

The role of family in assisting the recovery of patients suffering from Tuberculosis

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ABSTRACT

Background: Indonesia is one of the countries with a high increase in the number of cases of Tuberculosis (TB). In 2016 the number of new TB cases in Central Java was 118 per 100,000 and increased in 2017 by 132.9 per 100,000 population. Bangetayu Healthcare is one area with a high number of TB cases. The success rate of TB treatment in Bangetayu Healthcare in 2017 is 55% and the increase in 2018 is 80% but has not reached the target. Many factors cause the low success rate of TB treatment; one of them is family factors. **Objective:** To analyze the success of TB treatment in terms of family perceptions. **Methods:** This research is qualitative with descriptive-analytic. This research was conducted in the working area of Bangetayu Healthcare in September to October 2019. Primary data were taken from 2 family members of patients who were declared cured and two family members of patients who were declared failed and confirmed to the healthcare. **Results:** 2 family members of patients who were declared cure explained that they always monitored and reminded them to take medication and accompanied them during the control to Healthcare, and the other two families explained that they were not optimal in supervising taking medication and there was a rush so they could not provide maximum supervision. **Conclusion:** The function of the family in providing motivation and supervision is very influential on medication so that it can increase the success rate of treatment.

Keywords: Family Perception, Tuberculosis, Treatment Success, Bangetayu Healthcare

Introduction

Tuberculosis (TB) is still a global problem, and is the target of the third goal in the Sustainable Development Goals, namely improving health status. According to the World Health Organization (WHO) data, in 2016, TB was ranked as the 10th highest cause of death in the world. Deaths due to Tuberculosis have estimated as many as 1.4 million deaths plus 0.4 million

deaths due to Tuberculosis in people with HIV ^[1]. Indonesia is one of the countries with a high rate of increase in new TB cases. There was an increase in new cases in Central Java in 2016, from 118 per 100,000 population to 132.9 per 100,000 population in 2017. The increase in new cases was accompanied by the failure to achieve TB treatment targets. Thus, increasing the number of TB sufferers in Indonesia ^[2]. Bangetayu Healthcare is one area with a high number of TB cases. Based on data obtained at Bangetayu Healthcare, the treatment success rates for 2017 (55%) and 2018 (80%) did not meet the target of 90%. Factors affecting the success of Tuberculosis treatment include health facilities, patients, families and the community. In 2019, health facilities were not the main factor influencing the failure of TB treatment. The government has provided adequate infrastructure facilities for the screening, inspection, and treatment of TB. ^[3, 4] Patient, family, and community factors are the focus that must be resolved to increase the success of TB treatment. The family is related to

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the success of the patient's treatment because it tends to provide more positive support in the patient's recovery. The family is the closest person to the patient, so it is expected to be able to provide motivation, support both physically and psychologically, and also in terms of funding for treatment for the patient's recovery. Several studies were conducted related to family support and adherence to taking medication for patients to cure TB. In the study mentioned that family support factors in the form of motivation, help in supervising sufferers in taking the medication regularly is related to the patient's recovery [5]. Other research also states that there is a relationship between motivation and the Drop Out (DO) event ($p = 0.01$), a relationship between the role of the *Pengawas Menelan Obat* (PMO) means Medicine Taking Supervisor, and the DO event ($p = 0.001$), the relationship between family support and the DO event ($p = 0.001$) [6]. Most of the research that has been done using a quantitative approach, so it is less able to dig deeper into patient problems. The research will be conducted by researchers using a qualitative approach, so it is expected to reveal more profound phenomena related to the success of TB treatment.

The purpose of this study by analyzing family support for the success of TB treatment is expected to increase the success of TB treatment by strengthening family support for sufferers.

Methods

This research is qualitative research with the descriptive-analytic method. This research was conducted in the working area of Bangetayu Healthcare which was conducted from September to October 2019. The population in this study was 51 informants. The sampling technique used was purposive sampling with inclusion and exclusion criteria. Inclusion criteria were families of TB patients who had recovered and failed treatment and TB patients who recovered and failed treatment with data obtained from Bangetayu Healthcare. The exclusion criteria of this study were TB patients who were accompanied by certain diseases such as TB-HIV, TB-DM, and MDR TB, and patients who refused to be informants so that the samples obtained were four informants, consisting of 2 families of TB patients who were declared cured and two families of patients who were declared failed treatment, and conducted interviews with the person in charge of the TB program from the Bangetayu Healthcare.

Results

This study used a triangulation method, namely TB patients consisting of 2 who failed treatment and two who had succeeded in treatment as well as in-depth interviews with the person in charge of the TB program at the Bangetayu Healthcare in Semarang. In-depth interviews were conducted regarding motivation, supervision of taking medicine, funding and free time given to TB patients.

Table 1. Characteristic of Respondent

Respondents	Age	Gender	Relationship with Sufferers
Informant 1	48	Women	Mother
Informant 2	29	Women	Wife
Informant 3	42	Women	Wife
Informant 4	27	Women	Wife

Informant 1 gives information that always gives encouragement to sufferers and always reminds them to take medicine. Informant 1 explained, "*I always encourage to remind to always take medicine according to the rules until healed.*" Informant 1 also explained that there were no costs incurred by families related to illnesses suffered by their children. Besides, informant one also explained that it was difficult to provide free time to accompany patients to come to the Primary Healthcare but due to their self-awareness to recover so that they were always in control and were not free of drugs. Informant 1 explained, "*if I am not busy, I always accompany, however, if I am busy, he can go alone.*" It is also justified by sufferers that there is a high desire to recover, "*I always take medicine. I am also always reminded never to forget. I also realized that I had to take medicine so I always set the alarm.*"

Informant 2 explains that sufferers are always reminded always to take medicine. Informant 2 explained, "*I always remind you to take medicine until I set the alarm so you do not forget. Sometimes I have to go out of town so I always ask my friends to remind my husband to take medicine.*" Also, informant two always accompanies if the patient has to control healthcare. "*I always accompany my husband to take medicine in healthcare.*"

Informant 3 explained that they were always reminded and motivated, even though patients often went outside the city. Informant 3 explained, "*My husband is away from home, so I reminded him by phone. The medicine that I have to take I send. When my husband returns, I always accompany him to seek treatment at healthcare.*" Patients also always try never to be late taking medicine. "*I am always accompanied by my wife when I go home. When I am out of town, I always come to the nearest healthcare to ask for help.*"

Informant 4 explained that at the beginning of treatment is always reminded and sufferers also have the self-awareness always to take medicine. Informant 4 explained, "*the first time I took medicine, I always reminded her, but because my husband was able to remember it by himself, I just monitored it.*"

The Healthcare explained, "*the first thing to do is to approach the family. If healthcare finds a new case, then we work together with the surveillance officer to visit his house to be given education related to his illness.*" The healthcare also has several cadres whose aim is to assist the Health Ministry and the healthcare to provide information, especially information related to TB. "*Especially it motivates officers to search the environment around his house, if indeed*

he finds a suspect, then we immediately come to his house and report to the healthcare.”

Discussion

Motivation is a crucial factor in helping the success of treatment. The results of this study indicate the existence of positive family motivation that can encourage the success of treatment, and this result is per research that has been done that family support is an essential factor for TB sufferers because it is included in the driving system which can cause peace of mind for sufferers that has people who support and will always be ready to provide help if needed ^[7].

Supervision of taking medication is a driving factor for accuracy in taking medication to achieve successful treatment, the results of this study indicate that supervision of taking medication is essential to support the success of treatment where the families of patients who have recovered (Informants 1 and 2) are very active in conducting supervision taking medication, whereas those who failed treatment (Informants 3 and 4) were less than optimal in supervising. The presence of PMO in the treatment period of pulmonary TB patients is beneficial because the patient's non-compliance with treatment is caused by the lack of consistency of the patient in taking medication, returning control to the primary healthcare, and taking the drug for six months. The PMO serves as a reminder for patients to return to health facilities and motivate patients. If the patient is not compliant in the treatment process, the patient's treatment success rate will decrease ^[8].

Funding is one of the supporting factors for the success of pulmonary tuberculosis treatment; this funding includes financing in the treatment and purchase of tools to protect themselves and others, the results of this study reveal that funding for treatment is entirely free because it is one of the government's programs for the treatment of pulmonary tuberculosis. Research conducted by Erawatyingsih shows that there is an influence between family income and non-compliance with treatment in TB sufferers ^[9].

Free time is described as leisure after all the natural needs have been done. There is more time to do everything according to real desires. Free time in the success of the treatment of Pulmonary Tuberculosis is free time given by the family in delivering during control or free time in taking drugs. The division of functions of family social support is instrumental support including free time, where the family is a source of practical and concrete help. If there is a family member who is sick, the family must provide real help, in this case, TB sufferers need family help ^[10].

Conclusion

This study concludes that family function dramatically influences the success of TB treatment. Family factors assessed include providing motivation, supervision of taking medication,

financing and free time so that if the family factor is good, it can increase the success of TB treatment.

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