Relationship Between Age and the Level of Knowledge of Tuberculosis (TBC) Treatment of Communities in Kaliwates District, Jembers District

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ABSTRACT	ARTICLE DETAILS

Tuberculosis (TB) is an infectious disease caused by the bacterium Mycobacterium tuberculosis that is easily transmitted. These bacteria can attack any organ in the body, but they most commonly attack the lungs. According to some research findings, there is a link between a person's level of knowledge about disease prevention and management, including pulmonary tuberculosis. Many government efforts have been made to eradicate tuberculosis cases. These efforts include health centers and hospitals' promotional, preventive, and curative efforts. Counseling is a comprehensive process of communication and behavior modification through education. The purpose of this study is to determine the relationship between age and TB treatment knowledge in the community of District Kaliwates, Jember Regency. This analytic observational study with a cross-sectional design was carried out online with a sample size of 123 people. Using the Google application form, conduct a survey. The researcher explained the research's goals and objectives before distributing questionnaires via the Google form application, collecting questionnaire data, and verifying data respondent answers. The collected data will be made available automatically via spreadsheet or excel. IBM SPSS Statistics 23 was used for data analysis. The chi-square test was used to analyze the data. The chi-square test results revealed that there was no relationship between age and knowledge of TB treatment. Conclusion: there is no significant relationship between age and medical knowledge TB in the community of Kaliwates District, Jember.

KEYWORDS: age, level of knowledge, tuberculosis

INTRODUCTION

Tuberculosis (TB) is an infectious disease caused by the bacterium Mycobacterium tuberculosis that is easily transmitted. These bacteria can attack any organ in the body, but they most commonly attack the lungs. The most common method of transmission is through TB patients' saliva splashing (droplet infection). According to some research findings, there is a link between a person's level of knowledge about disease prevention and management, including pulmonary tuberculosis.

The World Health Organization (WHO) estimates that there would be 10.4 million incident TB cases between 2016 and 2020, or 120 cases for every 100,000 people. India, Indonesia, China, the Philippines, and Pakistan have the highest incidence of instances. In 2017, there were 420,994 new cases of TB in Indonesia, with a prevalence of 257 cases per 100,000 people aged 15 and older, according to the Center for Data and Information Health of the Republic of Indonesia. There are around 76,794 suspected TB patients in Jember, of whom 3,497 cases have been identified. In Jember Regency, where in 2015, Kaliwates District had the greatest concentration of tuberculosis patients, Up to 86 persons have TB smear + (resistant bacteria positive acid), 14 have EP TB (extrapulmonary), and up to 2 have MDR TB (multiple drug resistant). A TB infection will have different effects on a person's life on a physical, mental, and social level. Physically, a person with TB infection will frequently cough, experience shortness of

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breath, chest pain, gain weight, have a decreased appetite, and experience night sweats. dealing with To reduce the high TB prevalence, measures must be taken, one of which involves using medicine.

The government has made numerous efforts to end TB cases. These efforts include those made by hospitals and health institutions in the areas of promotion, prevention, and treatment. Along with making early discoveries, hospitals and health facilities also stopped the incidence and transmission from rising. This, however, is not the best way to increase community awareness about tuberculosis. so that others can Health education is essential to spread health messages to the general public or groups in order to improve health knowledge. Counseling is a complex process of education-based behavior modification and communication. The methods and media of counseling must be paid close attention to and tailored to the goal in order to get the best results in extension operations. Using a variety of media in combination will be very beneficial for the process of health education. The more you engage your senses, the If you accept something, it will come to you more frequently and with a clearer understanding or body of knowledge.

The purpose of this study is to ascertain the association between community knowledge of TB treatment and age in the District Kaliwates, Jember Regency.

METHOD

This cross-sectional analytical observational study was conducted online with a sample size of There are 123 participants in this survey. utilizing the Google application form for the poll. Researchers described the goals and objectives of the study, the dissemination of questionnaires via the Google Forms application, the data collecting from the questionnaire, and the data verification of respondents' responses. Spreadsheet or Excel will automatically display the obtained data. Using IBM SPSS Statistics 23, conduct data analysis. Data analysis was done using the chi-square test. For observed differences between treatment groups (p 0.05), the chi-square test is effective.

RESULT

By disseminating questionnaires utilizing a Google form in the Kaliwates District area, Jember, data collection for the study was conducted. Respondents received questionnaires on August 25, 2021. The data were given in tabular form after the questionnaires were gathered and tabulated (see Table 4.1). The findings of the research on the association between age and understanding of tuberculosis therapy will be discussed in this chapter. There were 123 individuals who completed the survey, and their ages ranged from 17 to almost 50. (see Figure 4.1). Survey data was tabulated, and IBM SPSS Statistics 23 was used to evaluate it. Chi-square analysis was used to examine the data. Check to see whether there is a correlation between age and amount of knowledge in the Kaliwates community.

Table 1. Knowledge Level by age

Age	Knowledge Level Category	Percentage (%)
17-19	sufficient	73
20-24	good	75
25-29	sufficient	74
30-34	sufficient	68
35-39	sufficient	60
40-44	good	77
45-49	sufficient	60
50-54	good	78
55-59	good	85
>60	sufficient	70

Table 2. The results of data analysis using the chi-square test

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	61.621	63	0.526
Likelihood Ratio	59.160	63	0.614
Linear-by-Linear Association	0.063	1	0.801
N of Valid Cases	0.123		

DISCUSSION

The Chi Square Test was used to analyze the tabular data findings in SPSS, and a significant value of 0.526 (p>0.05) was achieved (Table 2). Then came In the Kaliwates District region of Jember, it is well known that there is no correlation between age and amount of awareness regarding TB treatment. The age range of 20 to 24 had the highest score on the data, while 45 to 49 and older than 59 received

the lowest marks. Due to their greater curiosities and access to the internet, which makes it simpler to discover knowledge, those in the age range of 20 to 24 received the highest score. Additionally, between the ages of 20 and 24, there is a desire for quick self-development because this is the time when adolescence and maturity are transitioning, necessitating a high level of wisdom and understanding. Knowing something is the outcome of sensing something. The creation of an action is influenced by a number of factors, including information. The more knowledge one possesses, the more it will contribute to a positive outlook on the tuberculosis treatment process.

According to Arikunto, there are three categories of knowledge levels based on percentage values: good category knowledge is defined as having a value above 75%, sufficient category knowledge is defined as having a value between 56 and 74%, and less category knowledge is defined as having a value below 55%. The age ranges with the highest percentages in the "good" category, as determined by the number of correctly answered questions, are 20–24, 40–44, 50–54, and 55–59. Age ranges that have a sufficient percentage sum by category include those between 17 and 19, 25 and 29, 30-34, 35 and 39, 45 and 59, and >. According to Rosid (2011), respondents' category level of knowledge is sufficient and good and is determined by things like experience, facilities, local culture, customs, attitude, or belief. which internal and external variables influence knowledge. Age, experience, intelligence, and gender are examples of internal factors, while education, employment, social culture, environment, information, and facilities are examples of external elements.

Around 76,794 people in Jember are thought to have TB, of whom 3,497 cases have been identified. The majority of tuberculosis cases in Jember Regency occur in Kaliwates District, where in 2015 there were 86 cases of TB smear + (positive acid-resistant bacteria), 14 cases of EP TB, and 2 cases of MDR tuberculosis. Jember District has implemented several strategies to improve health facilities and infrastructure, the active participation of all health professionals, and the empowerment of families and communities in an effort to hasten the elimination of tuberculosis (TB) (Trihono, 2018). The three health facilities at Regency Jember, which is located in the Kaliwates District, are quite good. Overcrowding is the primary factor contributing to the subdistrict's TB outbreak. The population, at 95,177, is out of proportion to the little area (approximately 24.94 sq km). Population density might affect humidity levels, which accelerated the growth and spread of the TB disease.

It is not, according to the analysis' findings utilizing the chi-square test. Age and treatment knowledge for tuberculosis are related. Matter A person's knowledge can be influenced by a variety of factors, including formal and informal learning outcomes, training, personal experience, environment, culture, mass media, etc., which can lead to this. The findings of this survey are consistent with those of a survey by Sari et al.12, which found no connection between age and TB patient treatment adherence.

CONCLUSION
Based on the survey's findings, it can be said that in the Kaliwates District, Jember community, there is no conclusive link between age and medical knowledge of TB.

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