



THE EFFECT OF COGNITIVE THERAPY ON MEDICATION ADHERENCE IN MENTAL PATIENTS WITH SCHIZOPHRENIA

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ABSTRACT

Schizophrenia is a severe mental disorder that is unable to recognize realistically and loses self-view or is unable to assess oneself or measure one's own strengths and weaknesses. One of the causes of schizophrenia is psychological factors, namely the inability to overcome existing problems. Objective : to determine the effect of cognitif therapy on adherence to taking medication in patients with mental disorders with schizophrenia at the Jekulo Kudus Jalma Sehat Foundation. Method: The type of this research is a quasi-experimental with a cross-sectional approach, the population of this study is 63 respondents. Results: The results of the statistical analysis of the Willcoxon test obtained p value = 0.001 which is less than the significance level $\alpha < 0.05$, then H_0 is rejected and H_a is accepted. there is "The Effect of Cognitif Therapy on Compliance with Taking Medication in Patients with Mental Disorders with Schizophrenia at the Jalma Sehat Jekulo Kudus Foundation". Conclusions: there is "The Effect of Cognitif Therapy on Compliance with Taking Medication in Patients with Mental Disorders with Schizophrenia at the Jalma Sehat Jekulo Kudus Foundation".

Keywords: cognitif therapy; medication compliance; schizophrenia

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INTRODUCTION

Mental disorders are psychological disorders that clinically occur in a person associated with distress, disability accompanied by an increased risk of painful death or loss of freedom (Christensen et al., 2020). Severe mental disorders that have the highest prevalence are schizophrenia estimated the number of people with mental disorders in the world approximately 450 million people experience mental disorders. Schizophrenia is a severe mental disorder that is unable to recognize realistically and loss of self-vision or unable to assess oneself or measure one's own strengths and weaknesses. Schizophrenia itself is a chronic disease worldwide, the prevalence of schizophrenics is estimated at 20 million people sufferers in the world (Sutria, 2020). Indonesia with a population that has diversity and various social, psychological and biological factors, the decline in productivity occurs due to the increasing incidence of mental disorders. The prevalence rate of schizophrenia mental disorders in Indonesia, schizophrenics reach 400,000 people or around 7 per 1000 population, which means that out of 1000 households there are 7 households that have household members who experience schizophrenia (Badan Pusat Statistik, 2022)

Based on a report from the health office in 2021, the percentage of severe ODGJ who receive services is 65%. Of the 30 provinces that reported, the achievement above 100% was 6

provinces, namely DKI Jakarta, Central Sulawesi, Bangka Belitung Islands, South Kalimantan, East Nusa Tenggara and Central Kalimantan (Laila et al., 2019) One of city in central java, the prevalence of schizophrenia in Kudus Regency in 2020 was 880 people, with 543 people or 61.7% receiving health services in accordance with standards. The working area of the Wergu Wetan Health Center has the highest percentage in heavy ODGJ health services at 98.7%, while the working area of the puskesmas with the lowest percentage is the Rendeng Health Center with a percentage of 22.1% (Rashid & Jagar, 2020)

Schizophrenia is characterized by psychopathological symptoms such as positive symptoms (delusions and hallucinations), vague symptoms (motivational disorders, spontaneous and social reduction of words), and cognitive impairment. In general, schizophrenic patients display distortions in the way of thinking, perception, emotions, and behavior. The exact cause of schizophrenia is unknown, but the development of this condition cannot be separated from the role of a combination of genetic and environmental factors. Another suspicion of influence is abnormalities that occur in brain chemicals (Irawani & Marthoenis, 2022). Positive symptoms tend to recur and arise whereas cognitive symptoms tend to be chronic and are associated with long-term effects on the patient's social functioning. Treatment of schizophrenia requires a long time and medication adherence. Treatment adherence is an important point that must be aware of patients, families and health workers(Suartha et al., 2022).

A person is said to be obedient to undergo treatment if taking medicine according to the rules of use and accuracy in taking medicine until the end of the treatment period. Adherence includes the level of accuracy of an individual's behavior with medical advice, the use of medications as directed and includes use at the correct time. About 25% of patients who experience psychosis, schizophrenia or severe mental disorders fail to comply with treatment (Siskind et al., 2022) There are several factors that affect medication adherence in mental patients such as therapy, age, family support, environment, and education. Family therapy is a therapy oriented to the activity of the therapist where in this therapy the therapist is responsible for building a change strategy for the client. Interpersonal problems in the family are explained by the causal model (Saputra et al., 2022). Family therapy should consider the system of individuality and the circumstances associated with it. Cognitive therapy focuses on present circumstances and changes in behavior. Of these factors can cause the impact of adherence to taking medication in schizophrenia patients is that it can improve the quality of life of patients, prevent the remission phase or the reappearance of positive symptoms in patients, can prevent relapse and schizophrenic patients who are not compliant in treatment can increase the risk of exacerbation or worsening of positive symptoms that affect the patient's condition and can risk suicide (Subu et al., 2022).

Based on the explanation from the nurse said that the average patient has different levels of need to take medicine. The results of an initial survey conducted on Tuesday, May 17, 2023 with open interviews by the head of management and nurses said that the prevalence of patients with mental disorders undergoing hospitalization was 63 people, including 56 male patients and 7 female patients with the most cases of schizophrenia. In the observation data carried out at least 55% of patients are very lacking in adherence to taking medication, where the nurse must wait for the patient to take the drug directly so that the patient does not regurgitate the drug. Patients who lack compliance usually say that they are not sick so there is no need to take the medication given. This can affect the patient's psyche and can hinder healing in patients(Eka & Daulima, 2019). This research aims to know the effect of cognitive

therapy on medication adherence in mental patients with schizophrenia at the Jalma Sehat Jekulo Kudus foundation.

METHOD

This type of research is Quasi Experiment which aims to reveal the influence between variables independent and variables Dependent. While the approach method carried out uses an approach Cross sectional i.e. a type of research that emphasizes the time of measurement / observation of variable data independent (Cognitive Therapy) and variables Dependent (Adherence to Taking Medication) only once at a time. With this study, the prevalence or effect of a phenomenon (variable independent) connected by cause (variable Dependent)(Gopalan et al., 2020)

RESULTS

This reserch has 60 skizofrenia patients who live in Jamal Sehat Foundation. The characteristics of respondents are seen from two aspects, they are age and sex.

Table 1.
The Respondents Characteristics

Characteristics: Age	f	%
25-34 years	26	43,3
35-44 years	20	33,4
45-54 years	14	23,3
Total	60	100,0
Characteristics: Sex		
Female	11	18,3
Male	49	81,7
Total	60	100,0

Table 1 on the data table above, the number of respondents 25-34 years old there are 26 respondents, 35-44 years old there are 20 respondents, 45-54 years old there are 14 respondents. From the results of interval estimation, it can be concluded that 43.3% of respondents on average are aged 25-34 years. Based on the data table above, the number of female respondents was 11 respondents (18.2%), and the number of male respondents was 49 respondents (81.7%). According to researchers, this is because the age range of 25-34 years some people experience stress caused by several factors, such as education, environment and family. This is what can trigger a person to experience interference with coping. Therefore, at the age of 25-34 years, a person often experiences excessive stress. This finding is in line with previous research that in the productive age, people feel stress (Jetelina et al., 2020). In early adulthood individuals have begun to explore themselves and the environment, such as developing internalized systems or values and starting to live separately from parents and independently (Subu et al., 2021). The success of adults in completing developmental tasks in carrying out their new roles will make the individual have a mature and wise personality, but not all individuals are able to fulfil developmental tasks. The failure of individuals to fulfil developmental tasks in early adulthood is caused by several factors that make early adulthood so complicated according to Jahja (2011), namely: (a) individuals are not ready to face new roles; (b) is unable to adjust to a new role that occurs simultaneously; (c) do not get support from anyone. So this exploration period is also called the emerging adulthood period (Sandi et al., 2020). The age range of 20 to 29 years is often called young adulthood. This period can be called the most productive period in a person's life. The reason is, at this time, a person begins to have ambitions, dreams, and desires, both personal such as life partners or work (Laila et al., 2019).

Based on the results, gender was obtained from 60 respondents, the majority of men as many as 49 male respondents (81.7%), and as many as 11 female respondents (18.3%). With the latest number of respondents in the age range of 25-34 years. Sex differences in mental health can be explained by differences in hormones, brain structure, gender-based violence, patriarchy and so on. The tendency of men to experience mental disorders is not detected, generally caused by a lack of ability to convey emotions (Arango et al., 2021). The other reason why most of schizophrenia patients and man and in the productive age are biological and hormonal differences, productive age and brain development, genetic and environmental factors, the last is differences in seeking and receiving treatment. In the biological hormonal aspects, man with testosterone as the sex hormone have a role in increasing the risk of schizophrenia. This happens because the hormonal changes during puberty since the male in young can affect the brain development and increase susceptibility (Constantinides et al., 2023). In the other hand, Estrogen, a hormone found in women, protects against schizophrenia. Dopamine is one neurotransmitter in the brain that estrogen can alter and is linked to symptoms of schizophrenia. Women might therefore be at a lesser risk or experience milder symptoms (Seeman & Gonz, 2021).

The second is brain development period and stress and social expectations. In the brain developmental period, from adolescence until early adulthood, the human brain undergoes substantial development. Major alterations in brain structure and function, such as the maturation of synapses and modifications to brain circuits associated with cognitive and affective functions, frequently cause schizophrenia to manifest during this period (Clausen et al., 2022). For the stress and social expectation, during the productive age, people are subject to a variety of pressures and expectations from their job, schooling, and social networks. For those who are susceptible, major life events and ongoing stress can exacerbate or start the symptoms of schizophrenia (Gonz et al., 2023). The third is genetic and environmental factors. Schizophrenia has a significant hereditary component, according to the hereditary factors. An individual's chance of having schizophrenia is higher if there is a history of the condition in their family. It's possible that men are more vulnerable than women to these hereditary impacts (Trifu et al., 2020). In environmental factors, exposure to environmental stressors including malnourishment, illnesses during pregnancy, or traumatic childhood experiences may raise the chance of schizophrenia. During important periods, these elements may have a bigger effect on the development of the male brain (Wahbeh & Avramopoulos, 2021).

The last is the differences in seeking and receiving treatment. In this case, it focuses on the social perception. Men may be less likely than women to seek medical attention or receive a correct diagnosis because of the disparities in societal stigma around mental health. This might lead to more cases in guys being identified later on (Wahbeh & Avramopoulos, 2021). This research also uses the univariate analysis to know the differences of adherence to taking medication between pre-test and post test in control and experimental group.

Table 2.

The Table of Frequency Distribution Pre-test and Post-test for Medication Adherence scores

Group	Adherence to taking medication	Pre-test		Post-test	
		f	%	f	%
Experimental group	Obedient	15	50,0	29	96,7
	Disobedient	15	50,0	1	3,3
Control group	obedient	10	33,3	21	70,0
	disobedient	20	66,7	9	30,0

Table 2 on the table above, it is known that the level of adherence to taking medication in the intervention group before the intervention was given as much as 50% of respondents were obedient to taking drugs, after the intervention results were obtained as much as 96.7% were adherent to taking drugs. While in the control group before the intervention as many as 33.3% of respondents were obedient to taking drugs while 66.7% of respondents were not active in taking drugs. After the intervention, it was found that as many as 70% of respondents were obedient to taking medication. Based on table2, it was found that as many as 29 respondents (96.3%) of the intervention group adhered to taking drugs, and as many as 20 respondents of the control group (70%) there was an increase in respondents to take drugs.

Table 3.
Distribution of Respondents' Frequency Based on The Effect of Cognitive Therapy on Medication Adherence

Group	Medication Adherence	Pretest		Post Test		P Value
		f	%	f	%	
Experimental group	obedient	15	50,0	29	96,7	0,000
	disobedient	15	50,0	1	33,3	
Control group	obedient	10	33,3	21	70,0	0,001
	disobedient	20	96,7	9	30,0	

Based on the table above, the results of Wilcoxon's statistical test obtained the P value of the intervention group and the control group of 0.000 (less than 0.005) then H_0 was rejected which means there is a significant relationship between the effect of Cognitive Therapy on adherence to taking medication at the Jekulo Kudus healthy people foundation. High knowledge has an influence on health behavior. A person with high knowledge has a high self-awareness of health and has high motivation to heal (Christensen et al., 2020). The frequency of relapse and retreatment of people with schizophrenia can be reduced by conducting mental health education aimed at patients, their families, or other people who are responsible for caring for them (Sutria, 2020). The relationship between the level of knowledge and adherence to taking medication in people with schizophrenia suggested that patients who were well informed about the drug showed increased adherence resulting in better therapeutic outcomes. Adherence occurs when the rules of use of prescribed drugs and their administration are followed correctly (Ebrahim et al., 2020). Based on the results of the Wilcoxon Test shows the value of Sig. (2-tailed) which is 0.000 ($p < 0.05$) so it can be concluded that the initial hypothesis (H_1) is accepted while H_0 is rejected. The conclusion that can be drawn from the receipt of H_1 in this study is that Cognitive Therapy is able to influence a person with mental disorders with schizophrenia to obediently consume the drugs given.

The effects of cognitive interventions on increased knowledge and adherence to taking medication in people with schizophrenia in Riyadh, Saudi Arabia. This study was quasi-experimental, where the treatment group respondents were given cognitive intervention, then the variables of knowledge and adherence level of taking medication were analyzed and compared with the same variables in the control group respondents (Agenagnew, 2020). The results of the study stated a significant difference in the level of knowledge and adherence to taking medication between the intervention and control group respondents, this means that according to this study, there is a positive influence of cognitive on increasing the vision and knowledge of people with schizophrenia. Increasing the quality of knowledge of people with schizophrenia, also affects self-awareness to be obedient in taking medication. Various experimental studies on the basis of randomized clinical trials have suggested that cognitive programs are effective in reducing relapse rates, increasing recovery rates, as well as having a good impact on patient well-being (Yin et al., 2020).

The cognitive therapy can be effective to improve the medication adherence if it is done individualized, integrative and ongoing. The individualized will be more effective because the personal approaches are more likely to address the unique challenges faced by individuals. Second is integrative. It means that using combination with other therapeutic approaches and support systems. A holistic approach that includes family support, psychoeducation, and social services can enhance the effectiveness of cognitive therapy. The last is ongoing that continuous rather than short-term. Ongoing therapy ensures sustained support and adaptation to new challenges as they arise (Gaur & Gupta, 2024). Cognitive therapy is an effective means of enhancing drug compliance in individuals diagnosed with schizophrenia. Through addressing cognitive distortions, improving comprehension, and offering coping mechanisms, cognitive therapy can help patients live better and manage their illness more effectively (Gkintoni & Skokou, 2024).

CONCLUSION

The conclusions in this research are (1) Cognitive therapy is an activity that provides education, helps individuals develop existing sources of support, and helps individuals improve their coping abilities using the concept of group, family or individual approaches (2) Level of compliance in taking medication from 60 respondents. 45 respondents had a low level of compliance in taking medication. (3) There is a relationship between the influence of cognitive therapy on medication compliance in mental disorder patients with schizophrenia at the Jalma Sehat Jekulo Kudus Foundation and the P value in the intervention group is 0.000 and $\alpha 5\%$. (4) There is a relationship between the influence of cognitive therapy on medication compliance in mental disorder patients with schizophrenia at the Jalma Sehat Jekulo Kudus Foundation in 2022, with a P value in the control group of 0.001 with $\alpha 5\%$,

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