Knowledge Of Pulmonary Tb Patients About The Transmission And Prevention Of Pulmonary Tuberculosis Diseases In Klibur Domin Tibar Clinic Municipality Of Liquica Timor-Leste [2024]

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Abstract

Introduction: *Globally the level of tuberculosis disease in the world in 2020, be it 10 million people indicated in 2020, the highest number of new tuberculosis cases, [43%] occurred in the Southeast Asia Region. Tuberculosis in Indonesia ranks second to India, with 969,000 cases and 93,000 deaths. The total number of people infected with tuberculosis in Timor-Leste is 508, this number of cases leads Timor-Leste to be the second country with high cases in Southeast Asia. Based on the pre-elimination data at the Klibur Domin Tibar Clinic Liquica, the tuberculosis-positive patients are 160 male patients, 127 female patients.*

Research Objectives: *To know the level of knowledge of pulmonary tuberculosis patients about transmission and prevention in the Klibur Domin Tibar Clinical Clinic Liquica.*

Research Methodology*: We used a quantitative descriptive method, using the Probability Sampling technique with a simple random sampling approach and the univariate data analysis technique.*

Results Discussion: *the knowledge of the 52 respondents based on the knowledge of the disease pulmonary tuberculosis shows that most of this frequency is with knowledge less with 28 frequencies [53%], adequate with frequency 16 [31%], less frequently 8 [16%]. Distribution is based on the level of knowledge about the prevention of pulmonary TB disease of the total of 52 respondents, the majority of respondents with knowledge category less frequently presents 32 [62%], knowing adequate frequently 14 [27%], knowing good frequently 6 [11%], of with the research result.*

Conclusion*: it is concluded that the majority of patients in the Klibur Domin Tibar Clinic Liquica Timor-Leste with a level of knowledge about the transmission and prevention of pulmonary tuberculosis still with a category < 55 is a category with less knowledge cited by [Tilman CB., et al, 2024].*

Keyword: Level of Knowledge, Transmission, Prevention.

INTRODUCTION

Globally the level of tuberculosis disease in the world in 2020 is 10 million people indicated with 5.6 million cases of men, 3.3 million cases of women, 1.1 million children and 1.5 million people died of tuberculosis [including 214,000 people with HIV]. Globally, the incidence of tuberculosis is decreasing by approximately [2%] per year, and between 2015-2020, there will be a cumulative increase of [11%]. Between 2000 and 2020, it is estimated that 66 million lives will be saved through the diagnosis and treatment of Tuberculosis, (WHO, 2022). Tuberculosis exists in all countries and in all age groups. However, TB is curable and preventable. In 2020, the highest number of new TB cases [43%] occurred in the Southeast Asia Region, followed by the Africa Region with [25%] of new cases, and the Western Pacific Region with [18%]. By 2020, 30 countries with a high burden of tuberculosis will account for [8.6%] of new cases. Two-thirds of this figure came from eight countries, with India being the largest contributor, followed by China, Indonesia, the Philippines, Pakistan, Nigeria, Bangladesh and South Africa. (WHO, 2022) is there a way to get more information namely health promotion cited by [Tilman CB., et al, 2024].

Tuberculosis in Indonesia ranks second to India, with 969,000 cases and 93,000 deaths per year, or the equivalent of 11 deaths per hour. Based on the Global Tuberculosis Report in 2023, the highest number of cases in the world is in the productive age group, especially in the 25-34 age group. In Indonesia, the highest number of cases is in the productive age group, especially in the age group of 45 to 54 years. According to the latest data from the World Health Organization published in 2020, deaths from Tuberculosis in Timor-Leste amounted to 1,139 [16.16%] of the total deaths The age-adjusted death rate of 127.88 per 100,000 inhabitants ranks Timor-Leste in second place in the world. (WHO, 2020). The Estimation of the infertility rate of tuberculosis in the organization in the 2023 World Health Championship, the total number of people infected with tuberculosis in Timor-Leste is 508, this number of cases leads Timor-Leste to be the second country with high cases of tuberculosis in Southeast Asia, (WHO, 2022). Based on the pre-eliminatory data at the Klibur Domin Tibar Clinic in 2023 shows that the total number of patients who came to be diagnosed [suspected **TB**] to diseases **TB** there are 4886 patients, among them the tuberculosis positives are 160 male patients, 127 female patients thus, we need to have attention from the Ministry of Health Timor-Leste and structures are supported [Tilman CB., et al, 2024].

General objective: To know the level of knowledge of patients about the transmission and prevention of Pulmonary Tuberculosis diseases in Klibur Domin Clinical Clinic a part of tourism in future development from Administrative Post Bazartete the Municipality of Liquica Timor-Leste.

Theoretical Framework

Human of knowledge according to how it is divided into 6 levels, such as:

1. Knowing is like remembering previously learned material. Included in this level of knowledge is the recollection of something specific from all the material studied or the stimuli received. So, knowing is the lowest level.

2. Comprehension is like an ability to correctly explain about what is already known and can interpret into the same material correctly.

3. Application can be interpreted as an ability to use material that has been studied in a real-world condition.

4. Analysis is an ability to describe a material or an object as a component, but still within the organizational structure and still related to each other.

5. Synthesis is an ability to compose or connect, plan, summarize, adapt something to existing theories or formulations.

6. Evaluation is refers to the ability to make an evaluation of a material or object, this evaluation is based on self-determined criteria.

Knowledge scale that is defined by Sri Lestari as follows: Good knowledge [76% - 100%], Adequate knowledge [56% - 75%] and Less knowledge (Nursalam, 2022) [< 55%]. Factors Influencing Knowledge There are six [6] factors that influence knowledge, including: Education, Jobs, Age, Interests, Experience, and Culture is very important of each person's surrounding environment and development tourism in future cited by [Tilman CB., et al, 2024].

Tuberculosis is classified by 2 according to the site that the tuberculosis bacterium settles and develops:

a. Pulmonary tuberculosis is the most common form of the disease and occurs due to the entry of the bacillus into the upper respiratory tract and lodging in the lung.

b. Extrapulmonary tuberculosis [affects organs other than the lungs].

Epidemiologically, tuberculosis is a public health problem worldwide, although many efforts have been made to control the spread of its transmission. (Agustin R., 2018). Tuberculosis does not always present symptoms of disease; experts distinguish between the two types of tuberculosis based on clinical manifestation:

Latent tuberculosis is a type of tuberculosis, the bacteria are in an inactive state so that the patient does not show any symptoms. Therefore, the latent type is not contagious. However, the condition needs to be treated so that it does not turn into active tuberculosis, but in fact prevention is important for people to know.

Active tuberculosis as the bacteria in tuberculosis can be contagious and cause a range of symptoms after the infection occurs. Signs and symptoms of active tuberculosis include: coughing for three weeks or more, coughing up blood or mucus, chest pain, weight loss, fatigue, fever, sweating at night, and loss of appetite, so take your life carefully.

If you infect other organs, the signs and symptoms may vary depending on which organ is infected. For example, tuberculosis of the spine can cause back pain, and tuberculosis of the kidneys can cause blood in the urine. If a person's immune system declines for any reason, e.g., old age, co-infected with HIV, person with diabetes mellitus, malnutrition, immunosuppressive conditions, when infected with *M. tb,* it's easier to get sick. Molecular rapid test for tuberculosis is an automated, simple, fast and easy test to perform in laboratories, indicative for the diagnosis of pulmonary and laryngeal tuberculosis, using the polymerase chain reaction [PCR] technique, presenting faster results in obtaining results, and detecting resistance to rifampicin, obtaining results in up to two hours, with a sample for the performance of this test. (Vicente

M. de Et al, 2020). The GeneXpert MTB/RIF system consists of a GeneXpert machine, computer, barcode reader, and uses a single disposable Expert MTB/RIF cartridge containing reagents. After going through three stages or phases of test sample preparation, the sample is transferred to the Cartridge MTB/RIF and fed into the GeneXpert machine, which is automatically supported by the software at all stages, including test sample processing, nucleic acid ampliation, target sequence detection, and result interpretation.

Usually, the treatment of tuberculosis is carried out in two stages with the same drug, a tablet with the following components: Isoniazid, Pyrazinamide, Rifampicin and Ethambutol. First two months: this is the intensive phase of treatment in which the individual must make use of the pill with the four substances. Next four months: This is the continuation phase in which only the tablet containing two components, rifampicin and isoniazid, is used. It is important to note that a person is not always cured of the infection after treatment – which requires different attention, (Silva R. A., 2019). The main preventive measure against tuberculosis is vaccination, which guarantees the protection of the body against severe disease. The indicated vaccine, BCG, should be applied to all children from birth.

RESEARCH METHODOLOGY

We used a quantitative descriptive method, using the Probability Sampling technique with a simple random sampling approach and a univariate data analysis technique. Simple Random Sampling with a sample is 69 repapers. We used to collect with the questionnaire and analyze using the SPSS [Statistical Package for the Social Sciences] version 22 computer program.

RESULTS

Table of characteristic distribution of respondents based on gender.

No	Sex	Frequency	Percentage (%)
1	F	18	35%
2	M	34	65%
Total		52	100%

Based on the table above, it shows that the distribution of 52 respondents is based on gender, most of this frequency is men with 34 frequencies [65%] and women 18 [35%].

Table characteristic distribution of respondents based on age.

No	Age	Frequency	Percentage (%)
1	18-25	10	19%
2	26-44	15	29%
3	45-59	16	31%
4	60-75	11	21%
Total		52	100%

Table shows that the distribution of 52 respondents is based on age, most of this frequency is age group 45-59 with 16 frequencies [31%], 18-25 with frequency 10 [19%], 26-44 with frequency 15 [29%], 60-75 with frequency 11 [21%].

Table of distribution, frequency and percentage on "Transmission" is based on "Know" per respondent with a total of 52.

Category	Interval (%)	Frequencia	Percentage (%)
Good	76-100	8	16%
Adequate	56-75	14	31%
Less	<55	28	53%
Total		52	100%

Table shows that the knowledge of the 52 respondents based on **"knowledge"** about the **"transmission"** of the disease pulmonary tuberculosis shows that the majority of this frequency is with knowledge **"less"** with 28 frequencies [53%]. Because the criterion that when the result < 55 is categorized into minus.

Table distribution, frequency and percentage on "prevention" is based on "knowing" per respondent with a total of 52.

Category	Interval (%)	Frequencia	Percentage (%)
Good	76-100	6	11%
Adequate	56-75	14	27%
Less	<55 AM	32	62%
Total		52	100%

Based on Table 4.2.1.2, it shows that the knowledge of the 52 respondents based on the **"knowledge"** about the **"prevention"** of pulmonary tuberculosis disease shows that most of this frequency is with **"less"** knowledge with 32 frequencies [62%]. Because the one that when the result < 55 is categorized into less according to the search result [Tilman CB., 2024].

DISCUSSION

Distribution based on the "knowledge-level "know" on transmission of the disease pulmonary TB of the total of 52 respondents, majority respondent with category "Less" frequently presents 28 [53%], know "Adequate" often 16 [31%], know "Good" often 8 [16%]. Comparing the results of the researcher's research in HNGV with respondent 35 patients, it shows that the majority frequency of this respondent with the category knowledge "know" is "(Soares, 2022). Adequate" often 20 [75%], "Less" often 8 [23%], "Good" with frequency 7 [20%]. This result demonstrates that HNGV patients with knowledge about pulmonary TB transmission is adequate compare with the patients of Clinic Klibur Domin Tibar Bazartete Liquica, who with less knowledge bases on the sources of data than researching in the investigation process by the researcher (2024).

Distribution is based on the level of knowledge "knowledge" about prevention of pulmonary TB disease of the total of 52 respondents, the majority of respondents with a category "Less" frequently features 32 [62%], know "Adequate" often 14 [27%], know "Good" often 6 [11%]. Compares with the result of the researcher's research in HNGV with respondent 35 patients, shows that the majority frequency of this respondent with the category knowledge "knowing" is "(Soares, 2022). Adequate" often 30 [85%], "Good" often 5 [15%]. This result demonstrates that HNGV patients with knowledge about the prevention of pulmonary TB is adequate compare with patients of Clinic Klibur Domin Tibar Municipality of Liquica Timor-Leste, the location is a part of tourism in future, who with less knowledge bases on the data sources than researching by the researcher.

Based on this conclusive result that patients still have less knowledge, the result of human knowledge and this occurs after people feel certain objects. Feeling occurs through the five human senses, i.e., sight, hearing, smell, taste, and touch. Most human knowledge is obtained through the eyes and ears. Knowledge itself is strongly influenced by various factors that can be obtained from f-formal education, so knowledge is very much related to tourism development someone's education, so that person's education is broader. But it must be emphasized that it is not someone with a low level of education, absolute knowledge is also low. Be-

cause education is not obtained at all in formal education, but non-formal education is also obtained as training to the peoples and continuation to progressive. Knowing is like remembering previously learned material. Included in this level of knowledge is the recollection of something specific from all the material study the stimuli received. So, knowing is the lowest level. Verbs to measure that people know what is being studied include mention, describe, define, and so on. For example: it can mention the purpose of search engine development and data analysis and will interpret the relationship with appropriate information to know the reality of knowledge and respect in research practice implementations [Tilman CB., et al, 2024].

CONCLUSION

Based on the result of the research he conducts at Klibur Clinic Domin wants to recommend to the relevant parties in the form of the following:

a. The level of knowledge of patients about the transmission of pulmonary TB disease, most of them with less category, is based on the result of research, shows that the highest frequency is 28 [54%] than categorized in less knowledge.

b. The level of knowledge of patients about the prevention of pulmonary TB disease, most of them with less category based on the result of research, shows that the highest frequency is 34 [62%] than categorized in less knowledge.

Knowledge can directly influence individuals, while attitudes can arise from the individual's knowledge about the prevention of transmission of pulmonary TB disease, most human knowledge is obtained through the eyes and ears [information] according to. In fact, patients should already be educated about this disease by the professionals of this location, because TB disease is a communicable/infectious disease that is too risky for the people closest to them so that they can prevent it. So that there is no possibility of contracting the disease from the people closest to them, for example by visiting relatives. But unfortunately, in reality, the research results show that most patients still have knowledge about the transmission and prevention of pulmonary TB and are less so, so health professionals should strive to increase patients' knowledge about this disease so that they can take care of themselves and others, because it is better to prevent than to cure. is that the main point of science and knowledge of all health professionals according (Notoatmodjo S., 2018), the condition to be able in implementation of professionals' treatments is very important to follow-up more them in health facility public and privately nonprofits to continue the update treatments based on the condition is existed cited by (Tilman CB., et al, 2024).

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