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# NURSING IMPLEMENTATION IN CONTROL LONG COGNITIVE AND PSYCHOMOTOR CAPABILITIES OF HALLUCINATORY PATIENTS IN KALAWA ATEI MENTAL HOSPITAL OF PALANGKA RAYA

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### ABSTRACT

**Background:** *Hallucination is one of the symptoms of mental disorders in individuals that are characterized by sensory changes in perception, feeling a false sensory in the form of sound, vision, taste, touch and smell that is felt by the patient, but actually nothing. Hallucinatory can affect to the patient behaviors and sometime can endanger others. By implementing nursing of cognitive abilities and psychomotor abilities be expected to control hallucinatory among patients. This study aims to determine the implementation of cognitive abilities and psychomotor abilities in controlling hallucinatory in Atei Kalawa Menta Hospital, Palangkaraya.*

**Methods:** *This study was a quantitative study. There were 32 respondents that recruited in this study used purposive sampling methods. The inclusion criteria for this study were patients in Atei Kalawa Mental Hospital who had aged 20-56 and diagnosed for schizophrenia. The univariate analysis was used to describe the descriptive statistic.*

**Results:** *Implementing cognitive and psychomotor abilities towards patients with hallucinatory can decrease the hallucinatory among 17 patients (53.1%) and improve the ability from 19 patients (59.4%) to communicate with others, to do schedule activities, and to follow the medication.*

**Conclusion:** *By implementing cognitive and psychomotor towards patients who had hallucinatory can bring positive impact in their treatment. It is recommended for health providers to implementing cognitive and psychomotor towards patients who faced hallucinatory.*

**Keywords:** *Hallucinations, cognitive abilities, psychomotor abilities*

### INTRODUCTION

The World Health Organization (WHO) estimates that around 450 million people with mental disorders are found in the world, even based on World Bank studies in several countries showing 8.1% of global health people suffer from mental disorders. Hallucinations are one of the symptoms of a mental disorder that is characterized by sensory changes in perception, where the sufferer feels a false sensation in the form of sound, vision, taste, smell and smell but actually does not exist, estimated that 0.7% of the world's population suffers from hallucinations [1]. Hallucinations are one of the symptoms of mental disorders in individuals characterized by sensory changes in perception, feeling false sensations in the form of sound, vision, taste, touch and smell that is felt by patients [2]. Hallucinations are the most mental nursing problems that can lead to violent behavior in patients, especially in patients whose have hallucination that instruct them to do something endangers and threaten others.

The high incidence of mental disorders globally is also inseparable from the high incidence of hallucinations in Indonesia. This can be seen from data from several mental hospitals such as the Suharto Merjan Grogol Mental Hospital, 42,57% from 2040 patients suffer hallucination, while Marzoeeki Mahdi Bogor Mental hospital reaching 46,24% patients suffering from hallucinations from a total of patients. In Kalawa Atei Mental Hospital Palangka Raya in 2016 from 3001 visits and inpatient mental patients 72,9% had hallucinations, while in 2017 has risen to 3764 visits and inpatient mental patients, 81,3% of them experienced hallucinations. Previous research found that implementasi nursing standards can help reduce signs and symptoms of hallucinations as much as 14%. And may also improve pasien's cognitive ability to 47% as well as psychomotor ability as much as 48% [3].

Efforts made to overcome hallucinations in patients are by implementing nursing about cognitive abilities and psychomotor abilities of hallucinatory patients in controlling hallucinations. The cognitive abilities of hallucinatory patients in controlling hallucinations are patients able to recognize the hallucinations they experience and are able to recognize four (4) ways to control hallucinations which are hallucinogenic rebuke, conversing with other people, carrying out scheduled activities and adhering to medication [4]. Whereas psychomotor abilities that must be performed by hallucinatory patients are able to demonstrate how to control hallucinations, practice how to control hallucinations according to schedule and practice ways of controlling hallucinations that have been trained when hallucinations are felt by patients so that implementation of nursing can help hallucinatory patients overcome hallucinations. This is reinforced by the results of the previous study which suggested that there was a relationship between knowledge and behavior of hallucinatory patients in controlling hallucinations. Also reinforced by Castro's research which suggested that there were differences in how to control hallucinations before and after implementation of hallucinatory nursing care with a value of  $p = 0.00013$  [5].

Atei Kalawa mental hospital is the only hospital that treats mental patients and is located in the city of Palangka Raya. The number of visits to outpatient and hospitalized mental patients in 2016 was 3001 visits, with a number of mental patients with hallucinatory problems as much as 72.9% or as many as 2187 people, while in 2017 data on outpatient visits and hospitalization increased to of 3764 visits, with the number of mental patients with hallucinatory problems amounting to 81.3% or as many as 3060 people [6]. Referring to the incidence of hallucinatory problems that have increased, it is deemed necessary to carry out nursing care about cognitive abilities and psychomotor abilities optimally for patients in order to accelerate the patient's recovery process and reduce the number of hospitalizations [7]. Nursing care is an important thing that must be given to hallucinatory patients to help the problem. In Atei Kalawa Mental Hospital the implementation of hallucinatory nursing about cognitive abilities and psychomotor abilities in controlling hallucinations in four ways has not been done optimally and continuously in each hallucinatory patient, so this was what makes researcher interested to conduct the research. The purpose of this study was to describe the implementation of hallucinatory nursing about cognitive abilities and psychomotor abilities in controlling hallucinations in Atei Kalawa Mental Hospital Palangka Raya.

## **METHODS**

The research method used was quantitative descriptive research method, namely the method of research carried out with the main purpose of making a description or description of a situation or event objectively [6]. This study used purposive sampling and the number of respondents was 32. The inclusion criteria in this study were adult patients aged 20-56 years, diagnosed with schizophrenia, diagnosed as a hallucinatory patient with symptoms such as auditory hallucination or frequent laughter and self-talk and had received psychopharmaceutical therapy. The patients who refused to become a respondent will be excluded from the research. The steps in data collection were carried out by first taking care of the research permit, explaining the purpose of the study to nurses in the inpatient ward of Kalawa Atei Mental Hospital and to respondents of research on nursing implementation, and explaining

to patients and families that this study did not have a negative impact on respondents and guaranteed confidentiality. For respondents who were present in the explanation of family research, the signing of the informed concern was carried out by the family, while the respondent who did not have a family signing was conducted by the head of the room .

Data in this study are primary data that obtained directly from the patient's mental disorder. Data collecting is done through observation and interviews as well as questionnaires. Data collection was developed into 3 parts namely demographic data, cognitive ability data and psychomotor ability data. Before fill the questionnaire respondents were first trained to perform cognitive abilities and psychomotor abilities in controlling hallucinations. The questionnaire of cognitive abilities consists of ten (10) questions and the psychomotor ability questionnaire also consists of 10 questions. The questions are how to rebuke hallucinations, chat with other people, scheduled activities, and adhere to taking medication. After the data is collected, data will be processed through 3 stages, the first stage was editing . Researchers will examine the list of questions on the questionnaire, the completeness of answers, writings limitations and relevance of answers. The second stage is coding to clarify the answers from the respondents in the form of numbers by giving numeric marks / codes to each answer. The third stage is analysis data with univariate statistical tests to describe nursing implementation about cognitive abilities and psychomotor abilities of hallucinatory patients . The data presented in the form of a table and the evaluation of the implementation of cognitive abilities and psychomotor abilities assessed through scoring and divided into 3 categories. Score  $\leq 4$  is categorized as less, a score of 5-7 in the category is sufficient, the score of 8-10 is well . This research has ethical clearance from the Research Committee Ethics of Palangka Raya Polytechnic with number of letter : 006B/X/KE.PE/2018.

## RESULTS

The results of research that conducted at Atei Kalawa Mental Hospital Palangka Raya in 2017 displayed in the form of frequency distribution. The results of the study on the description of nursing implementation about cognitive and psychomotor abilities in controlling hallucinations in Atei Kalawa Mental Hospital Palangka Raya, can be seen in the table below.

### 1. Overview of Respondents

Table 1 Distribution of the description of nursing implementation about cognitive and psychomotor abilities of hallucinatory patients in controlling discrimination based on the characteristics of the respondents.

Characteristics of Respondents	Amount (n)	Presentation (%)
Age		
24-35	7	29.9
36-45	9	28.1
45-55	11	34.4
56-65	5	15.6
Gender		
Man	17	53.1
Women	15	46.9
Education		
Elementary school	14	43.8
Junior high school	9	28.1
High school	5	15.6
University	4	12.5
Work		
Civil servants	3	9.4
Private Employee	21	65.6
Entrepreneurship	3	9.4
Student/College	5	15.6
Total	32	100

Table 1 shows the distribution of hallucinatory patients based on age groups, there were more than one-third of the hallucinatory patients at age groups of 46-55 years as many as 11 people (34.4%), and ages 56-65 years were 5 people (15.6%). Distribution of hallucinatory patients based on sex, in the table above it was found that patients with more hallucinations were male with total 17 people (53.1%) compared to female which only amounted to 15 people (46.9%). Distribution of hallucinatory patients based on education in Table 1 above showed that most of the hallucinatory patients only graduated from elementary school as many as 14 people (43.8%), and hallucinatory patients that graduated from University only 4 people (12.5%). Based on patients's job, table 1 showed the following results as 21 hallucinatory patients with private jobs (65.6%), and patients that still a student amounting to 5 people (15.5%).

## 2. An image commonly respondents based on cognitive abilities and psychomotor ability

Table 2 Distribution of cognitive abilities and psychomotor ability based of respondent age, gender, education and jobs

Characteristics of Respondents	Cognitive abilities					Psychomotor ability				
	Less (%)	Sufficient (%)	Well (%)	n	%	Less (%)	Sufficient (%)	Well (%)	n	%
Age										
24-35	14.3	28.6	57.1	7	100	-	28.6	71.4	7	100
36-45	11.1	55.6	33.3	9	100	-	77.8	22.2	9	100
45-55	9.1	63.6	27.3	11	100	9.1	45.5	45.5	11	100
56-65	-	60.0	40.0	5	100	-	40.0	60.0	5	100
Gender										
Man	17.6	41.2	41.2	17	100	5.9	41.2	52.9	17	100
Women	-	66.7	33.3	15	100	-	60.0	40.0	15	100
Education										
Elementary school	14.3	57.1	28.6	14	100	7.1	50.0	42.9	14	100
Junior high school	-	55.6	44.4	9	100	-	66.7	33.3	9	100
High school	-	80.0	20.0	5	100	-	40.0	60.0	5	100
PT	-	25.0	75	4	100	-	25.0	75.0	4	100
Work										
Civil servants	-	66.7	33.3	3	100	-	33.3	66.7	3	100
Private	9.5	57.1	33.3	21	100	4.8	52.4	42.9	21	100
Entrepreneurship	-	66.7	33.3	2	100	-	66.7	33.3	2	100
Student / college student	20.0	20.0	60.0	5	100	-	40.0	60.0	5	100

From the table above, the percentage of respondents' cognitive abilities based on the age of the well category is in the range of 24-35 years, which is 57.1%, while the psychomotor abilities are well at 71.4%, in the age range of 45-55 years. These results indicate that the client's ability to control hallucinations is better at older adulthood, old adulthood is a transition age in both physical and psychological functions which is actually better at other ages. Because older adults have more experience in solving problems.

Variables of cognitive ability based on sex between well and sufficient categories showed the same amount of 41.2%, while the variable psychomotor abilities showed that the highest in the majority of female sexes, was sufficient at 60.0%. These results show that the cognitive and psychomotor abilities of hallucinatory patients between women and men are the same.

The sufficiently cognitive ability of hallucinatory patients in the category of high school education as much as 80% while psychomotor ability in the category is sufficient at 60%.

Variables of cognitive abilities and psychomotor abilities based on work indicate that civil servants' work is in the sufficient category of 66.7%. This showed that work that raises high levels of stress can trigger affect the mind that causes problems can not be overcome, thus affecting a broad scope that has the opportunity to cause hallucinations.

### 3. *Implementation of nursing overview of cognitive ability and ability to control hallucinations psychomotor*

Data on the description of nursing implementation about psychomotor and cognitive abilities in controlling hallucinations in hallucinatory patients includes the ability of the patient to explain how to rebuke the hallucinations, the benefits of conversing with other people, the activities carried out and the benefits of taking medication / obediently taking medication as shown in table 3 below

Table 3. Distribution of nursing implementation descriptions of cognitive abilities and psychomotor abilities in controlling hallucinations

Nursing Implementation	Cognitive and psychomotor abilities						Total	
	Less		Sufficient		Well		n	%
	n	%	n	%	n	%		
Rebuke hallucinations	3	9.3	17	53.1	12	37.5	32	100
Chat with other people	2	6.3	19	59.4	11	34.3	32	100
Perform scheduled activities	5	15.6	19	59.4	8	25	32	100
Obediently taking medication	5	21.8	8	25	19	59.4	32	100

In table 3 above, the presentation of nursing implementation on cognitive abilities and psychomotor abilities of patients in controlling hallucinations in sufficient (53,1%), conversing with other people and conducting scheduled activities (59,4%, respectively), while for the implementation of compliance, the medication is in the well category which is equal to 19 people (59,4%).

## DISCUSSION

### 1. *General description of Respondents based on cognitive abilities and psychomotor abilities*

Based on the research that has conducted on the patients with hallucinations that hospitalized in Kalawa Atei Mental Hospitals Palangkaraya that most of the patients were in the age of 46-55 years as many as 11 people (34, 4%). Respondents' age are in an adult age range, at an age very mature in terms of life experience. In general, the higher the age of people, they are become more independent and more experience and also can improve their communication skills. This in line with theory revealed by Stuart and Laraia in Caroline 2008 which suggests that age is related to variations in stressors in life, sources of support and coping skills in dealing with problems. Age also affects someone based on life experiences that have been passed, the higher the age the ability to overcome problems becomes better [7].

The general description of respondents in nursing implementation about cognitive and psychomotor abilities of hallucinatory patients in controlling hallucinations based on gender was categorized into two groups, namely male and female, in the table above it was found that patients with more hallucinations were male, amounting to 17 people (53,1%) compared to female which only amounted to 15 people (46,9%). . Expressing that women and men have the same risk of suffering from severe mental disorders. However, the severity of severe mental disorders was greater in men, so men were more hospitalized Men experiencing hallucinations more than women because men tend to experience changes in the role and decreased social interaction, job loss, alcohol withdrawal and cocaine intoxication, which triggers hallucinations to happen. [8]. These results do not agree with Kaplan & Sadock which states that the prevalence of the incidence of mental disorders in male and female sexes is the same, but shows differences in the onset and course of the disease. Men have an earlier onset of disease than women [9].

The result of the study showed that the average client has a low education. The low level of education of a person will make it difficult for someone to understand the problems that occur and can receive the knowledge gained. The ideal is that the higher the level of education, the better the knowledge. A low level of knowledge from the respondent will influence how to think. In this study the researcher found that one's cognitive and psychomotor abilities are not solely due to education, but there are other things that need to be observed, namely the frequency of someone getting information and training that is done repeatedly.

The variable description of nursing implementation about cognitive and psychomotor abilities of hallucinatory patients in controlling hallucinations based on the work in the result showed that the highest number is private employment of 21 people (65.6%). Work is closely related to one's economic status. Low income and not even work create unhealthy socio-economic conditions that can affect the mind that cause problems that cannot be overcome. Job problems can occur due to the breakdown of work relationships, not suitable for work and work that is too much can trigger the risk of developing mental disorders. Disorders of sensory hallucinations are pervasive diseases that affect the broad scope of psychological processes, including cognition, affect, and behavior, which can occur because of the enormous economic pressures on daily necessities that make people try to do any work that profitable, which can meet their needs. This pressure will be even greater if in the work only the benefits are small while the necessities of life are getting bigger. This is what makes a person difficult to be maintained and can be psychologically disturbed, which gradually can not be overcome if it can cause mental disorders.

## ***2. An overview of cognitive abilities and psychomotor abilities***

Based on the results of research that has been carried out on the hallucinatory patients, it showed that patients with hallucinations mostly cognitive abilities and psychomotor abilities are in a sufficient category but the points analyzed included the implementation of hallucinations rebuke, conversing with others, more in the sufficient category, as much as 19 people (59,4%). Scheduling activities also showed that there were 19 people in the sufficient (59,4%), while the implementation of adherence to medication was in the well category as many as 19 people (54,9%). So from the description of the implementation of cognitive abilities and psychomotor abilities of hallucinatory patients, what is still lacking is the implementation of conversations with other people, amounting to 2 people (6,3%).

The table's presentation shows that cognitive abilities in hallucinatory patients are rational thinking abilities including the process of remembering, assessing orientation and perception and paying attention [10], while psychomotor abilities in hallucinatory patients are related to the ability to act and do something after the patient receives the learning experience. Psychomotor ability is a continuation of the results of cognitive abilities [11].

Cognitive ability is the ability to think and provide rationale, including the process of remembering, judging, orientation, perception and paying attention [12]. Cognitive ability is one that is rated in the ability to control the client's hallucination outcomes, cognitive ability were investigated consists of four parts: the client's ability to explained about hallucinations scorn which consisted of explaining hallucinatory contents, hallucinations, frequency of hallucinations, hallucinatory situations, hallucinatory responses, knowing real / no hallucinations, and explanations about how to hallucinate hallucinations, then explaining the use of talking to others, expressing activities carried out, and the benefits of taking medicine properly and correctly.

The results showed that the clients who had been given the implementation of hallucination nursing, the hallucinatory cognitive abilities experienced were able to explain about hallucinatory rebuke, the content and timing of hallucinations. Each group that is dialed can be valued by the client [13]. The implementation of routine and early hallucinatory nursing care strategies carried out by nurses such as rebuking hallucinations and getting acquainted or talking with other people and medication therapy, which are continually trained and repeated, can make the ability to understand, remember and perform

these actions on hallucinations patient be modified / return to normal. This is because there is a neurotransmitter balance in the brain which is the body's central nervous system that starts back to normal. The nervous system functions as a memory store especially in the forebrain, the hippocampus located between the thalamus and the cortex cerebry. So with the implementation of nursing with cognitive and psychomotor abilities, patients with hallucinations can slowly recall and cure their hallucination [11].

With the explanation above it can be described the client's cognitive abilities in controlling hallucinations most clients are able to reveal the hallucinatory content experienced and when hallucinations occur. Psychomotor ability is an ability related to the ability to act or do something after someone has received a certain learning experience [13]. This psychomotor ability is actually a continuation of the results of cognitive abilities (understanding something). Psychomotor ability is also one of the abilities assessed to be able to find out that hallucinatory patients are able to control their hallucinations. In this study, psychomotor abilities consisted of four parts assessed namely hallucinations which consisted of demonstrating how to rebuke hallucination (by doing rebuke exercises, and controlling hallucinations by rebuking), conversing with other people (which consisted of demonstrating talking to other people and doing speaking exercises with other people and invite other people to speak), scheduled activities (such as doing exercises doing daily activities and carrying out activities when hallucinating), and adhering to medications (consisting of patients being able to take their own medicine and requesting medication correctly for nurses and taking medicine well and right). In this study the ability to demonstrate how to hallucinate hallucinations, demonstrating talking to other people is a cognitive and psychomotor ability to show sufficient quality. Thus an illustration of cognitive and psychomotor abilities in controlling hallucinations is that most patients are able to trace and re-demonstrate how to control hallucinations which include: how to scour hallucinations and talk to other people, carry out scheduled activities and adhere to taking medication.

## **CONCLUSION**

Based on the results of research and discussion conducted on the cognitive and psychomotor abilities nursing implementation of hallucinatory patients in controlling hallucinations in the Kalawa Atei Mental Hospital Palangka Raya can be concluded that the ability of hallucinogenic patients to rebuke the hallucination is in the sufficient category as much as 17 people (53.1%), the ability to converse with other people in the sufficient category was 19 people (59.4%), the ability to do scheduled activities was also in the sufficient category was 19 people (59.4%) while the ability to adhere to medication compliance was in the well category as many as 19 people (59.4%). The research only focusing on descriptive research, so the future research can be developed into bivariate, multivariate research in the context of mental nursing care. This research is expected to be evidence based for the development of nursing science, especially mental nursing with problems with perceptual disorders: hallucinations and can be policy recommendations for mental hospitals to implement nursing implementation of cognitive and psychomotor abilities of hallucinatory patients in controlling Hallucinations.

## **CONFLICT OF INTEREST**

The author declares that there is no conflict of interest regarding the publication of this paper

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