Outcome of Antidepressants Treatment among Adult Patients in KSA: A Cross-Sectional Study

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Abstract: Objective: This research aims to determine the Outcome of Antidepressants Treatment among Adult Patients in KSA.
Methods: This study will employ a cross-sectional design to assess the outcomes of antidepressant treatment among adult patients diagnosed with depression in Saudi Arabia. This design will allow for data collection at a single point in time, facilitating the examination of treatment effectiveness and related factors. The sample size undertaken for the study was 680 in order to understand better the factors responsible.
Results: The study included 680 participants. The most frequent age among them was 34-41 years (n= 198, 29.1%%) followed by 26-33 years (n= 183, 26.9%), then 42-49 years (n=137, 20.1%), 50 and more years (n=126, 18.5%), finally age from 18-25 years (n=36, 5.3%). The most frequent gender among study participants was male (n= 397, 58%) and female (n= 283, 42%). Study participants' most frequent marital status was married (n= 475, 69.9%), followed by single (n= 151, 22.2%), then divorce (n=36, 5.3%), and widow (n=18, 2.6%). The participants were asked if they smoked, and the majority's responses were no (n=587, 86%) and yes (n=93, 14%). Depression duration among study participants, with most of them not diagnosed with depression (n= 587, 45.9%) and depression duration (n= 93, 14%). The participants who were diagnosed with depression were asked if they stopped taking antidepressant medications when they felt better, and the majority's responses were no (n=61, 65.6%) and yes (n=32, 4.7%). The participants who were diagnosed with depression were asked if they stopped taking

medications when they felt worse after taking them, and the majority's responses were no (n=70, 10.3%) and yes (n=23, 3.4%). Conclusion: The findings of this study highlight critical aspects of antidepressant treatment outcomes among adults in Saudi Arabia. Despite the established effectiveness of antidepressant medications, adherence remains a significant challenge, with notable percentages of participants reporting discontinuation of medications both when feeling better and worse. Sociodemographic factors, such as age, gender, and marital status, play a role in shaping treatment patterns, but they do not fully account for variations in adherence. Additionally, the results underscore the importance of addressing subjective factors, such as patients' beliefs about medication efficacy and side effects, significantly impacting adherence rates.

1. Introduction

When dealing with long-term health conditions, patients must take their drugs as prescribed [1-2]. There are several definitions of adherence; one that the World Health Organization uses is "the extent to which a person's behavior, taking medication, following a diet, and/or executing lifestyle changes, corresponds with agreed recommendations from a healthcare provider" [2]. A patient's failure to take their medication as prescribed due to forgetfulness or inconvenient accessibility is an example of the latter kind of non-adherence [3]. Intentional non-adherence, on the other hand, occurs when a patient disregards a prescription due to subjective factors such as the patient's views about the treatment or their values [3].

An estimated 15% of the population suffers from severe depressive illness, making it a huge burden on public health systems across the world [4]. Disrupting everyday life, hobbies, and employment, major depressive disorder is a crippling condition. In the next twenty years, major depressive disorder is expected to overtake all other diseases as the second leading source of illness burden [5-6]. Another prevalent and increasingly serious health issue in Saudi Arabia is major depressive disorder. The incidence of depression was reported at 18% in prior research conducted in Saudi Arabia [7]. Worldwide, the usage of antidepressants and other treatment alternatives is anticipated to rise since the World Health Organization predicts that half of all individuals with depression have not received therapy [8].

Despite the efficacy of antidepressant drugs, many patients do not take the recommended dose for the recommended amount of time, and non-adherence significantly diminishes the medication's impact [9]. At least nine months of continuous antidepressant treatment is recommended by both national and international therapy recommendations [10, 11]. After one month of taking a medicine, 28% of patients stop using it, and after three months, 44% to 52% of patients stop taking it [10, 12]. Research conducted in the Gulf states found that a staggering 88% of patients suffering from severe depressive disorder in Kuwait do not follow their prescribed antidepressant regimen [13–15]. One cross-sectional research found that only 60% of depressive patients keep their mental clinic appointments [16], and sadly, there is no data from Saudi Arabia about patients' adherence to antidepressants. Research on medication adherence and the variables that influence it among non-psychiatric patients with chronic illnesses is few in Saudi Arabia [17–18].

A number of research have looked at what makes people take their antidepressants as prescribed [6,9,19,20], and a recent review found that there is no correlation between sociodemographic indicators and what makes people take their antidepressants as prescribed [6]. Predictors of antidepressant drug adherence include sociodemographic characteristics,

educational attainment, clinical variables (such as symptom severity), quality of life, and adverse effects [6,9]. There is some evidence that patients' views about antidepressant medication might impact their adherence to treatment [21]. Patients' actions may be described using Horne's Theoretical Model of medicine, which is based on comparable elements. This model reveals that patients' actions are influenced by their perception of the treatment's need and their worries about the drug's potential side effects [22]. Adherence will be high if the treatment's need outweighs the likelihood of negative consequences and low if the opposite is true, as this theory predicts [21]. Beliefs' effects on adherence also differ among cultural contexts [23]. There has been a lot of research on medicine attitudes, but not nearly as much on the views of Saudi Arabian depressed patients about antidepressants or how those beliefs impact their prescription usage. Moreover, the impact of other variables on pharmaceutical use in Saudi Arabia remains largely unknown.

2. METHODS

Study design

This study will employ a cross-sectional design to assess the outcomes of antidepressant treatment among adult patients diagnosed with depression in Saudi Arabia. This design will allow for the collection of data at a single point in time, facilitating the examination of treatment effectiveness and related factors.

Study approach

The research will be conducted in various healthcare settings across different regions of Saudi Arabia, including primary care clinics, psychiatric hospitals, and outpatient mental health facilities. This diverse setting will help ensure that the findings are representative of the broader population.

Study population

The target population will consist of adult patients (aged 18 and above) who have been diagnosed with depression and are currently receiving antidepressant treatment. This population will include individuals from various demographic backgrounds to capture a comprehensive overview of treatment outcomes.

Study sample

A purposive sampling method will recruit approximately 680 participants from selected healthcare facilities. This approach will ensure that participants meet the eligibility criteria and reflect the diversity of the patient population receiving antidepressant treatment.

Study tool

For the current study, a questionnaire was adopted for data collection, also categorized as a study tool.

Data collection

Data will be collected through structured interviews and self-administered questionnaires, which will include validated measures of depression severity, treatment adherence, and demographic information. Trained research assistants will conduct interviews to ensure consistency and accuracy.

Data analysis

Data will be analyzed using descriptive and inferential statistics. Descriptive statistics will summarize demographic and clinical characteristics, while inferential statistics, such as regression analysis, will identify relationships between treatment outcomes and influencing factors. A significance level of $p < 0.05$ will be set for hypothesis testing.

Ethical considerations

Ethical approval will be obtained from the relevant institutional review boards before the study. Informed consent will be secured from all participants, ensuring they understand the

study's purpose, their right to withdraw at any time and their responses' confidentiality. Data will be anonymized to protect participants' privacy.

3. RESULTS

The study included 680 participants. The most frequent age among them was 34-41 years (n= 198, 29.1%%) followed by 26-33 years (n= 183, 26.9%), then 42-49 years (n=137, 20.1%), 50 and more years (n=126, 18.5%), finally age from 18-25 years (n=36, 5.3%). Figure 1 shows the age distribution among study participants. The most frequent gender among study participants was male (n= 397, 58%) and female (n= 283, 42%). Figure 2 shows the gender distribution among study participants. Study participants' most frequent marital status was married (n= 475, 69.9%), followed by single (n= 151, 22.2%), then divorce (n=36, 5.3%), and widow (n=18, 2.6%). Figure 3 shows the marital status among study participants.

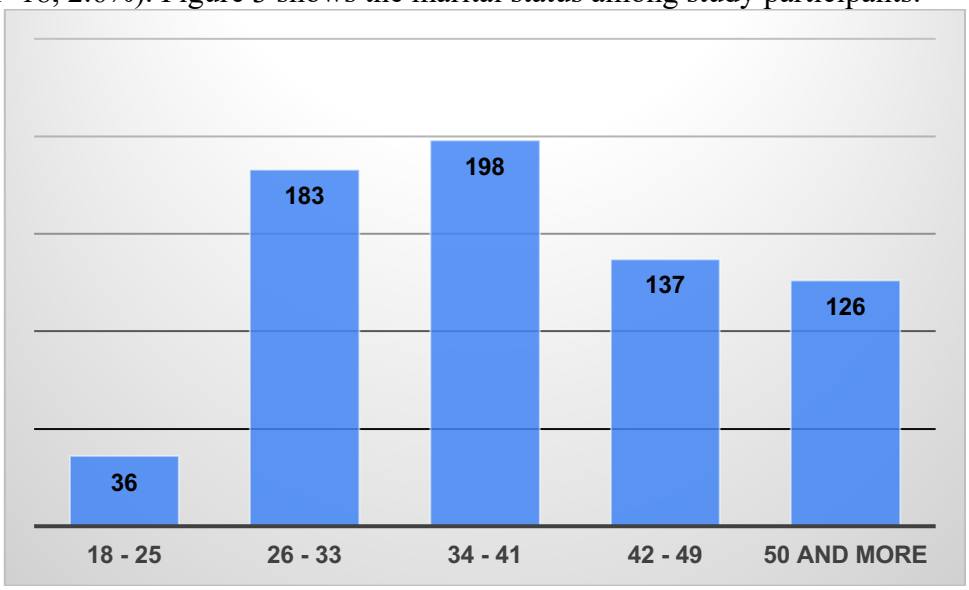

Figure 1: Age distribution among study participants

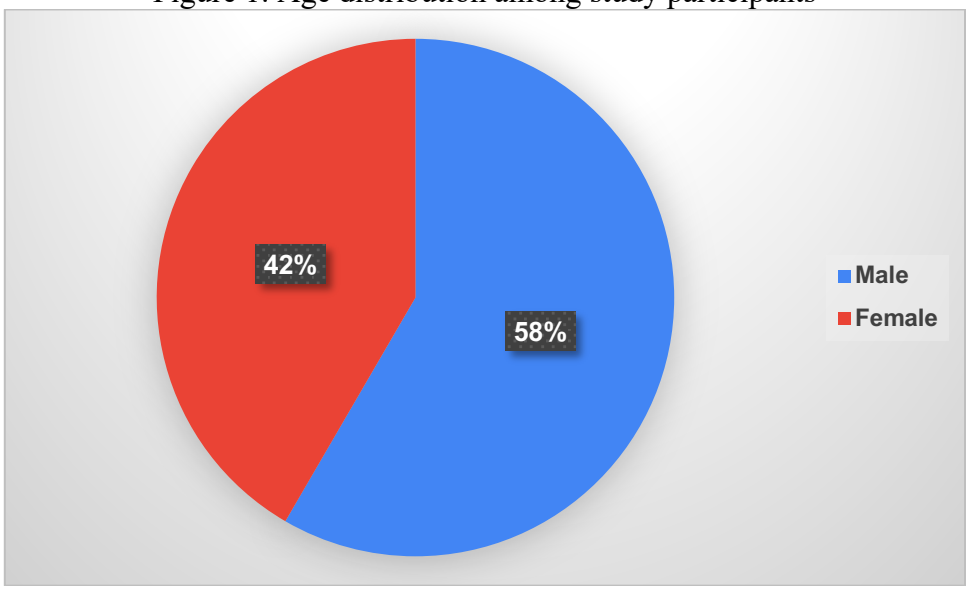

Figure 2: Gender distribution among study participants

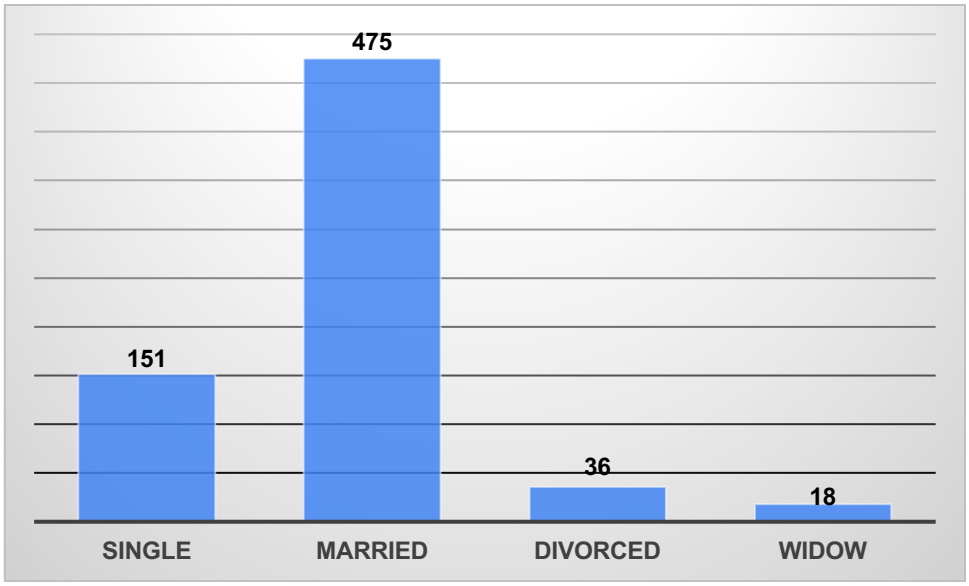

Figure 3: Marital status distribution among study participants

The participants were asked if they smoked, and the majority's responses were no (n=587, 86%) and yes (n=93, 14%). Figure 4 shows the smoke distribution among study participants.

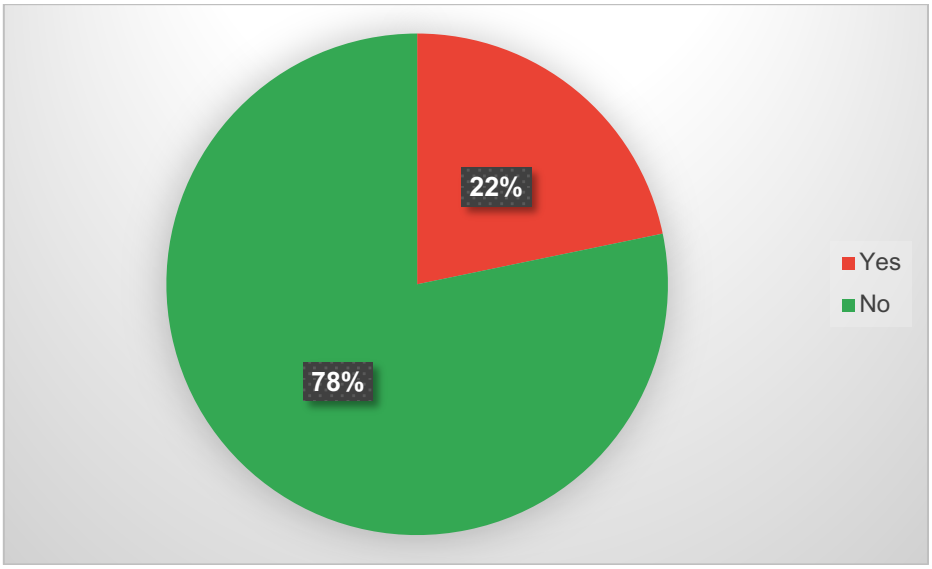

Figure 4: Smoke distribution among study participants

Depression duration among study participants, with most of them not diagnosed with depression (n= 587, 45.9%) and depression duration (n= 93, 14%). Figure 5 shows the depression duration distribution among study participants.

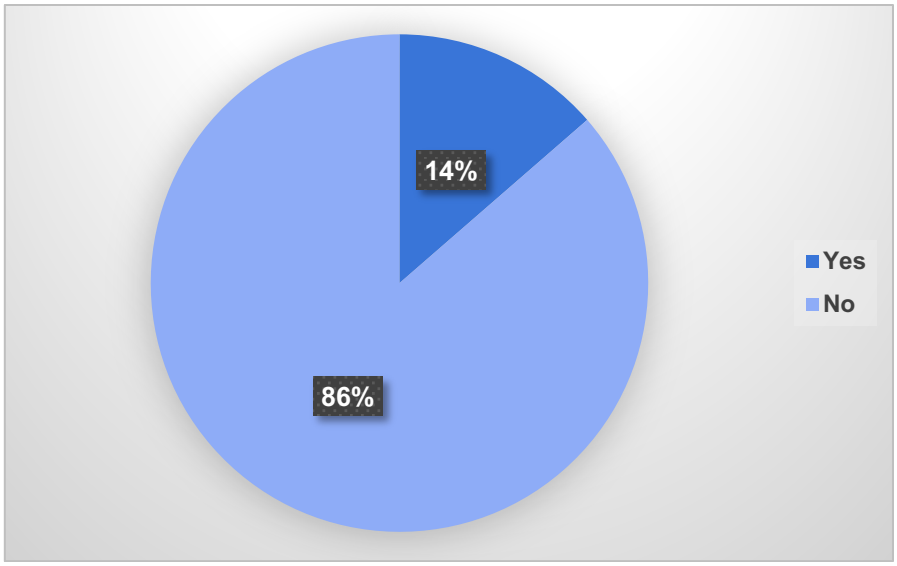

Figure 5: Depression duration distribution among study participants

The participants who were diagnosed with depression were asked if they stopped taking antidepressant medications when they felt better, and the majority's responses were no (n=61, 65.6%) and yes (n=32, 4.7%).

The participants who were diagnosed with depression were asked if they stopped taking medications when they felt worse after taking them, and the majority's responses were no (n=70, 10.3%) and yes (n=23, 3.4%).

Participants were asked Over the last 2 weeks how often they have been bothered by the following problems. Their responses and results are presented in Table 1.

Table 1: Problems experienced in the last two weeks

Over the last 2 weeks, how often have you been bothered by any of the following problems?	Not at all	Several days	More than half days	Nearly every day
Little interest or pleasure in doing things	262 (38.5%)	281 (41.3%)	75 (11%)	62 (9.1%)
Feeling down, depressed, or hopeless	243 (35.7%)	330 (48.5%)	60 (8.8%)	47 (6.9%)
Trouble falling or staying asleep or sleeping too much	208 (30.6%)	298 (43.8%)	105 (15.4%)	69 (10.1%)
Feeling tired or having little energy	157 (23.1%)	343 (50.4%)	110 (16.2%)	70 (10.3%)
Poor appetite or overeating	241 (35.4%)	280 (41.2%)	85 (12.5%)	74 (10.9%)
Feeling bad about yourself—or that you are a failure or have let yourself or your family down	353 (51.9%)	239 (35.1%)	46 (6.8%)	42 (6.2%)
Trouble concentrating on things, such as reading the newspaper or watching television	318 (46.8%)	258 (37.9%)	65 (9.6%)	39 (5.7%)
Moving or speaking so slowly that other people could have noticed. Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual	416 (61.2%)	184 (27.1%)	47 (6.9%)	33 (4.9%)
Thoughts that you would be better off dead or of hurting yourself	526 (77.4%)	116 (17.1%)	21 (3.1%)	17 (2.5%)

4. DISCUSSION

Worldwide, millions of individuals suffer from depression, making it one of the most prevalent mental health disorders. With an estimated 300 million sufferers worldwide, major depressive disorder (MDD) is an important issue in public health [24–25]. Major depressive

disorder significantly affects fundamental living functions like eating, sleeping, intelligence, and self-esteem. Anyone exposed to significant loss, abuse, or other traumatic experiences in life is at risk for developing depression. When compared to males, women have a higher risk of depression [26]. The predicted adult prevalence of major depressive disorder in the United States was 8.4% in 2020, with the greatest rate among those aged 18–25 (17.0%), about twice as common in girls as in men [27]. There have been a lot of large-scale clinical studies looking at how well traditional treatments work for depression. In only fourteen months, 67% of patients saw complete resolution of symptoms [28]. Medical genetics, environmental variables, a person's clinical presentation, and the presence of co-morbidities all have a role in whether or not MDD develops at a certain age [29].

An estimated 26.4% of Saudis suffer from depression, according to a research published in the International Journal of Clinical and Health Psychology in 2021. Symptoms of coronavirus disease 2019 (COVID-19) in the nervous system include headaches, impaired smell and taste perception, and cognitive deficits [30]. Anxieties, despair, and suicidal thoughts have worsened as a result of the COVID-19 pandemic lockdown, travel limitations, social isolation, and the adoption of the vaccination [31]. It should be mentioned that these results might vary from one study to another due to differences in technique and criteria. The complexity and multidimensional nature of depression means that many individual, societal, and environmental variables may contribute to the disorder's prevalence [32].

Although psychotherapy and antidepressants are often recommended therapies, not all patients get relief from these methods. The medical term for this is treatment resistant depression (TRD) [33]. The standard definition of treatment-resistant depression (TRD) is an ineffective response to two or more antidepressant drugs or psychotherapies. Nevertheless, the precise meaning might differ from one study to the next. When a patient does not react to many forms of treatment, such as ECT or TMS, it may have a devastating effect on their quality of life and even put them at danger of suicide, according to some doctors. Lack of clinically significant improvement despite the use of at least two first-line antidepressants administered at sufficient dosages for an adequate time with adequate treatment adherence is defined by the European Medicines Agency (EMA) as TRD [34]. Approximately 33% of patients with depression did not achieve remission even after four successive trials of antidepressant therapy [35], and TRD is frequent, linked with increased comorbidities and longer duration of disease, leading to a major medical and economic burden.

The incidence of TRD rises with the severity and length of depressive symptoms, and estimates place it between 10% and 30% of depressed individuals [36]. Suicidal ideation and behavior are more common in people with TRD, and their depression tends to last longer. Research in Europe and Hungary found that 8.3% of MDD patients were eligible for TRD. Women made up 66.6% of the overall study group, but they made up a much higher percentage of the TRD population (71.0%) [37]. In Poland, a retrospective study found that TRD patients made up 25.2% of all MDD patients [38]. In Asia, on the other hand, TRD was most common in males aged 18–29 and females aged 30 and up, with pharmaceutically treated depression (PTD) accounting for 2.0% and TRD for 4.17% of PTD.

5. CONCLUSION

The findings of this study highlight critical aspects of antidepressant treatment outcomes among adults in Saudi Arabia. Despite the established effectiveness of antidepressant medications, adherence remains a significant challenge, with notable percentages of participants reporting discontinuation of medications both when feeling better and worse. Sociodemographic factors, such as age, gender, and marital status, play a role in shaping treatment patterns, but they do not fully account for variations in adherence. Additionally, the

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