

Studying Patient Attitudes and Family Support in The Perspective of Ro Tb Patients' Medication Compliance in Jayapura City

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Abstract

Drug-Resistant Tuberculosis (TB RO) is tuberculosis caused by *Mycobacterium tuberculosis* bacteria which have developed immunity to Anti-Tuberculosis Drugs (OAT). The number of RO TB cases in Jayapura City was recorded at 54 cases from January 2022 - January 2023. The research aims to identify the relationship between patient attitudes and family support on compliance with taking medication for RO TB patients in Jayapura City.

This type of research is quantitative descriptive, with a cross sectional design. The population is all patients diagnosed with RO TB. The sampling technique used a total sampling technique, as many as 54 people. The research location was carried out at the Pulmonary TB Polyclinic of Abepura Regional Hospital and the TB Polyclinic of Jayapura Regional Hospital, in April-May 2023.

The results of the univariate analysis showed that almost the majority of respondents had good attitudes (68.4%), half of the respondents had good family support (54, 4%), and more than half of respondents with high compliance (64.9%). The results of bivariate analysis using the chi-square test showed that there was no relationship between patient attitudes towards medication adherence ($p\text{-value} = 0.850 > 0.05$), and there was a relationship between family support and medication adherence ($p\text{-value} = 0.031 \leq 0.05$), with a moderate strength of relationship, where the value of $r = 0.286$, meaning that the better the family support, the better the adherence to taking medication. Future researchers can develop this research by adding other variables that influence the level of medication compliance in RO TB patients, such as patient knowledge and health worker support.

Keywords: TB RO, Patient Attitude, Family Support, Medication Compliance

Introduction

Tuberculosis Drug Resistance (TB RO) is tuberculosis caused by germs *Mycobacterium tuberculosis* which has experience immunity against Anti-Tuberculosis Drugs (OAT). Resistance of *M. tuberculosis* bacteria to anti-drugs Tuberculosis (OAT) is a condition where germs are immune so they can no longer be killed by anti-tuberculosis drugs [10]. MDR-TB is resistant TB to two lines of anti-TB drugs The first most effective, rifampicin (R) and isoniazid (H).

RO TB treatment requires attention special Because duration long treatment and effect side more medicine a lot. In 2020, WHO recommended a new, more oral treatment regimen short

(9–11 months) for patient with TB RO. RO TB cases arise as a result of inadequate treatment, patient non-compliance in taking first-line medication until completion, as well as through transmission from other RO TB patients (Ministry of Health of the Republic of Indonesia, 2020). The National TB Control Strategy for 2020 - 2024 specifically makes the role of communities, partners and other multi-sectors one of the 6 strategies set out in the 2030 TB Elimination plan [7].

Based on the 2021 Global TB Report, the TB RO burden in the world is estimated at 449,682, while in 2020 the estimate is 436,016 and according to region the largest is in the South East Asia Region, then Africa and the Western Pacific. India is

the country with the highest TB RO burden with an estimate of 77,328. In 2021, the achievement of TB RO case detection in Indonesia is 8,296 cases or 33.5% (national target is 70%), TB RO treatment coverage is 5,082 patients or 20.6% (national target is 60%) and the TB enrollment rate RO is 61%, while the national target is 86%. In 2020, the achievement of TB RO case detection in Indonesia was 7,921 cases or 32.1%, TB RO treatment coverage was 4,590 patients or 18.6% and the TB RO enrollment rate was 57.9% [11].

In 2021, the coverage of RO TB case detection in Papua Province is 50%, RO TB treatment coverage is 26%, and the percentage of RO TB cases starting treatment (enrollment rate) is 53%. The results of treatment for RO TB patients in Papua in 2021, namely 24% recovered, 6% completed treatment, 35% dropped out of treatment, 0% failed treatment, 17% died, 0% moved and 18% are in the treatment stage [11]. Amount TB RO cases in Jayapura City were recorded a total of 54 cases from January 2022 - January 2023, of which 32 RO TB cases were recorded at the Abepura Regional Hospital's Pulmonary Polyclinic, namely in the first quarter there were 4 cases, in the second quarter there were 7 cases, in the third quarter there were 13 cases, in the first quarter there were 9 cases. case . Meanwhile, 22 cases were recorded at Jayapura Regional Hospital TB Poly, namely in the first quarter there were 4 cases, in the second quarter there were 4 cases, in the third quarter there were 9 cases and in the fourth quarter there were 5 cases.

Family support is one of the factors that influences non-compliance with TB treatment . Family support and family attitudes encourage sufferers to comply with taking their medication, show sympathy and concern, and not avoid sufferers from their illness. In providing support to a member suffering from pulmonary TB, support from all family members is very important for the patient's healing and recovery process [25].

Based on the results of interviews with nurses at the Pulmonary TB Polyclinic at Abepura Regional Hospital and the TB Polyclinic at Jayapura Regional Hospital, it was found that there was an increase in RO TB cases every month. Some RO TB patients

are accompanied or not accompanied by their families when taking medicine. TB RO patients receive transportation money for treatment of IDR 600,000 from the Government every month which is transferred directly to the patient's account number. Based on the above background, researchers are interested in conducting research with the title "The Relationship between Patient Attitudes and Family Support on Medication Compliance in RO TB Patients in Jayapura City" [1-9].

Research Objectives

General purpose

Identify connection attitude patients and support family to obedience drink drug RO TB patients in Jayapura City. Objective Special

1. Identified characteristics respondents' obedience drink drug RO TB patients in Jayapura City based on age, gender, education, occupation, ethnicity, place of residence, income and length of treatment.
2. Identified attitude patient about obedience drink drug RO TB patients in Jayapura City.
3. Identified support family about obedience drink drug RO TB patients in Jayapura City.
4. Identified obedience drink drug RO TB patients in Jayapura City.
5. You know obedience drink drug deep RO TB patients' perspective attitude patients in Jayapura City.
6. You know obedience drink drug deep RO TB patients' perspective support family in Jayapura City

Research Methodology

Types of research namely quantitative descriptive , with a cross sectional research design (cross section). Population is all over diagnosed patients TB RO. The sampling technique is total sampling or saturated sampling technique. The sample in the study was 32 RO TB patients at the Abepura Regional Hospital's Pulmonary TB Clinic and 25 people at the Jayapura Regional Hospital's TB Clinic, with a total sample of 57 people. This research was conducted in Jayapura City, namely at the Abepura Regional Hospital's Pulmonary TB Clinic and Jayapura Regional Hospital's TB Clinic, in April-May 2023.

Research Result

Univariate Analysis

1. Respondent Characteristics

a. Age

Table 1: Frequency Distribution of Respondent Characteristics Based on Age (n=57)

Category	Frequency (n)	Percentage (%)
Early teens (12-16 years)	4	7
Late teens (17-25 years)	12	21.1
Early adulthood (26 - 35 years)	15	26.3
Late adulthood (36 - 45 years)	9	15.8
Early elderly (46-55 years)	8	14
Late elderly (56-65 years)	6	10.5
Seniors (>65 years)	3	5.3

The research results in table 1 show that in part big the characteristics of the respondents were in the early adult age group (26-35 years).

b. Gender

Table 2: Frequency Distribution of Respondent Characteristics Based on Gender (n=57)

Category	Frequency (n)	Percentage (%)
Man	34	59.6
Woman	23	40.4

The research results in table 2 show that in part Most of the respondents' characteristics were male.

c. Education

Table 3: Frequency Distribution of Respondent Characteristics Based on Education (n=57)

Category	Frequency (n)	Percentage (%)
No school	1	1.8
elementary school	8	14
JUNIOR HIGH SCHOOL	10	17.5
SENIOR HIGH SCHOOL	27	47.4
S1 / S2	11	19.3

The research results in table 3 show that in part Most of the respondents' characteristics were high school and bachelor's/ master's degrees.

Work

Table 4: Frequency Distribution of Respondent Characteristics Based on Occupation (n=57)

Category	Frequency (n)	Percentage (%)
Civil servants / Polri / TNI	6	10.5
Private sector employee	10	17.5
Self-employed	6	10.5
Doesn't work	28	49.1
Etc	7	12.3

The research results in table 4 show that in part Most of the characteristics of respondents are not working.

d. Ethnic group

Table 5: Frequency Distribution of Respondent Characteristics Based on Ethnicity (n=57)

Category	Frequency (n)	Percentage (%)
Papua	38	66.7
Non-Papuan	19	33.3

The research results in table 4.5 show that in part characteristics of Papuan ethnic respondents.

e. Residence

Table 6: Frequency Distribution of Respondent Characteristics Based on Place of Residence (n=57)

Category	Frequency (n)	Percentage (%)
Abepura	18	31.6
Heram	13	22.8
South Jayapura	14	24.6
North Jayapura	9	15.8
Tami Estuary	3	5.3

The research results in table 6 show that in part Most of the respondents' characteristics reside in Abepura, South Jayapura and Heram.

f. Income

Table 7: Frequency Distribution of Respondent Characteristics Based on Income (n=57)

Category	Frequency (n)	Percentage (%)
Less (< Rp. 3,561,932)	50	87.7
Good (≥ IDR 3,561,932)	7	12.3

The research results in table 7 show that in part the characteristics of low-income respondents (< Rp. 3,561,932).

g. Treatment Stage

Table 8: Frequency Distribution of Respondent Characteristics Based on Treatment Stage (n=57)

Category	Frequency (n)	Percentage (%)
Short Term (9-11 months)	14	24.6
Long Term (18-24 months)	43	75.4

The research results in table 8 show that the characteristics of the respondents were that most of them underwent long-term treatment (18-24 months).

h. Patient Attitudes Towards Medication Adherence

Table 9: Frequency Distribution of Patient Attitudes towards Compliance with Taking Medication for RO TB Patients in Jayapura City (n=57)

Category	Frequency (n)	Percentage (%)
Not enough	18	31.6
Good	39	68.4

Table 9 shows that the attitude of RO TB patients towards medication adherence is mostly good and mostly good with less attitude.

i. Family Support for Medication Adherence

Table 10: Frequency Distribution of Family Support for Medication Adherence in RO TB Patients in Jayapura City (n=57)

Category	Frequency (n)	Percentage (%)
Not enough	26	45.6
Good	31	54.4

Table 10 shows that family support for RO TB patients' medication adherence is partial big with good family support.

j. Adherence to Taking Medication in RO TB Patients

Table 11: Frequency Distribution of Adherence to Taking Medication for RO TB Patients in Jayapura City (n=57)

Category	Frequency (n)	Percentage (%)
Low	20	35.1
Tall	37	64.9

Table 11 shows that compliance with taking medication for RO TB patients in the city of Jayapura is partial large with high compliance.

2. Bivariate Analysis

Study of Patient Attitudes in Perspective of Medication Adherence in TB Ro Patients in Jayapura City

Table 12: Study of Patient Attitudes in Perspective of Medication Adherence in TB Ro Patients in Jayapura City (n=57)

Patient Attitude	Medication Adherence				ρ Value	r
	Low		Tall			
	n	%	n	%		
Not enough	6	10.5	12	21.1	0.850	-0.025 (275-2901)
Good	14	24.6	25	43.9		
Total	20	35.1	37	64.9		

Table 12 shows the results of bivariate analysis that there were 6 patients with poor attitudes and low medication adherence (10.5%), and 12 patients with poor attitudes and high medication adherence (21.1%), while patients with poor attitudes There were 14 people (35.1%) with good attitudes and low medication adherence, 25 patients with good attitudes and high medication adherence (43.9%). Chi-square test results the value obtained is

$p\text{-value} = 0.850$ ($p > 0.05$), so it can be said that there is no relationship attitude patient compliance taking medication with a negative relationship strength, where the r value = -0.025, meaning there is no correlation, or the relationship is not in the same direction. With OR value: 0.025 (275-2901) means the attitude of the respondent own influence amounting to 2,901 times on Medication Compliance in TB Ro Patients.

a. Study of Family Support in Perspective of Medication Adherence in TB Ro Patients in Jayapura City
Table 13 The Relationship between Family Support and Compliance with Medication in TB RO Patients in Jayapura City (n=57)

Family support	Medication Adherence				p Value	r
	Low		Tall			
	n	%	n	%		
Not enough	13	22.8	13	22.8	0.031	0.286 (1,096 -10,721-
Good	7	12.3	24	42.1		
Total	20	35.1	37	64.9		

Table 13 shows the results of bivariate analysis that patients with less family support and low medication adherence were 13 people (22.8%), and patients with good family support and high medication adherence were 13 people (22.8%), while patients with good family support and low medication adherence were 7 people (12.3%), and patients with good family support and high medication adherence were 24 people (42.1%). Chi-square test results the value obtained is $p\text{-value} = 0.031$ ($p \leq 0.05$), so it can be said that there is a relationship family support for compliance take medicine with medium strength of relationship, where the value of $r = 0.286$, meaning that there is family support influence amounting to 10,721 times on medication adherence.

Discussion

Respondent Characteristics

Age

The research results in table 4.1 show that the characteristics of almost half of the respondents are in the late adolescent (17-25 years) and early adulthood (26-35 years) age groups.

According to Notoatmodjo (2018), age influences a person's grasping power and thought patterns. The older you get, the more you're understanding and thinking patterns will develop, so that the knowledge you gain will get better. According to Azwar (2015), age is also associated with a person's experience in doing something. Experience can influence a person's knowledge and attitudes, with no experience at all, a person will tend to have less knowledge and a negative attitude [12-15].

The results of this research are in line with research conducted by Ar-Rasily and Puspita (2016) which states that age can be related to individual treatment compliance because as age increases, the knowledge they gain is greater so it can influence thought patterns and actions taken [25]. Pulmonary TB disease attacks the productive age group more often due to high activity, mobility, lifestyle and smoking habits. High activity and mobility will provide a greater possibility of contact with other people, so there is also a greater possibility of contracting pulmonary TB (Siswanto, 2015).

Those of productive age with high activity are also at high risk of contracting pulmonary TB, because they have external contact with other people, so they are easily exposed to TB germs. Busy activities make a person forget and pay less attention to their health [16-20].

Gender

The research results in table 4.1 show that the characteristics of more than half of the respondents are male.

According to Notoatmodjo, in epidemiological studies, gender is also one of the characteristics that has an influence on the incidence of illness. Men are more susceptible to disease than women due to unhealthy lifestyles such as smoking, drinking alcohol, etc., which can reduce the body's defense system. According to Erawatyningasih et al (2009) stated that during TB treatment men tend to be more disobedient and irregular in taking medication compared to women because men tend to have higher activity and therefore tend not to pay attention. health (Widyastuti, 2016).

The results of this study are in line with research conducted by Jamaluddin that men are more often affected by pulmonary TB than women. This is because men have higher levels of activity than women, so the possibility of exposure is greater than women. Apart from that, the habit of smoking and consuming alcohol in men can reduce the body's resistance, making it easier for them to get pulmonary TB.

The male gender is more susceptible to non-compliance with pulmonary TB treatment due to high activity, mobility, lifestyle and smoking habits. High activity, such as work, causes patient treatment time to be hampered in taking medication at the hospital.

Education

The research results in table 4.1 show that almost half of the respondents' characteristics have high school and bachelor's/ master's degrees.

According to Notoatmodjo, education influences the learning process, the higher a person's education, the easier it is for that person to receive information. Education can influence a person, including a person's behavior regarding lifestyle, especially in motivating attitudes towards participating in health development. The higher a person's level of education, the faster their ability to obtain information and grasp it. According to Oktavia et al (2016), the level of education will influence knowledge of conditions or requirements regarding the criteria for a healthy home, knowledge about tuberculosis, prevention and treatment (Suryani, 2021).

The results of this research are in line with research by Suryani (2021) that the majority of respondents had a high school education with a total of 25 respondents (51%). This is supported by research by Yuni (2016), that education influences treatment failure, the lower the patient's education causes the patient's lack of understanding of the disease and its dangers.

The higher the patient's level of education will influence knowledge and attitudes towards carrying out regular treatment.

Work

The research results in table 4.1 show that the characteristics of almost half of the respondents are not working.

According to Nursalam (2016), work is a necessity that must be done, especially to support one's life and the life of one's family. Work is something done to earn a living. According to research by Zuliana (2009), one of the social structural factors, namely work, will influence the use of health services. A person's work can reflect the amount of information they receive regarding disease and health services. Work will help someone in making decisions regarding the use of existing health care and views on treatment (Yuni, 2016).

According to research by Rokhmah (2013), TB sufferers who have precarious jobs can be more compliant with treatment because they have more free time so they can make maximum use of health services (Widyastuti, 2016). Research conducted by Jamaluddin (2019) shows that work influences the use of health services, work can reflect to some extent the amount of information received and will help a person make decisions about utilizing existing health services [21-24].

Patients who have jobs that are classified as busy will affect compliance with treatment, because of limited time to access health services for TB treatment.

Ethnic group

The research results in table 4.1 show that the characteristics of the respondents are mostly Papuan.

According to Juliati (2020), race or ethnicity is a distinction between the culture and habits of the local community and is a labeling that is determined because of the similarities within certain groups, thus forming a separate community. This allows the emergence of habits in society that affect health.

The results of Juliati's research (2020) stated that ethnicity has nothing to do with compliance with taking medication. Respondents who complained of a cough that didn't get better usually took herbal medicine or over-the-counter medicine first after it got worse, then checked with a health service. Respondents assumed that disease was from God, and God would give them medicine. After feeling better from their cough, they thought they had recovered from their TB disease.

The customs or cultural habits of a tribe that are still embedded in society will have an influence on taking action for patient treatment.

Residence

The research results in table 4.1 show that the characteristics of a small number of respondents live in Abepura, South Jayapura and Heram.

A residence is a building where a person or several people live permanently for a certain period of time, in a certain place. Distance can influence patient compliance in seeking treatment at health services (Jamaluddin, 2019). TB sufferers who require a

lot of visiting time, meaning they have to go back and forth to the hospital, will affect their financial condition. There is a reason that patients cannot go to the hospital because there are no fees, which will affect the patient's compliance with treatment (Wulandari, 2015).

Yulisetyaningrum's (2019) research results show that the majority of respondents' homes are at a distance of 0-10 km and >10-20 km, as many as 23 respondents (40.4%), meaning that people tend to choose health services that are close to where they live. This is supported by research by Widyastuti (2016), that the distance between residence and health services is also a cause of non-compliance with treatment.

The farther the residence is from health facilities, the greater the risk of non-compliance with treatment (Widyastuti, 2016). Yuni's (2016) research results stated that many patients used transportation to get to health services because the distance between their homes and the East Perak Community Health Center was quite far.

A place of residence that is quite far from a health service location will influence a person's attitude in using the health service facility.

Income

The research results in table 4.1 show that the characteristics of most respondents are low income (< Rp. 3,561,932).

Economic status is the position of a person or family in society based on monthly income. Respondents with low socioeconomic backgrounds tend to be disobedient in undergoing treatment due to the costs required to purchase medication and transportation to the health center (Juliati, 2020). Patients who do not have a job and have a low-income influence patient to come to health services on schedule to take medication (Yuni, 2016).

According to research by Hiswani (2014), low income can increase a person's risk of contracting tuberculosis. This situation leads to poor housing (inadequate room temperature, ventilation, lighting, humidity, sanitation) and overcrowding, inadequate nutritional intake and poor working conditions (Nasution, 2021). Patients who have less than sufficient or low income will have an impact on compliance with treatment, such as medical or transportation costs.

Treatment Stage

The research results in table 4.1 show that the characteristics of the respondents were that most of them underwent long-term treatment (18-24 months).

According to the Indonesian Ministry of Health (2022), RO TB treatment must be started within 7 (seven) days after the patient's diagnosis is made. Treatment for TB RO patients is given on an outpatient basis (ambulatory) from the start and is supervised every day directly by the Drug Ingestion Monitor (PMO). In accordance with WHO recommendations in 2020, RO TB treatment in Indonesia currently uses a combination without injection drugs, which is divided into two short-term treatment combinations (9-11 months) and long-term treatment combinations (18-24 months) (RI Ministry of Health, 2022). TB treatment aims to cure patients, prevent death from active tubercu-

losis or late effects of TB, prevent recurrence and reduce the rate of TB transmission (Ministry of Health of the Republic of Indonesia, 2022).

The results of Pratama's research (2020) state that long-term treatment clearly has a significant impact on the quality of life of MDR-TB patients due to various things such as the large amount of medication that must be taken in the early stages, repeating medication if no phlegm conversion occurs and requiring patients to take medication on time. can have an impact on the patient's mental state. On the other hand, if patients regularly take medication, follow the treatment program regularly and complete the stages of treatment, MDR-TB patients can have a better quality of life.

The long-term treatment stage in TB RO patients results from the patient's non-compliance with taking medication regularly and correctly, causing the patient to drop out of medication and not complete the treatment program and become resistant [26-28].

Patient Attitudes Towards Medication Adherence

Table 4.9 shows that the attitudes of RO TB patients towards medication adherence are mostly good. The patient's attitude influences the patient's readiness to comply with treatment, this is also supported by good knowledge of attitude and action.

According to Notoatmodjo (2018), attitude is the result of a thought and will be applied into behavior or readiness to behave. According to Azwar (2013), attitudes are influenced by several things, including personal experience, the influence of other people who are considered important, the influence of culture, mass media, educational and religious institutions, and emotional factors (Sriyannah, 2022).

According to research by Tambunan (2019), the majority of respondents have good attitudes, this is because the respondents already understand how to respond, understand, respect and take responsibility if the respondent or one of the respondent's families is affected by pulmonary TB. Hendesa's research (2018) stated that even though the respondents' knowledge was good, the respondents were not ready to act due to lack of funds, so this made the patient's attitude towards treatment compliance less good.

Family Support for Medication Adherence

Table 4.10 shows that family support for RO TB patients' medication adherence is partial big with good family support. Family support greatly influences patient compliance with regular treatment, this is because the positive family support given to the patient makes the patient motivated and enthusiastic about carrying out the treatment.

According to Friedman (2016) family support is an attitude, an act of family acceptance towards family members, in the form of informational support, assessment support, instrumental support and emotional support (Nasution, 2021). According to Nasution (2020), through family support a person feels comfort, attention, appreciation and can accept their condition.

According to research by Sibua (2021), the family plays a role in motivating and supporting family members who suffer from

pulmonary TB to seek treatment regularly. Apart from playing a supporting role, the family also plays a role as a Medication Monitor (PMO) who will then remind the sufferer to continue taking medication until the program is completed (Sibua, 2021).

Adherence to Taking Medication in RO TB Patients

Table 4.11 shows that compliance with taking medication for RO TB patients in Jayapura city is more than half with high compliance. Patient compliance with treatment influences the patient's recovery rate. The more patients comply with treatment, the more patients will recover and be successful in carrying out their treatment program.

Compliance is a form of behavior that arises as a result of interactions between health workers and patients so that patients understand the plan with all its consequences and agree to the plan and carry it out (Ministry of Health, 2020). Patient compliance can be measured by how to take medication correctly according to instructions from health workers, such as the amount of medication and the time to take medication (Siregar, 2019). Compliance with treatment is one of the main determining factors in the success of therapy (Sulistyowati, 2022).

Non-compliance of TB patients in undergoing treatment will result in low cure rates, resistance to OAT so that TB disease will be very difficult to cure, and the death rate will also increase (Irnawati, 2016). Patient compliance is the extent to which the patient's behavior complies with the provisions given by health professionals (Tambunan, 2019). Non-compliance will result in underuse of a drug, resulting in the patient losing the benefits of therapy and possibly causing the condition to gradually worsen.

Fitria's research results (2016) stated that non-compliance with TB treatment can cause low TB cure rates, recurrence, drug resistance, and even death. Apart from that, the large number of drugs that must be taken at once and the long treatment period are reasons for sufferers to drop out of treatment (Sibua, 2021). Nesi's (2017) research states that compliance is also influenced by the support of health workers. Health workers also influence health behavior by providing positive rewards for patients who have been able to adapt to their treatment program (Nesi, 2017).

Analysis of the Relationship between Patient Attitudes and Compliance with Medication in TB RO Patients in Jayapura City

the chi-square test obtained a value of $p\text{-value} = 0.850$ ($p > 0.05$), so it can be said that there is no relationship between patient attitudes towards medication adherence and the strength of the negative relationship, where the value of $r = -0.025$, meaning there is no correlation, or the relationship is not unidirectional. A good attitude towards medication adherence is a form of patient behavior in taking appropriate action, namely taking medication obediently. So that further research can conduct research on the attitudes of health workers in treating RO TB patients.

Attitude can be considered as a general predisposition to respond or act. Factors that predispose behavior to occur in a person or society are the knowledge and attitudes of a person and society towards what they are going to do (Notoatmodjo, 2018). Supporting factors such as existing facilities are also needed to change attitudes into positive actions (Hendesa, 2018). Changes in new individual behavior can be optimal if the change occurs

through internalization, where the new behavior is considered to have positive value for the individual and is integrated with other values in his life. This internalization process can be achieved if the officer or figure is someone who can be trusted who can make individuals understand the meaning and use of this behavior and make them understand the importance of this behavior for their own lives (Yuda, 2018).

According to Hardianto (2013), changes in individual attitudes and behavior begin with the compliance stage, identification and then internalization. At first the individual complies with the officer's recommendations or instructions without being willing to carry out the action and often because they want to avoid punishment/sanctions if they do not comply or to obtain the promised reward if they comply with the recommendation. This stage is called the willingness stage. Usually, the changes that occur in this stage are of a nature. temporary, meaning that the action is carried out while there is still supervision by officers. But once supervision loosens or disappears, the behavior is abandoned (Sirait, 2020).

According to Darmanto (2014), the success of pulmonary TB treatment is greatly influenced by compliance with treatment and the problem of compliance in pulmonary TB patients is influenced by many factors. Factors that can influence a person's level of compliance with taking medication are age, occupation, free time, supervision, type of medication, dosage of medication, knowledge, attitudes and education from health workers (Sirait, 2020). According to Partasmita (2016) who states that because of the long treatment period specified, there are several possible patterns of compliance, namely patients who receive regular treatment and use medication regularly, sufferers who do not receive treatment regularly (defaulting), sufferers who are not at all compliant with treatment, namely dropping out of treatment. (drop out) (Sirait, 2020).

The results of this research are in line with research conducted by Hendesa (2018), the results of statistical tests using Chi-square obtained a value of $p = 0.213$ ($p < 0.05$) so that H_0 was accepted, meaning that statistically there is no significant relationship between patient attitudes towards TB. Lungs with treatment compliance.

The results of this study are not in line with the research of Sirait (2020), based on the results of statistical tests, the value of $p = 0.043$ was obtained, which means that there is a significant relationship between attitude and adherence to taking anti-tuberculosis medication in pulmonary TB patients at the Medan Teladan Community Health Center in 2019. Tambunan (2019) research results, based on the results of the Chi Square test, the value obtained was $p = 0.003 < 0.05$ so it can be concluded that there is a relationship between attitude and patient compliance with taking medication.

Analysis of the Relationship between Family Support and Compliance with Medication in TB RO Patients in Jayapura City the chi-square test obtained a value of $p\text{-value} = 0.031$ ($p \leq 0.05$), so it can be said that there is a relationship between family support and medication adherence with a medium strength relationship, where the value of $r = 0.286$, meaning that the better the family support, the better good adherence to taking medication.

Family support is one of the supporting factors in the treatment of RO TB patients. The positive support provided by the family makes patients feel comfortable and motivated in carrying out their treatment. Family support also provides reinforcement for patients to comply with taking RO TB medication regularly. Conditions at the Abepura Regional Hospital's Pulmonary TB Clinic and the Jayapura Regional Hospital's TB Polyclinic are that there are still patients who are not accompanied by their families, so further research needs to be carried out on the factors that influence family support for the treatment of RO TB patients.

According to Friedman (2018), the family has several support functions, namely informational support in the form of information that can increase suggestions for individuals, assessment support in the form of guidance to sufferers, instrumental support in the form of helping attention to sufferers, and emotional support in the form of attention to sufferers. Family support in the form of support from family members is an important factor in compliance with medical programs (Nasution, 2021). According to Mongan (2017), good family support makes sufferers taking medication feel comfortable and increases their confidence in undergoing treatment (Siregar, 2019).

According to research by Irnawati (2016), family support also causes patients to feel more loved, cared for, respected, helped economically, and sufferers do not feel alone and are not burdened by the disease they suffer from (Siregar, 2019). According to research by Limbu and Marni (2013), positive family support is expected to lead directly to examination at the health center or hospital, doctor or other health worker.

Positive family support is full participation in the treatment of sufferers such as arranging food and drink menus, rest patterns, personal care, especially hygiene, taking medication and being able to refer sufferers if there are serious side symptoms of medication (Nasution, 2021).

Nasution's research (2021) states that family support can reduce the effects of anxiety by directly improving an individual's mental health. Family support is one of the most important family coping strategies, because family support is support that is seen by family members as something that the family can obtain to overcome the problem. Family support is one of the factors that influences compliance with pulmonary TB treatment, where the nuclear and extended family function as a support system for family members (Fitriani, 2019).

The results of this research are in line with research by Bonita (2021), based on the results of the Chi Square test with a confidence level of 95%, a P value = 0.010 is obtained, so it will be concluded (P Value $0.010 < 0.05$) which means there is a significant relationship between family support. with adherence to taking medication in TB patients. The results of Hamidah's research (2019), the results of statistical tests using the Chi Square test obtained a P value of 0.001, so it can be concluded that at α 5%, it can be concluded that there is a relationship between family support and adherence to taking medication in pulmonary TB patients at high risk of resistant TB. The results of this study are not in line with research by Anwar (2020), based on the results of the chi square statistical test it can be explained that there was no significant relationship found between family support and

compliance with taking medication for tuberculosis patients in the Pekauman Community Health Center working area in 2020.

Conclusion

1. Characteristics of TB RO respondents (n = 57) almost half were in the late teens (17-25 years) and early adulthood (26-35 years), more than half were male, almost half had high school and bachelor's/master's degrees., almost half do not work, almost the majority are Papuan, a small portion live in Abepura, South Jayapura and Heram, the majority earn less (< Rp. 3,561,932), the majority undergo a long-term treatment phase (18-24 months).
2. Most patients' attitudes towards medication adherence are good and a small number are poor.
3. Family support for medication compliance in RO TB patients is half with good family support.
4. Compliance with taking medication for RO TB patients in the city of Jayapura is more than half with high compliance.
5. There is no relationship attitude patient compliance take medicine.
6. There is a relationship family support for compliance take medicine with moderate strength of relationship, where the value of $r = 0.286$, meaning that the better the family support, the better the adherence to taking medication.

Suggestion

1. For Society

It is hoped that the community can increase their caring attitude and also provide positive support to family members who are sick and undergoing TB RO treatment programs by providing motivation, taking care of them, and taking or accompanying them to pick up medicine.

2. For Hospitals

It is hoped that health workers will continue to improve health education in TB RO patients to increase knowledge and compliance with taking medication, so that patients can know the negative impacts of non-compliance with taking medication. Health workers are also expected to provide education and motivation to patients to take OAT regularly and on time, and evaluate patients who are non-compliant with treatment by conducting home visits .

3. For Education

It is hoped that this research can become reference material for nursing science, especially regarding the relationship between patient attitudes and family support on medication compliance in RO TB patients.

4. For Further Researchers

It is hoped that future researchers can develop this research by adding other variables that influence the level of medication adherence in RO TB patients, such as patient knowledge and health worker support.

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