THE RELATIONSHIP BETWEEN SELF EFFICACY AND MEDICATION COMPLIANCE IN TUBERCULOSIS PATIENTS AT GARUDA HEALTH CENTER IN BANDUNG CITY IN 2023

Seli Marselina [ID], **Eny Kusmiran, Iqbal Sutisna**

Institut Kesehatan Rajawali, Indonesia

ABSTRACT

Introductio:. Tuberculosis is an infectious infection that often attacks the lung organs caused by mycrobacterium tuberculosis bacteria. Adherence to medication is a behavior that adheres to recommendations made by health care providers related to timeliness, dosage and frequency of taking medication. Tuberculosis patients have a treatment time of about 6-9 months, making patients will be saturated with the duration of treatment. One of the psychological factors that affect adherence to taking medication is self-efficiency. High self-efficacy in a person will have a positive impact and can provide confidence and confidence in one's own ability to deal with problems.

Method: The design of this study is descriptive analytic with a cross sctional approach. This research instrument used questionnaires. Data collection using total sampling technique obtained 77 respondents, data analysis using Chi-square test.

Results: This study found 25 (32.5%) respondents belonging to the low self-efficacy category with a compliance rate of 14 (18.2%). There was a relationship between self-efficacy and medication adherence in tuberculosis patients with a p-value of <0.001.

Conclusion: It can be concluded that there is a relationship between self-efficacy and adherence to taking medication in tuberculosis patients at the Garuda City Bandung Health Center in 2023.

Keywords: Self Eficacy; Medication Adherence; Tuberculosis.

INTRODUCTION

Tuberculosis is an infectious disease infection that most often affects the lung parenkin, usually caused by the bacterium mycrobacterium tuberculosis. Tuberculosis can spread to almost any part of the body, including the meninges, kidneys, bones and lymph nodes (Smalzer SC, 2013). Tuberculosis attacks through the air when patients cough, sneeze, they push tuberculosis germs into the air. Symptoms of tuberculosis such as cough, fever, night sweats, weight loss (WHO, 2022).

The World Health Organization (WHO) explains that tuberculosis is one of the 13 highest causes of death in the world. In 2020, 10 million people contracted tuberculosis, and 1.5 million lost their lives due to tuberculosis. This disease is more commonly found in developing countries. People who have poor immune systems and nutritional deficiencies are more susceptible to mycrobacterium tuberculosis bacteria.

The world's health program, Sustainable Development Doals (SDGs), has 17 goals and 169 targets. One of the agreements refers to goal 3 target 3 in the SDGs, namely ending the Tuberculosis (TB) pandemic which is the basis for the initiation of sustainable TB control programs. TB control programs are still included in the main concentration. Globally, it is shown that the emergence of a new paradigm of tuberculosis in the era of Sustainable

Development Doals (SDGs) which replaces the era of Millennium Development Doals (MDGs). In the era of Millennium Development Doals (MDGs), the point was the STOP TB movement adopted by many countries. However, the era of Sustainable Development Doals (SDGs) of the STOP TB movement changed to END TB, where the goal of END TB is to end the TB pandemic worldwide.

Referring to the Global TB Report from WHO in 2021, Indonesia is ranked third highest in terms of the burden of tuberculosis (TB), after India and China, both of which have populations of more than 1 billion. Currently, Indonesia is one of eight countries that contribute to 2/3 of the total TB cases worldwide. In 2020, it is estimated that around 824,000 people were infected with TB and 93,000 people died from this disease in Indonesia

Based on the 2021 Global TB Report, the estimated number of TB cases in Indonesia reached 824,000, but only 393,323 individuals were successfully identified as TB patients, received treatment, and recorded in the national information system, only amounting to 48%. This indicates that about 52% of TB cases are still undetected or may have been detected but have not been archived in official reports. The West Java region is the largest contributor to the number of TB cases. In the period from January to August 2022, 75,296 cases were reported, or about 59% of the target until August of 60%, with the success rate of TB treatment reaching 72% of the target of 90%. According to the Bandung city health office, the number of tuberculosis cases increased from 2021 by 24,164 people. In 2022, the number of tuberculosis cases was 103,036 people counted in January-October 2022.

Therapy in patients suffering from tuberculosis requires a relatively long period, approximately between 6 to 9 months. Antituberculosis drugs (OAT) are used as part of treatment, and these types can be divided into several groups. The main group of OAT therapies consists of Isoniazid (H), Rifampicin (R), Pyrazinamide (Z), Ethambutol (E), and Streptomycin (S), as regulated by the Minister of Health Regulation in 2016. Approaches to tuberculosis treatment can also be divided into three categories, namely category 1, category 2, and specific approaches to the treatment of children. Treatment in category 1 is intended for patients who have just received a clinical and bacteriologic diagnosis, or have cases outside the lungs, and this uses the 2HRZE/4HR therapy plan (Ministry of Health, 2012).

According to Dewi, Nursiswati, & Ridwan (2009, in Sutarto 2019), compliance is the level at which patients carry out treatment methods and behaviors recommended by doctors or other health workers. In undergoing long-term treatment, patient compliance is highly required to know the patient's attitude and behavior towards the treatment program that has been given by health workers. Poor adherence to recommended treatment can result in adverse side effects. This can be caused by poor patient self-regulation. With adherence to taking medication, it is hoped that the ability of bacteria in the body can be reduced and die so that it is needed by tuberculosis sufferers. Compliance is influenced by the existence of five dimensions that are interrelated with each other. The five dimensions are patient factors, therapeutic factors, health system factors, environmental factors and socioeconomic factors.

According to Sedjati (2013, in Sutarto, 2019), self-efficacy is a person's self-estimate of his ability to carry out and regulate actions needed to solve a problem or achieve certain goals. Self-efficacy is one of the key factors in the exercise of personal control, including control over one's own state of health. In addition, self-efficacy also contributes to providing benefits to the level of motivation and performance achievement. Individuals with good self-efficacy will focus on the opportunities that exist in their lives, even in environments with limited opportunities they believe that problems and obstacles can be overcome..

METHOD

This research uses a quantitative approach method using a cross sctional study design. The sample in this study of tuberculosis patients seeking treatment at the Garuda City Bandung Health Center in 2023 amounted to 77 respondents. The time of this study is June – July 2023. In this study using the total sampling method. The measuring instrument used for efficacy is the Tuberculosus Self Efficacy Scale (TBSES) questionnaire and the measuring instrument used for medication adherence is the Morisky Medication Adherence Scale-8 (MMAS-8). The independent variable in this study is self-efficacy. The dependent variable in this study was medication adherence. The research data was collected and then processed and analyzed using univariate and bivariate data using the Chi-Square Test. With a 2 ×3 cotency table.

RESULTS

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The results of the study of 77 respondents showed that 14 (18.2%) respondents had adherence to taking non-adherent medication and 30 (39.0%) respondents had moderate adherence to taking medication (Table 1).

Table 1. Distribution of Frequency of Adherence to Taking Medication in Tuberculosis Patients at Garuda Health Center Bandung City in 2023.

Adherence to taking medication	N	%
Disobedient	14	18,2
Moderate	30	39'0
Obedient	33	42'9
Total	77	100,0

Table 2. Distribution of Self-Efficacy Frequency in Tuberculosis Patients at Garuda Health Center Bandung City in 2023

Self-Efficacy	N	%
Low	25	32,5
High	52	67,5
Total	77	100,0

Table 3. The Relationship between Self-Efficacy and Adherence to Taking Medication in Tuberculosis Patients at Garuda Health Center Bandung City in 2023

Self-efficacy	Adherence to taking medication						Total		p-value
	Disobedient		Moderate		Obedient				
	n	%	n	%	n	%	T	%	
Low	12	48,0	11	44,0	2	8,0	25	100	<0,001
High	2	3,8	19	36,5	31	59,6	52	100	
Total	14	18,2	30	39,0	33	42,9	77	100	

Source: Chi-Square Test

The results of the self-efficacy study showed that of the 77 respondents, most of the respondents as many as 25 (32.5%) had low self-efficacy and 52 (67.5%) respondents had high self-efficacy (Table 2).

Bivariate Analysis

The results of this analysis aim to determine the relationship or not of self-efficacy with adherence to taking medication at the Garuda City Bandung Health Center in 2023. The bivariate analysis in this study is shown in Table 3.

There is a relationship between self-efficacy and medication adherence in tuberculosis patients at the Garuda City Bandung Health Center in 2023 with a p-value of <0.001.

DISCUSSION

Adherence to Taking Medication for Tuberculosis Patients at Garuda Health Center Bandung City in 2023

Based on the results of research that has been conducted shows that 77 respondents obtained a little from respondents, namely 18.2% had non-compliance in taking tuberculosis drugs, almost half of the respondents namely 39.0% had moderate adherence in taking tuberculosis drugs and found almost most of the respondents namely 42.9% had high adherence. This is due to the high motivation of

the patient to recover and fear if the disease continues.

The results of this study showed that some respondents had moderate adherence and non-compliance, they admitted that sometimes they forgot to take medicine, they also forgot to bring medicine when traveling long distances but most of them complained of being upset with the long treatment, so they felt the side effects of the treatment. In addition, they still lack to understand the effects caused if they do not take medication obediently. According to the Indonesian Ministry of Health, patient non-compliance in undergoing therapy is one of the causes of therapy failure. This is often due to patients lacking self-efficacy, knowledge and understanding of tuberculosis. The main cause in the failure of treatment of tuberculosis patients is the non-compliance of patients with regular treatment. One of them causes anti-tuberculosis drug resistance (Ministry of Health, 2020).

Based on research according to Hafizil Arzit (2021), this situation is caused by the non-compliance of patients in undergoing treatment. Compliance is the most important thing in healthy living behavior. In addition, another problem in the treatment of tuberculosis is that treatment requires a long time and must remain routine for 6-9 months. Thus, if the patient takes the drug irregularly or incompletely, it will result in the occurrence of double

immunity of pulmonary TB germs to anti-tuberculosis drugs (OAT), which ultimately for the treatment of patients must require higher or expensive costs and a relatively longer period of time.

Self-Efficacy in Tuberculosis Patients at Garuda Health Center Bandung City in 2023

Based on the results of research that has been conducted, it shows that from 77 respondents, almost half of the respondents (31.6%) have low efficacy and almost all of the respondents, namely (68.3%) who have high self-efficacy. Based on the results of research that high self-efficacy in respondents have confidence and motivation to change behavior by obediently taking drugs so that the tuberculosis suffered does not repeat in treatment again and faster in curing tuberculosis.

The results of this study that respondents have high self-efficacy give confidence that tuberculosis sufferers will carry out treatment or treatment on themselves optimally in carrying out behaviors to maintain their own health status. Individuals with high self-efficacy will proactively mobilize their personal and social resources to maintain and promote a better quality of life.

The effect of self-efficacy on cognitive processes varies widely. Strong self-efficacy will affect personal goals, the stronger the self-efficacy, the better the goals set by the individual for oneself and what reinforces is the individual's commitment to those goals. Individuals with strong self-efficacy will have good goals and goals, set plans and commit themselves to achieving these goals (U.C.A.S Isnainy, 2021).

The Relationship between Self-Efficacy and Adherence to Taking Medication in Tuberculosis Patients at Garuda Health Center Bandung City in 2023

The results of research conducted using the chi square test obtained a p-value in this study of <0.001, which means that there is a relationship between self-efficacy and drug adherence in tuberculosis patients. Where in this study most respondents low self-efficacy with low adherence to treatment as many as 12 respondents or (48.0%).

This shows that respondents who have high self-efficacy tend to be obedient to taking drugs. The researchers' assumption that the high self-efficacy possessed by respondents obediently taking medication is because respondents have a positive attitude and also awareness of the disease as they believe that the disease suffered can be cured.

The results of research from Masyita Haerianti (2022) show that there is a relationship between self-efficacy and adherence to taking medication with p-value

results of <0.002 with p<0.05. The results of this study are in line with the research of Gebremariam et al (2021) which shows there is a relationship between self-efficacy and medication adherence.

The results explained that patients with high self-efficacy had the opportunity to be obedient in taking medication compared to self-efficacy patients who had low self-efficacy because they did not have the ability to maintain an attitude to be obedient in taking drugs (Shen et al). High self-efficacy makes patients have high self-confidence so that they can convince patients that patients can maintain an attitude of being able to convince patients that patients can take medicine, while patients who have low efficacy where patients cannot maintain an obedient attitude in taking drugs (Huang &; Shiyanbola, 2021).

CONCLUSION

Based on the results of research on the relationship between self-efficacy and medication adherence in tuberculosis patients at the Garuda City Bandung Health Center in 2023 with the number of samples that have met the inclusion criteria of 77 samples, it can be concluded that:

1. A small percentage of respondents (18.2%) had non-adherence to taking medication.
2. Almost a small percentage of respondents (32.5%) had low self-efficacy.
3. There is a relationship between self-efficacy and medication adherence in tuberculosis patients at the Garuda City Bandung Health Center in 2023 with a p-value of <0.001.

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