

Section: Mental Health Nursing

Hallucination management in patient with schizophrenia experiencing sensory perception disorders

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Abstract

Schizophrenia is a severe mental disorder characterized by disturbances in thought, perception, emotions, and behavior, with auditory hallucinations being one of its most prominent symptoms. This case study explores the application of hallucination management nursing interventions in a 35-year-old male patient with schizophrenia and sensory perception disturbances, who was admitted to Soerojo Hospital, Magelang. The patient presented with behaviors such as talking to himself, restlessness, poor concentration, social withdrawal, and repeated auditory hallucinations, often hearing whispering voices in the evening or late at night. Over four sessions, the interventions included monitoring hallucinatory behavior, providing psychoeducation on hallucination control techniques (e.g., rebuking voices, scheduled activities), encouraging communication, and collaborating in the administration of antipsychotic medications (clozapine and risperidone). The results showed a notable reduction in hallucination frequency, improved concentration, decreased social withdrawal, and better emotional control. These improvements indicate that hallucination management is effective in enhancing patients' sensory perception, reality orientation, and self-control. From a nursing perspective, this case highlights the importance of comprehensive and structured intervention in managing sensory perception disorders in schizophrenia. The therapeutic relationship, consistent education, and collaboration in pharmacological treatment were instrumental in achieving the desired outcomes. Hallucination management effectively reduces the intensity and frequency of hallucinations and enhances the patient's ability to cope with psychotic symptoms, making it a valuable component of psychiatric nursing care for patients with schizophrenia experiencing sensory perception disturbances.

Keywords: Hallucination management, mental health nursing, nursing care, schizophrenia, sensory perception disorders

Introduction

Schizophrenia is a mental disorder that affects brain function and leads to disturbances in thinking, perception, emotions, movement, and abnormal individual behavior (Patel et al., 2014). Schizophrenia is also characterized by symptoms of psychosis and can cause significant disability, affecting various aspects of life including personal relationships, family life, social interactions, education, and employment (Rahman & Lauriello, 2016). This disorder is commonly manifested through positive symptoms such as disorganized speech, delusions, hallucinations, as well as difficulties in thinking and understanding information. Meanwhile, negative symptoms include decreased motivation, lack of interest in communication, limited speech content, flat emotional expression, and difficulties in establishing social relationships. Schizophrenia is generally marked by two main types of symptoms: positive symptoms such as hallucinations and delusions, and negative symptoms including reduced motivation and verbal ability (Luvsannyam et al., 2022). Hallucinations are a hallmark symptom of schizophrenia with auditory hallucinations being one of the most common and distressing symptoms. Patients experiencing these hallucinations hear voices or sounds that are not actually present, disrupting their cognitive and social functioning, and increasing the risk of harm to themselves or others if left untreated. Globally, schizophrenia affects approximately 1% of the population, while in Indonesia, the prevalence is 6.7 per 1,000 households. At Soerojo Mental Hospital in Magelang, over 100 patients with schizophrenia were hospitalized in early 2023, highlighting the need for comprehensive intervention to address this major mental health issue.

Hallucinations are sensory perception disturbances in which a person perceives the presence of stimuli despite the absence of actual external input (Boksa, 2009). The most common type of hallucination is auditory hallucination. Hallucinations can arise due to stressors from predisposing factors such as socio-cultural developmental aspects, biochemical conditions, psychological, and genetic factors (Jardri et al., 2014). These risk factors influence an individual's ability to mobilize resources to cope with stress (Kumar et al., 2009). Several predisposing factors contribute to neurobiological responses, including hallucinations, while precipitating factors for

patients with sensory perception disturbances (hallucinations) include infection history, chronic illness, brain abnormalities, domestic violence, life failures, poverty, and social conflicts. Auditory hallucinations can lead to negative impacts, such as suicide risk, self-harm, or harm to others, emphasizing the need for immediate management. Hallucination management is a crucial approach to addressing sensory perception disturbances. Implementing standard nursing care, including hallucination management, is necessary to optimize care for schizophrenic patients with auditory hallucinations in hospital settings. This case study examines the implementation of hallucination management in a schizophrenic patient with sensory perception disturbances at Soerojo Mental Hospital, Magelang.

Case Description

The patient, a 35-year-old male, was admitted to Soerojo Hospital Magelang on September 26, 2024, with complaints of talking to himself, pacing, appearing confused, daydreaming, and hearing voices without any real external stimuli, particularly in the evening. Assessment revealed that the patient frequently heard whispering voices, approximately three times a day, especially when alone. He appeared anxious, isolated himself, and avoided eye contact during interactions. The identified predisposing factors included a family history of mental illness, specifically from his father, and stopping medication one week prior to hospitalization, which likely triggered his relapse. Additional psychosocial stressors that exacerbated his condition included stress from lacking a permanent job and inadequate social support, contributing to decreased self-esteem and social isolation. Based on the assessment, the nurse established three nursing diagnoses: sensory perception disturbance (auditory hallucinations), social isolation related to changes in mental status, and chronic low self-esteem related to psychiatric disorders, with sensory perception disturbance being the primary focus. The nursing care plan, guided by the Indonesian Nursing Intervention Standards (SIKI) and Indonesian Nursing Outcomes Standards (SLKI), aimed to reduce hallucination frequency, improve concentration, and empower the patient to control and recognize his hallucinations.

The interventions included observing behaviour and hallucination content, maintaining a safe and comfortable environment, discussing the patient's response to hallucinations therapeutically, educating on hallucination control techniques (including rebuking), and collaborating on antipsychotic medication administration (clozapine 25 mg once daily and risperidone 2 mg twice daily). Implemented over four sessions, the interventions yielded progressive improvements. Initially, the patient appeared withdrawn with active symptoms like talking to himself and pacing. Following education and discussion, he began to open up and understand the importance of regular medication. By the second day, he was calmer and cooperative, demonstrating understanding of the rebuking technique. Significant improvements were observed on the third and fourth days: reduced hallucination frequency, decreased withdrawal, improved concentration, and increased environmental engagement. Nursing evaluation showed most goals were achieved. SLKI-based outcomes indicated improved sensory perception disturbances, including reduced hallucination verbalization, distortion, and behaviours, as well as decreased social withdrawal, daydreaming, and pacing, and improved concentration. The patient independently applied hallucination control techniques, expressed feelings, and showed willingness to continue post-discharge treatment, demonstrating good understanding and compliance.

Discussion

Individuals with genetic predispositions are at a higher risk of developing schizophrenia compared to those without such a history (Lu et al., 2018). This can be observed in the tendency that individuals with genetic risk factors are more likely to experience schizophrenia, whereas those without tend not to. Genetics play a role in transmitting information to the next generation and determining inherited characteristics (Hermiati & Harahap, 2018). Mental status examination revealed that the patient was experiencing auditory hallucinations. Auditory hallucinations are defined as the experience of hearing voices that give commands or call the individual, typically involving two or more voices commenting on the person's behaviour or thoughts. Hallucinations represent an inaccurate perception of sensory stimuli in which individuals respond inappropriately to non-existent stimuli. This condition results from perceptual disturbances caused by abnormal neurological responses. The emergence of hallucinations can be influenced by various factors, including parenting patterns, developmental stages, neurobiological aspects, or psychological conditions. Common signs of hallucinations include talking, smiling, or laughing to oneself, withdrawing from social environments, and losing the ability to distinguish reality from illusion (Firdaus et al., 2023).

Hallucinations triggered by stopping medication, especially drugs that affect the dopamine system, result from an imbalance in brain chemicals (neurotransmitters) after discontinuation (Rolland et al., 2014). Dopamine plays an important role in mood regulation, motivation, and perception. When dopamine-targeting medications are stopped, dopamine receptors become more sensitive and easily activated by the body's natural dopamine, resulting in increased dopamine activity in certain brain areas. One of the affected pathways is the mesolimbic pathway, which regulates reward and motivation. Overactivation of this pathway can lead to psychotic symptoms such as delusions and hallucinations (Kadir et al., 2023). This dopamine imbalance also disrupts the brain's ability to process sensory stimuli accurately, leading to distorted perceptions such as hearing voices or seeing things that do not exist (Muthmainnah & Amris, 2024). Factors influencing medication non-adherence include the distance from healthcare facilities, the patient's belief that they are fully recovered and no longer need medication, and discomfort due to side

effects (Kvarnström et al., 2021). These conditions contribute to low motivation to continue regular treatment (Hasanah et al., 2024). Therefore, taking medication regularly and according to the prescribed dose can support recovery. This should be accompanied by nursing therapy and health education to reshape the patient's cognition and behaviour, ultimately increasing adherence to medication (Kohu et al., 2025). Major signs and symptoms of sensory perception disturbances include hearing whispers or seeing shadows, tactile, olfactory, or gustatory hallucinations, sensory distortions, inappropriate responses, and behaving as if seeing, hearing, tasting, touching, or smelling something non-existent. Patients with auditory hallucinations often appear suspicious, anxious, indecisive, unable to distinguish real from unreal, socially withdrawn, talking to themselves, laughing alone, and smiling without cause (Knippenberg et al., 2024). The data from this case study gathered from the assessment aligns with the literature on sensory perception disturbance, particularly auditory hallucinations.

Management of patients with sensory perception disturbances can be carried out through hallucination management interventions. These aim to minimize the occurrence of auditory hallucination symptoms, improve patient concentration, and enhance orientation. Such interventions are implemented to help patients gain awareness of their symptoms and differentiate between reality and delusion (Prasetyo et al., 2022). The implementation of standard psychiatric nursing care through hallucination management over four days showed that this intervention is effective in patients with sensory perception disturbances, as indicated by a decrease in hallucination symptoms (Sari et al., 2023). Hallucination management is a nursing intervention aimed at minimizing recurrence. It consists of observation, therapeutic communication, education, and collaboration. Teaching patients how to rebuke hallucinations, engage in conversations with others, follow structured daily activities, and take medications consistently are effective techniques (Sholihah et al., 2024). The goal of hallucination management is to help patients recognize their hallucinations and empower them to use support systems to control those experiences. In patients with auditory hallucinations and a medical diagnosis of schizophrenia, this intervention helps maintain safety, increase comfort, and improve orientation to reality (Jannah & Gati, 2023). Hallucination management is an essential component of psychiatric nursing care that aims to help patients cope with and control inaccurate sensory perceptions. Numerous studies have shown that hallucination management effectively reduces the frequency, intensity, and impact of hallucinations on patients' psychological and social functioning.

The implementation conducted over four sessions included monitoring behaviour indicative of hallucinations, observing the content of hallucinations, maintaining a comfortable environment, discussing feelings and responses, encouraging patients to monitor their own hallucination patterns, recommending communication with trusted individuals for support and feedback, suggesting distraction techniques, teaching both patients and families how to manage hallucinations, encouraging social interaction, and collaborating on the administration of antipsychotic and anti-anxiety medications. These interventions were carried out according to the care plan and were evaluated daily over four days. Evaluation after four sessions showed a reduction in sensory perception disturbance symptoms. According to a study, patients became more cooperative, sociable, able to maintain eye contact, and willing to discuss their illness after hallucination management was provided with a decrease in the frequency of hallucinations (Nashirah et al., 2022). As a result, hallucination intensity has been reduced, as indicated by patients being able to manage their fear when hallucinations occur after learning control strategies. Nursing interventions in the form of hallucination management have proven to be effective, as they equip patients with techniques to reduce the frequency and severity of hallucinations and enhance their coping abilities.

Conclusion

Based on the nursing care process, which included assessment, diagnosis, care planning, and implementation over four sessions, the evaluation results showed a reduction in the signs and symptoms of sensory perception disturbances. Hallucination management effectively reduced the intensity and frequency of hallucinations and enhanced the patient's ability to cope with psychotic symptoms. This intervention is a valuable component of psychiatric nursing care for patients with schizophrenia experiencing sensory perception disturbances. For future researchers, it is recommended that the intervention be implemented over a longer period to assess the sustained effectiveness of hallucination management. Additionally, more active involvement of the patient's family as a primary support system outside the hospital environment is suggested.

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