

RELATIONSHIP OF NURSE KNOWLEDGE AND ATTITUDE ABOUT NUTRITION SCREENING TO HYPALAL BUMIN EVENT

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Background: Hypoalbuminemia is a condition of low levels of albumin in the blood. Albumin is one of the parameters for malnutrition in patients. According to Meijers et al (2010), 30-50% of patients treated experience malnutrition. The prevalence in Indonesia of malnutrition in patients treated in hospital reaches 20-60%. Malnutrition can be identified from the results of nutritional screening during the initial assessment of inpatients carried out by nurses. This requires a good level of knowledge and a positive attitude about nutritional screening so that you can anticipate hypoalbumin events.

Research Objectives: To determine the relationship between the knowledge and attitudes of nurses regarding nutritional screening to the incidence of hypoalbuminemia in the inpatient room of the Jakarta Islamic Hospital Pondok Kopi for the January 2019 period.

Research Methods: This research method used analytic with a cross-sectional approach. The samples in this study were all nurses on duty in the inpatient rooms of the Jakarta Islamic Hospital Pondok Kopi.

Research Results: Based on the results of the study, it was shown that there was a relationship between the variables of knowledge and attitudes of nurses regarding nutrition screening with the incidence of hypoalbuminemia with Pvalue = 0.014, and Pvalue = 0.016.

Conclusions and Suggestions: From the results of the study it can be concluded that knowledge and attitudes about nutritional screening are associated with the incidence of hypoalbuminemia in patients in the inpatient room of the Jakarta Islamic Hospital Pondok Kopi. **It is suggested** to all nurses to increase their knowledge and positive attitude towards nutrition screening in order to minimize the incidence of hypoalbumin.

Key words: knowledge, attitudes, nutritional screening, and hypoalbuminemia.

INTRODUCTION

Hypoalbuminemia is a condition of low levels of albumin in the blood. Albumin is one of the parameters of malnutrition in patients. According to Meijers et al (2010) 30-50% of patients treated are malnourished. The prevalence in Indonesia of malnutrition in hospitalized patients reaches 20-60%. Malnutrition can be known from the results of nutrition screening during the initial assessment of inpatients conducted by nurses. This requires a certain level of knowledge. good and positive attitudes about nutritional screening so that they can anticipate hypo albumin events. The purpose of this study was to determine the relationship between knowledge and attitudes of nurses about nutritional screening to the incidence of hypoalbumin.

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METHODS

This research method used analytic with a cross-sectional approach. The samples in this study were all nurses on duty in the ANNAS room at the Jakarta Islamic Hospital Pondok Kopi (total sampling). Data collection is through questionnaire results and laboratory supporting data. From these results the data was processed and analyzed using the SPSS 16.0 application. Before carrying out data collection, the researcher asked for approval from the nurse who was the research respondent.

RESULTS

a. Univariate Analysis

Based on the results of data processing carried out by researchers, they are as follows:

Table 1. Frequency distribution of nurses' knowledge about nutritional screening in the ANNAS ward at Islamic Hospital Jakarta Pondok Kopi for the 2019 period

No	Knowledge of Nutrition Screening	Frequency	Percentage
1	Good	37	77,0%
2	Enough	8	16,7%
3	Not enough	3	6,3%
Amount		48	100%

Table 2. Frequency Distribution of Nurses' Attitudes About Nutrition Screening in the ANNAS Room of the Jakarta Islamic Hospital Pondok Kopi Period 2019

No	Attitude	Frequency	Percentage
1	Pos	31	64,6%
2	Neg	17	35,4%
Amount		48	100,0

Table 3. Frequency distribution of hypoalbumin incidence rates in the ANNAS room at Islamic Hospital Jakarta Pondok Kopi for the 2019 period

No	Nutrition Screening Results	Frequency	Percentage
1	No Albumin (> 3.5 mg/dl)	18	37,5
2	Hypo Albumin (\leq 3.5 mg/dl)	30	62,5
Amount		48	100,0

Based on the results of the bivariate test, the following results were obtained:

Table 4. The Relationship between Knowledge and Hypoalbumin Incidents in the ANNAS room at Islamic Hospital Jakarta Pondok Kopi for the January 2019 period

No	Knowledge	Nutrition Screening Results				Total		OR	P value
		No Albumin		Hypo Albumin					
		N	%	n	%	n	%		
1	Good	18	48,6%	19	51,4%	37	100%	0.032	0,014
2	Enough	0	0%	8	100 %	8	100%		
3	Not enough	0	0 %	3	100 %	3	100%		
		18	37,5%	30	62,5%	48	100%		

Table 5. The Relationship between Attitude and Hypoalbumin Incidents in the ANNAS room at Islamic Hospital Jakarta Pondok Kopi for the January 2019 period

No	Attitude	Nutrition Screening Results				Nutrition Screening Results		OR	P value
		No Albumin		No Albumin		Nutrition Screening Results			
		N	%	n	%	n	%		
1	Positive	16	51,6%	15	48,,4%	31	100%	8(1,6 – 41,0)	0,016
2	Negative	2	11,8%	15	88,2 %	17	100%		
		18	37,5%	30	62,5%	48	100%		

Based on the table above, it can be seen that the results of the bivariate test between nurses' knowledge and the incidence of hypoalbumin showed good knowledge regarding the incidence of hypoalbumin, namely No Albumin, there were 18 people (48.6%) while those with sufficient knowledge regarding the incidence of hypoalbumin were 8 people (100%), and those who with less knowledge and the incidence of hypoalbumin there were 3 people (100%). From the results of bivariate analysis, the P value = 0.014 ($\alpha = <0.050$). Thus, it can be said that there is a significant relationship between nurses' knowledge about screening and the incidence of hypoalbumin. .

From the results of the bivariate test between attitude and the incidence of hypoalbumin, it was found that the attitude of nurses was positive with the incidence of not hypoalbumin being 16 people (51.6%), while the incidence of hypoalbumin was 15 people (48.4%). From the results of bivariate analysis, the P value = 0.016 ($\alpha = <0.05$). Thus, it can be said that there is a significant relationship between nurses'

attitudes and the incidence of hypoalbumin. The Odd Ratio (OR) value is 8 (1.6 – 41.0) with a lower limit of 1.6 and an upper limit of 41.0.

DISCUSSION

Variate Analysis

Knowledge

Based on the research results obtained regarding nurses' knowledge about nutritional screening, 37 people (77%) had good knowledge. Nurses' knowledge about nutritional screening is influenced by the nurses' experience and interest in seeking information about nutritional screening and understanding the signs that someone is at risk of developing hypoalbumin. Apart from that, the good knowledge of nurses is due to the large number of respondents who have a sufficient level of education and work experience of more than 20 years. The level of education and experience also determines whether it is easy for someone to absorb and understand the information they obtain. In general, the older a person is, the more mature their thinking and the more experience they gain

Attitude

Based on the results of the research that has been done, it was found that the attitudes of the respondents to the hypoalbumin incident had the most positive attitudes, namely out of 48 respondents there were 31 people (64.4%). This was indicated by the ability of the respondents to answer well to statements about hypoalbumin. This is due to the large number of respondents who have a diploma education level and are aged ≥ 40 years, because the more mature the individual, the better the individual is in responding to the existing situation. This also makes the respondents have a lot of experience in dealing with patients with hypoalbumin. On the other hand, 17 respondents (35.4%) had a negative attitude. This is due to a lack of awareness of the results of nutritional screening. There were some respondents who did not follow up on the results of their nutritional screening by collaborating with the nutrition team and doctors.

Relationship of knowledge and attitudes about nutritional screening to the incidence of hypoalbumin.

Based on the results of the study, it was shown that in respondents who had a good level of knowledge, as many as 37 people, there were 19 people (51.4%) patients who were at risk of malnutrition experiencing hypoalbumin events and 18 people (48.6%) patients who were at risk of malnutrition did not experience hypoalbumin. Meanwhile, there were 8 respondents who had a sufficient level of knowledge and all patients whose nutritional screening results were at risk of malnutrition as many as 8 people (100%) experienced hypoalbumin. There were 3 respondents who had less knowledge and all patients (100%) who underwent nutritional screening experienced hypoalbumin. From the researcher's analysis based on observations made in the room, it is known that according to the procedures that apply in the room, patients who are at risk of hypoalbumin malnutrition based on the results of the nutritional screening are identified by an asterisk (*) on the patient's board so that at the time of handover all nurses know that the patient is at risk of malnutrition. . In addition, if the nutrition team visits the room, they will know that there are patients who are at risk of malnutrition. But what happens in that room is that many don't do it. Various factors become reasons for nurses not to identify patients who are at risk of malnutrition, including the number of activities

or actions that must be carried out by nurses so that this procedure is forgotten or missed.

In terms of education, it can be concluded that the education level of the respondents in this study ranged from Diploma 3 in Nursing to Bachelor Degree in Nursing. Where the majority of respondents were D3 Nursing graduates, 42 people (87.5%). Based on the existing theory, regarding the education level of the respondents in this study, it is true that the ability of the respondents to receive or understand each experience or when they are given new skills shows quite a clear difference. Where respondents with a Bachelor's level of education are more easily given new skills compared to respondents with a lower level of education. This strongly supports the statement that the higher a person's education level, the easier it is for that person to absorb new knowledge/things or adapt to new things more easily (Notoadmojo, 2018). According to the researchers' analysis, the number of D 3 Nursing graduates in the room greatly influenced their knowledge about nutritional screening. Based on the results of interviews with room nurses before the questionnaire test was carried out, only 2 out of 10 nurses knew about nutrition screening and they were Bachelor of Nursing graduates. This can be an obstacle to the success of nutritional screening. This should be overcome by obtaining knowledge about nutrition screening through formal and informal channels.

Based on the years of service/experience of the respondents, there were 48 people, the majority of respondents, namely as many as 26 people (54%) had experience/work experience of 11-20 years. This of course would affect the respondents' experience in working and the level of knowledge of the respondents. The length of time worked here is of course related to the age of the respondent, where respondents who are already older will of course have more experience and years of service compared to respondents with a younger age. Experience can be used as an effort to gain knowledge by repeating the experience that has been obtained in solving problems encountered in the past. (A. Wawan and Dewi. M, 2016). This is also in accordance with the theoretical concept that the level of one's knowledge is also influenced by the level of experience in work (long tenure). According to the researchers' analysis, the longer the nurse's tenure in the room, the more likely they will find cases of patients with signs of hypoalbumin. From this experience, nurses can learn how to handle patients who show signs of hypoalbumin so that the incidence of hypoalbumin does not get worse. Experience can also teach how to do a good nutrition screening so that it can identify patients who are at risk of hypoalbumin malnutrition. From the identification results, nurses can intervene, namely collaborating with doctors and nutritionists so that the risk of hypoalbumin malnutrition does not occur or hypoalbumin does not get worse.

From all the descriptions above, the researcher concluded that the problem that often occurs in the room with regard to the role of nurses in the nutrition care process is that nurses often do not identify the results of nutritional screening so that hypoalbumin problems can occur. In theory, it is known that the role of nurses in nutrition care after carrying out a nutrition screening in the initial assessment/assessment is to identify the results of the new nutrition screening and then collaborate with doctors and nutritionists. This is as a result of nurses not knowing how to identify the results of nutrition screening according to the applicable procedures and because they often forget to put identification marks on the patient's board, because of the high level of activity. For this reason, good nurse knowledge is needed in carrying out their role in the process of patient nutrition care and teamwork that needs to be improved so that the identification of nutritional screening results is not missed.

The results of attitude research regarding nutritional screening regarding the incidence of hypoalbumin were obtained from 31 respondents who had a positive attitude. 15 people (48.4%) of patients whose nutritional screening results were at risk of malnutrition experienced hypoalbumin and 16 people (51.6%) did not experience hypoalbumin. Meanwhile, 17 respondents Those who had a negative attitude were 15 people (88.2%) whose nutritional screening results were at risk of malnutrition experiencing hypoalbumin and 2 people (11.8%) did not experience hypoalbumin.

From the results of this study, it is said that in percentage terms, a positive nurse attitude has an impact on good screening results, namely no hypoalbumin, and vice versa, a negative nurse attitude has an impact on poor screening results, namely hypoalbumin.

From the research results, it was found that OR = 8, meaning that a positive nurse's attitude had 8 times the chance compared to a negative nurse's attitude of a good event, namely no hypoalbumin occurring at the Jakarta Pondok Kopi Islamic Hospital. experiencing hypoalbumin is greater than experiencing hypoalbumin. This is because their good knowledge about nutritional screening has been applied/practiced in their attitude towards their work in carrying out nutritional screening. Meanwhile, negative attitudes are the tendency to act away from, avoid, hate, dislike certain objects, resulting in unfavorable results. Respondents' negative attitudes towards nutritional screening resulted in a greater incidence of hypoalbumin than non-hypoalbumin. This is due to not applying/practicing nutritional screening on patients or less than optimal actions by nurses regarding the results of nutritional screening, such as not collaborating with nutritionists if the results of nutritional screening show that patients are at risk of hypoalbumin malnutrition.

In theory, factors that can influence attitudes include experience, influence of other people, cultural influence, educational institutions and emotional factors (A.Wawan and Dewi.M, 2016). According to researchers, the factors that most dominantly influence respondents' negative attitudes are experiences and emotional factors. Insufficient experience causes the respondent's level of knowledge to be less, thus influencing the attitudes taken. Meanwhile, the emotional factor is in accordance with the theory put forward by Thomas and Znaniecki (quoted by A.Wawan and Dewi.M, 2016) that attitude is a predisposition to carry out or not carry out a certain behavior so that attitude is not just a psychological condition but attitude is more of a process of awareness (awareness).) which is individual in nature. Besides that, attitudes are also influenced by three components, namely the cognitive/perceptual component, the affective/emotional component and the conactive/behavioral component for action.

Based on the researcher's analysis, the attitude of some nurses in the room was influenced by cognitive or perceptual components, namely the perception of nurses who said that the problem of nutrition screening was part of a nutritionist's job, not a nurse's job. Besides that, the affective or emotional component also influences the nurse's attitude where the component is related to a sense of pleasure in a job. There are some nurses who like to do their job in the nutrition care process but there are also nurses who don't like their job in this nutrition care process. The conactive component also plays a role in the nurse's tendency to act towards a job. There are some nurses who carry out their roles in the nutrition care process well, namely carrying out nutrition screening, identifying the results of nutrition screening and collaborating with the nutrition team, both doctors and nutritionists. However, there are also nurses who carry out their duties only up to the stage of carrying out nutrition screening but do not identify the results of the nutrition screening, let alone collaborate with other nutrition teams, namely doctors

and nutritionists. This is what happens most in the room. In addition to all the reasons above, there are other obstacles that also play a role, namely the ineffectiveness of the nutrition team that has been formed by the Hospital due to a lack of competent enough resources in this regard. The limited human resources resulted in not optimal monitoring of nutritional problems in hospitals so that many cases of malnutrition were not handled properly.

From all the reviews above the researcher concluded that the things that influence nurses' attitudes about nutrition screening towards hypoalbumin incidents are nurses' perceptions that nutrition screening is not a nurse's job, there are nurses who don't like their job in the nutrition care process and there is a tendency for nurses not to do everything its role in the process of providing good nutrition care, namely carrying out nutrition screening, identifying the results of nutrition screening and collaborating with other nutrition teams. In addition, it is necessary to optimize the nutrition team in the hospital.

CONCLUSION

Based on the description above, it can be concluded that there is a significant relationship between nurses' knowledge and attitudes regarding nutritional screening and the incidence of hypoalbumin. Nurses' knowledge needs to be increased through formal and informal education, either through higher levels of education or through attending seminars on nutritional screening. In addition, it is necessary to reactivate the nutrition team at the hospital to anticipate hypoalbumin malnutrition.

REFERENCES

- A.Wawan dan Dewi M, 2016, *Teori dan Pengukuran Pengetahuan dan Sikap,dan Perilaku Manusia*, Nuha Medika , Yogyakarta
- Ida Mardalena, S.Ke, M. Si, 2016, *Modul Bahan Cetak Keperawatan : Ilmu Gizi*, Kementrian Kesehatan RI, Jakarta
- Marina Damajanti,,2014, *Standar Terkini Pelayanan Gizi Rumah Sakit*, Persatuan Ahli Gizi Indonesia (PERSAGI), Yogyakarta
- Nursalam, 2016, *Metodologi Penelitian Ilmu Keperawatan*, Edisi Keempat, Salemba Medika, Jakarta.
- Notoatmodjo, Soekidjo, 2018, *Metodologi Penelitian Kesehatan*, Edisi Ketiga, Rineka Cipta, Jakarta.
- Omega DR Tahun, 2017, *Statistika Untuk Ilmu Kesehatan*, Wahana Resolusi , Yogyakarta.
- Program S1 Keperawatan STIKES Abdi Nusantara, 2017, *Buku Panduan Penulisan Skripsi*, STIKES Abdi Nusantara, Jakarta.
- Peraturan Menteri Kesehatan RI NO. 78 Tahun 2013, *Pedoman Pelayanan Gizi Rumah Sakit (PGRS)*, 2013, Kementrian Kesehatan RI, Jakarta.
- Susetyowati, 2015, *Penerapan Skringing Gizi di Rumah Sakit*, Gajah Mada University Press, Yogyakarta.
- Amit Akirov MD, 2017, *Low Albumin Levels Are Associated with Mortality Risk in Hospitalized Patients*, The American Journal of Medicine, Vol 130, No 12,

- Carey.E and Fletcher,A ,2011, *Knowledge, Attitudes, and Practices in the Provision of Nutritional Care*. British Journal of Nursing 570-574
- Meirina Dwi I, 2017, *Hubungan Faktor Risiko Malnutrisi dan Kadar Albumin Serum terhadap Lama Rawat Inap* , Jurnal Kedokteran Brawijaya
- Miriam Theilla RN1*, Jonathan Cohen2, Pierre Singer3, Chedva Liebman4 and Ilya Kagan5,2016, *The Assessment, Knowledge and Perceived Quality of Nutrition Care amongst Nurses*. Journal of Nutritional Medicine and Diet Care, Israel
- Susetyowati, Hamam Hadi, 2014, *Penerapan Algoritma Proses Asuhan Gizi Terstandar Berbasis Skrining Gizi*, Jurnal Gizi Klinik Indonesia UGM volume 11 no 01, Juli 2014 Halaman 20-30, Yogyakarta.
- Dedison Asahab,SKM, 2016, *Guidlines Nutrition Screening : Gizi Baik Pasien Untuk Pelayanan Yang Bermutu*, diperoleh dari <https://mutupelayanankesehatan.net>, , Yogyakarta
- J. Kondrup, 2012, *ESPEN Guidlines for Nutrition Screening*,diperoleh dari <https://clinicalnutritionjournal.com/article>, Denmark
- Lora Sri Nofi, PGNutr, MNutrDiet, RD, 2016, *Asuhan Gizi Pada Gizi Kurang Dan Gizi Buruk*, diperoleh dari <https://.persagi.com>, Jakarta.
- Raffida, 2015, *Peran Perawat Dalam Asuhan Gizi*, <https://id.scribd.com>, , Jakarta.
- Ruben Peralta MD, 2018, *Hipoalbuminemia*, diperoleh dari <https://www.medscape.com>, Republik Dominika.
- Tjin willy, 2018, *Hipoalbuminemia*,diperoleh dari <https://www.alodokter.com>, Jakarta.
- Zahra Latrobdiba, 2014, *Skrining Gizi*, diperoleh dari <https://www.academiaedu.com>,