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ABSTRACT

Pulmonary Tuberculosis is a respiratory infectious disease caused by Mycobacterium tuberculosis and is contagious. Symptoms of pulmonary tuberculosis such as bleeding cough, cold sweat at night, shortness of breath and weight decreased. The role of the family in improving the motivation of taking medication such as preparing the medicine, accompanying control and reminding to drinking drug regularly This study aims to determine the relationship of the role of the family with the motivation to take medication in patients with pulmonary tuberculosis in Nganjuk Public Health Center. This type of research uses correlation approach. The number of samples were 38 respondents of pulmonary tuberculosis patients and also their families were obtained by purposive sampling method. Independent variable is family role and dependent variable is drug drinking motivation. The result of statistical test using Spearman Rho test got 0,000 significance value *meaning* p-value < 0,05, it can be concluded that H_0 is rejected so that family role related to medication motivation in pulmonary tuberculosis patient at Nganjuk Public Health Center. The role of the family can increase the motivation to take medication so that it can reduce the risk of drug dropping and resistance to Anti Tuberculosis Drug (ATD) when undergoing treatment Process of pulmonary tuberculosis.

Keywords: Drug Drinking Motivation, Pulmonary Tuberculosis, The Role Of Family.

INTRODUCTION

In this era of globalization, pulmonary tuberculosis is one of the diseases often suffered by the community. Pulmonary tuberculosis is an infectious disease of the respiratory system caused by *Mycobacterium tuberculosis* (Nugroho, 2013). Pulmonary tuberculosis is one of the deadly diseases and if tuberculosis is not treated, it will result in airway obstruction, damage to the pulmonary parenchyma, lung carcinoma and respiratory failure syndrome (Nurfitriana, 2015).

The results of a survey from *the World Health Organization* (2013) show that around 685 million people in the world are diagnosed with pulmonary tuberculosis (WHO, 2013). Basic Health Research Data (2013) Ministry of Health of the Republic of Indonesia, the prevalence of pulmonary tuberculosis in Indonesia is 22.56% of the total population. East Java Province has a prevalence of 12.6% (RISKESDAS, 2013). The results of a preliminary study by the Nganjuk Regency Health Office in 2016 recorded that there were 8,904 people with pulmonary tuberculosis, while in the Nganjuk Health Center in the last 6 months there were 72 patients and 38 of them were still in treatment for category I tuberculosis.

There are various ways that can be done to reduce the failure of pulmonary tuberculosis treatment such as encouraging families who serve as Medication Supervisors (PMO) to supervise and provide motivation to take medication so that it can increase the patient's enthusiasm to recover from tuberculosis (Juwita, 2014).

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The role of the family greatly affects the patient's motivation to consume Anti-Tuberculosis Drugs (OAT) because the family always reminds the patient to take medication regularly so that the patient can recover completely after doing category I treatment for 6 months. This is in accordance with the research of Koyongian *et al* (2015) on the relationship between family role and motivation for treatment in pulmonary tuberculosis patients. This research was conducted in Likupang, North Minahasa with a total of 64 respondents. Motivation has a very large influence on patient healing. This is in accordance with Muna & Soleha's (2014) research on family motivation and social support affecting treatment adherence in pulmonary *tuberculosis* patients.

Based on the background of the above problem, the researcher is interested in conducting a study on "Motivation to Take Medicine Reviewed from the Role of the Family in Pulmonary Tuberculosis (TB) Patients at the Nganjuk Regency Health Center UPTD". This study aims to determine the relationship between Family Role and Motivation to Take Medication in Pulmonary Tuberculosis (TB) Patients at the Nganjuk Regency Health Center UPTD.

METHOD

This study is a quantitative research with a correlation design with *a cross sectional* approach. The population used is all Pulmonary Tuberculosis (TB) patients who have been treated at the Nganjuk Regency Health Center UPTD for the last 6 months as many as 72 people and their families. The sample in this study was 38 respondents with sampling techniques using *purposive sampling*. Data analysis using *the Spearman Rho* statistical test.

RESULT Identification of Family Roles for Pulmonary Tuberculosis Patients at UPTD Nganjuk Health Center

Table 1. The Role of Families for Pulmonary Tuberculosis Patients at UPTD Nganjuk Health Center

| It | Family Role | Frequency | Percentage (%) |
|-----|-------------|-----------|----------------|
| 1 | Good | 11 | 28,95 |
| 2 | Enough | 16 | 42,10 |
| 3 | Less | 11 | 28,95 |
| Sum | | 38 | 100 |

Based on table 1, out of 38 respondents, 11 respondents (28.95%) had family roles, 16 respondents (42.10%) had sufficient family roles, and 11 respondents (28.95%) had insufficient family roles.

Identification of Motivation of Pulmonary Tuberculosis Patients at UPTD Nganjuk Health Center

Table 2. Motivation of Pulmonary Tuberculosis Patients at UPTD Nganjuk Health Center

| It | Motivation | Frequency | Percentage (%) |
|-----|------------|-----------|----------------|
| 1 | Low | 8 | 21,05 |
| 2 | Keep | 14 | 36,84 |
| 3 | Tall | 16 | 42,11 |
| Sum | | 38 | 100 |

Based on table 2, out of 38 respondents, 8 respondents (21.05%) were low motivation, 14 respondents were moderately motivated (36.84%) and 16 respondents were highly motivated (42.11%).

Analysis of the Relationship between Family Role and Motivation of Pulmonary Tuberculosis Patients at UPTD Nganjuk Health Center

Table 3. The Relationship between Family Role and Motivation of Pulmonary Tuberculosis Patients at UPTD Nganjuk Health Center

| It | Statistical Test Results | P - Value |
|----|-----------------------------|-----------|
| 1 | Alfa Cronbach's Family Role | 0.646 |
| 2 | Alfa Cronbach Motivation | 0.724 |
| 3 | Spearman Rho Test Results | 0.000 |

After a validity test using *Pearson's Correlation* and reliability, an *alpha Cronbach* value was obtained for the family role variable, which was 0.646 and motivation 0.724, meaning that the questionnaire used was valid and reliable. The statistical test using the *Spearman Rho* Test obtained a significance value of 0.000, meaning p - value < 0.05 so that H₀ was rejected, meaning that the role of the family was related to the motivation to take medication for pulmonary tuberculosis (TB) patients at the Nganjuk Health Center.

DISCUSSION

The Role of Families of Pulmonary Tuberculosis (TB) Patients at the Nganjuk Health Center

Data obtained during the study from April 2, 2018 to April 12, 2018 showed that the role of the family in the good category was found in 11 respondents (29%), the role of the family in the good category was found in 16 respondents (42%) and the role of the family in the poor category was found in 11 respondents (29%).

A total of 11 respondents who have a good category family role and 16 respondents who have a good category family role always support their family members who suffer from pulmonary tuberculosis to recover immediately by preparing medicines, accompanying patients to take drugs at the health center or hospital along with routine control and supervising patient activities during the pulmonary tuberculosis treatment process. On the other hand, 11 respondents who had a family role in the category were less reasoned that there was no time to always accompany the patient to take medication and take the patient for control because they were too busy with their work. The lack of family role when accompanying the tuberculosis treatment process has a higher risk of failure when undergoing treatment

The age of 31-40 years is an age group that cares about health so that when there is a family member who suffers from pulmonary tuberculosis, he will try to facilitate his family to get treatment in accordance with the disease he suffers from (Subhakti *et al.*, 2015).

Men tend to be quick to respond when there is a family member who suffers from tuberculosis. Men also have more skills in overcoming a health problem because they consider themselves fully responsible to help family members who suffer from pulmonary tuberculosis to recover as soon as possible (Kartikasari *et al.*, 2013).

A person's level of education is related to a positive mindset to try to make a family member who suffers from pulmonary tuberculosis recover. A high level of education will make it easier to understand new knowledge when doctors provide *health education* about pulmonary tuberculosis disease to patients and their families. A good understanding of the information obtained from doctors can be applied with strict supervision of family members suffering from

pulmonary tuberculosis, especially in terms of taking medication, routine control and how to avoid transmission to other family members who often interact with patients (Herawati, 2015).

When patients with pulmonary tuberculosis have begun to be lazy to take medication, the family must continue to accompany the patient until the patient takes medication because if they stop taking medication, they are at great risk of developing resistance to Anti-Tuberculosis Drugs (OAT) or repeating treatment from the beginning. In addition, the family must also remind and escort when it is time to check phlegm at the hospital or health center to find out the development of the condition of pulmonary tuberculosis sufferers while undergoing treatment and if there are other family members who experience symptoms of pulmonary tuberculosis such as coughing up phlegm for more than 2 weeks, cold sweats at night without cause and weight loss should be given health *education* to immediately check yourself at the health center or hospital

Therefore, the role of the family is very important to change lifestyle such as starting to quit smoking, maintaining the cleanliness of the house in addition to supervising the patient to take medication and control regularly during the treatment process. The role of the family is very important in this case in providing support to family members suffering from pulmonary tuberculosis. With support from the family, pulmonary tuberculosis patients will have confidence to recover from their disease so that they will comply with doctor's recommendations such as taking medication and control regularly and will increase the success of pulmonary tuberculosis treatment.

Motivation for Taking Medicine for Pulmonary Tuberculosis (TB) Patients at UPTD Nganjuk Health Center

The data obtained during the study from April 2, 2018 to April 12, 2018 was known that the number of respondents with high motivation was 16 respondents (42%), medium motivation was 14 respondents (37%) and low motivation was 8 respondents (21%).

Respondents who had a sufficient and high motivation to take medication had a reason to be able to recover immediately from pulmonary tuberculosis so that they could return to health and be able to do activities as before suffering from pulmonary tuberculosis, while respondents who had low motivation to take medication had a reason because of the lack of family support for the treatment process that was being undertaken.

Age greatly affects the motivation to take medication because at an age that is still productive to work, a person needs a healthy body condition, especially physical condition. A healthy physical condition is very supportive in carrying out daily activities such as working to provide for herself and her family (Rachmawati & Turniani, 2013).

The last level of education of high school and university (PT) also has a high motivation to take medication because they know that pulmonary tuberculosis can be cured by consuming Anti-Tuberculosis Drugs (OAT) regularly, regular control and doing a healthy lifestyle such as not smoking. The level of education of respondents greatly affects the motivation to take medicine. The sufficient level of education of a respondent makes it easy for a person's mindset to understand new information, in this case information about tuberculosis treatment (Suswati, 2014).

Men tend to have a very strong desire to recover from tuberculosis because men consider themselves as people who are able to face all life problems and as role models for their families, therefore, when men are sick, there is a desire to immediately seek treatment and immediately recover from the disease they suffer from (Sari *et al*, 2014).

Respondents' motivation in consuming Anti-Tuberculosis Drugs (OAT) must continue to be improved so that respondents' behavior in consuming drugs regularly will continue to run until the tuberculosis treatment is completed or the respondent has been declared cured by a doctor. In addition, it is necessary to evaluate the results of consuming Anti-Tuberculosis Drugs (OAT) which aims to prevent respondents from discontinuing drugs so that they can become

resistant to Anti-Tuberculosis Drugs (OAT) which can make the process of curing pulmonary tuberculosis more difficult. High motivation in consuming Anti-Tuberculosis Drugs (OAT) will not only determine the success of treatment but also to meet the expectations of others who provide support so that respondents can recover from pulmonary tuberculosis.

High motivation to take medication will make patients regularly consume Anti-Tuberculosis Drugs (OAT) according to the recommendations of the doctor. The success of pulmonary tuberculosis treatment is highly dependent on the patient's regularity in consuming Anti-Tuberculosis Drugs (OAT), in this case it is related to the patient's motivation to take medication and the patient's confidence to recover from pulmonary tuberculosis.

The Relationship between Family Role and Motivation to Take Medication for Pulmonary Tuberculosis (TB) Patients at UPTD Nganjuk Health Center.

The research conducted from April 2, 2018 to April 12, 2018 obtained data analysis using the *Spearman Rho SPSS for Windows* Statistical Test, which is with *a p-value* or significance of 0.000 with a α of 0.05. Because *the p-value* or significance value is $< \alpha$, H_0 is rejected, meaning that the role of the family is related to the motivation to take medication for pulmonary tuberculosis patients at the Nganjuk Health Center UPTD.

At the time of the study, it was known that out of a total of 38 respondents with pulmonary tuberculosis who were used as a research sample, 8 of them had low motivation to take medication. This is due to several factors such as the lack of family role in providing support in this case, supervision, for example, not preparing drugs that should be taken and not accompanying during control time at health centers and hospitals, and not being able to change an unhealthy lifestyle such as smoking. These things increase the risk of tuberculosis treatment failure.

This role can be applied in the form of support when patients undergo the tuberculosis treatment process, for example preparing drugs that will be taken by the patient, accompanying during control and trying to change the patient's lifestyle to be healthier. Research conducted by Setyorini (2016) on the relationship between family support and adherence to taking Anti-Tuberculosis Drugs (OAT), namely the role of active families as Medication Supervisors (PMO) of patients so that the risk of patients not consuming Anti-Tuberculosis Drugs (OAT) is lower which can reduce pulmonary tuberculosis treatment failure.

Patients' motivation in consuming Anti-Tuberculosis Drugs (OAT) is still relatively low. This is due to the lack of family role, especially support and supervision when patients with pulmonary tuberculosis are undergoing treatment. Research conducted by Kurniawan *et al* (2015) on the factors that affect the motivation to take medication for pulmonary tuberculosis patients when undergoing the tuberculosis treatment process are family support, *self-efficacy* or self-confidence, social support and the role of health workers.

A good family role in caring for pulmonary tuberculosis patients such as preparing drugs, accompanying control and providing continuous *social support* while the patient is undergoing pulmonary tuberculosis treatment will make tuberculosis patients feel cared for by their families so that it can increase the patient's motivation to take Anti-Tuberculosis Drugs (OAT) (Febryanto & Ngapiyem, 2016).

High motivation to take medication is sometimes not supported by a good family role, and vice versa, a good family role but low motivation to take medication from pulmonary tuberculosis sufferers. This is one of the main causes of drug withdrawal in patients with pulmonary tuberculosis who are undergoing treatment. When pulmonary tuberculosis patients undergo treatment, the family must provide support and play an active role in the patient's treatment process so as to increase the patient's motivation in taking Anti-Tuberculosis Drugs (OAT) which can increase the success of treatment and reduce the incidence of drug withdrawal and resistance to Anti-Tuberculosis Drugs (OAT).

The researcher argues that the role of family is related to the motivation to take medication in pulmonary tuberculosis patients, because with the active role of the family to pulmonary tuberculosis patients, it can increase the motivation of patients to take medication regularly so that with this condition, it is likely that respondents with pulmonary tuberculosis have a greater chance of recovery.

CONCLUSION

- 1. Family roles of pulmonary tuberculosis respondents were found to have 11 (29%) respondents with high category family roles, 16 (42%) respondents with sufficient category family roles and 11 (29%) respondents with poor category family roles.
- 2. Motivation of pulmonary tuberculosis respondents was obtained by 16 (42%) respondents had high motivation, 14 (37%) respondents had moderate motivation and 8 (21%) respondents had low motivation in terms of consuming Anti-Tuberculosis Drugs (OAT).
- 3. The research conducted from April 2, 2018 to April 12, 2018 obtained the results of the analysis using the *Spearman Rho* Test with a significance value of 0.000, meaning that the role of the family is related to the motivation to take medication in pulmonary tuberculosis patients at the Nganjuk Health Center UPTD.

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