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Auditory hallucination management in patient with mental health issues

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Abstract
Hallucinations, characterized by altered perception of stimuli leading to exaggerated or abnormal responses, can pose significant risks, including violent behavior that may harm the individual, others, or the environment. Addressing hallucinations promptly is crucial, with hallucination management being a key intervention. This study aims to describe the characteristics of clients with hallucinations and assess the effectiveness of hallucination management. Utilizing a case study design and a purposive sampling technique, this study focused on individuals who had experienced sensory perception mental disorders with hallucinations for over a year. Data were collected through participatory observation, unstructured interviews, and documentation and analyzed using domain analysis. The findings demonstrate that hallucination management therapy significantly reduced the severity of hallucinations, transitioning from moderate to mild within six interventions. Hallucination management is effective in enhancing safety and comfort for individuals experiencing hallucinations, highlighting its critical role in mental health care.

Keywords: Mental health nursing; auditory hallucination; innovation in community care; healthcare services; case studies

Introduction

Auditory hallucinations are a complex and often distressing phenomenon where individuals perceive sounds, such as voices or noises, without any external auditory stimulus (Hugdahl, 2017). These experiences are commonly associated with psychiatric conditions like schizophrenia but can also occur in various other contexts, including during periods of extreme stress or sleep deprivation (Kumar, Soren, & Chaudhury, 2009). Understanding auditory hallucinations requires a deep dive into their mechanisms, prevalence, and effective treatment methods, as well as the profound impact they have on the lives of those who experience them. Auditory hallucinations involve hearing sounds that do not have a real external source. These can range from simple noises like whistles or hums to complex auditory experiences such as voices conversing or music playing (Kråkvik et al., 2015). The content of these hallucinations can be neutral, positive, or negative, with negative voices often commanding individuals to engage in harmful or self-destructive behaviors (Hugdahl, 2015). Such experiences can significantly disrupt a person's daily life and overall well-being. Several theories have been proposed to explain the mechanisms underlying auditory hallucinations. Neurobiological theories suggest that dysregulation in brain areas such as the auditory cortex, thalamus, and Broca's area may lead to the perception of nonexistent sounds (Boksa, 2009). Overactivity in these regions might cause individuals to misinterpret internal cognitive processes as external auditory events. Cognitive theories, on the other hand, propose that auditory hallucinations result from an inability to distinguish between internally generated thoughts and actual external sounds (Docherty et al., 2015). Psychological theories emphasize the role of stress, trauma, and emotional conflicts, with a significant link found between childhood trauma and the development of hallucinations later in life (Chaudhury, 2010).

Auditory hallucinations are more prevalent than often recognized. Studies suggest that between 5-28% of the general population may experience auditory hallucinations at some point in their lives (Maijer et al., 2019). Not all instances of auditory hallucinations are indicative of a mental illness; they can also occur in individuals without

psychiatric disorders, particularly during times of high stress or sleep deprivation. Auditory hallucinations are a hallmark of several psychiatric conditions **(Figure 1)**. In schizophrenia, around 60-80% of individuals experience auditory hallucinations, which are also present, though less frequently, in bipolar disorder during manic or depressive episodes (Lim, Hoek, Deen, Blom, & GROUP Investigators, 2016). The prevalence and nature of auditory hallucinations can vary across different demographic groups. They are more common in adolescents and young adults, with a decline in prevalence among older populations (Yates et al., 2021). While there is no significant gender difference in the occurrence of auditory hallucinations, the content and emotional impact may vary between males and females. Cultural factors also play a significant role; in some cultures, hearing voices is perceived as a spiritual or normal experience, which can affect the stigma and the likelihood of seeking treatment (Larøi et al., 2014).

Figure 1. Illustration of auditory hallucination (*Courtesy of pexels.com*).

Auditory hallucinations can have a profound psychological and emotional impact on individuals. Negative or commanding voices often lead to increased anxiety and emotional distress. Persistent hallucinations can also contribute to feelings of paranoia and mistrust, significantly impacting an individual's mental health (Tracy & Shergill, 2013). The chronic nature and often negative content of these hallucinations can result in depression and feelings of hopelessness (Bornheimer, Li Verdugo, & Thompson, 2022). The presence of auditory hallucinations can severely impair various aspects of an individual's life. Many individuals withdraw from social interactions due to fear of stigma and misunderstanding, leading to social isolation (Lincoln, Johnson, Kim, Edenbaum, & Hooley, 2021). Occupational functioning is also affected, as difficulty concentrating and heightened anxiety can impair job performance and career prospects. Even routine daily activities can become challenging due to the distraction and distress caused through the hallucinations. Medications are often the first line of treatment for managing auditory hallucinations. Antipsychotics are the most commonly prescribed drugs and work through regulating dopamine levels in the brain. Examples include risperidone, olanzapine, and clozapine, with clozapine being particularly effective for treatment-resistant auditory hallucinations (Sommer et al., 2012). Mood stabilizers and antidepressants may also be used in conjunction with antipsychotics for individuals with bipolar disorder or major

depressive disorder (Miron et al., 2023). Psychotherapy is crucial in managing auditory hallucinations. Cognitive Behavioral Therapy (CBT) is widely used to help individuals challenge and reframe their beliefs about the hallucinations, using techniques like reality testing and developing coping strategies (Shukla, Padhi, Sengar, Singh, & Chaudhury, 2021). Mindfulness-based therapy encourages individuals to focus on the present moment and accept their experiences without judgment, reducing distress associated with hallucinations (Sheng, Yan, Yang, Yuan, & Cui, 2019). Acceptance and Commitment Therapy (ACT) focuses on accepting the hallucinations while committing to actions aligned with personal values, promoting psychological flexibility and resilience (El Ashry, Abd El Dayem, & Ramadan, 2021). Support from social networks and structured programs can enhance treatment outcomes. Peer support groups allow individuals to share experiences and reduce feelings of isolation, providing practical advice and emotional support (Jameel et al., 2020).

Despite advances in treatment, several challenges remain in the literature. Treatment resistance is a significant issue, with many individuals not responding adequately to existing interventions. This necessitates the development of new treatment modalities. Medications, particularly antipsychotics, can have severe side effects, including weight gain, metabolic issues, and tardive dyskinesia, which can affect adherence to treatment. Societal stigma and misunderstanding about auditory hallucinations and mental illness can also hinder individuals from seeking help and receiving support. Therefore, the study aimed to investigate the benefits of hallucination management in patients with mental health issues, specifically focusing on those with schizophrenia. This research sought to understand how effective management strategies can alleviate the distress and impairment caused through auditory hallucinations, which affect a significant proportion of individuals with schizophrenia. Through exploring various interventions, including pharmacological treatments, cognitive behavioral therapy, mindfulness practices, and support systems, the study aimed to identify the most effective approaches for reducing the frequency, intensity, and impact of hallucinations. The goal was to enhance the overall quality of life for patients through improving their ability to function in daily activities, maintain social relationships, and achieve greater emotional stability. Additionally, the research intended to examine the role of healthcare professionals and caregivers in supporting patients through tailored treatment plans and continuous monitoring. Ultimately, the findings from this study could provide valuable insights into developing comprehensive, evidence-based guidelines for hallucination management in schizophrenia and potentially other mental health conditions characterized through similar symptoms.

Method

The study used a case study approach through integrating sampling with purposive sampling techniques to ensure the selection of participants who met specific criteria relevant to the research objectives. Conducted at mental Health Hospital Prof Dr Soerojo in Magelang City in 2022, the study focused on patients experiencing auditory hallucinations, a common symptom in various mental health disorders. Purposive sampling method was used in this study. The researchers were able to specifically target male and female patients who either had a history of or were currently experiencing auditory hallucinations, with the additional requirement of obtaining family consent. This approach ensured that the participants were relevant to the study's aims and that ethical considerations regarding patient consent and family involvement were strictly adhered. The study's inclusion and exclusion criteria were meticulously defined to focus on the primary symptom of interest—auditory hallucinations—while excluding patients with visual hallucinations. This distinction allowed for a more precise examination of the interventions' effectiveness on auditory hallucinations specifically. The interventions were comprehensive, starting with an initial assessment to understand each patient's unique situation and history. Patients were then taught to recognize and confront their hallucinations, a critical step in managing these symptoms. Education on the importance of timely medication adherence was provided, emphasizing how consistent medication use could help mitigate hallucinations. Additionally, patients were taught techniques to divert their hallucinations through scheduled activities and engaging in conversations with others, which could help reduce the hallucinations' impact on their daily lives. The intervention package was administered six times to ensure measurable changes following the treatment.

Family involvement was a crucial aspect of the data collection process. The study ensured that patients received support from their immediate social circle, which is vital for the success of the interventions. Family members were educated on how to support the patients, enhancing the overall effectiveness of the treatment strategies. The study also included regular evaluations through asking patients about their signs and symptoms,

providing continuous feedback on the interventions' efficacy. Ethical approval was obtained before the commencement of data collection, ensuring that all procedures met ethical standards and protected the participants' rights and well-being. This rigorous approach aimed to provide a thorough understanding of how targeted interventions could benefit patients with auditory hallucinations **(Figure 2)**, potentially informing future treatment protocols and improving patient outcomes in similar settings.

Figure 2. Illustration of fatigue as risk factor of hallucination (*Courtesy of unsplash.com*).

Results

The patient, a 72-year-old woman working as a notary, has been grappling with a mental disorder characterized by sensory perception disturbances, specifically auditory hallucinations, for the past two years. During the initial assessment, it was revealed that she has struggled significantly with managing these hallucinations, often failing to distinguish between real and hallucinated voices. The patient reported that she frequently hears whispers, especially when she is alone or about to rest at night. These whispers often command her to take various actions, which she finds difficult to resist, believing them to be real. This condition has led to severe disruptions in her daily life, causing her to daydream excessively, talk to herself, and pace back and forth at night, sometimes even screaming. Her condition deteriorated to the point where she required hospitalization in a psychiatric facility. However, she experienced a relapse three months after being discharged, exacerbating her inability to differentiate between real and hallucinatory voices. Compounding her distress, the patient reported frequent feelings of anger and frustration, particularly because her mother often compares her unfavorably to others, further impacting her mental state. Following a six-day intervention, notable improvements were observed in the patient's condition. The intervention focused on helping her establish a disciplined routine, which included scheduled activities that aimed to mitigate the impact of her hallucinations. The patient reported that adhering to this structured schedule helped her gain better control over her hallucinations, although she still required occasional assistance from her family. Additionally, she was taught techniques to challenge and confront her hallucinations, reducing their influence over her actions. Medication adherence played a crucial role in her progress, as did her newfound ability to articulate and describe her hallucinatory experiences. This combination of structured activities, medication, and supportive family

involvement enabled the patient to manage her condition more effectively, marking a significant step towards improving her quality of life. The intervention's success underscores the importance of comprehensive, multi-faceted approaches in treating complex mental health issues, particularly in elderly patients.

Discussion

Auditory hallucinations, particularly those experienced by individuals with schizophrenia or other psychiatric conditions, can be challenging to manage. Treatment typically involves a combination of medical, psychological, and supportive interventions (González-Rodríguez, Monreal, Natividad, & Seeman, 2022). First and foremost, it's important for individuals experiencing these hallucinations to seek professional medical advice (Buccheri, Trygstad, Buffum, Birmingham, & Dowling, 2013; Buccheri, Trygstad, Buffum, Lyttle, & Dowling, 2010). A psychiatrist can diagnose the underlying cause and prescribe antipsychotic medications, which are often effective in reducing or eliminating auditory hallucinations. Medications such as risperidone, olanzapine, and aripiprazole work by balancing the levels of neurotransmitters in the brain, which can help in managing the symptoms (Leff, Williams, Huckvale, Arbuthnot, & Leff, 2013). In addition to medication, individuals learn coping strategies to deal with the voices they hear, such as focusing on reality-based evidence and using distraction techniques. Therapists may also work with patients to identify and address any triggers or stressors that exacerbate their hallucinations, providing them with a toolkit of strategies to use in their daily lives. Support from family and friends also plays a crucial role in the management of auditory hallucinations (Widiyawati, Yusuf, Devy, & Widayanti, 2020). Family therapy involves educating family members about auditory hallucinations and developing supportive communication strategies. Loved ones can offer emotional support, help monitor symptoms, and encourage adherence to treatment plans. Peer support groups, where individuals can share their experiences and coping strategies, can also be beneficial (Chien, Clifton, Zhao, & Lui, 2019). Community programs offer resources and support for managing daily activities and improving quality of life, helping individuals integrate more fully into society. These groups provide a sense of community and understanding, reducing feelings of isolation and stigma associated with auditory hallucinations. Building a strong support network can significantly improve the overall well-being of individuals experiencing these symptoms. Lifestyle changes can also help manage auditory hallucinations. Maintaining a regular sleep schedule, engaging in regular physical activity, and practicing stress-reduction techniques such as mindfulness or meditation can have a positive impact on mental health. Avoiding substances like alcohol and drugs, which can exacerbate symptoms, is also important. A holistic approach that combines medication, therapy, support, and healthy lifestyle choices offers the best chance of reducing the frequency and severity of auditory hallucinations, leading to an improved quality of life for those affected.

One of the significant barriers in providing care for patients with auditory hallucinations is the stigma associated with mental health conditions. This stigma can lead to a delay in seeking help, as patients might fear judgment or discrimination (Subu et al., 2021). Additionally, stigma can affect the attitudes of healthcare providers, who may inadvertently minimize or dismiss the severity of the patient's symptoms. This can result in inadequate treatment and support, further exacerbating the patient's condition (Shahwan et al., 2022). Overcoming stigma requires ongoing education and awareness campaigns aimed at both the public and healthcare professionals to foster a more understanding and compassionate approach to mental health care (Jauch, Occhipinti, & O'Donovan, 2023). Another barrier is the complexity of the healthcare system and the lack of access to specialized care. Patients with auditory hallucinations often require a multidisciplinary approach, involving psychiatrists, psychologists, social workers, and support groups. However, access to such comprehensive care can be limited, particularly in rural or underserved areas (Morales, Barksdale, & Beckel-Mitchener, 2020). Financial constraints, long waiting times for appointments, and insufficient mental health services contribute to this problem. Ensuring adequate funding for mental health services, expanding telehealth options, and improving coordination among healthcare providers can help mitigate these barriers, ensuring that patients receive timely and effective care. Facilitators in providing care for patients with auditory hallucinations include the availability of comprehensive and integrated mental health services (Staab et al., 2022). Research continues to explore new avenues for treating auditory hallucinations. Transcranial Magnetic Stimulation (TMS) is a non-invasive procedure that uses magnetic fields to stimulate nerve cells in the brain, showing promise in reducing the frequency and intensity of hallucinations (Brunelin, Galvao, & Mondino, 2023). Virtual Reality Therapy uses immersive technology to help individuals practice coping strategies in a controlled environment (Freeman et al., 2023). Neuromodulation techniques investigate ways to alter brain activity using electrical or magnetic stimulation, aiming to reduce hallucinations and improve overall

mental health (Dokucu, 2015). Access to a multidisciplinary team of professionals—such as psychiatrists, psychologists, social workers, and occupational therapists—ensures that patients receive holistic care tailored to their individual needs. Integrating services within community health centers or through collaborative care models in primary healthcare settings can improve accessibility and coordination of care. These integrated services facilitate early intervention, consistent monitoring, and comprehensive support, which are crucial for managing auditory hallucinations effectively. Another key facilitator is the use of evidence-based therapeutic interventions and medication management **(Figure 3)**.

Figure 3. Illustration of medication management (*Courtesy of unsplash.com*).

Integrating spiritual care into the treatment of patients with hallucinations involves recognizing the significant role that spirituality and religious beliefs can play in their overall well-being. Spiritual care should be approached with sensitivity and respect, acknowledging each patient's unique beliefs and values (Ho et al., 2016). The first step is to conduct a thorough spiritual assessment as part of the initial evaluation. This assessment should explore the patient's spiritual background, beliefs, practices, and the role that spirituality plays in their life and mental health (Irawati, Indarwati, Haris, Lu, & Shih, 2023). It is essential to create a safe and non-judgmental environment where patients feel comfortable discussing their spiritual needs. Mental health professionals can utilize tools like spiritual assessment questionnaires or engage in open-ended conversations to gather this information (Mohr et al., 2006). Once the spiritual assessment is complete, mental health care providers can collaborate with chaplains, spiritual counselors, or religious leaders to develop a holistic treatment plan that incorporates the patient's spiritual needs. This collaboration ensures that spiritual care is provided by trained professionals who can offer appropriate support and guidance. For instance, chaplains can provide spiritual counseling, facilitate religious rituals or practices, and offer a compassionate presence. Integrating spiritual care into the treatment plan can help patients find meaning and comfort in their experiences, potentially reducing the distress associated with hallucinations (Lucchetti, Koenig, & Lucchetti, 2021). It is crucial to maintain open communication between all members of the care team to ensure that spiritual care is effectively coordinated with other therapeutic interventions. Incorporating spirituality into

psychotherapy can also be beneficial. The approach helps patients utilize their spiritual resources to cope with hallucinations, challenge negative thoughts, and foster resilience. Additionally, these practices can help patients develop a sense of inner peace and grounding, reducing anxiety and improving their ability to manage hallucinations. It is essential to tailor these interventions to align with the patient's spiritual framework, ensuring that they are meaningful and supportive. Overall, integrating spiritual care into the treatment of patients with hallucinations requires a compassionate and collaborative approach, recognizing spirituality as a vital component of holistic mental health care.

Conclusion

The study presented the benefits of hallucinations management in patient with mental health issues. Additionally, ensuring patients have access to the necessary medications and adherence support can improve treatment outcomes. Supportive environments and community resources also play a vital role in facilitating care. Furthermore, leveraging technology, such as telehealth services, can overcome geographic barriers and provide patients with consistent access to mental health professionals. These facilitators, collectively, create a comprehensive and supportive care ecosystem that empowers patients to manage their auditory hallucinations more effectively and improve their overall quality of life. Further research is necessary to investigate the benefits of the intervention across various types of hallucinations.

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Author's perspective

Key points

- Auditory hallucinations are a complex and often distressing phenomenon
- Supportive environments and community resources also play a vital role in hallucinations care
- Integrating spiritual care into the treatment can accelerate patients' healing

Potential areas of interest

- What specific benefits of hallucination management were highlighted for patients with mental health issues in the study?
- How can technology, such as telehealth services, address geographic barriers in mental health care?
- Why is further research needed to explore the benefits of the intervention across different types of hallucinations?

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