

Education And Supplementary Food Provision For Tuberculosis Patients At The Merdeka Health Center, Palembang City

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Abstract.

The nutritional status of TB patients is very important because it is a simple clinical sign to see the success of TB therapy. Health education or counseling is one way to change a person's knowledge and attitudes about health and can indirectly affect nutritional status. The assessment method for community service is carried out using lecture and discussion methods. Community service will be held on November 3, 2021, at the Merdeka Health Center in Palembang. The population of this activity is TB patients and drug-taking supervisors (PMO) in the working area of the Merdeka Palembang Health Center. The number of participants is 22 people. The evaluation was carried out by conducting pre-test and post-test to assess the increase in knowledge before and after education/counseling about nutrition in TB patients. The results of community service activities showed that the provision of education significantly affected the knowledge of the nutritional status of patients (p-value <0.05) between patients before being given education and after being given education. Suggestions that can be given are the need for knowledge about the nutrition and diet of TB patients to improve their nutritional status so that treatment can be optimal.

Keywords: TB, Education, Nutrition

I. INTRODUCTION

Tuberculosis (TB) is a contagious infectious disease caused by the bacterium *Mycobacterium tuberculosis*, which can attack various organs, especially the lungs. This disease can affect anyone, especially people with low immunity, old age, users of immunosuppressive drugs, and people with HIV/AIDS. Tuberculosis (TB) is a contagious infectious disease caused by the bacterium *Mycobacterium tuberculosis*, which can attack various organs, especially the lungs. This disease can affect anyone, especially people with low immunity, old age, users of immunosuppressive drugs, and people with HIV/AIDS. The characteristics of groups at risk of TB need to be known in order to increase the rate of case finding and early treatment. Estimates of TB cases decreased after there was a case-finding program for groups at high risk of contracting

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TB. In Indonesia, increasing the Case Detection Rate became an important part of reducing TB cases (Rahmawati and Budiono, 2015).

The level of public health in South Sumatra is quite good, but the high incidence of infectious diseases, especially pulmonary tuberculosis, is still a health problem today. Of the 12 minimum service standards at the Merdeka Health Center in Palembang until December 2020, data on the coverage of pulmonary TB patients had not reached the target of 52.3% (45 people) of 86 people (100%) and the success rate of TB patients (90%). The Merdeka Health Center is located on Jalan Merdeka which is in the center of Palembang city. It has 4 villages, namely 19 Ilir, 22 Ilir, 26 Ilir, and Talang Semut. The total population is 14,588 people spread over four villages. The distribution according to the age group is mostly people who are in the productive age category, namely 15-59 years, which is 6346 people, then the elderly population category (45-59 years old) is 3808 people. On January 29, 2021, there has been training for pulmonary tuberculosis youth cadres which was attended by 10 participants in the Merdeka Health Center area, it is hoped that these adolescent TB cadres will help find TB cases. The achievement of the target for reducing TB cases in the SDGs is the acceleration of Tuberculosis control in Indonesia through quality nutrition services that can accelerate the healing of Tuberculosis.

II. METHODS

The method for community service is carried out using lecture and discussion methods. Community service will be held on November 3, 2021, at the Merdeka Health Center in Palembang. The population of this activity is TB patients and drug-taking supervisors (PMO) in the working area of the Merdeka Palembang Health Center. The number of participants is 22 people. The evaluation was carried out by conducting pre-test and post-test to assess the increase in knowledge before and after education/counseling about nutrition in TB patients.

III. RESULT AND DISCUSSION

This community service is to see a description of the characteristics and nutritional status of pulmonary tuberculosis (pulmonary TB) patients who seek treatment at the Merdeka Health Center in Palembang City. The results of this community service activity were 22 patients with pulmonary tuberculosis (pulmonary TB) at the Merdeka Health Center, Palembang City. The results of the activities are as follows:

Frequency Distribution of Pulmonary TB Patients by Age

The distribution of patients by age is presented in the Table. Of the patients, the highest number of pulmonary TB patients was in the age range of 15-55 years with a total of 17 (77.3%) people. Patients aged > 55 years were 5 (22.7%) people.

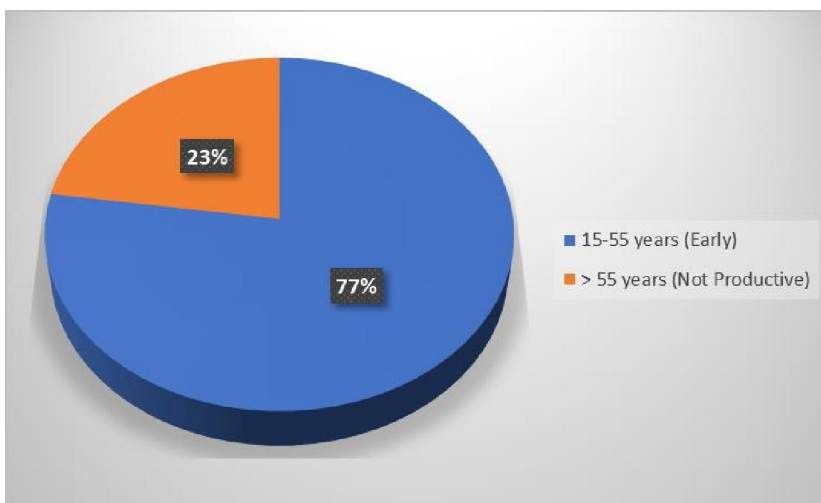


Fig 1. Frequency Distribution of Pulmonary TB Patients by Age

Frequency Distribution of Pulmonary TB Patients by Gender

Based on the analysis, it was found that the number of pulmonary TB patients with male sex was more than the female sex, namely as many as 13 (59.1%) people. Of the 23 patients, 9 (40.9%) were female.

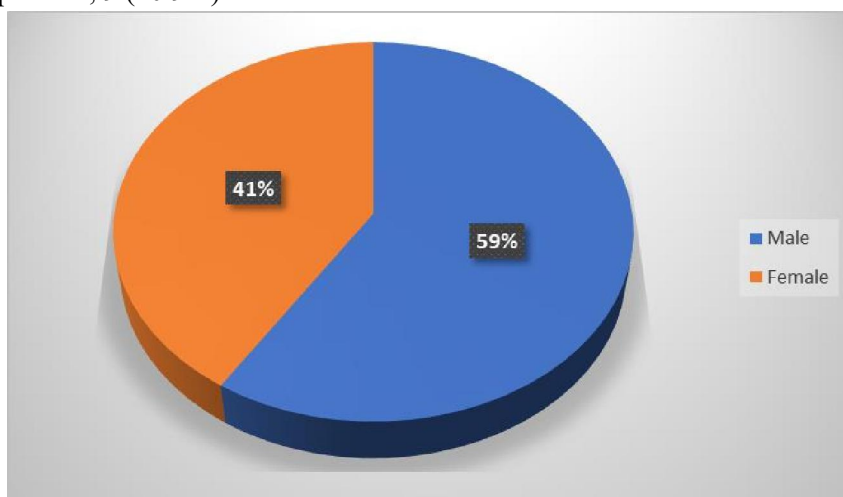


Fig 2. Frequency Distribution of Pulmonary TB Patients by Gender

Frequency Distribution of Pulmonary TB Patients by Nutritional Status

Based on the analysis, it was found that the nutritional status of pulmonary TB patients was norm weight (normal nutrition) more than underweight (undernourished). Of the 22 pulmonary TB patients, 8 (36.4%) patients had poor nutritional status, and the remaining 13 (59.1%) patients had normal nutritional status.

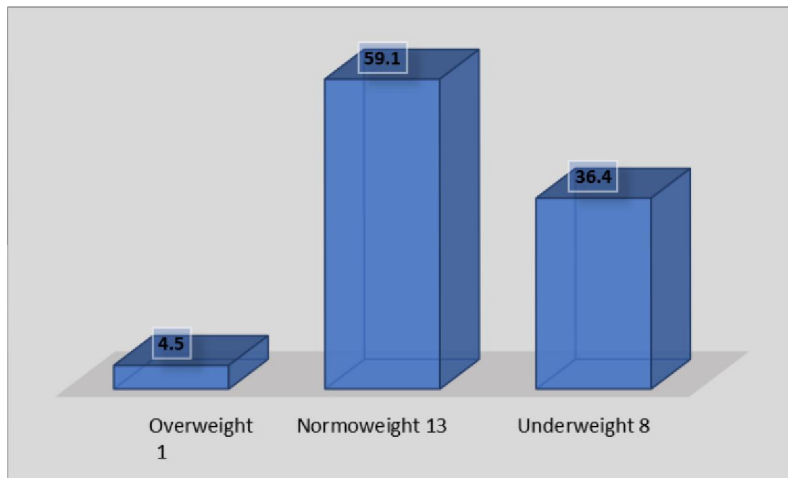


Fig 3. Frequency Distribution of Pulmonary TB Patients by Nutritional Status

Frequency Distribution of Pulmonary TB Patients by BSS

Based on the analysis, it was found that from 22 pulmonary TB patients, 17 (77.3%) patients were non-DM patients and the remaining 5 (22.7%) patients were DM patients.

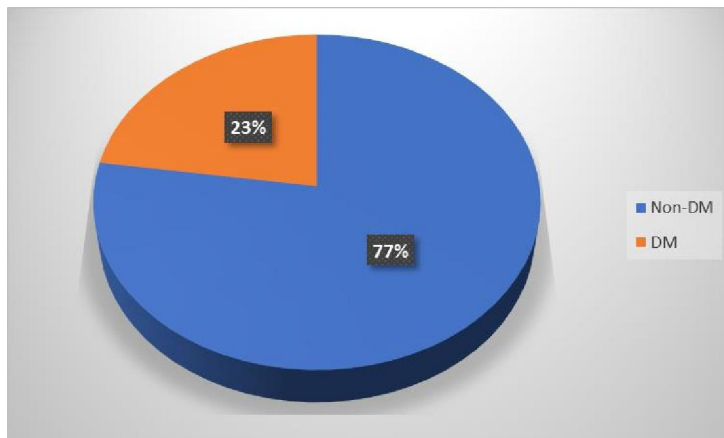


Fig 3. Frequency Distribution of Pulmonary TB Patients by BSS

Distribution of Nutritional Knowledge Based on Nutrition Counseling

Based on the distribution analysis, the data showed that there was a change in knowledge of the research subjects before and after counseling. In the table before counseling, there were 5 (22.7%) patients lacking knowledge and after counseling, only 1 (4.5%) patients had poor knowledge. Before counseling, there were 3 (13.6%) patients who had sufficient knowledge, but after receiving counseling, 1 patient (4.5%). As for good knowledge, there was a significant increase from before counseling was given, namely 14 (63.6%) patients to 20 (90.9%) patients after counseling. This provides information that the implementation of nutritional counseling influences helping to improve understanding of nutrition in pulmonary TB patients.

Table 1. Distribution of Nutritional Knowledge Based on Nutrition Counseling

Nutritional status	Nutrition knowledge			Total
	Not good (<60%)	Enough (60-80%)	Good (>80%)	
Before	5 (22,7%)	3 (13,6%)	14 (63,6%)	22 (100%)
After	1 (4,5%)	1 (4,5%)	20 (90,9%)	22 (100%)

Analysis of Nutritional Knowledge Before and After Giving Counseling

Based on the analysis shows an increase in the minimum value of 33.3 points and the maximum value of 50.0 points. This shows that nutrition counseling has a positive impact on the nutritional knowledge of pulmonary TB patients at the Merdeka Palembang Health Center. The average value also increased before and after being given counseling which was marked by an increase of 9.8 points. The results of the analysis of the influence between two variables, in this case the process of changing nutritional knowledge on research subjects before and after giving nutritional counseling. Wilcoxon test obtained a p-value of 0.017 (p-value <0.05), it can be concluded that there is a significant difference between the pre-test and post-test values after nutritional counseling in TB patients.

Table 2. Analysis of Nutritional Knowledge Before and After Giving Counseling

	n	Mean	SD	Median	Min	Max	*p	**p
Before	22	81,8	21,7	91,6	33,3	100,0	,001	,017
After	22	91,6	12,85	100,0	50,0	100,0	,001	

*p : Normality test Shapiro-Wilk

**p : Wilcoxon test

Discussion

Knowledge is the result of knowing and this occurs after people have sensed a certain object. Based on experience, it turns out that behavior based on knowledge will be more lasting than behavior that is not based on knowledge. Counseling is given to help understand the knowledge of balanced nutrition for TB patients. Nutrition education is very important to increase nutritional knowledge. According to research by Asri K in 2014 stated that patients acknowledge that counseling obtained from nutritionists is very important in continuing the TB treatment process for the health and recovery of pulmonary TB patients. In addition, research conducted by Lorian, Thaha, and Ramdan in 2012 stated that there were differences in knowledge about adherence to treatment for pulmonary TB patients before and after counseling. Nutrition counseling is an interpersonal/two-way communication process between counselor and client to help clients identify, cope and make the right decisions in overcoming the nutritional problems they face.

Adequate nutritional knowledge is expected to change the patient's behavior in choosing the right and nutritious food according to a balanced menu pattern and

according to the needs of pulmonary TB patients. Based on observations on the results of the questionnaire that there are still materials that are not well understood by pulmonary TB patients before counseling and after counseling, namely numbers 7 and 8 about examples of foods that are high in protein and rich in vitamins. Materials that still need to be given more in-depth include examples of high-protein foods and the functions of food sources of energy and building blocks as well as examples of each source of energy. This could be due to the low level of knowledge and lack of understanding of the sufferer himself. Understanding of food sources of energy and builders needs to be emphasized and reminded to patients with pulmonary TB so that people with pulmonary TB can determine what foods are nutritious for consumption. By knowing the function of each energy source along with good food selection, the healing process from pulmonary TB can be faster and good nutritional status achieved.

IV. CONCLUSION

The provision of education in this study affected the understanding of the nutritional status of TB patients significantly between patients before being given education and after being given education as seen from the results of the pretest and posttest that had been carried out. TB patients need to be given knowledge about nutrition and diet to improve their nutritional status so that patient treatment can be optimal.

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