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**DETERMINANT OF FAMILY BEHAVIOR IN GIVING A BALANCED MENU INTAKE TO PSYCHOTIC PATIENTS**

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**ABSTRACT**

Background: Psychotic disorders are mental disorders that make patients become disoriented in the flow of thought that results in the inability to care for themselves, including in fulfilling food intake. Moreover, the need for the family involvement in providing a balanced diet intake is very important. However, the high number of nutritional status that is lacking in psychotic patients in the West Kalimantan Provincial Hospital is something that needs to be studied in the fulfillment of food during home treatment.

Research Objectives: To analyze the relationship among patient and family characteristics, knowledge, attitudes, experience of getting nutrition consultation and food security with family behavior in giving a balanced menu intake.

Research Methods: This study was an observational analytic study using quantitative methods with cross sectional design. Next, the subject of the research was 292 families, with a total sample of 58 people. Purposive sampling was used to take sample of the research. Thus, data analysis was performed with the chi-square test and logistic regression test.

Research Results: Statistically, the variables that were significantly related to the family behavior in giving a balanced diet towards Psychotic sufferers were nutritional status / BMI with  $p = 0.026$ , knowledge with  $p = 0.030$  and attitude with  $p = 0.022$ . Attitude variable was the most dominant variable in family behavior in giving a balanced menu intake with a value of  $OR = 2.697$ .

Conclusion: Nutritional status, knowledge and attitude variables are significantly related to family behavior giving a balanced menu intake and the most dominant factor is attitude.

**KEYWORDS:** Psychotic Patients, Family, Balanced Nutrition, Behavior

**1. INTRODUCTION**

Psychotic disorders are mental disorders that show psychotic behavior. This disorder is characterized by hallucinations and clear delusions. This is because there are disturbances both visual and visual perception caused by interference with the working system of the brain.<sup>1</sup> Loss of conscious control impacts ignorance of oneself and experiences forgetfulness in everything including daily eating and drinking. This uncaring attitude results in psychotic patients tending to experience self-care deficits.<sup>2</sup>

The key to successful recovery of psychotic sufferers lies in the family. Therefore, the family's role is to strengthen personality while meeting the psychological needs of family members.<sup>3</sup> Although, the healing process for psychotic sufferers tends to be difficult and time consuming, family behavior in daily life for psychotic patients is crucial for their recovery. Provision of food intake with a balanced menu is a determining factor for the health problems of psychotic sufferers.<sup>4</sup>

Another problem that is often experienced by psychotic sufferers is decreased appetite. If not taken seriously, this situation can cause malnutrition problems. In fact, the family's efforts to pay attention to intake and diet are only limited to feeling full, by ignoring the nutritional value contained in these foods. Next, decreased appetite coupled with bad family behavior in treating psychotic sufferers can affect the degree of health that can be seen from the nutritional status of patients.<sup>5</sup>

Based on medical records of inpatients in the West Kalimantan Province Mental Hospital during 2018 there were 700 mental patients. The number of psychosocial disorders ranks second largest after Schizophrenia mental disorders, which reached 320 people. Meanwhile, from the survey results of the nutritional status of patients who were hospitalized in the West Kalimantan Provincial Mental Hospital during the period of January to September 2018 there were 5 patients with obesity, 42 patients were overweight, 352 patients had normal bodies and the remaining 301 the patient has less weight.

Based on the results of interviews with families there are many complaints from families who are directly in treating patients at home. Psychotic patients often experience delusions and excessive hallucinations. Meanwhile, at the time of relapse, psychotic patients would behave strangely, difficult to manage, emotional, easily offended, difficult to eat, consume dirty food, hallucinate about someone poisoning them so that they did not eat for days, watching certain foods, eating not knowing the time and place and consumed stale food because they felt that the food portion was not enough.

Inadequate family in providing a balanced diet can be a cause of high levels of malnutrition in psychotic patients in RSJ West Kalimantan Province. These factors can affect the mindset of families in applying the practice of feeding a balanced menu in the home environment.<sup>6</sup> With the condition of psychotic sufferers who have high dependence on other family members, it is hoped that they will also get a balanced diet with food to improve nutritional status and prevent complications from other diseases.<sup>7</sup>

Regarding to the problems above, family behavior in providing balanced food intake to Psychotic sufferers in maintaining the nutritional status of Psychotic sufferers is influenced by internal and external factors. The aim of this study is to describe and analyze the determinants of family behavior in providing a balanced menu to family members who suffer from Psychotic illnesses.

## 2. MATERIALS AND RESEARCH METHODS

The Explanatory research survey was used in this study to see the relationship between variables through testing the hypothesis. Next, the research belongs to the type of quantitative research that was analyzing factors that influence family behavior in providing a balanced menu to family members who suffer from psychotic illnesses. Furthermore, The research was carried out using chcross sectional aproach because the study was conducted on individuals from a single population without a comparison group and carried out at one time and together. This study also purposes to study the dynamics of the correlation between risk factors that affect the nutritional status of psychotic patients in the Outpatient Unit of the Mental Hospital of West Kalimantan Province by conducting an observational approach. The primary data collection method used the survey method through a questionnaire as a guide in structured interviews.

The target population in this study was the families of psychotic patients who did outpatient care in the West Kalimantan Province mental hospital for psychotic patients treated at home with a population of 292 people. The number of samples is calculated using the Arikunto formula, if the population reaches a number above 100, then the sample size used is 10%, 20%, 30% and so on. The number of samples determined by researchers is 30% of the total population is 58 respondents. The sampling technique used a purposive sampling technique that was based on the(judgment) of the researcher regarding to anyone who was suitable (meets the requirements) to be sampled with certain criteria. The dependent variable in this study was the family behavior of psychotic patients in providing food intake with a balanced menu with independent variables were the characteristics of psychotic patients (age, sex, education, frequency of hospitalization, nutritional status, food recall 1 and 2 days); family characteristics of psychotic patients (age, education, occupation, income, relationship with sufferers, length of stay and length of interaction); respondent's knowledge of balanced menus; the respondent's attitude towards the behavior of fulfilling a balanced menu; respondent's experience in getting a nutrition consultation; family food security. The results of the study were analyzed in a bivariate and multivariate manner. Moreover, bivariate analysis was used to test the relationship between variables using the chi-square test. Then, multivriat analysis was used to test together between variables using logistic regression test.

## 3. RESULTS AND DISCUSSION

### 3.1. Characteristics of Psychotic Patients

Based on table 1 showed that most patients aged 18-40 years by 72.4%. Psychotic patients with a younger age usually cause symptoms that are not typical, can develop quickly, show a more severe disease course, and lead to a worse prognosis.<sup>8</sup> The majority of sufferers were male by 62.1%. This can occur due to the onset of psychosis earlier in men than in women. Some of the causes of the emergence of psychotic symptoms are a history of medication, use of additives, smoking, consuming alcohol, and poor treatment.<sup>9</sup> Most psychotic sufferers are from Singkawang City, which is 17.2%. Singkawang City is the location where the mental hospital is located so that many sufferers come from the city.

**Table 1. Characteristics of Psychotic Patients and Relationships with Family Behavior Providing Balanced Menu Intake**

Characteristic	Category	Total		p value
		N	%	
Age	18-40 Years	42	72,4	0,544
	41-54 Years	16	27,6	
	55-65 Years	0	0,0	
Sex	Male	36	62,1	1,000
	Female	22	37,9	
Adress	Pontianak	6	10,3	1,000
	Bengkayang	5	8,6	
	Ketapang	3	5,2	
	Kubu Raya	1	1,7	
	Mempawah	6	10,3	
	Pahauman	1	1,7	
	Pemangkat	1	1,7	
	Putusibau	4	6,9	
	Sambas	7	12,1	
	Sei Duri	4	6,9	
	Sei Pinyuh	1	1,7	
	Sekadau	2	3,4	
	Singkawang	10	17,2	
	Sintang	7	12,1	
Education	Not	11	19,0	0,066
	Completed of Elementary School	12	20,7	
	Completed od Junior High School	14	24,1	
	Completed of Senior High School	18	31,0	
	Completed of College	3	5,2	
Frequency of Hospitalization	Never	3	5,2	0,277
	1-5 Times	14	24,1	
	6-10 Times	32	55,2	
	>10 Times	9	15,5	
Body Mass Index (BMT)	Underweight	37	63,8	0,026
	Normal	21	36,2	
	Overweight	0	0,0	
	Obesity	0	0,0	
Food Recall 1 Day	Calorie Less	22	37,9	0,614
	Calorie Balance	22	37,9	
	Calorie Excessive	14	24,1	

Food Recall 2 Day	Calorie Less	11	19,0	0,853
	Calorie Balance	28	48,3	
	Calorie Excessive	19	32,8	

Most of the sufferers had high school education at 31.0%. Psychotics are common in adolescents and early adulthood where individuals are in the most critical phase in life stages.<sup>10</sup> Psychotic patients have the highest frequency of hospitalization for 6-10 times by 55.2%. Factors that influence the recurrence of psychotic sufferers such as poor adherence of patients taking drugs, psychopathological complications, poor patient knowledge about illness, patient work activities, drug abuse, marital status, life events that cause stress and poor relationships between sufferers and families.<sup>11</sup> Characteristics of nutritional status of psychotic patients is underweight by 63.8%. The presence of psychotics triggers unintentional weight loss. Psychotic disorders can cause weight loss due to loss of appetite or lack of family motivation in fulfilling food with balanced nutrition both in buying and preparing food.<sup>12</sup> Food recall the first day, with balanced calories and less calories respectively 37.9% while food recall the second day, with balanced calories there were 48.3%. The method was food recall 24 hour often used and obtained through interviews between survey officers and subjects.<sup>13</sup>

Statistical test resulted state that only the nutritional status (BMI) of psychotic patients had a significant relationship to the family behavior of psychotic patients in providing food intake with a balanced menu. So that the nutritional status of patients can provide influence in family behavior for the fulfillment of balanced nutrition for psychotic patients.

**3.2. Family Characteristics of Psychotic Patients**

Based on table 2 showed that most respondents aged 41-54 years amounted to 72.4%. Many of the age of respondents in the age group 41-54 years due to the majority of respondents were parents of psychotic sufferers.<sup>11</sup> The majority were male by 84.5%. The number of men in this study was more due to the visiting hours of more parents, namely fathers or older brothers.<sup>11</sup> Most sufferers had completed junior high school education at 43.1%. The education category was low so that it had an impact on the ability of families to provide a balanced diet for Psychotic sufferers to be ineffective.<sup>14</sup> Most have jobs as entrepreneurs by 50.0%. The type of work was closely related to the income per capita of a family including the presentation space in the form of food or daily food.<sup>15</sup>

**Table 2. Distribution of Family Characteristics of Psychotic Patients Relationship with Family Behavior Providing Intake of Balanced Menu**

Characteristics	Category	Total		p value
		n	%	
Age	18-40 years	7	12,1	0,115
	41-54 years	42	72,4	
	55-65 years	9	15,5	
Sex	Male	49	84,5	0,372
	Female	9	15,5	
Education	Not	0	0,0	0,976
	Completed of Elementary School	10	17,2	
	Completed od Junior High School	25	43,1	
	Completed of Senior High School	17	29,3	
	Completed of College	6	10,3	
Job	Unemployee	4	6,9	0,401
	Civil Servants	8	13,8	
	Private	17	29,3	
	Entrepreneurs	29	50,0	
Income	>Rp 2.211.266,-	19	32,8	0,577
	<Rp 2.211.266,-	39	67,2	
Relationship with Psychotic Suffers	Parents	41	70,7	0,699
	Children	0	0,0	
	Husband/Wife	0	0,0	
	Siblings	17	29,3	
Lenght of Treatment	1-4 years	5	8,6	0,232
	5-10 years	35	60,3	
	>10 years	18	31,0	
Interaction Time	3 hours/day	2	3,4	0,292
	5 hours/day	2	3,4	
	6 hours/day	18	31,0	
	9 hours/day	10	17,2	
	>10 hours/day	26	44,8	

Relationship with the majority of psychotic sufferers was as much as 70.7% parents. The income of respondents ranged <Rp2,211,266, - by 67.2%. The majority of respondents were people who have an income below the applicable UMR. This could affect the family's inability to meet the adequate food of all family members.14 The inability of families to meet the needs of family members who suffer from psychotics could cause anxiety. This situation can threaten the balance of the family so

that effective coping mechanisms can be used by the family to reduce the anxiety.<sup>4</sup> Characteristics of the length of treatment by the majority of respondents were 5-10 years as much as 60.3% and the length of interaction between respondents and psychotic patients was mostly > 10 years by 44.8%. Respondents as families gave more time to interact with psychotic sufferers so they have less time for themselves. This could have an impact on high levels of distress in families who have a long time in interaction with psychotic sufferers.<sup>7</sup>

**3.3. Determinant of Family Behavior of Psychotic Patients Giving Balanced Menu Intake**

Table 3 showed that respondents who did not get family behavior in providing balanced menu intake, the majority had quite good knowledge of 44.8%. Knowledge is the result of human sensing or the result of one's knowing about objects through their senses. Nutrition knowledge is an important basis for changes in nutritional attitudes and behavior. A person's level of nutritional knowledge influences attitudes and behaviors in food selection which will ultimately affect the nutritional state of the individual concerned.<sup>16</sup> The results of this study mentioned that knowledge significantly influences family behavior in providing balanced menu intake with a p value of 0.030 (p value <0.05). The results of this study were in line with research conducted by Widodo in 2009 which examined the relationship between the level of family knowledge about people with mental disorders at home and the level of family acceptance of the frequency of care and food intake at the Central Lawang Hospital and Surabaya Regional General Hospital. The results of this study were there a relationship between the level of family knowledge and the level of family acceptance of people with mental disorders with the frequency of care and food intake.<sup>15</sup>

Respondent data on family attitudes that have family members with psychotic sufferers about behavior in providing a balanced diet showed that the majority of family attitudes were not good at 46.5%. Attitudes were views or feelings accompanied by a tendency to act. The attitude shown by the respondent is the lack of behavior in determining balanced menu intake.<sup>17</sup> Statistically, the attitude variable significantly influences family behavior in providing balanced menu intake with p value of 0.022 (p value <0.05). The results of this study supported the study of Fitri in 2012 showing that there was a relationship between perceptions about mental disorders and family attitudes that have family members of mental disorders to balanced nutritional intake at Surakarta City Hospital.<sup>15</sup>

**Table 3. Bivariate Determinants Behavioral Analysis Delivers Family Balanced Intake Menu**

Variabel	Category	Total		p value
		n	%	
Knowledge	Poor	2	3,4	0,030
	Fair	36	62,1	
	Good	20	34,5	
Attitude	Less	35	60,3	0,022
	Good	23	39,7	



Getting Experience of Nutriion Consultation	Less	29	50.,0	1,000
	Good	29	50,0	
Food Security	Fair	47	81,0	0,385
	Good	11	19,0	

Nutrition consultation is a combination of nutritional knowledge and psychological abilities carried out by nutrition counselors who use food and the nutritional content contained in it as an effort to change eating habits towards better physiological functions, emotions, and condition of sufferers. The majority of respondents who did not get family behavior in providing balanced diet intake had the experience of getting poor nutrition consultation at 32.7%. Statistically has no influence on family behavior in providing balanced menu intake with p value of 1,000 ( $p > 0.05$ ). This research was not in line with what was done by Anik in 2014 which stated that there was a relationship between the implementation of nutritional counseling with satisfaction of satisfaction in the behavior of providing balanced nutrition by having a strong relationship strength because it has a coefficient value  $> 0.05$ . This was different because the factor of past experience can make respondents forget information related to balanced nutrition that had been done before so that it could cause the behavior in fulfilling balanced nutrition to be less.<sup>18</sup> The status of food security in the families of psychotic patients in the Outpatient Unit of the West Kalimantan Provincial Mental Hospital showed varied results, but most were classified as food insecure with a moderate degree of hunger of 58.6%. Statistically, food security had no influence on family behavior in providing balanced menu intake with a p value of 0.385 ( $p > 0.05$ ). This research was different from the research conducted by Devi Eka and Sri Sumarmi showing there was a relationship between the status of household food security with the nutritional status of people with mental disorders with a value of  $p = 0.045$  ( $p < \alpha$ ). Good food security would produce good nutritional security. Nutrition security which was the intake of nutrition and nutritional status was a prerequisite for the formation of healthy individuals. The emergence of malnutrition was an indication of lack of nutritional security.<sup>19</sup>

**Table 4. Multivariate Analysis Behavioral Determinants Menu Family Delivers Balanced Intake**

		Variabel in the Equation							
''		B	S.E	Wald	df	Sig.	Exp (B)	95,0%/C.I.for EXP (B)	
								Lower	Upper
Step 1	IMT	.893	.600	2.213	1	.137	2.443	.753	7.926
	Attitude	.937	.589	2.535	1	.087	2.553	.805	8.093
	Knowledge	-1.074	.882	1.483	1	.223	.342	.061	1.924
	Constant	-1.995	1.564	1.628	1	.202	.136		



Step 2	IMT	.796	.584	1.856	1	.048	2.217	.705	6.970
	Attitude	.992	.580	2.924	1	.034	2.697	.865	8.409
	Constant	-3.180	1.262	6.345	1	.012	0.042		

Table 4 showed the results of the logistic regression multivariate analysis test results obtained that the most influential variable on family behavior providing balanced menu intake was attitude with  $p = 0.034$  ( $p < 0.05$ ). The results of the analysis found that the Odds Ratio (OR) or Exp (B) of the respondent's attitude variable was 2.697, this showed that in families of psychotic patients who have a positive attitude 2.6 times more likely to apply the behavior of giving a balanced diet intake compared to that of families of psychotic patients who has a negative attitude. This study supported the Fishingtyas research in 2016 related to the effectiveness of family support in fulfilling balanced nutritional intake to improve the condition of mental patients in the DR. Sarjido. The results showed that there were differences in the improvement of conditions between patients who were given support and those who were not given support in balanced diet intake. Patients who get good family support have a positive attitude of 4.7 greater in providing a balanced diet for people with mental disorders in home care.<sup>7</sup>

#### 4. CONCLUSION

The results of the study were 20 variables studied, there were 3 variables that were statistically related to family behavior in providing balanced menu intake for psychotic patients, namely nutritional status (BMI), knowledge and attitudes. Based on multivariate test results, it was stated that the most influential factor was attitude. RSJ West Kalimantan Province as a health service center can implement health promotion strategies related to optimal balanced nutrition counseling to families of psychotic patients both during hospitalization and when treatment at home. So that an increase in knowledge and a consistent attitude from the family in providing intake with a balanced menu for Psychotic sufferers that have an impact on improved nutritional status and a home visit for every Psychotic patient who has received home care so that the process of monitoring and evaluation during the healing and care process in continue to be controlled including in meeting the needs in a balanced diet.

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