

The Relationship Between Knowledge And Attitudes With Adherence To Taking Medication For Pulmonary Tuberculosis Patients

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ABSTRACT

Knowledge and attitude are the most dominant factors in shaping a person's behavior, including adherence to taking medication. A person who has good knowledge and attitudes tends to be adherence in taking medication. The purpose of this study was to determine the relationship between knowledge and attitudes with adherence to taking medication for pulmonary tuberculosis patients. This research used an observational analytic with a cross sectional study design. The sample were patients with pulmonary tuberculosis who underwent treatment and recorded on PIS-PK in the District of Genuk, Mijen District, West Semarang and Tugu, Semarang City from July-December 2020 who met the inclusion and exclusion criteria of 30 respondents. This study used total sampling technique and the Spearman rank correlation test. The majority of respondents had good knowledge 86.7%, good attitude 63% and moderate adherence 56.7%. The results of the analysis of the knowledge variable ($p = 0.022$) with correlation coefficient 0.417 and attitude variables ($p = 0.009$) with correlation coefficient 0.469. There is a significant relationship between knowledge and medication adherence in pulmonary tuberculosis patients with a moderate level and there is a significant relationship between attitude and medication adherence in pulmonary tuberculosis patients with a moderate level of relationship. Good knowledge about the success of pulmonary TB treatment and the consequences of not regularly taking pulmonary TB drugs are the dominant reasons that make high adherence. A positive attitude about the success of pulmonary TB treatment, reluctance to repeat treatment, and not wanting to transmit pulmonary TB disease are the dominant reasons that make high adherence.

Keyword : Knowledge, Attitude, Adherence To Taking Medication, Pulmonary Tuberculosis Patients

INTRODUCTION

Tuberculosis is an infectious disease caused by the bacterium *Mycobacterium tuberculosis*.¹⁻³ Based on the Data and Information Center of the Indonesian Ministry of Health (InfoDATIN) in 2018, the results showed that the number of new TB cases in Indonesia was 420,994.1 Pulmonary TB patients in Central Java in 2018. 2018 was 49,616 cases, especially in Semarang City, which was 3,415 cases with a prevalence of 6.88%.⁴

Tuberculosis prevalence rate is getting higher and higher, therefore it is included in one of the indicators in the healthy Indonesia program with a family approach, namely pulmonary tuberculosis sufferers get appropriate treatment, including one of the programs from Nawa Cita which aims to improve the quality of

life of healthy Indonesian people through a family approach.^{5,6} Patients with pulmonary tuberculosis receiving treatment according to standards is one of the 12 indicators of the Healthy Indonesia Program with a Family Approach (PIS-PK). The 12 indicators are used in the calculation of the Healthy Family Index (IKS) with the IKS category >0.8 including healthy families, IKS 0.5-0.8 including pre-healthy families, and IKS <0.5 including unhealthy families. According to the results of the 2019 national level IKS achievements, the indicator for pulmonary TB patients who seek treatment according to the national standard is 35.56% and in Central Java is 39.4%, while in Semarang City pulmonary TB patients who seek treatment according to the standard are 37.73% which means that the achievement

is still low, where the PIS-PK target is >80%.⁷⁻⁸

Compliance is a behavior to obey orders or rules that are needed to achieve a goal and one of them is to achieve standard pulmonary TB treatment.⁹ According to L. Green behavior is influenced by three factors, namely predisposing factors (knowledge, attitudes, perceptions), enabling (health facilities, drugs, tools), and drivers (health services, family support).¹⁰ Knowledge and attitude factors are the most dominant factors in shaping a person's behavior, including obedient behavior in taking pulmonary TB medication. Someone who has good knowledge and attitude about pulmonary TB treatment tends to be obedient in taking medication.

Compliance with taking medication in patients with pulmonary TB is influenced by several factors. There is a study on the relationship between knowledge and attitudes with medication adherence in pulmonary TB patients who were outpatients in Jakarta in 2014 and concluded that there was no relationship between knowledge, attitude, and medication adherence.¹¹ Other studies on the relationship between knowledge, patient attitudes, and family support with medication adherence in pulmonary TB patients at BKPM Pati, it can be concluded that there is a significant relationship between knowledge, patient attitudes, and family support with pulmonary TB drug adherence. interested in researching "the relationship of knowledge and attitudes with adherence to taking medication for pulmonary TB patients recorded at PIS-PK in the Semarang City Region".

METHOD

This study used observational

| Variable | Min | Max | Mean+SD |
|------------|-----|-----|-------------|
| Age (Year) | 18 | 76 | 47,07+13,89 |

analytic research with a cross sectional

research design. The population in this study were patients with pulmonary TB who underwent treatment and were recorded on PIS-PK in the Genuk District, Mijen District, West Semarang District, and Tugu District, Semarang City.

The sample in this study were pulmonary TB patients who underwent treatment and were recorded on PIS-PK in the Genuk District, Mijen District, West Semarang District, and Tugu District, Semarang City for the July-December 2020 period who met the inclusion and exclusion criteria.

The sample size of this study was the entire population that met the inclusion and exclusion criteria of the study, Inclusion criteria: TB patients who are willing to be respondents, aged ≥ 18 years who have undergone treatment for at least 2 months, are recorded on the PIS-PK in the Genuk District, Mijen District, West Semarang District, and Tugu District, Semarang City for the July-December 2020 period. Exclusion criteria: not living permanently, pulmonary TB patients with HIV co-existing and resistant to treatment. The sample size amounted to 30 respondents. Sampling used total sampling technique. Knowledge was measured using a knowledge questionnaire which has been tested for validity before. Score of 55% poor knowledge and 56% good knowledge, while attitudes using a questionnaire with a score of <16 poor attitudes, 16-30 moderate attitudes, and >30 good attitudes, then to measure compliance using the MMAS-Questionnaire. 8 with a score of <6 low adherence, 6-7 moderate adherence, and 8 high adherence. This study analyzed by the Spearman rank correlation test.

RESULT

Table 1. Frequency Distribution of Respondents by Age

Table 2. Frequency Distribution of Respondents Based on Gender, Knowledge, Attitude, and Compliance with Taking Drugs

| Variable | n | % |
|-----------|----|------|
| Gender | | |
| Male | 13 | 43,3 |
| Female | 17 | 56,7 |
| Knowledge | | |
| Poor | 4 | 13,3 |
| Good | 26 | 86,7 |
| Attitude | | |
| Poor | 0 | 0,0 |
| Middle | 11 | 36,7 |
| Good | 19 | 63,3 |
| Adherence | | |
| Low | 1 | 3,3 |
| Middle | 12 | 40 |
| High | 17 | 56,7 |
| Total | 30 | 100 |

Tabel 3. Results of Spearman Rank Analysis of the Relationship between Knowledge and Compliance with Taking Medicines for Pulmonary TB Patients Recorded at PIS-PK in the City of Semarang.

| Variable | n | p value | Correlation Coefficient |
|-----------|----|---------|-------------------------|
| Knowledge | 30 | 0,022 | 0,417 |
| Adherence | | | |

Tabel 4. The results of the Spearman rank analysis of the relationship between attitudes and adherence to taking medication for pulmonary TB patients recorded at PIS-PK in the Semarang City Region.

| Variable | n | p value | Correlation Coefficient |
|-----------|----|---------|-------------------------|
| Attitude | 30 | 0.009 | 0.469 |
| Adherence | | | |

DISCUSSION

The results of the Spearman rank analysis show that there is a significant

relationship between knowledge and attitudes in relation to taking medication for pulmonary TB patients recorded on PIS-PK in the Semarang City Region. Based on statements from the majority of respondents who have good knowledge with moderate medication adherence to high medication adherence they believe that their pulmonary TB disease can be cured, and are afraid that the pulmonary TB disease will get worse. As for respondents who have good knowledge but have low medication adherence, this happens because they have erratic working hours so they often forget to take pulmonary TB drugs. Meanwhile, based on statements from the majority of respondents who have sufficient and good attitudes with moderate medication adherence to high medication adherence they believe that their pulmonary TB disease can be cured, and feel reluctant to repeat treatment from the beginning and do not want to start again. transmit pulmonary TB disease to other people, especially those closest to them, such as family members who live in the same house. The respondents who have a good attitude but have low medication adherence, this happens because they have erratic working hours so they often forget to take pulmonary TB drugs.

The results of this study are in accordance with previous studies regarding the relationship between the level of knowledge and adherence to taking medication in pulmonary tuberculosis patients at UPT Puskesmas Simalingkar Medan City. The better the knowledge, the higher the adherence to taking pulmonary TB drugs.¹³ The results of this study are also in accordance with other studies regarding the relationship between knowledge, patient attitudes, and family support with pulmonary TB drug adherence. positive will trigger positive thoughts, feelings, and actions

Knowledge is the result of human sensing or the result of someone knowing about objects through their senses.¹⁴ Meanwhile, attitudes are responses that are emotional reactions to stimuli or stimuli from their environment based on knowledge and beliefs obtained by individuals.¹⁴ L.Green's theory says that knowledge and attitudes including predisposing factors in the formation of a person's behavior that can affect adherence to treatment.¹⁰ So that the better the knowledge and attitudes of pulmonary TB patients towards pulmonary TB treatment, the higher the adherence to taking their medication.

CONCLUSION

Good knowledge about the success of pulmonary TB treatment and the consequences of not regularly taking pulmonary TB drugs are the dominant reasons that make high adherence. A positive attitude about the success of pulmonary TB treatment, reluctance to repeat treatment, and not wanting to transmit pulmonary TB disease are the dominant reasons that make high adherence.

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