

The Relationship Between Family Support And Compliance With Routine Control Of Pulmonary TB Patients At UPTD Puskesmas Teluk Dalam Nias Selatan

¹ Syahrul Handoko Nainggolan, ² Yurdina Hulu
^{1,2} Universitas Imelda Medan

ARTICLE INFO

Keywords:
family support, compliance
with routine control,
TB patients. Lung.

Email :
syahrulhandoko88@gmail.com

ABSTRACT

Pulmonary TB or tuberculosis is an infectious disease caused by rod-shaped bacteria, namely *Mycobacterium tuberculosis*. Usually the most commonly infected are the lungs but can affect other organs. The disease can be transmitted from person to person through droplets from people infected with pulmonary TB. Treatment of tuberculosis depends on the patient's knowledge, socioeconomic circumstances as well as support from family. The lack of effort from oneself or lack of support from family for complete treatment will affect patient compliance to undergo brand treatment. The purpose of the study was to determine the relationship between family support and compliance with routine control in TB patients. Lung at UPTD Teluk Dalam Health Center in South Nias in 2022. This study is a quantitative research using a correlation descriptive design with a cross-sectional observation approach. The results of the study showed a positive and significant relationship between Family Support and Adherence to Routine Control in TB Patients. Lung at UPTD Puskesmas Teluk Dalam Nias Selatan result $p = 0.017$. The conclusion of the study is that there is a relationship between family support and adherence to routine control in TB patients. Lung at UPTD Puskesmas Teluk Dalam Nias Selatan.

Copyright © 2023 JUK-Medifa
All rights reserved is Licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License \(CC BY-NC 4.0\)](#)

INTRODUCTION

Pulmonary TB or tuberculosis is an infectious disease caused by rod-shaped bacteria, namely *Mycobacterium tuberculosis*. Usually the most commonly infected are the lungs but can affect other organs. This disease can be transmitted from person to person through droplets from people infected with pulmonary TB (WHO, 2011). Treatment of tuberculosis depends on the patient's knowledge, socioeconomic circumstances as well as support from family. The lack of effort from oneself or lack of support from family to seek treatment completely will affect patient compliance to undergo their treatment (Aditama, 2004).

According to WHO (2012) pulmonary TB deaths in developing countries account for 25% of all deaths, which are actually preventable. It is estimated that 95% of pulmonary TB sufferers are in developing countries, 75% of pulmonary TB sufferers are in the productive age group (15-50 years). The prevalence of Indonesians diagnosed with pulmonary TB by health workers in 2013 was 0.4 percent, with details The five provinces with the highest pulmonary TB are West Java (0.7%), Papua (0.6%), DKI Jakarta (0.6%), Gorontalo (0.5%), Banten (0.4%) and West Papua (0.4%) (Indonesian Basic Health Research, 2013).

Based on the health profile of East Java Province, 41,534 pulmonary TB sufferers were found with details of 22,682 male TB patients and 18,852 female TB sufferers, while the most cities with pulmonary TB sufferers in East Java Province were Surabaya City as many as 4212. The results of a study conducted by Asril (2011) on 30 patients with pulmonary TB showed that from family support factors there were 23 respondents (76.7%) received family support and there were 22 respondents (75.3%) who were quite obedient in treatment, and 8 respondents (26.7%) who were less compliant in treatment. Based on data from the Mojokerto Regency Health Office in 2017, the number of TB

The Relationship Between Family Support And Compliance With Routine Control Of Pulmonary TB Patients At UPTD Puskesmas Teluk Dalam Nias Selatan. Syahrul Handoko Nainggolan, et.al

sufferers was 1090 (65.29%) and the most were in the Kedundung Health Center work area as many as 41 patients.

Based on the medical records of UPTD Puskesmas Teluk Dalam Nias Selatan, data on the number of pulmonary TB patients in 2017 was 33 patients and increased to 41 patients in 2018. The results of a preliminary study conducted at the outpatient UPTD Teluk Dalam South Nias Health Center on 10 pulmonary TB patients obtained data from 6 respondents (60%) stated that families rarely remind when it is time to control or deliver family, while 4 respondents (40%) stated that families always take the time to take control patients to the puskesmas.

Erawaty Ningsih, et al (2009) mentioned that the factors that influence non-adherence to treatment in patients with pulmonary tuberculosis, namely education, knowledge, and family income have a significant effect on non-adherence to treatment in patients with pulmonary TB and the most dominant is the education factor. Of the various factors that cause non-adherence to taking medication for patients with Pulmonary TB, patient and family factors as the main cause of non-adherence to taking medication (Ivanti, 2010). Family social support is the will, participation and ability of the family to provide assistance to one family member who needs good help in terms of problem solving, providing security and increasing self-esteem. The individual receiving the support perceives himself as loved, cared for, and valuable. If individuals are accepted and valued positively, then the individual tends to develop a positive attitude towards oneself and is more accepting and respectful of himself (Niven, 2002 in Handayani, 2011). If family support is not provided properly, the impact that will arise due to the patient stopping taking medication is the emergence of drug-resistant tuberculosis germs. The resistance that occurs will complicate therapy so that the death rate continues to increase due to tuberculosis.

It is necessary to increase knowledge about alternative TB treatments through supervision of taking medication carried out by families. One way that can be done is by providing counseling and training that is expected to improve the knowledge and skills of cadres in the behavior of supervising taking TB drugs (Trisnawati & Rahayuningsih, 2008). So that the family can implement its role properly and can perform its duties as a supervisor of taking medication in patients with pulmonary TB. In the end, it can prevent TB transmission and improve the degree of public health optimally, especially for TB sufferers.

METHOD

This research is a quantitative research aimed at revealing the correlative relationship between the independent variable and the dependent variable and testing based on existing theories. This study uses a cross sectional approach that emphasizes the time of measurement or observation of data on independent variables and dependent variables carried out once at a time. A cross-sectional approach was taken to develop and explain the relationship between family support and adherence to routine control of TB. Lung. Affordable populations are populations that meet research criteria and are usually reachable by researchers from their cohorts. Meanwhile, the target population is a population that meets the sampling criteria and is the target of research at the UPTD Teluk Dalam Health Center in South Nias in 2022 as many as 35 people. The number of samples in this study was 35 people.

Data collection is obtained from respondents through questionnaires that will be conducted with direct interviews with respondents. Data obtained from other parties such as books and data obtained from UPTD Puskesmas Teluk Dalam Nias Selatan. Data obtained from journals, the results of other people's research from the internet that have been published and related to this study.

The variables in this study are independent variables, namely family support and dependent variables, namely compliance with routine control in patients with pulmonary TB. Research

instrument is a tool used to collect data or information that is useful for answering research problems;

1. Family Support

Variables for families were measured using questionnaires. This questionnaire consists of the general identity of respondents including: name, age, gender, education and occupation. The questions consist of 20 questions from 5 components, namely 5 information support questions, 5 instrumental support questions, 5 emotional support questions, and 5 award support questions. By answer choice "Sometimes" means family sometimes supportive. "Never" means the family has never been supportive.

2. Compliance with routine control of TB patients. Lung

Variables for medication adherence were measured using observation sheets. With indicators, patients are said to be compliant if they carry out treatment for 6 months routinely. And it is said to be non-compliant if the patient takes treatment for less than 6 months. A positive question consists of 10 questions. Respondents simply chose yes and no answers. If the answer yes is given a score of 1, if the answer is not given a score of 0.

This study used an analysis of:

1. Univariate is an analysis carried out on each variable from the results of the study. This univariate analysis is to see the frequency distribution of data: age, sex, religion, ethnicity, education, occupation, length of time undergoing hemodialysis.
2. Bivariate is an analysis used to explain the close relationship between two variables that are suspected to have a family support relationship with compliance with routine control in TB patients. Lungs at UPTD Puskesmas Teluk Dalam Nias Selatan." The data obtained is analyzed using a computer.

The measurement results of the two variables studied were collected and processed in the form of tables and exposures. Data with a sample of 35 people with data criteria of all ordinal variables were tested hypothetically using correlation tests to look for relationships between variables. To answer the hypothesis that has been made, interpretation of correlation values is used. Interfaces:

- a. Ho is rejected if the rhoxy value > rtab or p< value 0.05, which means there is a relationship between family support and compliance with routine control in TB patients. Lung at UPTD Puskesmas Teluk Dalam Nias Selatan.
- b. Ho is accepted when rhoxy < rtab or p> value 0.05, which means there is no relationship between family support and compliance with routine control in TB patients. Lung at UPTD Puskesmas Teluk Dalam Nias Selatan.

RESULTS AND DISCUSSION

Univariate Results

Table 1. Distribution Of Respondents' Characteristics Based On Age In Pulmonary TB Patients at UPTD Puskesmas Teluk Dalam Nias Selatan

| No | Characteristics | Frequency | Percentage % |
|--------------|-------------------|-----------|--------------|
| 1 | 26 - 35 years old | 18 | 48,6 |
| 2 | 36-45 years old | 15 | 40,5 |
| 3 | 46-55 years old | 4 | 10,8 |
| Total | | 37 | 100 |

Based on table 1 above, it can be seen that the majority of respondents whose age interval is 26-35 years is 18 people (48.6%), while the minority of respondents whose age interval is 46-55 years is 4 people (10.8%).

The Relationship Between Family Support And Compliance With Routine Control Of Pulmonary TB Patients At UPTD Puskesmas Teluk Dalam Nias Selatan. Syahrul Handoko Nainggolan, et.al

Table 2 Distribution Of Respondents' Characteristics By Sex In Patients With Pulmonary TB at UPTD Puskesmas Teluk Dalam Nias Selatan.

| No | Characteristics | Frequency | Percentage % |
|--------------------|-----------------|-----------|--------------|
| 1 | Man | 29 | 78,4 |
| 2 | Woman | 8 | 21,6 |
| TotalJumlah | | 37 | 100 |

Based on table 2 above, it can be seen that the majority of respondents are men as many as 29 people (78.4%).

Table 3. Distribution Of Respondents' Characteristics Based On Occupation In Patients With Pulmonary TB at UPTD Puskesmas Teluk Dalam Nias Selatan

| No | Characteristics | Frequency | Percentage % |
|--------------|--------------------|-----------|--------------|
| 1 | Civil Servants | 8 | 21,6 |
| 2 | Self-Employed Work | 15 | 40,5 |
| 3 | Farmer | 14 | 37,8 |
| Total | | 37 | 100 |

Based on the 3 above, it can be seen that the majority of respondents based on self-employed work are 15 people (40.5%) while the minority are civil servants as many as 8 people (21.6%).

Table 4. Distribution of Respondents' Characteristics of Family Support in Pulmonary TB Patients at UPTD Puskesmas Teluk Dalam Nias Selatan

| No | Family Support | Frequency | Percentage % |
|--------------|----------------|-----------|--------------|
| 1 | Good | 20 | 54.1 |
| 2 | Bad | 17 | 45.9 |
| Total | | 37 | 100 |

Based on table 4 above, it can be seen that good family support is 20 people (54.1%) and bad family support is 17 people (45.9%)

Table 5. Distribution of Characteristics of Compliance Respondents Conducting routine control on patients with pulmonary TB at UPTD Puskesmas Teluk Dalam Nias Selatan

| No | Low Salt (Sodium) Diet Adherence | Frequency | Percentage % |
|--------------|----------------------------------|-----------|--------------|
| 1 | Obedient | 20 | 54,1 |
| 2 | Disobedient | 17 | 45,9 |
| Total | | 37 | 100 |

Based on table 5. Above can be seen respondents who adhere to a low-salt diet as many as 20 people (54.1%) and respondents who do not comply as many as 17 people (45.9%).

Bivariate Results

Table 6. The relationship between family support and adherence to a low salt (sodium) diet in patients with pulmonary TB at UPTD Puskesmas Teluk Dalam Nias Selatan

| Family Support | Compliance Perform Routine controls | | Total | Chi-Suare |
|----------------|-------------------------------------|-------------|-------|-----------|
| | Obedient | Disobedient | | |

The Relationship Between Family Support And Compliance With Routine Control Of Pulmonary TB Patients At UPTD Puskesmas Teluk Dalam Nias Selatan. Syahrul Handoko Nainggolan, et.al

| | | | | |
|--------------|-----------|-----------|-----------|-------|
| Good | 15 | 5 | 20 | |
| Bad | 6 | 11 | 17 | 0.017 |
| Total | 21 | 16 | 37 | |

From the results of the analysis using the SPSS system Chi-Square test showed that there was a positive and significant relationship between family support and pulmonary TB patients at UPTD Teluk Dalam South Nias Health Center with a result of $p = 0.017$, so it can be concluded that H_a accepted that there is a meaningful relationship between family support and compliance with routine control.

Discussion

The relationship between family support and compliance with routine control of pulmonary TB patients at UPTD Puskesmas Teluk Dalam Nias Selatan

From the results of the analysis using the SPSS system, the Chi-Square test showed that there was a positive and significant relationship between compliance with routine control in patients with B.Lung at UPTD Puskesmas Teluk Dalam Nias Selatan with the result $p = 0.017$, so it can be concluded that H_a accepted that there is a significant relationship between compliance with routine control of pulmonary TB patients at UPTD Puskesmas Teluk Dalam Nias Selatan.

The results of the 2020 chandra study showed that of the 18 respondents who had less family support, there were 18 respondents who were not compliant in undergoing treatment control. While in the 15 respondents who had good family support, there were 11 respondents who were obedient in undergoing treatment control. Based on the data from the coefficient contingency test results showed the results of $p = 0.022$, $\alpha = 0.05$, so that $p < \alpha$ then H_0 was rejected and H_1 was accepted so that there was a relationship between family support and compliance with pulmonary TB treatment control at the Kedusun Health Center.

Suryanto, E., (2010) mentioned that the factors that influence non-adherence to treatment in patients with pulmonary tuberculosis, namely education, knowledge, and family income have a significant effect on non-adherence to treatment in patients with pulmonary TB and the most dominant is the education factor. Of the various factors that cause non-adherence to taking medication for patients with pulmonary TB, patient and family factors as the main cause of non-adherence to taking medication (Ivanti, 2010). Family social support is the will, participation and ability of the family to provide assistance to one family member who needs good help in terms of problem solving, providing security and increasing self-esteem. The individual receiving the support perceives himself as loved, cared for, and valuable. If individuals are accepted and valued positively, then the individual tends to develop a positive attitude towards oneself and is more accepting and respectful of oneself (Niven, 2002 in Handayani, 2011). This fact shows that families who have good knowledge and understanding of the importance of their role and function in caring for people with pulmonary TB can provide good support to patients with pulmonary TB so that with this support, patients with pulmonary TB can comply with the control of treatment that must be undertaken. As for pulmonary TB sufferers who have received good family support but they are not obedient in undergoing treatment control occurs because they do not know how to provide support and also how to carry out good and appropriate treatment control.

CONCLUSION

Based on the results of research and discussion, this study concluded that the relationship between family support and low-salt diet adherence in CRF patients with hemodialysis in the RSU hemodialysis room. IPI Medan. The Hospital increased the provision of education in terms of family support with adherence to a low-salt diet in Chronic Renal Failure patients undergoing

The Relationship Between Family Support And Compliance With Routine Control Of Pulmonary TB Patients At UPTD Puskesmas Teluk Dalam Nias Selatan. Syahrul Handoko Nainggolan, et.al

hemodialysis, thereby improving the quality of life in these patients. Improve health services, especially in treating Chronic Renal Failure patients undergoing hemodialysis by involving family support to improve adherence to a Low Salt (Sodium) Diet. Provide family support and holistic health services so that the compliance of Chronic Renal Failure patients in a Low Salt (Sodium) Diet increases.

REFERENCE

- Nastiti, A. D., & Kurniawan, C. (2020). Hubungan Dukungan Keluarga Dengan Kepatuhan Kontrol Pasien TB Paru. *Jurnal Ilmiah Keperawatan*, 15(1), 78-89.
- Riskesdas, R. I. (2013). *Riset Kesehatan Dasar*. Jakarta: Kemenkes RI.
- Asril. (2011). Pencegahan TB Paru. Tersedia di <http://www.scribd.com>
- Erawatyningasih E, Purwanta, Subekti H (2009). Faktor-faktor yang mem-pengaruhi ketidaktpatuhan berobat pada penderita tuberkulosis paru. *Berita Kedokteran Masyarakat*, 25(3)
- Notoatmodjo. (2007). *Promosi Kesehatan Dan Ilmu Perilaku Jakarta* : Rineka Cipta.
- Nursalam (2013). *Konsep dan Penerapan Metodologi Penelitian Ilmu Keperawatan (Pedoman, Skripsi, Tesis, dan Instrumen Penelitian Keperawatan)*. Jakarta : Salemba Medika.
- Pandit, N., & Choudary, S.K., 2061. A Study of Treatment Compliance in Direct Observe Therapy for Tuberculosis. *Indian Journal of Community Medicine*. 31:4
- Sudiharto.(2007). *Asuhan Keperawatan Keluarga dengan Pendekatan Keperawatan Transkultural*. Jakarta: EGC
- Kemenkes RI. (2011). *Pedoman nasional penanggulangan tuberkulosis*. Jakarta.
- Kemenkes RI. (2011). *Profil pengendalian penyakit dan penyehatan lingkungan tahun 2011*. Jakarta.
- Kemenkes RI. (2011). *Strategi nasional pengendalian tb indonesia 2010-2014*. Jakarta. Kemenkes RI. (2011). *Profil kesehatan indonesia 2011*. Jakarta
- Sunaryo. (2014). *Psikologi Untuk Keperawatan*. Jakarta : EGC
- Brunner, L. S., Suddarth, D. S., & Smeltzer, S. C. C. (Eds.). (2013). *Enfermería medicoquirúrgica [de] Brunner y Suddarth: 12a edición*. Wolters Kluwer/Lippincott Williams & Wilkins.
- Suryanto, E., 2010. *Tuberkulosis dan HIV*. Dalam *Jurnal Respiriologi Indonesia*. Jakarta : JRI
- Reviono, Kusnanto P, Eko V, Pakiding H, Nurwidhiasih D. (2014). Multidrug Resistant Tuberculosis (MDR TB): Tinjauan Epidemiologi dan Faktor Risiko Efek Samping Obat Anti Tuberkulosis. *Kesehatan Masyarakat*, 46(4): 189-196.
- WHO (2014). *Companion Handbook to the WHO Guidelines for the Programmatic Management of Drug- Resis-tant Tuberculosis*. Geneva, Switzerland. ISBN 9789241548809. Alamat Link: apps.who.int/iris/bit-stream/10665/130918/1/9789241548809_eng.pdf.
- Handayani, T. E., & Purwanti, O. S. (2011). Pengaruh Pendidikan Kesehatan Terhadap Tingkat Pengetahuan Dan Sikap Masyarakat Tentang Pencegahan Tuberkulosis Paru Di Dusun Kayangan Kecamatan Karanganyar Kabupaten Karanganyar.
- Handayani, I. B. (2012). *Evaluasi Tingkat Kepatuhan Penggunaan Obat pada Pasien Diabetes Mellitus Tipe 2 di Instalasi Rawat Jalan RSUD Kabupaten Sukoharjo (Doctoral dissertation, Universitas Muhammadiyah Surakarta)*.
- Smeltzer Suzane C, Bare Brenda. (2002). *Buku Ajar Keperawatan Medical Bedah*. Volume 2, Edisi 8, Alih Bahasa dr. Andri Hartono et al Jakarta: EGC