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Family And Social Support on Successful Treatment of Pulmonary Tuberculosis Patients: A Cross-Sectional Study

Velia Rahmadhani[1], Agung Setiyadi[1], Nuniek Setyo Wardani[1], Indra Gilang Pamungkas[1]

Nursing Study Program, Faculty of Nursing and Midwifery, Binawan University, Jakarta, Indonesia[1]

Corresponding author:
Name: Agung Setiyadi
Address: Nursing Study Program, Faculty of Nursing and Midwifery, Binawan University, Jakarta, Indonesia
E-mail: agung.setiyadi@binawan.ac.id

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Abstract

Introduction: Eradicating Tuberculosis is one of the government's three main priorities in the health sector, so the success of pulmonary TB treatment really needs to be considered. The family and social environment are the closest things for patients to be able to comply and be successful in carrying out treatment. Objectives: This research aims to assess the relationship between family and social support to successful treatment of pulmonary TB patients. Methods: This study used a cross-sectional design with 72 respondents who had completed TB treatment for 6 months. Results: The results of the study showed that there was a significant relationship between family and social support on the success of pulmonary TB treatment with p-value was 0.005 (p-value < 0.05) and 0.001 (p-value < 0.05). Conclusion: Family and social support have a meaningful relationship. The family and social environment of patients with pulmonary TB must provide support and motivation for the patient to be able to complete the treatment he is receiving.

Keywords:
Family support, Social Support, Treatment outcome, Tuberculosis.

INTRODUCTION

Tuberculosis (TB) is an airborne disease caused by *Mycobacterium tuberculosis*. TB infection can also attack several organs, namely the lungs, kidneys, lymph nodes, etc(Wahdi & Puspitosari, 2021). This is supported by Setyowati (2020) which states that TB is a chronic infectious disease that attacks the lungs, especially lung parenchymal tissue, caused by Mycobacterium Tuberculosis. The incubation period for Mycobacterium Tuberculosis bacteria is 2-10 weeks, with symptoms often appearing 10 weeks after the bacteria enter the body.

The number of pulmonary TB sufferers is quite high both in the world and in Indonesia. World Health Organization (WHO) (2019) said there have been 10.4 million cases of pulmonary TB globally. In Indonesia, Ministry of Health of the Republic of Indonesia (2018) said that the number of new cases 3 reached 420,994 cases. This shows that care and treatment for pulmonary TB need to be carried out.

Eradicating Tuberculosis is one of the government's three main priorities in the health sector. The solution to the TB problem in developing countries has been carried out in the form of an approach through both prevention and treatment. Efforts made, namely breaking the chain of transmission, rapid diagnosis, infection control, and effective treatment are very important. However, in implementation in the field, prevention and successful treatment experienced several obstacles that did not provide maximum results(World Health Organization (WHO), 2019).

Success in treating Tuberculosis is a very important effort and is closely related to the healing process for Tuberculosis patients. One of the determinants of successful management of tuberculosis therapy is patient compliance with the therapy given. Non-compliance with therapy will cause relapse or failure in treatment. The impact will increase the risk of morbidity, mortality, and even drug resistance in both patients and the wider community (Ratna et al., 2017). Several things can cause success in patient treatment.

One of the factors in the success of treatment for TB patients is the people closest to them, namely the family. The family is the person closest to the patient, so the role of family members is very much needed in the treatment process for pulmonary tuberculosis patients. The family must provide support so that the sufferer can complete the treatment until they recover(Tukayo et al., 2020). Apart from family, the social environment is also the closest thing to patients.

Social support can be from friends, neighbors, religious leaders, or community leaders in the patient's area. The role of society can increase the enthusiasm and sense of respect for TB sufferers. Poor social support in the form of stigma can affect the well-being of TB sufferers (Gebreweld et al., 2018). This study aims to assess the relationship between family and social support on the success of pulmonary TB treatment.

METHOD

This research was conducted using a cross-sectional design. The number of respondents used in this research was 72 people. This research uses Total Sampling Technique. Total sampling is a sampling technique where the number of samples is the same as the population. Respondents involved in this study had inclusion criteria such as patients who had completed TB treatment for 6 months and were cooperative. Patients who had an unstable condition and who had not completed treatment for 6 months were not included in the study.

This study used 3 instruments, each of which was used to assess family support, social support, and TB treatment success. The family support instrument uses an instrument prepared by Nasution (2018) with a validity value of 0.84. and the results of the reliability test on the questionnaire were 0.922. The instrument used to assess social support is the Multidimensional Scale of Perceived Social Support), Multidimensional Scale of Perceived Social Support (MSPSS). Questions on both instruments use a Likert scale consisting of strongly disagree, disagree, agree and strongly agree. The instrument used to assess treatment success is reviewed from the TB01 treatment sheet (form provided by the DKI Jakarta Health Department). This research has passed the ethical test number No.005/KEPK-UBN/1/2024 and permit number No.016/SDM/DIKLAT/RSMMA/IX/2023.

RESULT

The table below shows that most respondents were women with a total of 40 people (55.6%) compared to men who only numbered 32 people (44.4%). More than half of respondents received family support for taking TB medication (54.2%). Most respondents had insufficient social support with a figure of 55.6% compared to the number of respondents who were successful in carrying out TB treatment which was 73.6%. This shows that many patients have been successful in undergoing TB treatment. The results of bivariate analysis using chi-square on family support were $p = 0.005 < \alpha$ (0.05) with an Odds Ratio (OR) = 5.011. The results of the Chi-Square test on social support obtained a value of $p = 0.001 < \alpha$ (0.05) with an Odds Ratio (OR) = 11.087.

Table 1. Number of Family Support, Social Support, and Treatment Success (n=72)

Variable		Successful Treatment of Tuberculosis		p-value	Odds Ratio (OR)
		Not successful	Succeed		
Family Support	Does not support	14	19	0.005*	5.011
	Support	5	34		
Social Support	Not enough	17	23	0.001*	11.087
	Good	2	30		

Note: (*) shows significant if p-value < 0,05.
Source: Primary Data, 2024

DISCUSSION

This research shows that there is a significant relationship between family and social support with the success of tuberculosis treatment. The lack of effort made by TB patients regarding the success of treatment can have serious impacts. This has an impact on patients to stop taking medication so that drug-resistant tuberculosis germs can emerge. If this continues to happen and these germs continue to spread, controlling tuberculosis drugs will become increasingly difficult to implement and the death rate will continue to increase due to TB disease (Pakpahan, 2021; Rammang, 2024).

This research is in line with Ma'arif's theory (2012) which states that the better the family's role, the greater the success of treatment and vice versa, if the family's role is worse, the success of treatment will be smaller. Family support is important because the family is very influential in determining the perception of pulmonary TB patients regarding the treatment services they receive. Pulmonary TB is a chronic disease that requires long-term treatment. If family support is given to pulmonary TB patients, it will motivate pulmonary TB patients to comply with their treatment and take the medication given by health workers (Yuli Nurwidia et al., 2022).

Humans are social creatures who cannot live without the help of other people, including TB patients who need other people. Support from other people is what is called social support. Social support greatly influences the quality of life of TB patients, where without social support TB patients tend to feel useless in society and ultimately stop treatment, which ultimately results in them not getting better and worsening their quality of life and the treatment becomes unsuccessful (Pameswari et al., 2016)

One of the benefits of social support is improving an individual's mental and physical health. Social support is in the form of emotional support that comes from friends, family members, and even those who provide health care that helps individuals when they are in trouble(Prameswari, 2018).

CONCLUSION

This research shows a relationship between family and social support on the successful treatment of pulmonary TB patients.

Conflict of Interest

The authors declare no conflict of interest.

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