”<sup>(2)</sup>. Factors

that may affect patients’ compliance with drugs can be summarized along five dimensions:

Patient characteristics (e.g., attitudes toward illness and medication, socio-economic considerations, social supervision);

Treatment setting (e.g., primary care versus specialty office and in-patient versus out-patient);

Medication characteristics (e.g. side effects, individual sensitivity to side effects, simple versus complicated medication regime);

Clinical features of the disorder (e.g., chronicity, exaggerated feelings of guilt in depression, suspiciousness in schizophrenia, substance abuse and co- morbid anxiety);

and clinician expertise (e.g., knowledge of pharmacology, empathy, instilling hope, successful integration of pharmacology and psychotherapy)<sup>(2)</sup>.

Mental health nurses play a significant role in supporting drug compliance in people with mental illnesses particularly regarding psychopharmacological treatment and the education of the patient and their families. Also in assessment, drug administration, evaluation and counselling<sup>(3)</sup>. Therefore, improving drug compliance in patients who are mentally ill holds the potential for reducing morbidity and sufferings of patients and their families, in addition to decreasing the cost of re-hospitalization <sup>(4)</sup>.

### **Significance of the study:**

Poor drug compliance is significantly associated with an increased risk of hospitalization, re-admissions, emergency room visits, and symptom exacerbation. Irregular drug users increase hospital costs as compared to regular drug users. Irregular drug users had higher rates of hospitalization (42% versus 20%) and longer hospital stays (16 days versus 4 days). Mental health nurses play a significant role in supporting compliance to psychotropic drugs in psychiatric patients because psychiatric nurse spend more time in direct contact & work for the long-term management of psychiatric patients.

To the best of author's current knowledge, there is little or no published information on the magnitude of compliance of the psychotropic drugs in Khartoum State. The present study was undertaken to evaluate the magnitude of the problem of non-compliance and examine the factors contributing to non-compliance with psychotropic drugs among psychiatric patients.

### **Materials and Methods:**

**Study design:** This is a descriptive, cross-sectional study conducted at Taha Baasher Psychiatric Hospital, Khartoum State in 2015.

**Sampling:** purposive sampling technique was used. One hundred and twenty psychiatric patients with prescribed psychotropic drugs, for more than one year, attending to psychiatry outpatient department.

**Inclusion criteria:** psychiatric patient's aged between 18 to 60 years of either sex were included in this study.

**Exclusion criteria:** psychiatric patients who were on psychotropic drugs for less than one year; having cognitive deficit; or acute psychosis; unable to undergo the interview and with no accompanying informant; age below 18 years and above 60 years were excluded from the study.

**Data collection:** structured interviewing questionnaire was developed after the review of the literature by the researchers which consists of three parts:

Part 1: consists of socio-demographic data.

Part 2: consists of medical history and history of disease (duration of illness, psychotropic drug regimen).

Part 3: consists of questions related to various factors affecting compliance (patient-centered factors, therapy-related factors, health care system factors, social & economic factors as well as disease factors).

Official ethical clearance was obtained from Taha Baasher Outpatient Clinic Director. Informed consent was obtained from the participants and their relatives. The researchers have made it clear that the participation in the study is not connected to, and does not affect, the care provided to the patient. The participants were told that they can withdraw at any time and their privacy will be protected. High confidentiality was ensured during filling of the questionnaires. Data were collected from the participants by face-to-face interview method. Each interview lasted about 15-20 minutes.

**Data analysis:** Collected data were analyzed using SPSS Version 20. Frequencies were calculated for socio-demographic data, patients characteristic and

factors affecting compliance to psychotropic drug.  
The proportion of compliance to psychotropic  
drugs also obtained: Presentation of analysis by

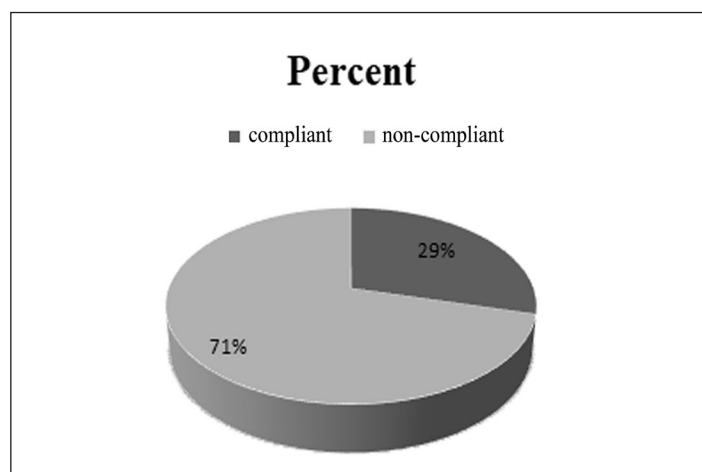
percentages, figures and frequency tables.

### Result:

**Table1. Distribution of studied group according to factors affecting compliance to psychotropic drug related to socio-demographic characteristics (n=120)**

| Items              | Total<br>n=120 | Compliance        |                  | P-value |
|--------------------|----------------|-------------------|------------------|---------|
|                    |                | Yes<br>No.35(29%) | No<br>No.85(71%) |         |
| Age                |                |                   |                  |         |
| Less than 28       | 27(22.5%)      | 10(37.1%)         | 17(62.9%)        |         |
| 37-28              | 34(28.3%)      | 10(29.4%)         | 24(70.6%)        |         |
| 47-38              | 35(29.2%)      | 8(22.8%)          | 27(77.2)         |         |
| 48+                | 24(20.0%)      | 7(29.1)           | 17(70.9%)        |         |
| Gender             |                |                   |                  |         |
| Male               | 67(55.8%)      | 23(34.3%)         | 44(65.7%)        |         |
| Female             | 53(44.2%)      | 12(22.6%)         | 41(77.4%)        |         |
| Marital status     |                |                   |                  |         |
| Single             | 48(40.0%)      | 17(35.4%)         | 31(64.6%)        |         |
| Married            | 63(52.5%)      | 15(23.8%)         | 48(76.2)         |         |
| Divorced           | 6(5.0%)        | 2(33.3%)          | 4(66.7%)         |         |
| Widowed            | 3(2.5%)        | 1(33.3%)          | 2(66.7%)         |         |
| Occupation         |                |                   |                  |         |
| Employee           | 45(37,5%)      | 17(37.85)         | 28(62.2%)        |         |
| Student            | 10(8.3%)       | 4(40.0%)          | 6(60.0%)         |         |
| Unemployed         | 65(54.2%)      | 14(21.5%)         | 51(78.55)        |         |
| Level of education |                |                   |                  |         |
| Illiteracy         | 28(23.3%)      | 5(17.9%)          | 23(82.1)         |         |
| Read & write       | 5(4.2%)        | 1(20.0%)          | 4(80.0%)         |         |
| Literate           | 87(72.5%)      | 29(33.3%)         | 58(66.7%)        |         |
| Residence          |                |                   |                  |         |
| Urban              | 74(61.7%)      | 22(29.7%)         | 52(71.3%)        |         |
| Rural              | 46(38.3%)      | 13(26.3%)         | 33(73.7%)        |         |

Table1 shows the distributions of studied group by their socio-demographic data & their compliance to psychiatric drugs. It was found that there was no statistically significant difference between compliance and non-compliance of psychiatric patients as regarding socio-demographic characteristics.



**Figure 1. Distribution of the study group according to proportion of compliance to psychotropic drugs.**

It was noticed that the majority of patients (71%) were not compliant to the psychiatric drugs as advised.

**Table 2. Distribution of factors affecting compliance of psychiatric patients to psychotropic drug (n=120)**

| Factors |  | Yes             |                   | No          |
|---------|--|-----------------|-------------------|-------------|
|         |  | Usually No. (%) | Sometimes No. (%) |             |
| 1       | Forgetfulness                                  | 4(3.3%)         | 29(24.2%)         | 87(72.5%)   |
| 2       | Feel better                                    | 54(45.0%)       | 6(5.0%)           | 60(50.0%)   |
| 3       | Using traditional medicine or Religions belief | 8(6.7%)         | 7(5.8%)           | 105(87.5%)  |
| 4       | Longer duration of therapy                     | 18(15.0%)       | 5(4.2%)           | 97(80.8%)   |
| 5       | Embarrassed                                    | 3(2.5%)         | -                 | 117(97.5%)  |
| 6       | Wants to be re-hospitalized                    | -               | 1(0.8%)           | 119(99.2%)  |
| 7       | Suspiciousness                                 | 3(2.5%)         | 2(1.7%)           | 115(95.8%)  |
| 8       | Denial of their illness                        | 15(12.5%)       | 4(3.3%)           | 101(84.2%)  |
| 9       | Feel worse                                     | 13(10.8%)       | 4(3.3%)           | 103(85.8%)  |
| 10      | Believe that they are ineffective              | 10(8.3%)        | 1(0.8%)           | 109(90.8%)  |
| 11      | Try to avoid addiction                         | 18(15.0%)       | 3(2.5%)           | 99(82.5%)   |
| 12      | Fear of causing side-effects                   | 28(23.3%)       | 9(7.5%)           | 83(69.2%)   |
| 13      | Not understanding instructions                 | -               | 1(0.8%)           | 119(99.2%)  |
| 14      | Multiple drug therapy                          | 11(9.2%)        | 2(1.7%)           | 107(89.2%)  |
| 15      | Frequency of administration                    | 8(6.70%)        | 2(1.70%)          | 110(91.70%) |
| 16      | Cost   | 30(25.00%)      | 13(10.80%)        | 77(64.20%)  |
| 17      | Difficulty getting drug                        | 25(20.8%)       | 12(10.0%)         | 83(69.2%)   |
| 18      | Abuse of medical team                          | 1(0.8%)         | 1(0.8%)           | 118(98.3%)  |

Table2 shows the distributions of factors affecting compliance of psychiatric patients to psychotropic drug. It showed that all factors mentioned have contributed to non-compliant with varying degrees.

## Discussion

Non-compliance to medication is common among psychiatric patients, which is considered a major problem. Non-compliance rates among mentally ill seen range from 20% to 80% with an average rate of approximately 50%<sup>(5,6)</sup>. In this study, there was no association between socio-demographic characteristics and factors affecting compliance to psychotropic drug, the reality might be the diseases naturally the subject of concern. This correlates well with Lama study<sup>(7)</sup>. Also no significant association between factors affecting compliance to psychotropic drugs and the clinical details of patients (diagnosis, duration of illness & family history of mental illness, type of psychotropic drug, received instruction about drugs regimen and side effect). Possible reasons for these findings may be due to the fact that the people having major illness may require long-term treatment, which is again similar to Lama study<sup>(7)</sup>.

This study showed that non-compliance was more common in the age group 38-47 years (77.2%) and is similar to other studies<sup>(8-10)</sup>. It was also more common among females (77.4%) and in married females (52.5%) which is consistent with Selen study findings<sup>(11)</sup>. In contrast, Zito study showed non-compliance was predominantly in unmarried patients<sup>(12)</sup>. Frazier study showed the opposite in married females. This could be explained by the help and support from a spouse ;and this could be the reason why married patients were more compliant to drug than unmarried patients<sup>(13,14)</sup>. Non-compliance is more common in unemployed patients (78.55) ,which is consistent with that of Bloom and other finding<sup>(15-17)</sup>. It is more common in illiterate patients (82.1%), which is similar to that of Maan<sup>(18)</sup>.

Again, it is more common in patients with bipolar disorder (78.3%), which is in sharp contrast to that of Maan<sup>(18)</sup> and Victoria studies<sup>(19)</sup> who reported that schizophrenic patients have the highest non-compliance rate. The reason may be that bipolar patients do not have consistency during periods of treatment.

As regards to the factors affecting compliance to psychotropic drug related to patients , drugs and health care service the major factors for non-compliance were: feeling better (45.0%), difficulty getting drug (25.0%), forgetfulness (24.2%), fear of causing side effect (23.3%), longer duration of therapy (15.0%), try to avoid addiction (15.0%), denial of their illness (12.5%), feeling worse (10.8%), which are opposite to Bharat Pareek, Raman Kalia study, who found that there are other various factors perceived as contributing to non-compliance<sup>(20)</sup>. Because different cultures, settings and regions may lead to different factors.

## Conclusion:

In the light of the present study findings, it can be concluded that, non-compliance is common in psychiatric patients. Factors found to be significantly associated with non-compliance were: female gender; illiteracy; unemployment; taking three types of psychotropic drugs. The main factors mentioned by participants affecting their compliance to psychotropic drug are: feeling better; cost of drug; and transportation problems. Forgetfulness, fear of drugs side-effect, longer duration of therapy; trying to avoid addiction; and denial of their illness are widely reported factors that cause non-compliance.

## Recommendations:

Mental health nurse-patient relationship, as well as, psychiatric patient's knowledge of psychotropic drugs should be improved through proper training programs. Understanding the reasons for non-compliance by the health team and encouraging a collaborative approach can go a long way to improve compliance. Also, further research is needed to assess the impact of counseling on reducing the rate of non-compliance to psychotropic drug among psychiatric patients.

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