

ORIGINAL ARTICLE

The Effect of Nursing Care for Client Symptoms Frequency with Sensory Perception Disorders: Auditory Hallucination in Bantur Village

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ABSTRACT

Introduction: Auditory hallucination is a dangerous type of mental disorder because it has various impacts, leads to suicide, violent behavior, and threaten the environment. **Objective:** The purpose of this study was to identify the effect of nursing care on clients with sensory perception disorders: auditory hallucinations in Bantur village. **Methods:** The design used is One Groups Pretest-Posttest Design, with a simple random sampling technique. The sample in this study amounted to 48 respondents. Analysis of the data used in this study used the Wilcoxon test. **Results:** Based on the test resulted in Wilcoxon p-value <0.05, which means there was a difference in nursing care to decrease the signs of client symptoms with sensory perception disorder: auditory hallucinations. **Conclusion:** This study concludes that nursing care has proven to be effective in reduced the signs of symptoms in patients with auditory hallucinations. Nursing in this study implies that nursing care becomes an essential and essential thing that must be given to people with mental disorders.

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1. Introduction

Schizophrenia is a mental disorder that requires serious attention. One type of mental disorder is hallucinations. Hallucinations are a symptom of schizophrenia (Abdul Muhith, 2015). it was stated that 70% of schizophrenic clients had hallucinations (R. S. Aditya, 2019). Auditory hallucinations are generally defined as false perceptions. Recent developments in auditory neuroscience have rapidly increased our understanding of normal auditory perception revealing (partially) separate pathways for the identification ("what") and localization ("where") of auditory objects (Badcock, 2010). Hallucinations are dangerous because they can cause violent behavior. Hallucinations can endanger the safety of the environment around them (Rohmi, 2007). Clients with hallucinations can take action outside of their consciousness, become lazy in their activities, it is difficult to trust others and be cool with the internal stimulus they experience (Buccheri, Trygstad, Buffum, Birmingham, & Dowling, 2013). Clients with hallucinations are not able to distinguish between real and intangible situations, withdraw from others, and are easily offended and irritable. Therefore clients with hallucinations need to GZbe given comprehensive nursing care (Mann & Chong, 2004).

WHO data in 2016 showed that there were around 35 million people affected by depression, 60 million people affected by bipolar disorder, 21 million affected by schizophrenia,

and 47.5 million affected by dementia. Riskesdas 2013 data shows the prevalence of mental-emotional disorders as indicated by symptoms of depression and anxiety for the age of 15 years and overreaching around 14 million people or 6% of the population of Indonesia. While the prevalence of severe mental disorders, such as schizophrenia, reaches around 400,000 people or as much as 1.7 per 1,000 populations. East Java has the sixth highest prevalence in Indonesia. Based on data from East Java's population of 38,005,413 people, it can be concluded that people with severe mental disorders in East Java reached 83,612 people (Kementerian Kesehatan Republik Indonesia, 2016) From the initial survey at Bantur Public Health Center, in October 2017, in Bantur Village with a total population of 13,008 people, there were 46 patients with each patient experiencing more than one psychiatric disorder with hallucinations of 18 people (39.1%).

Hallucinations must be the focus of attention by the health team because if hallucinations are not handled properly, they can pose a risk to the safety of the client himself, others, and also the surrounding environment. This condition may occur because hallucinations hear clients often contain orders to injure themselves and others (Van Rheenen & Rossell, 2013). Clinically and evidence base, auditory hallucinations have been proven to cause distress in individuals (Gourley, Wind, Henninger, & Chinitz, 2013). Auditory hallucinations (AHs) in schizophrenia typically involve voices. Voices carry speech, and in schizophrenia, these may range from single words or short phrases to linguistically complex perceptions of multiple voices conversing or commenting on the voice hearer. Not surprisingly, many cognitive explanations of AH have assumed abnormal mechanisms of speech.

Hallucinated voices and environmental sounds may now be understood as an outcome of dysfunctional processing within the auditory, which is usually responsible for the perception of a variety of complex auditory objects. Inconsistent evidence of structural abnormalities in the superior temporal gyrus (STG) in early studies of AHs in schizophrenia led to suggest that for hallucinatory experiences to emerge, the relevant neural structures may need to be relatively intact. However, more recent neuroimaging data consistently indicate volume reductions in patients with AH, especially in left STG and in nonsensory areas including prefrontal (and cerebellar) cortices, providing a potential substrate for abnormal neural activity at different hierarchical levels along the ventral.

The high prevalence certainly requires the right intervention. The intervention that can be given is by giving comprehensive Nursing Care. Based on the results of research states that the provision of nursing care can reduce hallucinogenic symptoms by 14% (Keliat, 2012). Based on the background description above, the authors are interested in conducting a case study of how "the effect of nursing care on the frequency of client symptoms with sensory perception disorder: auditory hallucinations in Bantur village." The purpose of this study was to identify the effect of nursing care on clients with sensory perception disorders: auditory hallucinations in Bantur village.

2. Methods

This research has a type of quantitative research with the research design used in this study has "One Groups Pretest-Posttest Design," the research design that has interpreted before being given treatment and posttest after being treated. This approach was made so that it can be known more accurately because it can be compared withheld before being given treatment (Yusuf, PK, Tristiana, & Aditya, 2017). The sampling technique used was simple random sampling with a total sample of 48 people. The data collection took four weeks, with a frequency of visits 2x every week with a duration of 45-60 minutes.

3. Result and Discussion

The result of the study was described in [table 1](#) and [table 2](#).

Table 1. Frequency of demographic dominance respondents.

Category	Percentage (%)
Sex: Female	31 (64)
Education Junior High School	29 (60)
Job: Jobless	28 (58)

Based on [table 1](#) shows, there are demographic dominance respondents. The average respondent was mostly women with an average age of 31.5 years, with education being mostly junior high school, and not having a job.

Table 2. Frequency distribution of symptoms before and after nursing care.

Frequency of Symptom Signs	Before (%)	After (%)
Increase	23 (47.9)	16 (33)
Persistent	12 (25)	12 (25)
Decrease	13 (27)	20 (41.6)

Based on [table 2](#) shows, there are differences after being given nursing care. The number of respondents who had a decrease in symptoms was 14.6%. For respondents who experience permanent symptoms, have similarities. Respondents with symptoms increased by 14.6% decreased. The results of the study conducted showed that there were differences in the frequency of hallucinatory signs and symptoms after being given nursing care. This result proves that the provision of nursing care routinely and continuously can provide a better direction ([R. S. et al. Aditya, 2019](#)). Explains that proper management of people with schizophrenia will reduce positive symptoms ([Rohmi, 2015](#)). Voxel-wise correlations with a score of auditory hallucination severity identified areas in the left and right superior temporal cortex (including Heschl's gyrus), left supramarginal/angular gyrus, left postcentral gyrus and left posterior cingulate cortex ([Dasgupta, 2015](#)). Instead of saying that a hallucination is a false exterior percept, one should say that the external percept is a real hallucination. There is a paucity of evidence on the treatment of musical hallucinations. Treating the etiology has been known to remit musical hallucinations in some cases. Auditory Charles Bonnet Syndrome is known to remit following the improvement of hearing ([Dasgupta, 2015](#)).

Whereas Baddock, therapeutic communication intervention is the best technique to approach patients because secure communication will increase the confidence of patients ([Badcock, 2010](#)). Patients with schizophrenia often perceive hallucinated voices/sounds as being located in external auditory space, while others are experienced "inside the head." ([Corlett et al., 2019](#)). Auditory hallucinations (AHs) can be experienced in the context of many different disorders and syndromes. The differential diagnosis rests on the presence or absence of accompanying symptoms ([Sommer, Koops, & Blom, 2012](#)). Another opinion [Keliat \(2012\)](#) makes scheduled activities, and clients will not have much free time ([Nenadic, Smesny, Schlösser, Sauer, & Gaser, 2010](#)). free time often triggers hallucinations, for that client with hallucinations need to be helped given scheduled activities ([Rohmi, 2017](#)). So when the activity is not done correctly, the client hallucinations will not be distracted to the maximum ([R. S. Aditya, S, Yusuf, & Suwito, 2017](#)).

Models of auditory hallucinations that link self-monitoring deficits leading to misattribution of inner speech to an external source, however, do seem to be supported by studies using brain stimulation techniques (Moskowitz & Corstens, 2008). arising from current models of normal auditory perception may be used as a neural foundation on which to understand the phenomenology of AHs in schizophrenia and the general population (Doluweera & Suraweera, 2018).

Over the last decade, psychological-level research has focussed on the link between social cognition and auditory verbal hallucinations and has amassed a significant amount of evidence as a result. However, researchers working in cognitive neuroscience, who are specifically looking to make links with neurobiology, have only occasionally engaged with studies that have investigated the social neurocognition of hearing voices. Despite some exciting results, they have not yet used paradigms that would disentangle the extent to which the "social brain" is part of the hallucinatory experience. This part of the brain was an area where more targeted research needs to be completed. Similarly, more effort needs to be put into developing theories that include socially relevant evidence, as this has been largely ignored in both cognitive and neurocognitive accounts (Buccheri et al., 2013).

According to Sommer (2012), the goal of nursing action on clients with the impaired perception of auditory hallucinations is that there is an increase in the client's health status (Doluweera & Suraweera, 2018). The results of this study were consistent, also with who found that significant improvement of patients' auditory hallucinatory symptoms from pre- to post-intervention after the behavioral management program (Moskowitz & Corstens, 2008). Investigate the coping program in reducing psychotic symptoms and enhancing functions with schizophrenia. They found that there was a significant difference between the control and experimental groups in hallucinations, but this improvement soon relapsed to its pre-test level one month after the treatment. Musical hallucinations are known to have heterogeneous aetiologies. Hearing impairment, psychosis, organic conditions, including epilepsy, brain tumors, head injury, encephalitis, multiple sclerosis, and substance intoxication, are among the most frequent causes (Sommer et al., 2012).

AHs can be defined as sensory experiences in the auditory modality, occurring in the absence of a corresponding external stimulation while in a fully conscious state, and resembling veridical perceptions. CBT is a psychosocial intervention that is the most widely used evidence-based practice for treating mental disorders. CBT focuses on the development of personal coping strategies that target solving current symptoms and changing unhelpful patterns in cognitions (e.g., thoughts, beliefs, and attitudes), behaviors, and emotional regulation. A significant association between lifetime experience of AH and thinner cortex of the HG in schizophrenia spectrum patients. Our results suggest that previously described volume deficits related to AH in schizophrenia are mainly driven by the thinner cortex in selected regions, and not reduced cortical surface area. The results demonstrate the importance of investigating cortical area and thickness separately, as one may risk losing valuable information by combining them into cortical volume. The HG contains the primary auditory cortex, and the observed cortical thinning may be consistent with postmortem studies reporting decreased dendritic arborization in this region. Increased knowledge on the neurobiological underpinnings of AH, which is the most frequent psychotic symptom of schizophrenia, will aid the search for disease mechanisms and better treatment of schizophrenia. Patients who attended the behavioral management of command hallucinations in schizophrenia perceived it as helpful, and improvement was seen in the severity of auditory hallucinations (Hugdahl, 2017).

4. Conclusion

Based on the results of the present study, it can be concluded that the results of this study clearly show that nursing care has proven to be effective in reducing symptoms in patients with auditory hallucinations. Nursing in this study implies that nursing care becomes an essential and essential thing that must be given to people with mental disorders alone or should be an additional method of learning that already exists.

References

- Abdul Muhith. (2015). *Pendidikan Keperawatan Jiwa: Teori Dan Aplikasi* -. Retrieved from <https://Books.Google.Co.Id/Books?Id=Yp2ACwAAQBAJ&Printsec=Frontcov>
- Aditya, R. S. Et Al. (2019). Teenager Response to The Conditions of Basic Level Emergency: A Phenomenology Study. *Indian Journal of Public Health*, 10(1), 170.
- Aditya, R. S. (2019). Perbandingan Metode Health Coaching Dan Ceramah Tentang Basic Life Support (BLS) Untuk Remaja Masjid. Retrieved November 1, 2019, From *Jurnal Keperawatan BSI* Website: [Http://Ejurnal.Univbsi.Id/Index.Php/Keperawatan/Article/View/105](http://Ejurnal.Univbsi.Id/Index.Php/Keperawatan/Article/View/105)
- Aditya, R. S., S, F. K., Yusuf, A., & Suwito, J. (2017). Experience of The Health workers In Conductin Methadone Rehabilitation Therapy at The Public Health Center. *Dama International Journal Researchers (DIJR)*, 2(2), 107–113.
- Badcock, J. C. (2010). The Cognitive Neuropsychology of Auditory Hallucinations: A Parallel Auditory Pathways Framework. *Schizophrenia Bulletin*, Vol. 36, Pp. 576–584. <https://Doi.Org/10.1093/Schbul/Sbn128>
- Buccheri, R. K., Trygstad, L. N., Buffum, M. D., Birmingham, P., & Dowling, G. A. (2013). Self-Management of Unpleasant Auditory Hallucinations: A Tested Practice Model. *Journal of Psychosocial Nursing and Mental Health Services*, 51(11), 27–34. <https://Doi.Org/10.3928/02793695-20130731-02>
- Corlett, P. R., Horga, G., Fletcher, P. C., Alderson-Day, B., Schmack, K., & Powers, A. R. (2019, February 1). Hallucinations and Strong Priors. *Trends in Cognitive Sciences*, Vol. 23, Pp. 114–127. <https://Doi.Org/10.1016/J.Tics.2018.12.001>
- Dasgupta, A. (2015, July 1). The Realm of Auditory Hallucinations. *The Lancet Psychiatry*, Vol. 2, P. 585. [https://Doi.Org/10.1016/S2215-0366\(15\)00181-9](https://Doi.Org/10.1016/S2215-0366(15)00181-9)
- Doluweera, Y., & Suraweera, C. (2018). Those Who Hear Music: Three Cases on Musical Hallucinations. *Case Reports in Psychiatry*, 2018. <https://Doi.Org/10.1155/2018/9361382>
- Gourley, L., Wind, C., Henninger, E. M., & Chinitz, S. (2013). Sensory Processing Difficulties, Behavioral Problems, And Parental Stress in A Clinical Population of Young Children. *Journal of Child and Family Studies*, 22(7), 912–921. <https://Doi.Org/10.1007/S10826-012-9650-9>
- Hugdahl, K. (2017). *Auditory Hallucinations in Psychiatric Illness*. <https://Doi.Org/10.4274/Balkanmedj.2017.1226>
- Keliat, A. Et Al. (2012). *Keperawatan Jiwa Komunitas CMHN (Basic Course)*. EGC.
- Kementerian Kesehatan Republik Indonesia. (2016). *Peran Keluarga Dukung Kesehatan Jiwa Masyarakat*. Retrieved November 1, 2019, From <https://Www.Kemkes.Go.Id/Article/Print/16100700005/Peran-Keluarga-Dukung-Kesehatan-Jiwa-Masyarakat.Html>

- Mann, S. K. F., & Chong, B. B. W. (2004). The Effect of Symptoms Coping Program In Reducing Psychotic Symptoms And Enhancing Functions In Chinese With Schizophrenia. *American Journal of Psychiatric Rehabilitation*, 7(1), 69–82. <https://doi.org/10.1080/15487760490465013>
- Moskowitz, A., & Corstens, D. (2008). Auditory Hallucinations: Psychotic Symptom Or Dissociative Experience? *Journal of Psychological Trauma*, 6(2–3), 35–63. https://doi.org/10.1300/J513v06n02_04
- Nenadic, I., Smesny, S., Schlösser, R. G. M., Sauer, H., & Gaser, C. (2010). Auditory Hallucinations and Brain Structure in Schizophrenia: Voxel-Based Morphometric Study. *British Journal of Psychiatry*, 196(5), 412–413. <https://doi.org/10.1192/Bjp.Bp.109.070441>
- Rohmi, F. (2015). Pengaruh Psikoedukasi Keluarga Terhadap Tingkat Kecemasan Dan Kemampuan Keluarga Dalam Merawat Penderita Tb Di Puskesmas Sumbermanjing Wetan Kecamatan Sumbermanjing Kabupaten Malang. *The Indonesian Journal of Health SCIENCE*, 5(2), 255–270.
- Rohmi, F. (2017). Korelasi Antara Beban Keluarga Dengan Kemampuan Komunikasi Keluarga Pada Penderita Skizofrenia. *Jurnal Kesehatan Mesencephalon*, 3(1). <https://doi.org/10.36053/Mesencephalon.V3i1.23>
- Sommer, I. E., Koops, S., & Blom, J. D. (2012). Comparison of auditory hallucinations across different disorders and syndromes. *Neuropsychiatry*, 2(1), 57–68. <https://doi.org/10.2217/npv.12.2>
- Suryani, S. (1970). A Critical Review of Symptom Management of Auditory Hallucinations in Patients with Schizophrenia. *Jurnal Keperawatan Padjadjaran*, 3(3). <https://doi.org/10.24198/jkp.v3i3.116>
- Van Rheenen, T. E., & Rossell, S. L. (2013). Auditory-prosodic processing in bipolar disorder; From sensory perception to emotion. *Journal of Affective Disorders*, 151(3), 1102–1107. <https://doi.org/10.1016/j.jad.2013.08.039>
- Yusuf, A., PK, F. R., Tristiana, R. D., & Aditya, R. S. (2017). *Qualitatif Research in Nursing (1st ed.)*. Surabaya: Mitra Wacana Media