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Assessment Of Medications Compliance Among Psychiatric Patients at Atbara hospital from march 2018 to July 2018

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الآية الكريمة

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قال تعالي:

﴿ألا إنَّ أَوْلِيَاء اللهِ لاَ خَوْفٌ عَلَيْهِمْ وَلاَ هُمْ يَحْزَنُونَ * الَّذِينَ آمَنُواْ وَكَانُواْ يَتَّقُونَ * لَهُمُ الْبُشْرَى فِي الْحَياةِ الدُّنْيَا وَفِي الآخِرَةِ لاَ تَبْدِيلَ لِكَلِمَاتِ اللهِ ذَلِكَ هُوَ الْفَوْزُ الْعَظِيمُ﴾

صدق الله العظيم

يونس :[62-64]

Dedication

To those

Who give us the best of life

Without payment

To our parents

To their patience and

Support

To our brothers and sisters

To our teachers

To all our friends

Acknowledgement

All thanks to Allah from start to the end ...

And pray for Prophet

Mohammed peace of Allah

Be upon him

We would like to acknowledge the

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Who guide us throughout our way and helped us to make this research as accurate and useful as possible.

And to all those who contributed their time and helped us.

Abstract

Background: compliance and non-compliance to psychiatric medications among psychiatric patient is an area of research interest. Previous research showed high rates of medications non- compliance among both adolescent with medical disorder and adult patients with psychiatric disorder. Therefore, we aim to assess compliance and non-compliance to psychiatric medication among psychiatric patient in clinic, and also to investigate the correlation with some other variable such as (age, gender, marital status, years of disease, occupation, disposition of individual in family).: it was descriptive cross sectional study. Study setting: this study was conducted in the period from March 2018 to July 2018 in psychiatric clinic refer in Atbara hospital at river Nile state among 138 Sudanese people.: psychiatric patient 72 of them were males, while 66of them were females , with age between 18 to 65yearsold.: the data was analysis by using statistical package of social science (SPSS).Result: 87.7% of patients were compliance to their medications, while 12.3% of them were non- compliance to medications. The age, gender, occupation, disposition of individual in the family have no significant effect the adhered to medications, on the other hand marital status and years of disease have significant effect with non-compliance to psychiatric medications.: The results of current study reflect that few of the psychiatric patients have low non-compliance level to their prescribed medications and majority of them were compliance to their medications. We recommended that counseling to teach patient and family about non- compliance and tools of compliance.

مستخلص البحث:

الخلفية: الالتزام وعدم الالتزام بالأدوية النفسية بين المرضى النفسيين هو مجال ذو أهمية بحثية. أظهرت الأبحاث السابقة معدلات عالية من عدم الالتزام بالادويه بين المراهقين الذين يعانون من اضطراب طبي والمرضى البالغين الذين يعانون من اضطراب نفسي. ولذلك فإننا نهدف إلي تقييم الالتزام وعدم الالتزام بالادويه النفسيه بين المرضي النفسيين في العيادة ، وكذلك للتحقيق في العلاقة مع بعض المتغيرات الأخرى مثل (العمر ، الجنس ، الحالة الاجتماعية ، سنوات المرض ، المهنة ، الترتيب الفردي في الأسرة). الدراسة كانت دراسة مقطعية وصفية. أجريت هذه الدراسة في الفترة من مارس 2018 حتى يوليو 2018 في عيادة الطب النفسي في مستشفى عطبرة في ولاية النيل من بين 138 شخصًا سودانيًا. مجتمع الدراسة: كان المرضي النفسيين 72 منهم من الذكور ، في حين كان 66 منهم من الإناث ، الذين تتراوح أعمارهم بين 18 و 65 سنة. المواد والطرق: تم تحليل البيانات باستخدام حزمة إحصائية للعلوم الاجتماعية (SPSS). تم الالتزام بنسبة 87.7٪ من المرضى بأدويتهم ، في حين أن 12.3٪ منهم لم يلتزموا بالأدوية. العمر والجنس والمهنة وترتيب الفرد في الأسرة ليس له تأثير كبير على الالتزام بالأدوية ، من ناحية أخرى الحالة الزوجية وسنوات المرض لها تأثير كبير مع عدم الالتزام بالأدوية النفسية. تعكس نتائج الدراسة الحالية أن عددًا قليلاً من المرضى النفسيين لديهم مستوى منخفض من عدم الالتزام بالأدوية الموصوفة ، وتم التزام معظمهم بأدويتهم. نحن أوصينا بأن تكون هناك مشورة لتعليم المريض والأسرة عن عدم الالتزام بالادويه ووضع خطط تساعد علي الالتزام بالادويه بالنفسيه .

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List of abbreviations

Abbreviation	Meaning
GAD	Generalized Anxiety Disorder
APA	American Psychiatric Association
SAD	Social Anxiety Disorder
SPA	Social Physique Anxiety
PTSD	Post Traumatic Stress Disorder
CBT	Cognitive Behavioral Therapy
OCD	Obssessive Compulsive Disorder
SepAD	Separation Anxiety Disorder
CT	Computed Tomography
MRI	Magnetic Resonance Imaging
TD	Tardive Dyskinesia
SSRI	Selective Serotonin Reuptake Inhibitor
SNRI	Selective Norepinephrine Reuptake Inhibitor
MAOI	Monoamine Oxidase Inhibitor
FDA	Food and Drug Administration

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Chapter One

1-2 Research problem:

Medications compliance among psychiatric patient is complex dynamic behavior requiring patients to initiate treatment and continue to tack their medications at the correct time in the correct dose for prolonged period of time.

1-3 Research justification:

Treatment non-compliance is a major factor contributing poor clinical outcomes in patients with mental disorder. Patient compliance to treatment is likely to be influenced by complex interaction of treatment, patient, and sociodemographic and clinical factors. Understand which factors identified by patient may have a high impact in treatment compliance. can enable the development of more effective strategies.

1-4-1General objective:

To assess mediations compliance at Atbara hospital in 2018 among psychiatric patient.

1-4-2 Specific objective:

A. To correlate some personal variables with non-compliance to medications to determine compliance.

B. To determine treatment and side effects based on common disorder.

C. To identify the common psychiatric disorder in Atbara hospital.

D. To assess patients who compliance and who not compliance to their medications.

E. To identify of common medications used in common disorder.

F. To detect the common side effect of pharmacological treatment of common disorder.

Chapter Two

2-1 Literature review:

Study was conducted by Peter O et al 2014. The aim of the study was to evaluate the level of patients' adherence to psychotropic drugs and also to explore factors associated with poor medication the result of the study is adherence varied from poor adherence (55.5%) through moderate (36%) to high adherence (8.5%) among participants. No significant associations were observed between poor medication adherence and the socio-demographics" characteristics of patients. More than half of the psychiatric out patients' were poorly adherent to prescribed medications [11].

And another study done by Sanele, Farzana Noor Mahomed 2012. The aim of this study was to assess the levels of medication adherence in psychiatric outpatients and explore factors that influence adherence. Adult, psychiatric outpatients were assessed to determine medication adherence and identify factors that might impact on adherence. The result of the study was Significant predictors of adherence to psychiatric treatment were age (p=0.045) and race (p=0.055). The impact of socio-demographic variables on adherence, such as the type of condition, employment status and educational level, were insignificant. Adherence levels amongst psychiatric outpatients were found to be acceptable, with race and age predictors of adherence levels in this study population [12].

Further study done by Joseph O Fadare*, 2014 . The main objective of this study was to determine the level of adherence and treatment satisfaction among psychiatric patients in a rural healthcare facility in South-West Nigeria. Results: A total of 100 patients participated in the study out of which 57 (57%) were males and 43 (43. %) female with a mean age was 37 ± 12.8years. Schizophrenia was the most common diagnosis (67%) found among the study participants. Forty-five (45.9%)

patients scored high for adherence. 34 (34.7%) had medium score while 19 (20.4%) scored low. Among patients with schizophrenia, 23 (39%) had high adherence, 26 (44.1%) medium and 10 (16.9%) low adherence [13].

And another study done by Kenfe Tesfay medication non adherence out patients in Jimma University specialized hospital, southwest Ethiopia 2011. This study was conducted to assess the magnitude and associated factors of non-adherence to medication. The result was: Out of the 422 patients, 40.3% were females and 59.7% males. The prevalence rate for no adherence was 41.2%. non-affective psychoses diagnosis contributing the highest rate (44.5%). From the total non-adherent respondents, 78.2% attributed their non-adherence [14].

2-2 Common psychiatric disorder:

Bipolar affective disorder: Bipolar disorder, or bipolar mood disorder, used to be called 'manic depression'. It is a psychiatric illness characterized by extreme mood swings. A person may feel euphoric and extremely energetic, only to drop into a period of paralyzing depression, in a cycle of elation followed by sadness[15].

Bipolar disorder and mania: Common symptoms include: feeling extremely euphoric ('high') or energetic, going without sleep, thinking and speaking quickly, delusions of importance, reckless behavior, such as overspending, unsafe sexual activity aggression irritability grandiose, unrealistic plans[15].

Bipolar disorder and depression: Common symptoms include: Withdrawal from people and activities overpowering feelings of sadness and hopelessness lack of appetite and weight loss feeling anxious or

guilty without reason difficulty concentrating suicidal thoughts and behavior[15].

Anxiety disorder: Anxiety disorders are a group of mental disorders characterized by significant feelings of anxiety and fear. Anxiety is a worry about future events and fear is a reaction to current events. These feelings may cause physical symptoms, such as a fast heart rate and shakiness. There are a number of anxiety disorders: including generalized anxiety disorder, specific phobia, social anxiety disorder, separation anxiety disorder, agoraphobia, panic disorder, and selective mutism. The disorder differs by what results in the symptoms. People often have more than one anxiety disorder [16].

Specific phobias: The single largest category of anxiety disorders is that of specific phobias which include all cases in which fear and anxiety are triggered by a specific stimulus or situation. Between 5% and 12% of the population worldwide suffer from specific phobias[24]. Sufferers typically anticipate terrifying consequences from encountering the object of their fear, which can be anything from. An animal to a location to a bodily fluid to a particular situation. Common phobias are flying, Blood, water, highway driving, and tunnels. When people are exposed to their phobia, they may experience trembling, shortness of breath, or rapid heartbeat[17].

Panic disorder: With panic disorder, a person has brief attacks of intense terror and apprehension, often marked by trembling, shaking, confusion, dizziness, nausea, and/or difficulty breathing. These panic attacks, defined by the APA as fear or discomfort that abruptly arises and peaks in less than ten minutes, can last for several hours. Attacks can be triggered by stress, irrational thoughts, general fear or fear of the unknown or even exercise[18].

Agoraphobia: Agoraphobia is the specific anxiety about being in a place or situation where escape is difficult or embarrassing or where help may be unavailable. [19] Agoraphobia is strongly linked with panic disorder and is often precipitated by the fear of having a panic attack. A common manifestation involves needing to be in constant view of a 0doo or other escape route. In addition to the fears themselves, the term agoraphobia is often used to refer to avoidance behaviors that sufferers often develop [17].

Social anxiety disorder: Social anxiety disorder (SAD; also known as social phobia) describes an intense fear and avoidance of negative public scrutiny, public embarrassment, humiliation, or social interaction. This fear can be specific to particular social situations (such as public speaking) or, more typically, is experienced in most (or all) social interactions. Social anxiety often manifests specific physical symptoms, including blushing, sweating, and difficulty speaking. As with all phobic disorders, those suffering from social anxiety often will attempt to avoid the source of their anxiety; in the case of social anxiety this is particularly problematic, and in severe cases can lead to complete social isolation. Social physique anxiety (SPA) is a subtype of social anxiety. It is concern over the evaluation of one's body by others. SPA is common among adolescents, especially females [20].

Post-traumatic stress disorder: Post-traumatic stress disorder (PTSD) was once an anxiety disorder (now moved to trauma- and stressor-related disorders in DSM-V) that results from a traumatic experience. Post-traumatic stress can result from an extreme situation, such as combat, natural disaster, rape, hostage situations, child abuse, bullying, or even a serious accident. It can also result from long- term (chronic) exposure to a severe stressor [21].

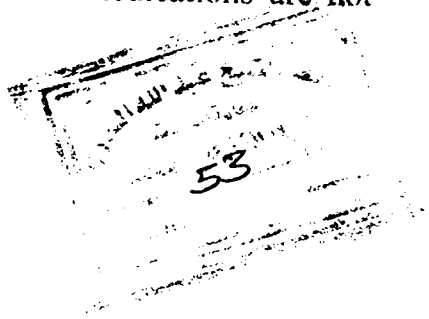
Separation anxiety disorder: Separation anxiety disorder (SepAD) is the feeling of excessive and inappropriate levels of anxiety over being separated from a person or place. Separation anxiety is a normal part of development in babies or children, and it is only when this feeling is excessive or inappropriate that it can be considered a disorder. [22]

Separation anxiety disorder affects roughly 7% of adults and 4% of children, but the childhood cases tend to be more severe; in some instances, even a brief separation can produce panic[23][24]. Treating a child earlier may prevent problems. This may include training the parents and family on how to deal with it. Often, the parents will reinforce the anxiety because they do not know how to properly work through it with the child. In addition to parent training and family therapy, medication, such as SSRIs, can be used to treat separation anxiety [25].

Obsessive–compulsive disorder: Obsessive–compulsive disorder (OCD) is not classified as an anxiety disorder by the DSM-5 but is by the ICD- It was previously classified as an anxiety disorder in the DSM-IV. It is a condition where the person has obsessions (distressing, persistent, and intrusive thoughts or images) and compulsions (urges to repeatedly perform specific acts or rituals), that are not caused by drugs or physical order, and which cause distress or social dysfunction. [26]The compulsive rituals are personal rules followed to relieve the anxiety. OCD affects roughly 1-2% of adults (somewhat more women than men), and under 3% of children and adolescents. [26] A person with OCD knows that the symptoms are unreasonable and struggles against both the thoughts and the behavior. [26]

Schizophrenia: it is a single disease, it probably comprises a group of disorders with heterogeneous etiologies, and it includes patients whose clinical Presentations, treatment response, and courses of illness vary.

Signs and symptoms are variable and include changes in perception, emotion, cognition, thinking, and behavior. **Subtypes:** Five subtypes of schizophrenia have been described based predominantly on clinical presentation: paranoid, disorganized, catatonic, undifferentiated, and residual [127] **Modern positive and negative symptoms based classification systems:** Positive symptoms include distortions or excesses of normal functioning such as, hallucinations, delusions, disorganized thinking and speech, and inappropriate affect. Frequently hallucinations are auditory in nature; rarely may they be visual, tactile or olfactory. Delusions are fixed false beliefs held despite negative evidence, and are not consistent with cultural norms. Types include persecutory, referential, somatic, grandiose, etc. Positive symptoms are generally more responsive to treatment than negative symptoms. Negative symptoms involve a decrease or absence of normal behavior. They include: Affective flattening, impoverishment of speech and language, avolition motivation, lack of interest, anhedonia, and social isolation. Modern classifications: Andresen's Positive and Negative Symptoms Type, Crow Type I and II: Type I – positive symptoms, good response to treatment, relatively better outcome, Type II – negative symptoms, poorer response to treatment, relatively poor outcome, MRI change [128].

2-3 Common psychiatric medication: Psychiatric medications treat mental disorders. Sometimes called psychotropic or psychotherapeutic medications, they have changed the lives of people with mental disorders for the better. Many people with mental disorders live fulfilling lives with the help of these medications. Without them, people with mental disorders might suffer serious and disabling symptom.

Medications used to treat schizophrenia: Antipsychotic medications are used to treat schizophrenia and schizophrenia-related disorders. Some a these medications have been available since the mid-1950. They are also called conventional "typical" antipsychotics. Some of the more commonly used medications include: Chlorpromazine (Thorazine) Haloperidol (Haldol) Perphenazine (generic only) Fluphenazine (generic only). In the 1990's, new antipsychotic medications were developed. These new medications are called second generation, or "atypical" antipsychotics. One of these medications was clozapine (Clozaril). It is a very effective medication that treats psychotic symptoms, hallucinations, and breaks with reality, such as when a person believes he or she is the president. But clozapine can sometimes cause a serious problem called agranulocytosis, which is a loss of the white blood cells that help a person fight infection. Therefore, people who take clozapine must get their white blood cell counts checked every week or two. This problem and the cost of blood tests make treatment with clozapine difficult for many people. Still, clozapine is potentially helpful for people who do not respond to other antipsychotic medications. Other atypical antipsychotics were developed. All of them are effective, and none cause agranulocytosis. These include: Risperidone (Risperdal), Olanzapine (Zyprexa), and Quetiapine (Seroquel). Ziprasidone (Geodon), Aripiprazole (Abilify), Paliperidone (Invega).The antipsychotics listed here are some of the medications used to treat symptoms of schizophrenia. Additional antipsychotics and other medications used for schizophrenia are listed in the chart at the end. Note: The FDA issued a Public Health Advisory for atypical antipsychotic medications. The FDA determined that death rates are higher for elderly people with dementia when taking this medication. A review of data has found a risk with conventional antipsychotics as well. Antipsychotic medications are not