

Factors Affecting the Behavior of Lung-Tb Patients in Preventing Transmission

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Abstract. *The study aims at determining what factors influence the behavior of pulmonary tuberculosis patients in preventing the transmission of pulmonary tuberculosis at the Garoga Health Center, Garoga District, North Tapanuli Regency in 2022. This type of research uses a descriptive analytic survey with a cross sectional design. The population in this study amounted to 48 people, while the sample amounted to 48 people. Data analysis was carried out by univariate, bivariate and multivariate analysis. The results of the chi square test showed that there was a relationship between 7 variables, namely knowledge, using masks, not spitting carelessly, consuming OAT regularly, isolation, PMO and culture had a p-value $< \alpha 0.05$, meaning knowledge, using masks, not spitting. indiscriminately, taking OAT regularly, isolation, PMO and culture affect the prevention of pulmonary TB transmission at the Karoga health center, and the multivariate test has 6 knowledge variables, not spitting carelessly, consuming OAT regularly, isolation, PMO and culture affect. the results of multiple logistic regression tests shows that the variable consuming OAT regularly is the most dominant with an odds ratio (OR) of 52,990, meaning that it affects the prevention of pulmonary TB 53 times. The conclusion is that the dominant variable that most influences the prevention of pulmonary TB transmission at the Karoga Health Center is consuming OAT on a regular basis. It is recommended for patients with pulmonary TB to comply with all recommendations from health workers, including taking anti-tuberculosis drugs so that pulmonary TB patients can recover from their disease.*

Keywords: *Behavior Prevention, New TB Transmission, Consuming OAT Regularly*

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INTRODUCTION

Tuberculosis (pulmonary tuberculosis) continues to be a public health concern in Indonesia and around the world, having emerged as the leading cause of mortality (Ardi et al., 2018). Tuberculosis has become into a global problem in recent years. 1 This condition is particularly prevalent in the productive age group of 15–49 years. The World Health Organization (WHO) estimates that tuberculosis (TB) causes around 8 million new infections and 3 million deaths per year. In our globe, one person gets infected with tuberculosis every second, and during the next decade, no fewer than 300 million individuals will be affected.

Tuberculosis (pulmonary tuberculosis) is an infectious illness caused by the bacterium *Mycobacterium tuberculosis*. While this bacterium is most commonly associated with the lungs, it may infect any area of the body, including the kidneys, spine, and brain (Xie et al., 2014). Tuberculosis is one of the top ten causes of mortality worldwide and the leading killer of HIV-positive individuals.

According to the 2019 WHO Global TB Report, the incidence of tuberculosis in Indonesia grew by 420,994 cases in 2019 compared to 360,565 cases in 2018 and 330,910 cases in 2017. Males had 1.4 times the number of cases as females in each province in Indonesia. Males have a threefold increased chance of developing tuberculosis than women, according to the results of the tuberculosis prevalence study. This is because men are more exposed to tuberculosis risk factors such as smoking and non-adherence to medicine.

According to the World Health Organization (WHO), pulmonary tuberculosis (TB) has now become a worldwide issue due to the infection of nearly a third of the world's population. Around 95 percent of tuberculosis cases and 98 percent of tuberculosis fatalities occur in underdeveloped nations. Tuberculosis is the leading cause of mortality among infectious illnesses and ranks third among the top ten most lethal diseases in Indonesia, claiming 100,000 lives each year. The high incidence and prevalence of tuberculosis, particularly positive tuberculosis cases, pose a severe danger to TB transmission in the population, as positive tuberculosis patients are the source of TB transmission.

According to a 2019 poll, the province with the largest number of tuberculosis patients had a total of 420,994 new tuberculosis cases in Indonesia in 2018. (data as of May 17, 2018). Males had 1.4 times the number of new tuberculosis cases in 2018 as females. Even according to the Tuberculosis Prevalence Survey, males have a threefold greater prevalence than women. Other nations are experiencing the same thing. This might be because men are more likely to be exposed to tuberculosis risk factors such as smoking and non-adherence to prescribed medications.

Based on the number of TB cases, the government implemented a program aimed at tuberculosis control through the acquisition of anti-tuberculosis medications (OAT) under the DOTS (Directly Observed Treatment Strategy). DOTS is composed of five components: the government's commitment to maintaining control of pulmonary tuberculosis, detection of pulmonary tuberculosis cases through sputum examination, supervised treatment for six to eight months, routine and uninterrupted supply of pulmonary tuberculosis drugs, and a reporting system for evaluating treatment and program progress.

According to Iseman & Maasen (1989); Calligaro et al. (2014), when medication compliance is high, recovery of smear-positive pulmonary tuberculosis patients also increases, hence reducing the likelihood of drug-resistant tuberculosis cases. The productivity of tuberculosis patients can also be increased since patients who take medicine on a consistent basis lessen the severity of the disease and, if hospitalization is necessary, the number of days spent in the hospital can be limited.

According to a report on the number of cases of Pulmonary Tuberculosis at the Garoga Health Center in the Garoga District of the North Tapanuli Regency, the largest significant increase in Pulmonary Tuberculosis occurred in 2018, when 125 cases were reported, followed by 121 cases in 2019 and 115 cases in 2020. The highest number of pulmonary TB cases that recovered following treatment increased to 109 in 2020, up

from 107 in 2019 and 105 in 2018. The highest number of pulmonary TB treatment drop out cases happened in 2018, at up to 20, the lowest number occurred in 2014, at 14, and the highest number occurred in 2020, at up to 6.

In terms of therapy (curative), the success of tuberculosis treatment is impacted by a variety of variables, both medical and non-medical. Medical factors include the initial complaint prior to treatment, comorbidities, adverse effects, and drug retention, whereas non-medical factors include age, type of work, communication of educational information, attitude of health care providers, affordability of treatment, drug taking supervisor (PMO), and medication adherence.

Based on an initial survey conducted by researchers at the Garoga Health Center, Garoga District, North Tapanuli Regency on 10 patients suffering from pulmonary tuberculosis by conducting interviews, it was found that as many as 8 people stated that there was no need to take medication many times, because taking just 1 time was enough. healed. The statement of tuberculosis sufferers related to non-adherence to taking medication that there is still a lack of knowledge and poor perceptions of patients about the disease they are suffering from and also regarding the treatment of pulmonary tuberculosis and the lack of support from families in motivating taking pulmonary tuberculosis drugs so that tuberculosis sufferers are not complete in their treatment.

As for the condition of the people in the Garoga area, many hold traditional party activities, so that when they gather, of course, patients suffering from pulmonary TB will mix with healthy ones, this makes pulmonary TB transmission occur, then TB patients who have been given drugs for 2 months feel healthy and even feel embarrassed to take medicine by neighbors or family, even though the medicine must be taken for 3 months without a break, then the problem of PMO (Drug Swallowing Supervisor) where many villages or hamlets have long distances and difficult terrain so they use PMO to pick up and deliver medicine or deliver sputum for further examination to maintain the health of pulmonary TB patients.

METHODS

The research design is an analytical survey using a cross sectional study technique, with the purpose of examining the influence of knowledge, mask use, not spitting carelessly, frequent use of OAT, isolation, PMO, and culture. The population for this study included all pulmonary tuberculosis (TB) patients who attended the Garoga Health Center in Garoga District, North Tapanuli Regency between July and November 2021, with an average of 48 patients, and a sample size of 48 persons.

A questionnaire is used to collect data. The data was analyzed using univariate, bivariate, and multivariate analysis. The purpose of univariate analysis is to determine the frequency distribution of all variables under consideration, including dependent and independent variables. Bivariate analysis is used to determine the link between the dependent and independent variables, whereas multivariate analysis is used to determine the influence of the independent variable on the dependent variable using the kind of multiple logistic regression analysis

RESULTS AND DISCUSSION

Univariate Analysis

According to table 1, the distribution of respondents' characteristics by gender, age, education, and employment demonstrates that. The bulk of respondents were

between the ages of 45 and 54, with as many as 21 respondents (43.8 percent). Then, based on the study's findings, it was determined that the majority of respondents received a SMA/SMK education. At Garoga Health Center, there were as many as 25 respondents (52.1%), and the majority of respondents' vocations were entrepreneurs, with as many as 16 respondents (33.3%).

According to the variable, the majority of respondents are knowledgeable. According to the variable, as few as 33 responders (68.8 percent) When respondents are provided with masks, the majority of respondents are negative, up to 33 respondents (68.8 percent), depending on the variable. Not carelessly spitting the majority of answers are negative, with as many as 38 responders (79.2 percent), depending on the variable. Consumption of OAT Typically, the majority of replies are negative, with as many as 32 respondents (66.7 percent) being unfavorable, based on respondents' isolation. The majority, as many as 38 responders (79.2 percent), are negative, according to the PMO variable. As many as 33 respondents (68.8 percent) are unfavorable, and depending on the culture, the majority of respondents are negative as many as 36 respondents (75.0 percent) The majority of respondents did not prohibit medication adherence from being a variable. As many as 35 respondents did not prevent medication adherence from being a variable (72.9 percent).

Table 1. Distribution of Respondent Characteristics, Independent and Dependent Variables

Variable	N	Percentages
Age group		
20-34 Years	4	8.3
35-44 Years	8	16.7
45-54	21	43.8
>55 Years	15	31.3
Sex		
Man	34	70.8
Woman	14	29.2
Education		
Basic (elementary/junior high)	9	18.8
Intermediate (SMA/SMK)	25	52.1
College	14	29.2
Job		
Student	4	8.3
Self-employed	16	33.3
Private employees	9	18.8
IRT	7	14.6
civil servant	4	8.3
Other	8	16.7
Knowledge		
Well	15	31.3
Not enough	33	68.8
Using Mask		
Positive	15	31.3

Negative	33	68.8
Don't Spit Carelessly		
Positive	10	20.8
Negative	38	79.2
Taking OAT		
Positive	16	33.3
Negative	32	66.7
Isolation		
Positive	10	20.8
Negative	38	79.2
PMO		
Positif	15	31.3
Negatif	33	68.8
Culture		
Positive	12	25.0
Negative	36	75.0
Preventing TB-pulmonary transmission		
Prevent	13	27.1
Not Prevent	35	72.9

Bivariate Analysis

Based on table 2 regarding the relationship between knowledge, using masks, not spitting carelessly, consuming OAT regularly, isolation, PMO and culture by preventing pulmonary-TB transmission at the Garoga Health Center, it shows that of 15 respondents who have good knowledge as many as 8 respondents (53.3%) prevent transmission of pulmonary TB and as many as 7 respondents (46.7%) did not prevent the transmission of pulmonary TB. Of the 33 respondents who had less knowledge as many as 5 respondents (15.2%) prevented the transmission of pulmonary TB and as many as 28 respondents (84.8%) did not prevent the transmission of pulmonary TB. Then of the 15 respondents who used masks, 10 respondents (66.7%) prevented the transmission of pulmonary TB and as many as 5 respondents (33.3%) did not prevent the transmission of pulmonary TB. Of the 33 respondents who used negative masks, 3 respondents (9.1%) prevented the transmission of pulmonary TB and as many as 30 respondents (90.9%) did not prevent the transmission of pulmonary TB.

Of the 10 respondents who did not spit carelessly, 7 respondents (70.0%) prevented the transmission of pulmonary TB and as many as 3 respondents (30.0%) did not prevent the transmission of pulmonary TB. Of the 38 respondents who did not spit indiscriminately, 6 respondents (9.1%) prevented the transmission of pulmonary TB and as many as 32 respondents (84.2%) did not prevent the transmission of pulmonary TB. Of the 16 respondents who consume OAT on a regular basis, 11 respondents (68.8%) prevent transmission of pulmonary TB and as many as 5 respondents (31.2%) do not prevent transmission of pulmonary TB. Of the 32 respondents who consume OAT regularly and as many as 2 respondents (6.2%) prevent transmission Pulmonary TB and as many as 30 respondents (93.8%) did not prevent the transmission of pulmonary TB. And of the 16 respondents who consume OAT regularly, 11 respondents (68.8%) prevent transmission of pulmonary TB and as many as 5 respondents (31.2%) do not prevent transmission of pulmonary TB. Of the 32 respondents who consume OAT regularly and 2

respondents (6.2%) prevent it. Pulmonary TB transmission and as many as 30 respondents (93.8%) did not prevent pulmonary TB transmission.

Then from the 15 respondents who had PMO, 9 respondents (60.0%) prevented the transmission of pulmonary TB and as many as 6 respondents (40.0%) did not prevent the transmission of pulmonary TB. Of the 33 respondents who were PMO and as many as 4 respondents (12.1%) were obedient to prevent transmission of pulmonary TB and as many as 29 respondents (87.9%) did not prevent transmission of pulmonary TB. %) prevented the transmission of pulmonary TB and as many as 4 respondents (33.3%) did not prevent the transmission of pulmonary TB. Of the 36 respondents who were cultural and as many as 5 respondents (13.9%) prevented the transmission of pulmonary TB and as many as 31 respondents (86.1%) did not prevent the transmission of pulmonary TB.

Table 2. Relationship of knowledge, using masks, not spitting carelessly, consuming OAT regularly, isolation, PMO and culture at the Garoga Health Center

Variable	Preventing Contagion				Total		P-Value
	Prevent		Not prevent		f	%	
	f	%	f	%			
Knowledge							0.009
Well	8	53.3	7	46.7	15	100	
Not enough	5	15.2	28	84.8	33	100	
Using Mask							0.000
Positive	10	66.7	5	33.3	15	100	
Negative	3	9.1	30	90.9	33	100	
Don't Spit Carelessly							0.002
Positive	7	70.6	3	30.0	10	100	
Negative	6	15.8	32	84.2	38	100	
Taking OAT							0.000
Positive	11	68.8	5	31.2	16	100	
Negative	2	6.2	30	93.8	32	100	
Isolation							0.000
Positive	8	80.2	2	20.8	10	100	
Negative	5	13.2	33	86.8	38	100	
PMO							0.000
Positive	9	60.0	6	40.0	15	100	
Negative	4	12.1	29	87.9	33	100	
Culture							0.001
Positive	8	66.7	4	33.3	12	100	
Negative	5	13.9	31	86.1	36	100	

Multivariate Analysis

According to the table above, it is clear that of the seven factors assessed for multiple logistic regression in the first stage, all variables with a p-value > 0.05 had an effect on pulmonary tuberculosis prevention.

According to Table 4, the significant value for the model as a whole was 0.000 0.05, indicating that the six factors employed as models in this study had a significant link with pulmonary tuberculosis prevention. The most significant/dominant effect on pulmonary tuberculosis prevention is consuming OAT on a regular basis, as indicated by an OR value of 52,990, meaning that respondents who consume OAT on a regular basis have 53 times

the opportunity to prevent pulmonary tuberculosis at the Garoga Health Center. Table 3 Effects of education, mask use, not spitting carelessly, frequent use of OAT, isolation, PMO, and culture on pulmonary tuberculosis prevention at the Garoga Health Center.

Table 3. Logistics Regression Test

Variable	B	Sig	OR
Knowledge	1.664	.009	5.281
Using a mask	.111	.221	.895
Don't spit carelessly	.244	.002	1.277
Consuming OAT regularly	3.970	.006	52.990
Isolation	1.452	.001	4.273
PMO	1.626	.001	5.085
Culture	1.369	.001	3.931

The Effect of Knowledge on Compliance Preventing the Transmission of Pulmonary TB Disease

Knowledge is a proxy for people taking action against something. If someone is based on sound understanding of adherence to pulmonary tuberculosis treatment, they will grasp the importance of health and will be encouraged to implement what they know.

According to the study's findings, eight respondents (53.3 percent) avoided transmission of pulmonary tuberculosis, whereas seven respondents (46.7 percent) did not. Of the 33 respondents with less information, up to 5 respondents (15.2%) avoided the spread of pulmonary tuberculosis, whereas up to 28 respondents (84.8%) did not.

According to the chi square test analysis, the p-value is 0.012 0.05, indicating that there is a link between knowledge and reducing pulmonary tuberculosis transmission. According to the logistic regression results, the Odds Ratio (OR) value of 5.281 indicates that there is an effect of knowledge on pulmonary tuberculosis prevention.

This corresponds to Lili D's study (2020). The findings indicated that there was a link between medication adherence and knowledge (0.000), attitude (0.000), education (0.000), employment (0.001), and family support (0.000). With an OR value of (Exp B = 29,169), knowledge is the most important element influencing avoiding the spread of pulmonary tuberculosis.

The Effect of Using a Mask on Preventing the Transmission of Pulmonary TB Disease

Wearing a mask is a respiratory protection tool, if not used for everyone who has contact with a tuberculosis patient, it will increase the risk of a person being infected because pulmonary tuberculosis is relatively easily transmitted from person to person through droplet nuclei. When someone coughs, in one cough there are 3000 droplets of phlegm (droplets) containing germs that can infect other people around them.

According to the study's findings, of the 15 respondents who wore masks, ten (66.7 percent) stopped the spread of pulmonary tuberculosis and as many as five (33.3 percent) did not. Three respondents (9.1 percent) and as many as thirty respondents (90.9 percent) who employed negative masks avoided the transmission of pulmonary tuberculosis. According to the chi square test, the p-value is 0.000 0.05, indicating that there is a correlation between wearing a mask and avoiding the spread of pulmonary tuberculosis. As per the logistic regression results, the Odds Ratio (OR) value of 1.277

indicates that there is an effect of employing a mask on pulmonary tuberculosis prevention.

This is in contrast to Gita Kurnia's research (2021), which stated that the data were evaluated using the chi square test with a 0.05 threshold of significance. Family support ($p = 343$), cadre involvement ($p = 0.476$), and health worker involvement ($p = 1,000$) were not linked with reducing pulmonary tuberculosis transmission in Surabaya. Another study that corroborates Fitri's findings (2019) According to in-depth interviews, informants have a good understanding of tuberculosis; some informants are unaware of the modes and sources of tuberculosis transmission; informants have a habit of not wearing masks; the majority of informants with tuberculosis take medication on a regular basis; extended family of informants with tuberculosis supports and reminds them to take medication; the distance between the houses of tuberculosis sufferers is close and does not.

The Effect of Not Spitting Carelessly on Preventing the Transmission of Pulmonary TB Disease

Not spitting carelessly, i. e. spitting carelessly can make saliva containing pathogens accidentally touched or splashed by other people. These pathogens can enter the mouth, nose, or eyes and cause disease transmission.

Based on the table above, it can be seen that from 10 respondents who did not spit carelessly, 7 respondents (70.0%) prevented the transmission of pulmonary TB and as many as 3 respondents (30.0%) did not prevent the transmission of pulmonary TB. Of the 38 respondents who did not spit indiscriminately, 6 respondents (9.1%) prevented the transmission of pulmonary TB and as many as 32 respondents (84.2%) did not prevent the transmission of pulmonary TB. Based on the chi-square test analysis, the p -value is $0.002 < 0.05$, so it can be concluded that there is a relationship between not spitting indiscriminately and preventing the transmission of pulmonary TB. The results of the logistic regression, the Odds Ratio (OR) value of 5.281 means that there is an influence between not spitting carelessly on the prevention of pulmonary TB.

This is in line with Nurlailatul's research (2019) from the results of data analysis, three themes and seven sub-themes were obtained, namely: (1) Environmental modification with the sub-themes of modifying adequate ventilation and maintaining cleanliness. (2) Efforts to cut off disease transmission with the sub-themes of removing phlegm, the use of masks, and cover when coughing (3) Consumption of drugs and routine control to the puskesmas with the sub-theme of monitoring from the family in taking medication (PMO), as well as routine control to the Puskesmas.

The Effect of Regularly Consuming OATs on Preventing Pulmonary TB Disease Transmission

Compliance with taking OAT plays an important role in the healing process of pulmonary tuberculosis, because only by taking medication regularly and obediently will patients with pulmonary tuberculosis recover completely (Nyorong et al., 2021). Rokhmah (2013) in his research states that compliance is strongly influenced by knowledge and attitudes in order to be able to adapt to self-change or in the sense of being obedient to taking medication. Compliance occurs when the rules for using the prescribed drug and its administration are followed correctly.

Based on the results of the study, it can be seen that of the 16 respondents who consumed OAT regularly, 11 respondents (68.8%) adhered to consuming oats and as

many as 5 respondents (31.2%) did not comply with consuming oats. Of the 32 respondents who consume OAT regularly and as many as 2 respondents (6.2%) adhere to consuming oats and as many as 30 respondents (93.8%) do not comply with consuming oats.

Based on the chi square test analysis, the p-value is 0.000 <0.05 so it can be concluded that there is a relationship between taking OAT regularly and preventing the transmission of pulmonary TB. The results of the logistic regression, the Odds Ratio (OR) value of 52.990 means that there is an influence between taking OAT regularly on the prevention of pulmonary TB.

This is in line with Firdous et al's research that consuming OAT significantly affects the level of medication adherence and even shows that someone who does not comply with taking OAT will have a 5.5 times greater chance of experiencing non-healing than people who consume OAT regularly.

Effect of Isolation on Compliance Preventing Pulmonary TB Disease Transmission

Isolation is a physical restriction and interaction with other people that is imposed because a person has an illness or is susceptible to disease. Social isolation according to Carpenito-Moyet (2009) is a condition when a person or group experiences or feels the need or desire to increase engagement with others, but cannot make such contact. Primack et al. (2017) also put forward another definition of social isolation, namely a condition in which an individual feels that he lacks social relationships, real involvement with other people, and fulfillment of interpersonal relationships, it is associated with increased morbidity and mortality. The National Institutes of Health (2020) defines social isolation as the perception of feeling spared, excluded, detached, disconnected from, or unknown to others. Social isolation can be applied as a result of an illness or a person's inability to establish relationships with other people and the presence or absence of social networks. This inability makes individuals have few social interactions and feel negative feelings due to isolation.

Based on the results of the study, it can be seen that of the 10 respondents who were isolated, 8 respondents (80.0%) adhered to taking drugs and 2 respondents (20.0%) did not prevent the transmission of pulmonary TB. Of the 38 respondents who were isolated and as many as 5 respondents (13.2%) and as many as 33 respondents (86.8%) did not prevent the transmission of pulmonary TB.

Based on the chi square test analysis, the p-value is 0.000 <0.05 so it can be concluded that there is a relationship between isolation and preventing transmission of pulmonary TB. The results of the logistic regression, the Odds Ratio (OR) value of 4.273, means that there is an influence between isolation and prevention of pulmonary TB.

This is in line with Lina's research (2019). Data analysis uses quantitative and qualitative methods. Qualitative data was obtained through the results of FGD and In-depth Interviews, while quantitative data was collected through the distribution of a questionnaire on knowledge of pulmonary TB patients about self-care (isolation) to prevent transmission of pulmonary TB.

The Effect of PMO on Preventing Pulmonary TB Disease Transmission

PMOs must be known, trusted, and authorized by both health care professionals and patients; also, the patient must be respected and respected by the PMO. Additionally,

a PMO is someone who lives close to the patient, is willing to assist the patient willingly, and is willing to attend training and/or counseling with the patient.

According to the study's findings, nine respondents (60.0 percent) avoided the spread of pulmonary tuberculosis, whereas six respondents (40.0 percent) did not. Of the 33 respondents who were PMOs, up to four respondents (12.1 percent) avoided the transmission of pulmonary tuberculosis, whereas up to 29 respondents (87.9 percent) did not.

The chi square test study revealed a p-value of 0.0010.05, indicating that there is an association between PMO and avoiding pulmonary tuberculosis transmission. The logistic regression results, with an Odds Ratio (OR) of 5.085, indicate that PMO has an effect on the prevention of pulmonary tuberculosis.

The findings of this study corroborate Permatasari's research (2020) in that there is a significant association between the role of PMO and patient adherence to TB treatment (p-value 0.001 = 0.05, rs = 0.44).

The Influence of Culture on Preventing the Transmission of Pulmonary TB Disease

The community's culture, among other things, is ashamed when it is discovered that they have pulmonary tuberculosis and so have the ability to transmit the disease. Many people still have a habit of spitting in public places, which makes them susceptible to infecting those around them if they have pulmonary tuberculosis.

According to the chart above, eight respondents (66.7 percent) adhered to medication use, whereas four respondents (33.3 percent) did not prevent the spread of pulmonary tuberculosis. Of the 36 respondents who were cultural, up to 5 respondents (13.9 percent) prevented the transmission of pulmonary tuberculosis, while up to 31 respondents (86.1 percent) did not.

According to the chi square test analysis, the p-value is 0.0010.05, indicating that there is a cultural component to avoiding pulmonary tuberculosis transmission. The logistic regression results, with an Odds Ratio (OR) of 3.931, indicate that culture has an effect on the prevention of pulmonary tuberculosis.

This is consistent with Hasan's (2018) study, which employs both the chi square and multiple logistic regression tests. The chi square test results indicate that cultural characteristics, patient attitudes, drug availability, family motivation, and health provider attitudes are all associated with healing success. The multiple logistic test revealed that culture was the most significant factor impacting the effectiveness of healing, with a p value of 0.002 and a coefficient value of 38.6.

CONCLUSION

There is an influence between knowledge, not spitting carelessly, consuming OAT regularly, isolation, PMO and culture on the prevention of pulmonary TB at the Garoga Health Center. Knowledge is a proxy for people taking action against something. Lili D's study indicated that there was a link between medication adherence and knowledge. Three respondents (9.1 percent) and as many as thirty respondents (90.9 percent) who employed negative masks avoided the transmission of pulmonary tuberculosis. Not spitting carelessly can make saliva containing pathogens accidentally touched or splashed by other people. Based on the chi square test analysis, the p-value is 0.002 <0.05, so it can be concluded that not spitting indiscriminately prevents the

transmission of pulmonary TB. The Effect of Regularly Consuming OATs on Preventing Pulmonary TB Disease Transmission. Compliance occurs when the rules for using the prescribed drug and its administration are followed correctly. The study shows that someone who does not comply with taking OAT will have a 5.5 times greater chance of experiencing non-healing. The National Institutes of Health (2020) defines social isolation as the perception of feeling spared, excluded, detached, disconnected from, or unknown to others. A PMO is someone who lives close to the patient, is willing to assist the patient willingly, and can attend training and/or counseling with the patient. The Influence of Culture on Preventing the Spread of Pulmonary TB Disease. Of the 36 respondents who were cultural, up to 5 respondents prevented the transmission of pulmonary tuberculosis. This is consistent with Hasan's (2018) study, which employs both the chi square and multiple logistic regression tests.

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