

The effect of batik occupational therapy on reducing hallucination symptoms in schizophrenia patients

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ABSTRACT

Hallucinations are the main symptom in patients with schizophrenia. Based on several studies found that most patients with schizophrenia experience hallucinations. One of the modality therapies to reduce hallucinations in patients with schizophrenia is occupational therapy. This study aims to determine the effect of batik occupational therapy on reducing signs of hallucination symptoms. This type of research is descriptive with a before after study approach. The sample of this study amounted to five patients with adult patient criteria, treated at least the fifth day, hearing voices and cooperative. The data analysis used is the paired t test. The results of the analysis showed that the average percentage of the five subjects after being given batik occupational therapy was a score of 3.6 (45%) from an average score of 4.4 (55%) to a score of 5 (100%), and there was a difference in auditory hallucinations between pretest and posttest scores in schizophrenia patients with a t of -3.930 and a P value of 0.002. The conclusion of this study is that batik occupational therapy can successfully reduce the symptoms of auditory hallucinations.

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INTRODUCTION

Schizophrenia is a mental disorder that affects brain function. The disturbances caused by it can impact thoughts, perception, emotions, movement, and behavior (Sulistiani, 2023). Schizophrenia is not considered a single disease but a disease process that includes many types with various symptoms (Candra et al., 2021). According to the World Health Organization (WHO), in 2000, mental disorders affected 154 million people, with 25 million suffering from schizophrenia. Schizophrenia is a chronic, severe, and debilitating brain disorder characterized by disordered thinking, delusions, hallucinations, and bizarre or incoherent behavior (Salcha, 2023). Schizophrenia is a serious, chronic mental disorder marked by communication difficulties, reality

distortion, abnormal or flat affect, cognitive dysfunction, and difficulty performing daily activities (Piola et al., n.d.).

Schizophrenia is a psychotic disorder characterized by the emergence of hallucinations. Hallucinations are perception disturbances where patients perceive something that is not actually happening in reality (Heru Wahyudi, Cucuk Suwandi, 2020). Among mental health patients, auditory hallucinations are the most common type (Pitriani, Samuel Ginting, Juni Mariyati, 2021).

Management of hallucinating patients includes pharmacological and non-pharmacological therapies. According to Pratiwi, Subekti, Kristanto, and Muhlisin (2023), one non-pharmacological therapy is relaxation therapy, which can reduce stress and thus benefit patients with hallucinations who experience stress. One such non-pharmacological therapy is occupational therapy (Pradana & Riyana, 2022). Occupational therapy involves natural treatment methods that help individuals with physical and mental disorders by introducing them to their environment, helping them improve, enhance, and maintain their quality of life (Hastuti & Nahrowiyah, 2022). Patients are trained to become independent through directed exercises, making the benefits of therapy evident.

According to the Minister of Health's Decree No. 571 on occupational therapist profession standards, occupational performance areas include productivity, which covers household management, caregiving, education/learning, and vocational activities (Muhamad Arif Ikhsan, 2023). Recommended vocational activities such as drawing and coloring can be applied in batik-making. Batik is a fabric-dyeing technique using wax with specific, traditional motifs (Valensy et al., 2021).

One type of batik activity is using a canvas pattern with a brush. Batik-making is a complicated skill process that requires patience and high concentration, which can improve activity performance (Bunga Permata Wenny, Isra Rizantiva, Rika Sarfika, 2023). Batik therapy can provide skill training to sharpen creativity and improve life skills, offering new knowledge that can be useful in the future. Similarly, for patients with hallucinations, batik activities can help divert their attention from the hallucinations, as patients will need to focus while engaging in the batik-making process (Irawan, 2021).

Based on the above data, the researcher is interested in conducting a study on the application of occupational therapy interventions using batik to reduce sensory perception disturbances and hallucinations in schizophrenia patients at RSJD Dr. Arif Zainuddin Surakarta.

RESEARCH METHOD

Table 1. Characteristics of subjects

Data Identity	Subject I	Subject II	Subject III	Subject IV	Subject V
Name	Mr. S	Mr. E	Mr. K	Mr. D	Mr. K
Age	42 years	46 years	30 years	27 years	28 years
Religion	Islam	Islam	Islam	Islam	Islam
Occupation	Laborer	Farmer	Student	Unemployed	Unemployed
Last Education	Junior High	Junior High	Senior High	Junior High	Senior High
Marital Status	Married	Married	Single	Single	Single
Symptoms	Wandering, talking to self, hearing whispers about sins and hell	Claims many are after the song recordings he created, hearing mocking, whispers, restless, often wandering	Hears whispers from a former friend who took someone he liked, annoyed, angry when whispers appear	Often talks to himself, hears whispers about a man asking for help, confused	Often talked to by animals, hears animals speaking like humans, daydreaming, talking to self

From Table 1, it can be seen that all patients are aged between 27 and 46 years, all patients are male (5 people), the majority have completed Junior High and Senior High School, 2 are married, and 3 are unmarried.

Table 2. Ability to perform batik therapy at meetings 1 and 2

Rated Aspects	Patient's Ability (Meeting 1)				
	Subject (n=5)				
	S1	S2	S3	S4	S5
Selecting a canvas batik motif that has been provided by the implementer	1	1	1	1	0
Taking the tools for batik (canvas and brush)	1	0	1	0	0
Choosing the color that will be used to color the batik motif	0	0	1	0	0
Can color each canvas motif with a colored brush	0	0	0	0	0
Can finish coloring the batik motif completely on the canvas	0	0	0	0	0
Total	2	1	3	1	0
Patient's Ability (Meeting 2)					
	S1	S2	S3	S4	S5
Selecting a canvas batik motif that has been provided by the implementer	1	1	1	1	1
Taking the tools for batik (canvas and brush)	1	1	1	1	1
Choosing the color that will be used to color the batik motif	1	1	1	1	0
Can color each canvas motif with a colored brush	1	0	1	1	0
Can finish coloring the batik motif completely on the canvas	1	0	0	1	0
Total	5	3	4	5	2

Based on Table 2, it shows that the abilities of all five patients improved in the second meeting, with an average score of 3.6 (45%) increasing from an average score of 4.4 (55%) to a score of 5 (100%).

Table 3. Hallucination symptoms after batik occupational therapy

No.	Symptom	Subject				
		S1	S2	S3	S4	S5
	Hearing whispers	-	√	√	-	√
	Feeling something through the sense of hearing	-	-	√	-	√
	Expressing annoyance	-	-	-	-	-
	Sensory distortion	-	-	-	-	-
	Inappropriate response	-	-	-	√	-
	Acting as if hearing something	-	-	√	√	√
	Disorientation of place, time, person and situation	-	-	-	-	-
	Suspicious	-	-	-	-	-
	Looking in a certain direction	√	-	√	√	√
	Pacing back and forth	-	-	-	-	-
	Talking to oneself	√	-	-	-	√
	TOTAL	2	1	4	3	5

Based on Table 3, the number of hallucination symptoms that appeared after batik therapy was highest at a score of 5 and lowest at a score of 1, across 11 points of hallucination symptoms.

Table 4. Paired sample test

	Mean	Std.deviation	Std.error mean	95% confidence interval of the difference	t	df	Sig.
Pre test	-13,0077	11,996	3,327	-20,326 -5,828	-3,930	12	0,002

The results of the paired t-test shown in Table IV indicate a significant difference between the pre-test and post-test values. The pre-test mean score was 3.6 (45%), increasing to a post-test mean score of 5 (100%). The study used 5 patients as respondents. The results show a difference in auditory hallucinations between the pre-test and post-test with a t-value of -3.930 and a p-value of 0.002.

RESULTS AND DISCUSSIONS

One of the positive symptoms of schizophrenia is hallucination, with estimates suggesting that more than 90% of patients experience hallucinations (Pratiwi et al., 2024). Hallucinations that are not properly managed can cause patients to lose control of themselves (Agustina et al., 2021).

Patients may experience panic and their behavior is controlled by the hallucinations; in such situations, patients might attempt suicide, commit homicide, or even damage their surroundings (Ernida et al., 2023).

Occupational therapy is one of the therapeutic approaches that can be provided to mental health patients in the healing process. Kusumawati & Hartono (2019) argue that occupational therapy is the science and art of guiding individuals to perform a specific task with the goal of learning, making it easier to function and develop skills necessary for adjustment to the environment (Parnawi, 2021)(Berliani, 2021)(Kurniawan et al., 2022)(Rafikayati & Badiyah, 2023). One important aspect of occupational therapy is that it not only provides the client with an occupation but also ensures that the activity or task helps channel the client's talents and emotions while increasing their productivity (Valensy et al., 2021).

The average percentage results for the five subjects after receiving batik occupational therapy were a score of 3.6 (45%) from an average score of 4.4 (55%) to a score of 5 (100%). Occupational therapy is conducted through activities or tasks for patients experiencing sensory-motor disorders. Batik therapy can be defined as a therapeutic activity using a creative process, where through batik, individuals with mental health disorders can express their thoughts and feelings through non-verbal communication using tools such as brushes, fabric, and color (Jatinandya & Purwito, 2020).

Batik therapy can reduce hallucinations because by engaging in the batik activity, patients minimize their interaction with their own world by releasing the thoughts, feelings, or emotions that have been affecting their behavior unconsciously. This therapy provides motivation, joy, entertainment, and diverts the patients' attention from the hallucinations they are experiencing, preventing them from focusing solely on their hallucinations. Patients with hallucinations are encouraged to focus and respond positively to the stimuli provided (Mashudi & Nasriati, 2020).

Occupational batik therapy can reduce auditory hallucinations because it enhances sensory-motor abilities, perception, cognition, social, and spiritual aspects. Additionally, it helps patients perform tasks such as self-care, productivity, and time management (Hidayat, 2021). This activity is expected to improve the patient's functional independence, health status, and participation in society. When patients engage in occupational batik therapy, their sensory-motor performance components improve, leading to increased productivity, better focus and concentration, and a reduction in hallucination symptoms.

CONCLUSION

Based on the results of applying batik therapy to five patients with sensory perception disorders, the author concludes that the occupational therapy of batik, conducted over two meetings, was effective in reducing the signs and symptoms of auditory hallucinations in these patients. Furthermore, the therapy contributed to the improvement of their sensory-motor skills, emotional expression, and overall functioning. Therefore, batik occupational therapy can be considered as a valuable intervention for patients with schizophrenia, particularly in addressing sensory perception issues and reducing hallucinations.

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