

The Influence of Occupational Arts of Drawing Therapy on Changes in Signs and Symptoms of Schizophrenic Clients' Halucinating at Jambi Mental Hospital

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Abstract

Background: Hallucinations that don't get treated immediately can have impacts such as violent behavior, a high risk of suicide, and impaired social interaction. One of the efforts to overcome the symptoms of hallucinations in schizophrenic clients is drawing occupational therapy which can stimulate the brain to control the production process of norpinephrine and beta endorphins so that they are balanced for mood improvement so that the signs and symptoms of hallucinations change.

Aims: to determine the effect of drawing occupational art therapy on changes in signs and symptoms of hallucinations of schizophrenic clients.

Methods: This research is a quantitative study with a quasi-experimental pretest-posttest control group design. The sample in this study were 36 respondents. Data collection techniques using observation sheets. The data analysis technique used was the Wilcoxon sign rank test.

Results: The statistical test results obtained a p-value of 0.000 (<0.05) which indicates a change in the average signs and symptoms of hallucinations.

Conclusion: There is an influence of occupational art drawing therapy on changes in signs and symptoms of hallucinations of schizophrenic clients.

Suggestion: it is recommended to the nurses in the Jambi Provincial Hospital that occupational therapy is carried out routinely 2-3 times a week to improve changes in signs and symptoms of hallucinations of schizophrenic clients so as to improve the quality of the client's mental health.

Keywords

Occupational Therapy, *Hallucinations*, Schizophrenia

Background

Mental disorder is a change in mental function that causes disturbances, which creates obstacles in carrying out social roles (1). The most common mental disorder is schizophrenia. Schizophrenia is a group of clinical syndromes characterized by changes in cognitive, emotional, perceptual and other aspects of behavior (2).

Schizophrenia is a mental disorder with negative and positive symptoms. Negative symptoms include feeling dull and flat, withdrawn, very poor emotional contact, passivity and apathy, difficulty in abstract thinking, stereotyped thinking patterns, and loss of motivation. While the positive symptoms of schizophrenia include chaos in the mind, noise, anxiety, delusions, thoughts full of suspicion, harboring a feeling of hostility, and hallucinations. Hallucinations that do not immediately get treatment will have impacts such as violent behavior, risk of suicide, impaired social interaction and damage to verbal and non-verbal communication (3).

Attempts to overcome the symptoms of hallucinations in clients with schizophrenia are carried out by providing psychopharmacological

therapy, somatic therapy (electro convulsion therapy), individual therapy, group activity therapy and occupational therapy. Occupational therapy is a combination of art and science to direct a person in carrying out a chosen task. has been determined with the aim of channeling the client's talents and emotions according to their abilities so that they can increase their productivity (4). One type of occupational therapy activity that requires concentration, the implementation is not complicated, the materials used are easy to control and can be done to fill the client's free time in the room is drawing activity. Occupational drawing therapy encourages a person to express emotions through artistic and creative processes (5).

Occupational therapy drawing activities stimulates the brain to control the production process of norpinephrine and beta endorphins so that they are balanced for mood improvement. the improvement in mood is influenced by the increased production of serotonin in the body as a feeling regulator. This improvement in mood can be seen from the reduced signs and symptoms of hallucinations in patients and reduced levels of endorphins which play a role in the occurrence of hallucinations (6). The purpose of this study was to determine "The effect of drawing occupational therapy on changes in signs and

symptoms of hallucinations of schizophrenic clients at the Regional Mental Hospital of Jambi Province".

Methods

Study Design

This research is a quantitative study with a quasi-experimental pretest-posttest control group design aimed at determining the effect of drawing occupational therapy on changes in signs and symptoms of hallucinations of schizophrenic clients at the Jambi Provincial Mental Hospital. The population in this study were all hallucinatory clients who were treated at the Jambi Provincial Mental Hospital as many as 271 people. The instrument used is the observation sheet.

Samples/Participants

The sampling technique is simple random sampling with a total sample

of 36 people consisting of 18 respondents in the intervention group and 18 respondents in the control group.

Data Collection

This research was conducted at the Jambi Provincial Mental Hospital in July 2019.

Data Analysis

The data analysis technique used in this study was the Wilcoxon sign rank test

Results

Characteristics of sex, signs and symptoms of hallucinations in the intervention group and the control group can be seen in the following table.

Table 1 Frequency Distribution of Respondents Based on Gender of Sufferers of Hallucinations in Jambi Provincial Hospital (n=36)

Variable	Category	Experiment group (n = 18)	Comparison group (n = 18)	Total
		n (%)	n (%)	n (%)
Gender	Man	14 (77,8)	14 (77,8)	28 (77,8)
	Woman	4 (22,2)	4 (22,2)	8 (22,2)
				36 (100)

Table 2 Signs and symptoms of auditory and visual hallucinations before given occupational art drawing therapy in the intervention and control group (n=36)

Variable	Category	Experiment group (n = 18)	Comparison group (n = 18)	Total
		n (%)	n (%)	n (%)
Auditory Hallucinations	Changed	0	0	0
	Do not change	16	16	32
Visual hallucinations	Changed	0	0	0
	Do not change	2	2	4
				36 (100)

Table 3 Signs and symptoms of auditory and visual hallucinations after given occupational art drawing therapy in the intervention and control group (n=36)

Variable	Category	Experiment group (n = 18)	Comparison group (n = 18)	Total
		n (%)	n (%)	n (%)
Auditory Hallucinations	Changed	15 (93,8)	9 (56,2)	24
	Do not change	1 (6,2)	7 (43,8)	8
Visual hallucinations	Changed	1 (50)	0 (0)	1
	Do not change	1 (50)	2(100)	3
Total		18 (100)	18 (100)	36 (100)

Effect of Intervention occupational drawing therapy

The Wilcoxon statistical test found that there was a change in the average value of signs and symptoms of auditory and visual hallucinations before (pretest) and after (posttest) being given treatment in the intervention group (**Table 2 and 3**).

The Difference in Fatigue in the Experiment and Comparison Groups

The results of the Wilcoxon statistical test can be seen that in the intervention group from the results of the Wilcoxon statistical test the value of auditory hallucinations was obtained p-value 0.000 (<0.05) and visual hallucinations p-value 0.017 (<0.05) these results indicate that there are differences in values signs and symptoms before and

after drawing occupational therapy in the intervention group. Whereas in the control group the results of the Wilcoxon statistical test obtained the value of auditory hallucinations p-value 0.357 (> 0.05) and visual hallucinations p-value 1.000 (> 0.05) these results indicate that there is no difference in values before and after occupational therapy drawing on the control group. Can be seen in **Table 4**

Table 4 Differences in Signs and Symptoms of Auditory Hallucinations in the Intervention Group and the Control Group ($N = 36$)

Auditory Hallucinations	Comparison group				Experiment group			
	Median	min	max	p-value	Median	min	max	p-value
Pretest	6	5	7	0,357	7	5	7	0,000
Posttest	6	5	7		5	3	5	

*) significant if $\alpha < 0.05$

Table 5 Differences in Signs and Symptoms of Visual Hallucinations in the Intervention Group and the Control Group ($N = 36$)

Auditory Hallucinations	Comparison group				Experiment group			
	Median	min	max	p-value	Median	min	max	p-value
Pretest	1	3	3	1,000	1	1	3	0,017
Posttest	1	3	3		1	1	2	

*) significant if $\alpha < 0.05$

Table 6 Effect of Occupational Art Drawing Therapy on Changes in Signs and Symptoms of Schizophrenia Clients' Hallucinations Between the Intervention Group and the Control Group ($N = 36$)

Halusinasi	Experiment group			Comparison group		
	Median	Min-max	p-value	Median	Min-max	p-value
Auditory hallucinations	7	5 – 7	0,000	6	5-7	0,357
Visual hallucinations	1	1 – 3	0,017	1	3-3	1,000

*) significant if $\alpha < 0.05$

Discussion

Based on the results of the study it was found that there was an effect after being given occupational art drawing therapy in the intervention group and in the control group it was found that there was no effect after being given occupational art drawing therapy.

Of the 18 respondents in the intervention group, it was found that 16 respondents were influential after being given occupational art drawing therapy. This is because occupational drawing therapy can provide opportunities for clients to fill their free time to channel or express the client's feelings, thoughts, and emotions positively so that the signs and symptoms of the hallucinations they experience become reduce.

Drawing is controlled by cortical systems that do not completely overlap. There are at least two cerebral cortex systems that play at least a role in drawing activity, namely the frontal lobe and the parietal lobe. The frontal lobes are generally involved in impulse control, judgment, problem solving, controlling and executing complex behaviors and organizing. In drawing activities, this system is fully involved in controlling hand movements in drawing. The parietal lobe in drawing activity plays a role in integrating sensors from the five senses and abstraction (manipulation) of objects in the visual processing of images to be made (6).

Occupational therapy drawing activities stimulates the brain to control the production process of noripinephrine and beta endorphins so that they are balanced which will give more energy to the body to improve mood. There was an improvement in mood as seen from an increase in self-coping abilities and the ability to socialize the respondents was influenced by the increased production of serotonin

in the body as a feeling regulator. This improvement in mood can be seen from the reduced signs and symptoms of hallucinations in patients and reduced levels of endorphins which play a role in the occurrence of hallucinations (7).

The results of this study are in line with previous studies showing that art drawing therapy is effective in reducing negative and positive symptoms in schizophrenic patients with a p-value of 0.017 (<0.05) (8).

The results of similar studies by other researchers showed that there was an effect of drawing activity therapy on the frequency of hallucinations in schizophrenic patients with a p-value of 0.018 (<0.05) (9). Previous studies have shown that there is an effect of giving occupational therapy activity drawing on changes in hallucinations in schizophrenic patients at the Mental Hospital in Bali Province with a p-value of 0.000 (<0.05) (10).

Previous research showed that there was an effect of giving occupational therapy activities with free time on hallucination symptoms in schizophrenic patients with a p-value of 0.000 (<0.05) (11).

The results of the study found that there was a significant change in the value of signs and symptoms of hallucinations in the intervention group because when the implementation was carried out for 7 group meetings, this was influenced by communication between the therapist and the respondent so that it affected the client's concentration level better (full concentration), the therapist can also keep the client focused on what is given and control external stimuli. In the control group there were no significant changes because the therapy was only carried out once in a group meeting where attention

and communication became less intense towards each member of the group, so that the client could not focus on the stimulus given and had difficulty carrying out the activities instructed by the therapist. This is in accordance with what was revealed by (12) that routine exercise can lead to better behavior formation.

In addition, there is a change in hallucination symptoms because there are several clients who are able to carry out activities properly during therapy. This affects other clients to focus on enjoying the activities given by following their group of friends so that hallucinations can be diverted. According to (1) one of the roles of the group is as an encourager which functions as a positive influencer on other members.

The impact that occurs if hallucinatory patients are not given occupational drawing therapy and other activity therapy can lead to the risk of violent behavior such as injuring oneself, others and the environment (13). Occupational therapy activities that are carried out routinely and on a schedule are proven to reduce signs and symptoms of hallucinations so that the hospital, especially nurses in the room, should make a routine and scheduled free time occupational therapy program 2-3 times a week to show optimal results so that there is a decrease in signs and symptoms of hallucinations. Based on the research conducted by Wijayanti, Sari and Candra, it has similarities with this study which both carried out occupational drawing therapy in groups for 7 days, while the difference with this study was that the researchers used a control group while the research was conducted by Wijayanti, Sari and Candra only used the intervention group with a one group pretest-posttest research design (8,10,11).

Research also conducted by Sartika Sari has similarities with this study in which both of them carried out occupational drawing therapy in groups for 7 days and used a control group, but the difference was that the control group in Sartika Sari's study used generalist therapy while this study used occupational therapy group drawing in one day.

The researcher's assumption is that drawing occupational therapy has a significant effect on changes in signs and symptoms of hallucinations. There is an influence of occupational art therapy drawing in which drawing activity stimulates the brain in controlling the production process of norpinephrine and beta endorphins so that they are balanced which will give more energy to the body to improve mood. This improvement in mood can be seen from the reduced signs and symptoms of hallucinations in clients and reduced levels of endorphins which play a role in the occurrence of hallucinations.

From the description above, the effort that can be conveyed is by recommending to the nurse in the Jambi Provincial Hospital that occupational therapy is carried out routinely 2-3 times and scheduled a week to improve changes in signs and symptoms of hallucinations of schizophrenic clients so as to improve the quality of the client's mental health.

Conclusion

The results of this study indicate that there is an effect of drawing occupational therapy on changes in signs and symptoms of hallucinations of schizophrenic clients in the intervention group at the Jambi Provincial Mental Hospital with a p-value of 0.000 (<0.05). It is recommended to nurses in Jambi Provincial Hospital

that occupational therapy is carried out routinely 2-3 times a week to improve changes in signs and symptoms of hallucinations of schizophrenic clients so as to improve the quality of the client's mental health.

Declaration of Conflicting Interest

The research entitled "The Effect of Drawing Occupational Art Therapy on Changes in Signs and Symptoms of Hallucinations of Schizophrenic Clients in the Regional Mental Hospital of Jambi Province" is the result of my own work and all sources, either directly or indirectly cited or referred to, are correct, and have never been published. at another place.

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