



Effect of Giving Food Hospital, Nutrition Intake and Nutritional Status of Patients Tuberculosis Room in the Lungs General Hospital Dok II Jayapura

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Abstract

It is estimated that there are 8.6 million cases of tuberculosis in 2012. There are 450,000 people who suffer from MDR TB and 170,000 fatalities. These deaths in developing countries are 25% of the mortality of the disease, which may be held prevention. The purpose of this study was to determine the effect of food and nutrition on nutritional status of patients with TB. This type of research is descriptive analytic approach "Cross-sectional Study". The experiment was conducted at room of Lungs Hospital Dok II Jayapura with a sample of the total population of TB patients by the number 46. The results showed that of the 46 samples, both feeding and feeding 76% less 24%. For good nutritional intake and nutrient intake of 30% less 70%. Based on Chi Square test found no effect between feeding and nutritional status of patients ($p = 0.002$), and there is influence between nutrient intake and nutritional status of patients ($p = 0.00$). The food intake of the hospital is one of the factors supporting the nutritional status changes that occur in hospitalized patients in the hospital, where the better nutrition of the hospital, the better the nutritional status changes.

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Counseling and nutritional counseling by a nutritionist in patients and families of patients suffering from tuberculosis of nutritious foods to support and help cure tuberculosis, and for the families of patients who are exposed to tuberculosis, so that the condition and stamina to stay healthy and not easily infected with the same disease.

Keywords: Feeding Hospital; Nutrient intake; nutritional status of patients with tuberculosis (TB).

1. Introduction

Tuberculosis (Tuberculosis) which is known to the public is an infectious disease that is largely caused by the bacteria *Mycobacterium tuberculosis*. Germs usually enter the human body through breathing air into the lungs, then the bacteria can be spread from the lungs to other body parts, through the circulatory system, system of lymphatic channels, through the breath (bronchus) or through direct spread to parts of the body. Other. Tuberculosis diagnosis history starting from the discovery of tuberculosis by Robert Koch in 1882, after the discovery of tuberculosis, began to develop a variety of techniques for the diagnosis of this disease [1]. *Mycobacterium tuberculosis* has infected the world's population, an estimated 8.6 million cases of TB in 2012. Whereas in 2012 there were an estimated 450,000 people who suffer from MDR TB and 170,000 fatalities. In developing countries these deaths constitute 25% of the mortality of the disease, which can actually be held prevention. It is estimated that TB sufferers are in developing countries and according to the WHO mortality from tuberculosis more women than deaths due to pregnancy, childbirth, and postpartum [2]. In Indonesia tuberculosis emerged as the leading cause of death after heart disease and respiratory tract, although the government is attempting to eradicate it. Results of Household Health Survey (Survey) in 1995 shows that Tuberculosis is the third leading cause of death after cardiovascular diseases and respiratory diseases in all age groups and number one of the group of infectious diseases [2]. Data from the Ministry of Health in 2012, said currently there are 400,000 new cases of TB each year with a mortality rate of 61,000 people. Former Minister of Health (Minister) Alm. Endang Rahayu Sedyaningsih said that currently many people are not aware that he had been infected with latent TB germs and such conditions hamper the efforts to eradicate the disease. Director General of Disease Control and Environmental Health, Tjandra Yoga Aditama said that currently no country free of tuberculosis, to the target world free of TB in 2050. There are about 2 billion people in the world who had been infected with TB germs but not to pain. In late 2010, Indonesia has reached 77.3% of the 70% case detection target, and has reached 89.7% treatment success target of 85%, while the death rate from tuberculosis has been successfully reduced more than 50% of the 92 / 100,000 1990 to 27 / 100,000 in 2010 [1].

Indonesia ranks 8th out of 27 countries that have a high burden and priority activities for MDR TB. MDR-TB burden in 27 countries accounted for 85% of the global burden of MDR TB. In countries that are included in this list of minimal estimated that there are 4,000 cases of MDR TB or at least 10% of all new cases of MDR TB. The WHO report estimates that in 2008 cases of MDR tuberculosis in Indonesia by 6427. The figure refers to the estimated number of MDR TB at 2% of new TB cases and 20% of re-treatment TB cases. Expected future drug resistance surveys can provide more accurate information about TB drug resistance. In Papua in 2014 as many as 5,550 cases of TB disease, secretary of the report PHO Papua, dr. Silvanus Sumule. In 2013 for TB control programs as much as 7,327 cases per 100 thousand inhabitants. Antara News Com. The number of cases

is high enough that in turn will have an impact on the number of tuberculosis patients who were hospitalized were quite high. It is quite evident from the hospital data Dok II Jayapura, where the number of cases hospitalized in 2014 due to tuberculosis was 265 people, Report lungs RSU room Dok II Jayapura. Efforts to fulfill the nutritional needs of the patient `substances merupakan one of the undertakings of healing patients. Fulfillment optimal nutrition is very beneficial in reducing the duration of treatment to accelerate the healing process. Also in reducing the occurrence of complications, reduce mortality and improve the nutritional status of patients. So in the process of healing a disease, there are two elements that play an important role, namely medical therapy and dietary therapy (nutritional) [3].

To meet the nutrient supply in accordance with the needs and condition of the patient in order to optimally meet the needs of the patient or by the requirements of that as well as possible the necessary involvement and close collaboration between health care advocates profession (doctors, nurses, pharmacists, and nutritionists). Efforts to fulfill the nutritional needs of patients hospitalized in general carried out by nutrition services through the provision of food or diet. Malnutrition status is one of the factors increasing the risk of infectious diseases include tuberculosis [3, 4, 5].

2. Materials and Methods

2.1 Types of Research

This research is a descriptive analytic with Cross Sectional Study ie every variable observed together.

2.2 Location Research.

The study was conducted at room Lungs Hospital Dok II Jayapura.

2.3 Time Research.

The study was conducted during a period of 3 months ie from June to August 2015.

D. Population and sample.

1. The population is all patients treated room of lungs RSU Dok II Jayapura totaling 46 people in June - August 2015.

2. Sample is the total population of patients suffering from tuberculosis numbered 46 people and hospitalized in the room Lungs Hospital Dok II Jayapura in June - August 2015.

E. Type collection, processing, presentation and analysis of data.

1. Data Types.

a. Primary data.

Data name, age, sex, nutrition, weight, height, and feeding is taken at the time of the study.

2. Data Analysis.

Hypothesis testing is done by calculating the statistical test Chi Square of the variables studied. Based on the distribution of the number (frequency) interpretation is limited to the presence or absence of a relationship between two variables.

The formula used is:

$$X = (O_i - E_i)^2$$

E_i

O_i = Frequency observed.

E_i = the expected frequency.

Assessment:

H_0 accepted, if X^2 count is greater than or equal to X^2 theoretical at 0.05, meaning there is no relationship.

H_0 is rejected, when X^2 count is smaller than the X theoretical at 0.05, meaning there is no relationship.

3. Results and Discussion

From the results of data processing that has been performed on 46 samples of the observed results of the study are presented as follows.

a. Feeding the hospital.

That of the 46 samples contained 35 samples (76%) the provision of hospital food is good and 11 samples (24%) hospital feeding less.

b. Nutrient intake.

That of the 46 samples, there were 14 samples (30%) good energy intake, and 32 samples (70%) less nutritional intake.

c. Nutritional Status.

In determining the nutritional status where samples using anthropometric indices and compared with a limit of IMT (Body Mass Index). Showed that of the 46 samples studied contained 14 samples (30%) had a good nutritional status, and 32 samples (70%) have less nutritional status.

d. Effect of hospital food and nutrition status.

Can be drawn from 46 patients with good feeding as many as 35 patients, feeding approximately 11 patients. Of the 46 patients, good nutritional status as many as 14 patients and less nutritional status of 32 patients. Contingential coefficient of the test results showed $p = 0.002 < 0.05$ then H_0 is rejected so that it can be concluded that there is influence between feeding and nutritional status [7, 8].

e. Effect of nutrient intake and nutritional status.

Can be drawn from 46 patients, a good intake of a total of 14 patients, and less intake of 32 patients. Of the 46 patients with good nutritional status of as many as 14 patients and less nutritional status of 32 patients. Based on the test results showed contingential coefficient $p = 0.00 < 0.05$ then H_0 is rejected so that it can be concluded that there is influence between nutrient intake and nutritional status. [9].

4. Conclusion

1. Feeding the hospital of the 46 samples, 11 samples (24%) feeding less and 35 samples (76%) giving good food.
2. Dietary intake of 46 samples, there were 32 samples (70%) less nutrient intake and 14 samples (30%) good nutritional intake.
3. The nutritional status of patients treated at room lungs 46 samples studied, there were 32 samples (70%) have less nutritional status and 14 samples (30%) had a good nutritional status.
4. There is influence between hospital feeding and nutritional status of patients with TB in the lungs rooms.
5. There is influence between nutrient intake and nutritional status of patients with TB in the lungs rooms.

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