Physical And Mental Health Examination Of Lung Tb Patients Due To The Covid-19 Pandemic And Health Education In Increasing Patient Knowledge

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Abstract

Pulmonary tuberculosis is an infectious disease that is still a major global health problem. Pulmonary TB cases are one of the co-morbidities of death for COVID-19 patients. The increase in the prevalence of TB patients and the increase in the number of cases and deaths of COVID-19 will certainly have an impact on patients and their families. The spread of COVID-19 worries the public, causing feelings of pressure and anxiety which are a common response from people who are affected (either directly or indirectly). The purpose of this activity is to describe the health status of pulmonary TB patients, both physical health and mental health in the working area of the Merdeka Palembang Health Center. The participants of this activity were 28 patients who were present at the Merdeka Palembang Health Center in November 2021. The results of this activity showed that the patient characteristics were mostly adults (20-60 years) as many as 21 people (75%), most of them were male 19 people (67.9%), 10 people with high school education (35.7%), work as laborers as many as 6 people (21.4%), body mass index mostly normal and underweight that is 10 people each (35.7%), most of them have poor knowledge 21 people (75%) and most of them do not experience anxiety as many as 22 people (78.6%), patients who experience mild anxiety 4 people (14.3%) moderate and severe anxiety each 1 person (3.6%). The results of the measurement of health status based on lipid profile examination showed that pulmonary TB patients had a mean cholesterol level of 141.53±31.42, an average triglyceride of 90.82±20.15, a mean HDL of 32.42±3.20, and an average LDL of 92.03. ±22.07.

Keywords: *knowledge, anxiety, lipid profile, pulmonary TB patients*

I. INTRODUCTION

Pulmonary Tuberculosis (TB) is one of the most important causes of morbidity and mortality in the world. According to the 2019 WHO report, there were more than 10,000,000 people worldwide suffering from tuberculosis, 1,500,000 people who died from tuberculosis, and 484,000 people suffering from multidrug-resistant tuberculosis ("multidrug-resistant tuberculosis") in 2018.Pulmonary TB disease if not treated properly will cause complications. Complications are divided into early complications (pleuritis, pleural effusion, laryngitis, spread to other organs such as the intestine) and late complications (severe parenchymal damage, lung carcinoma). Psychological complications can also arise from tuberculosis, namely that each person has a different

reaction when faced with a disease, the behavioral and emotional reactions depend on the disease, the person's attitude in dealing with a disease, the reaction of others to the disease he suffers, and others. Short-term, non-life-threatening illnesses cause only minor behavioral changes in the person's and family's functioning, whereas severe, life-threatening illnesses such as pulmonary tuberculosis can cause broader emotional and behavioral changes, such as anxiety, shock, rejection, anger, and withdrawal (Perry & Potter, 2005).The emergence of the Covid-19 pandemic that hit the world, including Indonesia, made people throughout Indonesia feel threatened by this condition.

Pulmonary TB cases are one of the comorbidities in the death of COVID-19 patients. The increasing prevalence of TB patients and the increasing number of cases and deaths of COVID-19 will certainly have an impact on patients and their families. The spread of COVID-19 is troubling the public, causing feelings of pressure and anxiety which are a common response from the affected community (either directly or indirectly). Based on the protocol for managing TB patients during the COVID-19 pandemic, for outpatient TB patients, one of them is that all TB patients are encouraged to stay at home, maintain social distancing and avoid places visited by many people, this is likely what causes patients to feel bored. threatened and emotional with this situation (Kementrian Kesehatan RI Direktorat Jenderal P2P, 2020).One of the emotional changes from tuberculosis is anxiety. Anxiety (anxiety) is a natural feeling disorder (affective) which is characterized by feelings of fear or worry that are deep and ongoing, do not experience disturbances in assessing reality (Reality Testing Ability), personality is still intact, behavior can be disturbed but still within normal limits. . There are conscious aspects of anxiety itself such as fear, helplessness, surprise, guilt or threat, but also aspects that occur outside of awareness and cannot avoid unpleasant feelings (Jatman, 2001).Based on the description above, the author wants to carry out community service activities for certain groups of people, namely TB patients and their families in controlling anxiety levels and increasing their knowledge in the COVID-19 pandemic situation at the Merdeka Palembang Health Center.

II.   METHODS

The implementation of this community service activity was originally planned to be carried out in the work area of the Palembang Reading Center Health Center, but there was a change in the location of the activity, namely the Merdeka Palembang Health Center. The target of the service activity is pulmonary TB patients who are recorded in the register book in the work area of the Merdeka Palembang Health Center with the number of invitees for pulmonary TB patients as many as 28 patients. The activity will be held in November 2021.The method of carrying out this activity is by examining the health status of pulmonary TB patients in the form of lipid profile levels and conducting mental health examinations using the Hamilton Rating Scale for Anxiety (HARS) questionnaire.Increased knowledge of pulmonary TB patients is

carried out through counseling using appropriate communication with lecture, discussion and question, and answer methods. The implementation of the activity is divided into 2 sessions.The first session consisted of 15 pulmonary TB patients and continued in the second session with 13 patients. The implementation of this activity is carried out while still complying with health protocols, including wearing masks, washing hands before and after activities, and maintaining distance.

III.   RESULT AND DISCUSSION

The frequency distribution based on the characteristics of pulmonary TB patients was found to be mostly found in adults aged 20-60 years as many as 21 people (75%), male sex more than women, namely 19 people (67.9%), having a high school education level, namely 10 people (35.7%), have a job as a laborer as many as 6 people 21.4%, most of the body mass index is underweight 10 people (35.7%), most of the patients have treatment duration <1 month, namely 12 people (42.9%). The results of the analysis are presented in a table.1

Table 1. Frequency Distribution Based on Characteristics of
Pulmonary Tb Patient (n=28)

Characteristics of Pulmonary Tb Patient	n	%
Age		
- Elderly (>60 years)	6	21.4
- Adult (20-60 years	21	75.0
- Midle aged (11-19 years)	1	3.6
Gender		
- Male	19	67.9
- Female	9	32.1
Education		
- Primary school	7	25.0
- Secondary school	7	25.0
- High school	10	35.7
- College	4	14.3
Job		
- Not yet working	7	25.0
- Housewife	6	21.4
- Laborer	6	21.4
- Private employees	5	17.9
- Entrepreneur	1	3.6
- Government employees	2	7.1
- Retired	1	3.6
Body Mass Index		
- Underweight	10	35.7
- Normal	10	35.7
- Overweight	3	10.7

- Obesity I	3	10.7
- Obesity II	2	7.1
Treatment Duration		
- <1 Month	12	42.9
- 1-3 Month	9	32.1
- >3 Month	7	25.0

Table 2. This shows that the frequency distribution based on the results of the examination of the lipid profile of pulmonary TB patients, the average total cholesterol, triglycerides, HDL, and LDL can be in the normal range. The average total cholesterol was 141.53 ± 31.42, triglycerides 90.82 ± 20.15, HDL 32.42 ± 3.20 and LDL 92.03 ± 22.07. The complete analysis results are presented in the following table:

Table 2. Frequency Distribution of Lipid Profile of Pulmonary TB Patients

Lipid Profile	n	Mean±sd	Minimum	Maximum
Total Cholestrol	28	141,53 ± 31,42	101	195
Trigliseryd	28	90,82 ± 20,15	65	136
HDL	28	32,42 ± 3,20	28	38
LDL	28	92,03 ± 22,07	57	128

Table 3. This shows that the frequency distribution based on the knowledge of pulmonary TB patients shows that most patients have poor knowledge, namely 21 people (75%) more than patients who have good knowledge. The complete analysis results are presented in the following table:

Table 3. Frequency Distribution Based on Knowledge

Knowledge	n	%
Not good	21	75.0
Good	7	25.0
Total	28	100.0

In table 4. The frequency distribution based on the anxiety of pulmonary TB patients showed that most of the patients did not experience anxiety, namely 22 people (78.6%), patients who experienced mild anxiety as many as 4 people (14.3%), while patients who experienced moderate and severe anxiety 1 person each (3.6%). The complete analysis results are presented in the following table:

Table 4. Frequency distribution based on anxiety of pulmonary TB patients

Anxiety	n	%
Severe anxiety	1	3.6
Moderate anxiety	1	3.6
Mild anxiety	4	14.3
No anxiety	22	78.6
Total	28	100.0

In table 4. The frequency distribution based on the anxiety of pulmonary TB patients showed that most of the patients did not experience anxiety, namely 22 people

(78.6%), patients who experienced mild anxiety as many as 4 people (14.3%), while patients who experienced moderate and severe anxiety 1 person each (3.6%).

Table 5. Frequency distribution based on anxiety of pulmonary TB patients

Knowledge	Anxiety			
	Severe anxiety n (%)	Moderate anxiety n (%)	Mild anxiety n (%)	No anxiety n (%)
Not good	1 (4.8)	1 (4.8)	2 (9.5)	17 (81.0)
Good	0 (0.0)	0 (0.0)	2 (28.6)	5 (71.4)
Total	1 (3.6)	1 (3.6)	4 (14.3)	22 (78.6)

IV.   DISCUSSION

The results of the analysis showed that the frequency distribution of the characteristics of patients with pulmonary TB were mostly adults, namely 75%, male 67.9%, high school education 35.5%, maternity work 21.4%, had a body mass index of less than 35.7%. and most of the duration of treatment <1 month 42.9%. The results of lipid profile examination based on total cholesterol, triglyceride, HDL, and LDL levels of pulmonary TB patients had normal values. Pulmonary TB patients have less knowledge about Covid-19, which is 75%. Most of the anxiety experienced by pulmonary TB patients due to the COVID-19 pandemic did not feel anxious as much as 78.6% and those who experienced severe anxiety were 14.3%.Anxiety according to Hawari, 2016 is a natural disorder a feeling characterized by feelings of fear or worry that deep and sustainable, not experiencing interference in assessing reality (still good), personality is still intact (not experiencing personality rift), behavior can be disrupted but still within limits normal. Anxiety levels are influenced by several related factors including potential stressors; Psychosocial stressors are any circumstances or events that cause changes in a person's life.

Educational status and low economic status in a person cause that person to experience anxiety and stress more easily than those with high educational status and economic status. A person's low level of knowledge will cause that person to be easily stressed and anxious. The more knowledge a person has, the more prepared that person will be to face something and can reduce anxiety. Ignorance of something is considered a pressure that can lead to crisis and can cause anxiety. Stress and anxiety can occur in individuals with low levels of knowledge, due to the lack of information obtained. Physical state; Individuals who experience physical disorders such as injuries, bodily illnesses, operations, physical disabilities are more prone to anxiety and stress. Personality type; Individuals with type A personality type is more easily disturbed due to anxiety and stress than individuals with personality B. Socio-cultural; the way of life of individuals in society that greatly affects the onset of stress. Individuals who have a very regular way of life and have a clear philosophy of life are generally more difficult to experience stress.

Likewise, religious beliefs will affect the onset of stress. Environment or situation; Individuals who live in an environment that is considered foreign will more easily experience anxiety and stress. Age; Some argue that the old age factor is easier to experience anxiety and stress than young people. Gender; Generally, women are more prone to anxiety and stress, but women's life expectancy is higher than men's (Isaacs, 2004).In pulmonary TB patients, there can be a decrease in appetite, changes in diet, malabsorption of nutrients and changes in metabolism that can trigger malnutrition and other disease complications that can worsen the condition of Tuberculosis infection, such as increased levels of lipids in the blood which can be an indicator for heart and vascular disease. blood (so we need the right diet for pulmonary TB patients (Anies, 2015). Hypocholesterolemia and TB infection are closely related. In the research of Metwally and Raheem (2012) concluded that patients with pulmonary tuberculosis have hypocholesterolemia that proved to be a consequence of the disease itself rather than a risk factor. This hypocholesterolemia proved to be correctable to normal levels with regular intake of anti TB treatment and normal diet

IV. CONCLUSION

1. Frequency distribution based on the characteristics of pulmonary TB patients, most of them are adults, namely 75%, male 67.9%, have high school education 35.5%, have a labor job 21.4%, have an underweight body mass index 35.7% and most of the duration of treatment <1 month 42.9%

2. Results of examination of lipid profiles Patients with pulmonary TB based on total cholesterol, triglycerides, HDL, and LDL have normal values on average

3. Frequency distribution is based on the knowledge that pulmonary TB patients have poor knowledge about Covid-19, which is 75%.

4. Anxiety experienced by pulmonary TB patients due to the covid-19 pandemic, most of them did not feel anxious as much as 78.6% and those who experienced severe anxiety 14.3%

V. ACKNOWLEDGMENTS

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