

The Effects of Cognitive Therapy on Changes in Symptoms of Hallucinations in Schizophrenic Patients

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Abstract

Schizophrenia is a disease that affects various areas of individual function, including thinking, communicating, accepting, interpreting reality, feeling, and showing emotions. Non-pharmacological therapy given to overcome hallucinations of schizophrenic patients is cognitive therapy. The purpose of this study was to determine the effect of cognitive therapy on changes in hallucinatory symptoms in schizophrenic patients at Prof. Dr. M. Ildrem Mental Hospital in Medan. The design of this study is Quasi-Experimental One Group Pre and Post-test design, The study population was all hallucinatory patients with a total of 286 and a sample of 19 respondents. The sampling technique uses purposive sampling. Data collection tools using a questionnaire that has been tested for validity. The statistical test used is the paired t test. The results of this study obtained the value of $p = 0,000$ ($p < 0.05$). In conclusion, there is a significant effect on changes in hallucinatory symptoms in schizophrenic patients before and after cognitive therapy.

Keywords: *hallucinations, schizophrenia, cognitive therapy, mental disorder*

Introduction

Schizophrenia is a chronic, severe, and disabling disease, a brain disorder characterized by chaotic thoughts, delusions, hallucinations, and strange behavior^{1,2}. Schizophrenia is a severe and chronic mental disorder that attacks 20 million people worldwide³. The highest number of schizophrenics is in the Western Pacific with a prevalence of 3 per 1,000 population, in developed European countries the prevalence of schizophrenia is 0.3 per 1000 population. More than 50% of schizophrenics get no attention, and 90% of them are in developing countries. Schizophrenia usually occurs in adulthood (productive age) between the ages of 18-35 years. In Indonesia, based on the results of⁴, it was estimated that the prevalence of people who had suffered schizophrenia in Indonesia was 1.8 per 1000 population.

That 20% of schizophrenic patients experience visual and auditory hallucinations simultaneously, another 70% experience auditory hallucinations,

and 10% experience other hallucinations⁵. Like hallucinations smell, touch and taste. To overcome the problem of hallucinations not only use pharmacological therapy but also use psychopharmaceutical therapy such as cognitive therapy.

Cognitive therapy is part of psychotherapy that can be given to several types of mental disorders. Cognitive therapy is a type of regular short-term therapy that provides a basis for thinking of patients to understand the problem, have words to express themselves and techniques to overcome difficult feelings, and problem-solving techniques⁶. Survey Results obtained by researchers from the medical record at Prof. Dr. Muhammad Ildrem Provsu Mental Hospital in Medan City was 4,341 people who had schizophrenia and those who had hallucinations, 3,435 people.

Methods

The design of this study is Quasi-Experimental One Group Pre and Post-test design. The population in this study were all hallucinatory patients. Based on medical record data at Prof. Mental Hospital Dr. M. Ildrem Provsu Medan in 2018. Samples in this study were 21

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people taken using a purposive sampling technique. Before conducting cognitive therapy interventions, researchers first measure the risk symptoms of violent behavior using a questionnaire that has been tested for validity and reliability with Cronbach’s Alfa 0.765. The questionnaire contained 12 statements consisting of cognitive, affective, behavioral, and social responses. Statistical tests were used with paired t-test. with a p-value <0.05 with a significant level of 95%.

Results and Discussion

Table 1 can be seen that the majority of respondents were male as many as 11 people (57.9%), aged <40 years as many as 11 people (57.9%), elementary education background of 8 respondents (42.1%), the majority of jobs are not working as many as 12 respondents (63.2%), and most respondents are not married as many as 9 respondents (47.4%).

Table 1.: Characteristics of Respondents

| Karakteristik | n | % |
|-------------------|----|------|
| Gender | | |
| Male | 11 | 57,9 |
| Female | 8 | 42,1 |
| Age | | |
| 30-40 years old | 11 | 57,9 |
| 41-50 years old | 7 | 36,8 |
| 51-60 years old | 1 | 5,3 |
| Education | | |
| No school | 2 | 10,5 |
| Elementary school | 8 | 42,1 |
| Middle school | 7 | 36,8 |
| High school | 2 | 10,5 |
| Profession | | |
| Student | 3 | 15,8 |
| Entrepreneur | 4 | 21,1 |
| Unemployment | 12 | 63,2 |
| Marital Status | | |
| Married | 7 | 36,8 |
| Divorce | 3 | 15,8 |
| Not married | 9 | 47,4 |

Table 2.: Hallucinations Symptoms of Schizophrenia Patients Before Cognitive Therapy is Given

| Symptoms of Hallucinations | Mean | n | SD | SE |
|----------------------------|-------|----|-------|------|
| Cognitive | 10,47 | 19 | ,841 | ,193 |
| Affective | 10,58 | 19 | 1.121 | ,257 |
| Behavior | 10,42 | 19 | ,692 | ,159 |
| Social | 10,58 | 19 | ,838 | ,192 |
| Composit | 42,05 | 19 | 3,492 | ,801 |

Table 3.: Hallucinations Symptoms of Schizophrenic Patients After Cognitive Therapy is Given

| Symptoms of Hallucinations | Mean | n | SD | SE |
|----------------------------|-------|----|--------|------|
| Cognitive | 4,63 | 19 | ,761 | ,175 |
| Affective | 4,53 | 19 | 1,124 | ,258 |
| Behavior | 4,53 | 19 | ,964 | ,221 |
| Social | 4,68 | 19 | 1,057 | ,242 |
| Composit | 18,37 | 19 | 2,9547 | ,896 |

Table 4.: Changes in Symptoms of Hallucinations in Schizophrenia Patients Before and After Cognitive Therapy is Given

| Symptoms of Hallucinations | Mean Before | Mean After | Mean Difference | SD | SE | Df | p |
|----------------------------|-------------|------------|-----------------|-------|------|----|-------|
| Cognitive | 10,47 | 4,63 | 5,842 | 1,068 | ,245 | 18 | 0,000 |
| Affective | 10,58 | 4,53 | 6,053 | 1,779 | ,408 | 18 | 0,000 |
| Behavior | 10,58 | 4,53 | 6,053 | 970 | ,223 | 18 | 0,000 |
| Social | 10,42 | 4,68 | 5,737 | 1,368 | ,314 | 18 | 0,000 |
| Composit | 42,05 | 18,37 | 23,685 | 5,185 | 1,19 | | 0,000 |

Table 2 can be seen the average hallucinatory symptoms in schizophrenic patients before Cognitive therapy include cognitive responses of 10.47, affective responses of 10.58, social responses of 10.58, behavioral responses of 10.42 and composite values of 42.05 .

Table 3 can be seen the average hallucinatory symptoms in schizophrenic patients after Cognitive therapy include cognitive response of 4.63, affective response of 4.53, behavioral response of 4.53, social response of 4.68, and composite value of 18, 37.

Table 4 can be seen significant changes between hallucinatory symptoms in schizophrenia patients before and after cognitive therapy. This is reinforced by the average value of hallucinatory symptoms in patients before and after getting cognitive therapy.

Hallucinations Symptoms Before Cognitive Therapy Is Given

The results obtained based on the characteristics of respondents showed that 57.9% were male. Male respondents have higher cognitive abilities compared to women. This is in accordance with the statement of⁷. that a person's cognitive, especially men, is higher than women, because men in using relationships between individuals and their environment can understand how if an event occurs that causes problems that burden the individual which is used even though the response shown is emotion so that aggressive behavior appears. The average age of respondents with hallucinations is 30-40 years, which means the respondent is in the late adult stage. Research conducted by⁸. on schizophrenic clients who experience hallucinations in India shows that most clients are aged between 21-40 years.

Most respondent's work status is not working. Research conducted by⁹. also shows that schizophrenic clients who commit suicide generally commit suicide due to hallucinations and most clients do not work. The explanation above shows that hallucinations clients generally do not work or have quit their jobs. Most marital status is not married. Research conducted by¹⁰. results showed that marital status is closely related to the prevalence of schizophrenia, most are not married and do not have a life partner is one of the characteristics of clients with schizophrenia.

Based on the results of research conducted by researchers, it was found that the symptom value of each response varied, from the cognitive response value obtained a value of 10, 47 which means the value of hallucinogenic symptoms before therapy in the high category. In this case, the majority of respondents experienced auditory hallucinations and these symptoms are symptoms that are often experienced by patients with hallucinations.

Feelings experienced by patients with hallucinations often feel the stimulus that is not there, so that changes in mindset. Changes in thought processes will result in patients experiencing hallucinations, changes experienced like feeling that the sounds heard are really real. One characteristic of clients with hallucinations is impaired cognitive function. Disruption of cognitive function affects changes in memory, has damage in assessing and using memory and impaired long/short term memory. With this condition, the client becomes forgetful and not interested.

In the affective response, the value obtained before therapy is given at 10.58 is categorized high. In this case hallucinations experienced by patients there are two, namely hallucinations that are liked and hallucinations that are hated, but equally the patient's feelings lead to maladaptive responses. In the social response also obtained value in the high category with a value of 10.42. This is influenced by the patient's bad experiences in the past which made him always remember the events he experienced. Sociocultural factors are very triggering the occurrence of schizophrenia, this is because that individuals with lower socioeconomic classes experience greater symptoms of schizophrenia compared to those from higher social groups¹¹.

In the behavioral response, the value of 10.58 was obtained, which is the value of symptoms that appear in schizophrenic patients is still in the high category. From the results of the questionnaire that was filled out by respondents, most respondents said "I do not like to be disturbed by anyone when the sound of a whisper that appears, I will expel people who bother me when I hear the voice of the whisper and some respondents said aware that the sound of the whisper can interfere with their relationship other people.

Based on the results of the study, it was found that the average hallucinatory symptoms before cognitive therapy were performed in a high category with a value of 42.05. This means that the value of these symptoms is of great concern. Hallucinations are disturbances of sensory perception without any external stimulation that can cover all sensing systems which occur when the individual's consciousness is full or good⁵.

This research is assisted by the results of research conducted by¹². with the title controlling negative thoughts of schizophrenic clients with cognitive therapy in the working area of the Mangasa health center in Makassar. The results obtained before therapy from 13 respondents (92.9%) included in the bad category in controlling negative thoughts. This happens when they have a problem that is a burden on the mind, they tend to want to tell their problems to family members but on the other hand, they are afraid to tell family members because they feel that when telling about their problems family members are burdened with these problems so clients with schizophrenia prefer to bury their own problems and sometimes the problem, in the end, they can not overcome themselves.

Hallucinations Symptoms After Cognitive Therapy Was Given

The results showed that the average hallucinatory symptoms after cognitive therapy included cognitive responses of 4.63, affective responses of 4.53, social responses of 4.68, behavioral responses of 4.53, and composite values of 18.37. The results of this study indicate that the ability to control hallucinations in schizophrenic patients has increased.

Based on research results obtained indicate that there are changes in hallucinatory symptoms after cognitive therapy can be seen from each response value of the respondent. This was obtained from the results of a questionnaire that researchers distributed to respondents after cognitive therapy. Most respondents said they were no longer afraid of the whisper that was always heard, able to concentrate when the whisper came, and said that they were not sure of the whisper voices they always heard. From these statements, it can be concluded that the respondent is able to control its hallucinations independently after cognitive therapy.

Cognitive therapy provides a basis for patients to understand the problem, have words to express themselves, and be able to overcome difficult circumstances. Cognitive therapy is also a form of psychotherapy based on the pathology of the soul which focuses on its actions based on the modification of cognitive distortion and maladaptive behavior⁶. In the process of implementing cognitive therapy involves the attention and sincerity of patients in following this therapy.

Effects of Cognitive Therapy on Changes in Symptoms of Hallucinations in Schizophrenic Patients

The results of the study conducted obtained $p\text{-value} = 0,000$ ($p < 0.05$). Thus it can be interpreted that cognitive therapy has an influence on changes in hallucinatory symptoms in schizophrenic patients. The value of symptoms before treatment was 42.05, the value of symptoms after treatment was 18.37, and the value of the difference before and after was 23.668. Can be interpreted that there are significant changes in symptoms between before and after cognitive therapy.

One of the mental nursing actions with hallucinatory patients is cognitive therapy, which is where cognitive therapy is one of psychotherapy that provides a basis for the patient to be able to understand the problem, techniques to overcome difficult circumstances, and problem-solving techniques⁶. The success in conducting cognitive therapy refers to the patient following the therapeutic process. The benefit of cognitive therapy is to practice changing rational thoughts and the patient is able to realize that negative unpleasant events can disturb feelings.

The same research has not been found by researchers, but other research conducted by¹³. also supports this research. In his research, it was found that there were differences in depressive conditions after the implementation of cognitive therapy which showed that a decrease in depressive conditions in the elderly group who received cognitive therapy ($p\text{-value} = 0.001 < 0.05$). In this study, researchers conducted 9 sessions of therapy. It can be interpreted that the longer cognitive therapy is given, the possibility to eliminate negative thoughts that interfere is also a big influence. Related research is also¹⁴. which states that cognitive therapy

has an influence on a person's level of depression, where depression conditions before and after giving cognitive therapy (p -value = <0.05).

All humans have certainly, often experienced problems that can make humans more mature, mature, and intelligent when faced with positive thinking. But if negative thinking is used, problems can bring disaster. This is where the importance of positive thinking in dealing with every problem. For people who think positively, every problem is always a solution. There is a way out of every problem.

In this study, it is hoped that after being given Cognitive Therapy Schizophrenia clients can have the ability to control good negative thoughts. Any negative thoughts that are felt to interfere or make clients worry can be reduced or even no longer appear and can be replaced with positive thoughts and make the schizophrenic client have a good spirit/optimism in living his life. This is in line with research conducted by¹⁵. stating that cognitive therapy can increase optimism.

Conclusion

Results showed that there was a significant influence on changes in hallucinatory symptoms in schizophrenic patients before and after cognitive therapy with $p = 0,000$ ($p < 0.05$).

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