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ANXIETY LEVEL OF CLIENT WITH LUNG TUBERCULOSIS EXPERIENCING WITH HEMOPTYCIS

[1]Agussalim, [1]Frans Manangsang and [2]Gutit Enny Susanti

[1]School of Nursing, Health Polytechnic of Jayapura, Papua Province, Indonesia
[2]School of Nutritionist, Health Polytechnic of Jayapura, Papua Province, Indonesia

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ABSTRACT

Pulmonary tuberculosis sufferers often have a blood cough; a blood cough raises anxiety because it is often considered a blood cough is a severe sign of the disease. Anxiety in the blood cough will cause the client to withstand coughing with the effort to make the blood cough not much out. The purpose of this research is to know the relationship between compliance, officers' support and the role of family with the anxiety level of lung TB clients who experience the history of Hemoptysis. This type of research is analytical observational research with cross sectional design. The population in this study is a hemoptysis lung TB client in Makassar Labuang Baji hospital, which are 38 people who then obtained a sample of 38 people with a total sampling. The Data is analyzed by alternative test Kolmogorov-Smirnov Z through SPSS program. The results of this study were obtained that there was a link between compliance, support officers, the role of family with the anxiety level of lung TB client who suffered hemoptysis because of the value of P. $< \alpha$ 0.05. In this study concluded there was a link between obedience, attendant support, and the role of a family with an anxiety level on lung TB clients experiencing hemoptysis history. It is advisable for officers and families to do health care not only to pay attention to the physical condition but also to note the psychic client's condition so that the anxiety experienced can be overcome.

INTRODUCTION

Tuberculosis is one of the deadliest diseases in the world. The World Health Organization (WHO) estimates a third of the world's population has been infected with Mycobacterium tuberculosis. Tuberculosis is still one of the major health problems in the world. Every year there are 9 million new cases and cases of death nearly 2 million people (Sudoyo, 2007). Tuberculosis is one of the important public health problems at the global, regional, national, and local level. Tuberculosis (TBC) causes 5000 deaths per day, or nearly 2 million deaths per year worldwide. Tuberculosis, Acquired immune deficiency syndrome (AIDS), and malaria are collectively the causes of 6 million deaths every year 1/4 million (25%) death because of tuberculosis relates to AIDS. The global incidence of TBC continues to increase about 1% per year, mainly due to the rapid increase in incidence of TBC in Africa in relation to AIDS morbidities (WHO, 2009). The culture is one of the most important against the level of development of public health in all region in the world to spread of tuberculosis (Agussalim *et al*, 2018).

Pulmonary Tuberculosis is a disease caused by Mycobacterium Tuberculosis, which is an aerobic germ that can live mainly in the lungs or in various other body organs that have high oxygen partial pressure. This germ has a high fat content on its cell membrane, which causes the bacteria to become resistant to acid and the growth of the treatment lasts slowly. This bacterium is not resistant to ultra violet; hence its transmission is especially occurring at night (Rab 2010). Tuberculosis (TB) is an infectious disease infection that is caused by the Mycobacterium tuberculosis bacteria, a sour-resistant basil aerobic, which is pursed by air. The handling and eradication of Indonesian TB stated that TB is a contagious disease caused by germ TB. TB more often affects the lungs, but can also attack other parts of the body such as the brain membranes, skin, bones, lymph nodes and other body glands (PPTI, 2012). The results obtained from SKRT (Household Health Survey) in 1992, showed that the number of sufferers tuberculosis increased and caused the most deaths in the second order. National Health Survey 2001 States TBC occupies the third cause of death (9.4%) (Widyono, 2008). Since the year 1993, the World Health Organization stated that

there is a global emergency caused by TB infection. Although the DOTs (directly observed treatment short course) proved very effective for TB control, but TB disease loads in the community is still very high (STRANAS TB, 2011). The WHO report 2010 mentions that in 2008, from 9,369,038 cases of TB worldwide, most TB patients found in southeast Asia were 34%, 30% of Africa, 21% of the Western Pacific, 7% of the Middle East, 5% of Europe, and 3% of the Americas. Southeast Asia carries more than one-third of global TB loads with 3.2 million lung TB patients per year (WHO, 2010). In 2009, 1.7 million people died of the TB (Depkes, 2012). Indonesian Ministry of Health in 2012 stated that every day there were 175 Indonesians died of tuberculosis disease. Thus, the death of Lung TB in a year reached 64,000 Indonesian people (PPTI, 2012). Almost 10 years Indonesia became the 3rd world ranking in the case of tuberculosis, but in 2009 the position of Indonesia decreased to rank 5 and included in the performance achievement of 1 year Ministry of Health (WHO Global Tuberculosis Control 2010). In the year 2009 found 9.4 million new cases of tuberculosis (Depkes, 2012). The Global report of TB WHO year 2011 reports that, the new discoveries of the pulmonary TB BTA positive increased by 5.2% compared to the year 2010. According to health department records, a third of the sufferers were found in hospitals and the other health facilities were not recorded or well detected (Depkes RI, 2011). From the research results of Saida (2012) on factors related to the anxiety of lung TB clients accompanied by a blood cough in the DR. Naval Hospital. Mintohardjo Jakarta There is a relationship between obedience, social support, and a family role with the anxiety of lung tuberculosis clients accompanied by a blood cough due to the value $p < 0.05$. However this is incompatible with the study of AridaNuralita (2002), i.e. there is no relationship between gender, attendant support and family role to the level of anxiety on lung tuberculosis clients that are subjected to hemoptysis due to the value $p < 0.05$. The lung TB prevalence rate in South Sulawesi in 2013 is 107 per 100,000 from the target of a 231-per-100,000 population, the Case Detection Rate (CDR) of 51.9%, and the success rate of pulmonary tuberculosis treatment of 88.93% from the target of the Renstra 85% (RI Kemenkes, 2012).

(Dinas Kesehatan Makassar, 2016). Special report of Makassar's client hemoptysis, data showed the case of the client hemoptysis lung TB in Makassar Labuang Baji Hospital 2013 that is 294 people, in 2014 IE 287 people, and in 2015 amounted to 312 people (Labuang Baji Hospital Makassar, 2018).

Methods of Study Area: This type of research is analytical observational research using a cross sectional study plan, which is that the subject is only observed once and the measurements are made to variables at the time of study to find out whether or not the relationship between compliance, support officers and the role of the family with an anxiety level on lung TB clients who experience a history of hemoptysis. The population in this study is all patients with lung tuberculosis who experienced a history of hemoptysis in Labuang Baji Hospital, Makassar amounted to 38 respondents.

RESULT

Sufficient analysis is performed to determine the relationship of independent variables with the dependent variables by using the SPSS for Windows version 11.5 program. The statistical tests used were the Kolmogorov-Smirnov test with a level of α-significance = 0.05.The distribution of variables independent to the dependent variables is described as follows:

a.   Compliance relationship with anxiety levels on lung TB clients who experience hemoptysis history. Based on the data obtained, the results of sufficient analysis of the relationship between adherences to anxiety levels can be seen in Table 5.

From Table 1. It can be concluded that there are 22 respondents (57.9%) Sufficient compliance, there were 6 respondents (27.3%) Severe anxiety, 9 respondents (40.9%) Moderate anxiety, and 7 respondents (31.8%) Experiencing mild anxiety. As for 16 respondents (42.1%) The compliance is good, there are 4 respondents (25.0%) Severe anxiety, 9 respondents (56.3%) Moderate anxiety, and 3 respondents (18.8%) Experiencing mild anxiety.

Table 1. Analysis of the relationship between compliance with anxiety levels on clients of lung tuberculosis experiencing haemoptysis history

Compliance	Anxiety level						Total		p Value
	Severe Anxiety		Moderate anxiety		Mild anxiety				
	n	%	n	%	n	%	n	%	0,002
Enough	6	27,3	9	40,9	7	31,8	22	57,9	
Good	4	25,0	9	56,3	3	18,8	16	42,1	
Total	10	26,3	18	47,4	10	26,3	38	100	

Table 2. Analysis of relationships between support officers and levels of anxiety on clients of lung tuberculosis who experience a history of hemoptysis

Officer Supporting	Anxiety level						Total		p Value
	Severe Anxiety		Moderate Anxiety		Mild Anxiety				
	n	%	n	%	n	%	n	%	0,028
Enough	1	20,0	2	40,0	2	40,0	5	13,1	
Good	9	27,3	16	48,5	8	24,2	33	86,8	
Total	10	26,3	18	47,4	10	26.3	38	100	

Special in the city of Makassar, the number of patients with clinical pulmonary tuberculosis in 2015 as many as 3,254 patients, based on the recording and reporting of Labuang Baji Hospital Makassar. The number of sufferers who have undergone treatment and expressed cured of 2,119 people

This indicates that the level of anxiety on lung TB clients experiencing the most hemoptysis history is moderate anxiety. Alternative test results Kolmogorov-Smirnov zobtained P value = 0, 002 with a degree of efficacy (= 0.05. This indicates that the value of p < (which means there is a link between

compliance with anxiety levels on lung TB clients that experience a haemoptysis history in Makassar's Labuang Baji Hospital.

b. The relationship between support officers with anxiety levels in lung tuberculosis clients experiencing hemoptysis history based on the data obtained the results of analysis of the relationship between officers' support and anxiety levels can be seen in table 6 below this.

Based on the Bivariate analysis in the Table 2, There are distributed 5 respondents (13.2%) Support officers who say enough, there is 1 respondent (20%) Severe anxiety, 2 respondents (40%) Moderate anxiety, and 2 respondents (40%) Experiencing mild anxiety. While from 33 respondents (86.8%) Support officers who say well, there are 9 respondents (27.3%) Who experienced severe anxiety, 16 respondents (48.5%) Moderate anxiety, and 8 respondents (24.2%) Experiencing mild anxiety. This suggests that the level of anxiety on lung TB clients experiencing a haemoptysis history in the support of officers who say well the most is moderate anxiety. Alternative test result Kolmogorov-Smirnov Z obtained P value = 0, 028 with a degree of efficacy (= 0.05. This indicates that the value of p < (which means there is a link between attendant support and an anxiety level on the lung TB client who is experiencing hemoptysis history.

c. Relationships between family roles and levels of anxiety on lung clients experiencing hemoptysis history based on data obtained the results of analysis of the relationship between family roles and anxiety levels can be seen in table 7 below.

Table 3. Analysis of relationships between family roles and levels of anxiety on clients of lung tuberculosis who experience hemoptysis

Family roles	Anxiety Level						Total		p Value
	Severe Anxiety		Moderate Anxiety		Mild Anxiety				
	n	%	n	%	N	%	n	%	0,021
Enough	1	25,0	3	75,0	0	0	4	10,5	
Good	9	26,5	15	44,1	10	29,4	34	89,4	
Total	10	26,3	18	47,4	10	26,3	38	100,0	

Based on the bivariate analysis in the Table 3, There are divided into 4 respondents (10.5%). The role of a family that says enough, there are 1 respondent (25%) Severely anxiety and 3 respondents (75%) Who are experiencing moderate anxiety, and no respondent is experiencing mild anxiety. While from 34 respondents (89.4%) the role of family that say well, there are 9 respondents (26.5%) Who are experiencing mild anxiety and 15 respondents (44.1%) Moderate anxiety and 10 respondents (29.4%) experiencing mild anxiety. This suggests that the level of anxiety on a lung TB client experiencing a hemoptysis history in a family role that says the most good is anxious. Alternative test Results Kolmogorov-Smirnov zobtained p value = 0.021 with a level of efficacy (= 0.05. This indicates that the value of P is < (which means there is a link between the role of the family with anxiety levels on lung TB clients who experience the history of Hemoptysis.

DISCUSSION

Based on the results of the data processing and adjusted to the purpose of the research that is looking for the relationship

between the variables studied, then the discussion systematics is described as follows:

1. Compliance relationship with anxiety levels on lung TB clients who experience hemoptysis history

Researchers analyzed 38 samples in the study. Of 22 respondents (57.9%) Sufficient compliance, there were 6 respondents (27.3%) Severe anxiety and 9 respondents (40.9%) Moderate anxiety and 7 respondents (31.8%) experiencing mild anxiety. As for 16 respondents (42.1%) There are 4 respondents (25%) severe anxiety, and 9 respondents (56.3%) moderate anxiety, and 3 (18.8) respondents who experienced mild anxiety. The results of this study showed strong association of adherence to anxiety levels due to the value of ρ (0.002) < α (0.05). A person is often more depressed and anxious about the consequences of a disease suffered compared to someone who has no symptoms, even though the difference is difficult to interpret. In addition to the different conditions of disease and severity are between the client and others. Most people feel that the symptoms of hemoptysis are severe lung disease that cannot be healed. This research is in line with Arida Nuralita Research (2002), there is a relationship between obedience, Officer support and the role of family to the level of anxiety on lung tuberculosis clients that are subjected to hemoptysis due to the value of ρ < 0.05. Where are gender and anxiety (0.043 < 0.05), attendant support (0.006 < 0.05), and family roles (0, 032 < 0.05). However, it is also in line with the research of Saida (2012) which is titled Factors related to the anxiety of lung TB clients accompanied by a blood cough in a naval hospital of DR. Mintohardjo Jakarta There is a relationship between obedience, with the anxiety of lung TB client accompanied by a blood cough because the value of ρ < 0.05.

2. The relationship between officer support and anxiety levels in hemoptysis lung TB clients.

From the Chi-square test results There are 3 cells that have a value of more than 5 significance. With these results, the test used is an alternative test Kolmogorov-Smirnov Z with ρ value = 0.028. This value is smaller than α = 0.05 which means there is a link between attendant support and anxiety levels on pulmonary TB clients experiencing a haemoptytic history. In this study, of 5 respondents (13.1%) Support officers who say enough, there are 2 respondents (40%) Severe anxiety, and 2 respondents (40%) Moderate anxiety, and 2 respondents (40%) Who experience mild anxiety. While from 33 respondents (86.8%) Support officers who say well, there are 9 respondents (27.3%) severely anxious, and 16 respondents (48.5%) and 8respondents (24.2%) experiencing mild anxiety. For that, most of the respondents said the support of the officers is good, not only pay attention to the problem of respondent treatment but the officer also pays special attention one of them give motivation to keep the spirit in living Treatment so that the degree of jealousy decreased. According to Taylor (2009) the goal of treatment not only restores the health of clients physically but can be sought to keep the client's emotional and physical condition comfortable. But rapid progress in medical technology has not been accompanied by the same progress on the humanitarian aspects of client care. The nursing process in the hospital often ignores the psychological aspects, causing various problems for the client, one of which is anxiety. The way officers in assisting clients during the treatment are not separated from the client's view of

the service provided by the officer. This perception results in a wide range of responses that can then affect client anxiety onset. Therefore, support officers are very influential in the process of the client's healing, especially for patients with hemoptysis who still rarely suffered by one need special attention in the treatment process. Therefore, to measure the support of officers during treatment is to ask questions directly (interviews) or through written questions or polls. The indicator of support officers is service during the process of treatment of respondents about the variables or health components (Notoatmodjo, 2010). This research is in line with AridaNuralita Research (2002), that is, there is a relationship between obedience, Officer support and the role of family to the level of anxiety on lung tuberculosis clients that are subjected to hemoptysis due to the value of $\rho < 0.05$. Where gender (0.023 < 0.05), attendant support (0.006 < 0.05), and family roles (0, 032 < 0.05).

3. The relationship between family roles and anxiety levels in hemoptysis lung TB clients

Researchers analyzed 38 samples in the study. 4 respondents (10.5%) Support officers who say enough, there is 1 respondent (25%) severely anxious and 3 respondents (75%) Who are experiencing moderate anxiety, and no respondent is experiencing mild anxiety. While from 34 respondents (89.4%) Support officers who say well, there are 9 respondents (26.5%) Severely anxious, and 15 respondents (44.1%) moderate anxiety and 10 respondents (29.4%) experiencing mild anxiety. The results of this research show there is a relationship between the role of the family with the level of anxiety on lung TB client that has been hemoptysis because the value of ρ (0.021) < α (0.05). The existence of health problems in one family member can cause other members to find risk factors, one of them on a hemoptysis lung TB client, the family members feel anxious to be infected by other family members who suffer from Pulmonary tuberculosis disease, and family members feel anxious about the disease suffered already severe because it sees the client cough blood, for that family role is very influential in lowering the anxiety level of lung TB client by giving attention, and good attitude To a sick family member (Friedman, 2010). A disease in the family affects the whole family and otherwise affects the course of a disease and family member status. The role of the family is very important for every aspect of the health care of individual members of the family, from strategies to rehabilitation phases (Friedman, 2010) Researchers analyzed that the reasons for research results on the role of family There is no connection with the level of anxiety on lung tuberculosis clients who experience a history of hemoptysis because almost all of the respondents investigated say the role of family is good. Although families are busy with their respective dealings, they still take the time to accompany the respondents in their treatment. If one member of the family does not come, they always take turns, so that the level of anxiety of respondents can be resolved by the attention of family members. The research is in line with Saida's research titled Factors related to the anxiety of lung TB clients accompanied by a blood cough in Dr. Mintoharjo Hospital, Jakarta. There is a relationship between family roles, with the anxiety of a lung TB client accompanied by a blood cough because the value $\rho < 0.05$.

Similarly, the study of Arida Nuralita (2002), namely there is a relationship between the gender, the support of officers and the role of family against the level of anxiety on lung tuberculosis clients who are experiencing hemoptysis because the value of $\rho < 0.05$. Where are compliance (0,023 < 0.05), attendant supporting (0.006 < 0.05), and family roles (0, 032 < 0.05).

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