



Knowledge and Attitude of Community towards Tuberculosis Prevention Efforts within Batua Public Health Center in Makassar, Indonesia

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Abstract

This study is an endeavor to acquire an overview of the knowledge and attitudes of the community in efforts to prevent tuberculosis. This study was carried out at working area of Puskesmas Batua (Public Health Center), involving 52 subjects who were the outpatient care. An interview utilizing a selected questionnaire by convenience sampling was the data collection instrument. Results indicated that the subjects with good knowledge were 36 (69.23%), and less one were 16 (30.77%), while with a positive attitude were 36 (69.23%) and negative one were 16 (30.77%). The outcome inferred that there is still a lack of knowledge of the community in the terms of the Tuberculosis prevention. However, the knowledge does not affect the attitude to the community in the prevention efforts.

Keywords : Knowledge; attitude.

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1. Introduction

An eradication program of infectious diseases has the role in reducing morbidity and mortality. The goal can be achieved by the application of appropriate health technologies by health workers supported by the active role of the community. As recognized that attempting to eradicate the disease from Indonesia has not been implemented well. It is the reasons that the TB has still spread, even Indonesia listed as a country contributing to the third largest TB patient in the world after India and China.

TB is an infectious disease that still remains a health problem in the world. World Health Organization (WHO) in the 2003 Annual Report on Global TB Control maintains that 22 countries were categorized as High Burden Countries for TB. According to the organization, the estimated incidence of sputum examination obtained positive acid-fast Bacilli (AFB) was 115 per 100,000 (WHO) 2008.

Annual Risk of Tuberculosis Infection (ARTI) in Indonesia is regarded to be quite high and varied - 1-2% in a region with ARTI of 1%. It means that every year among a thousand populations, 10 people will be infected. Several of the infected people will not have TB, only 10% of those infected will get one [1].

Referring to Data of Makassar health office, TB patients increased from 2010-2014 reaching 455 people, and it is possibility that there are still other patients who have not been detected. From 2006 to 2009, data obtained was 7% of TB patients who were not converted because they died before the end of the intensive stage.

One of the possible factors affecting a person contaminated the disease is socio-economic status such as malnutrition, environment, and healthy lifestyle behaviors in the community itself. Regarding to that, the patients' behavior towards an illness depends on their knowledge, attitudes and actions about the disease, if the community's knowledge of the disease is not or not yet known, it is possible that attitudes and actions towards the risk of transmission of the disease are sometimes ignored.

At this time, there is still an assumption in the community that TB is a hereditary disease. As the result, numerous sufferers refuse the treatment due to embarrassment, or the families tend to conceal the condition of their disease. The perception should be abolished because, in fact, the illness is not genetic one, but it can be cured. TB sufferers who do not treat can transmit their disease to other people around him or closely related to them, and can extensively lead to the spread of bacteria.

1.1. An overview of the Lung TB

Lung TB is an infectious disease caused by the Mycobacterium Tuberculosis; most of the TB germs attack the lungs but can also attack other organs. The bacteria are rod-shaped, and have special nature that is resistant to acid on coloration, so it is also known as Acid-fast basil (AFB). In the body, these germs can be dormant or asleep for several years. The bacteria were first discovered by Robert Koch on March 24, 1882. Therefore, to commemorate his services, this bacterium was then named Koch. Even TB in the lungs is so-called as Koch Pulmonum (KP) [2].

1.1.1. Mode of transmission

The sources of the transmission are patients with positive TB-AFB. As coughing or sneezing, the patients spread germs in the form of droplets. The droplets containing the germs can then survive on the air at room temperature for several hours depending on the presence or absence of ultraviolet light, poor ventilation and moisture. In humid and dark atmosphere, the germs enable to survive for days to months. People can be infected if the droplets are inhaled into the respiratory tract. The germs can then spread from the lungs to other parts of the body, through the circulatory, lymphatic system, respiratory tract, or spread directly to other parts of the body. The powers of transmission from patients are determined by the number of the germs released from their lung. The higher positive degree of sputum test results, the more infected the patients are. If the results are negative (no germs are noticed), the patients are considered not being infected [3].

Annual Risk of Tuberculosis Infection (ARTI) in Indonesia is regarded to be quite high and varied, 1-2% in a region with ARTI of 1%. It means that every year among a thousand populations, 10 people will be infected. Several of the infected people will not have TB, only 10% of those infected will get one. From the information, it can be estimated that regions with ARTI of 1%, among 100,000 populations, there are on average about 100 TB sufferers every year, where 50% of them are positive AFB [4].

1.1.2. Pathophysiologya

a. Primary tuberculosis

Primary infection occurs when a person is first affected by the TB germs. The inhaled droplets are generally very small. As the consequence, they can pass through the defense system of mucociliary bronchus and proceed to the alveoli and settle in it. As germs settle in the lung tissue, they grow and proliferate in the macrophage cytoplasm. The nesting germs in the lung will form pneumonia TB called a primary nest. The nest will then cause lymphatic inflammation of the lymph nodes (local lymphangitis) and also followed by enlargement of the hilum of lymph nodes (regional lymphadenitis). The nests of the primary lymphangitis and the regional lymphadenitis are called primary complex. Infection occurs until the formation of the primary complex for 3-8 weeks.

This primary complex can indeed occur:

- 1) Heal completely without leaving defects, and this mostly occurs.
- 2) Heal by leaving little marks.
- 3) Spread by means of Prokontinuitatum - spreading around it, bronchogen, hematogen, and lymphogen

b. Post-Primary Tuberculosis (Secondary Tuberculosis)

The secondary TB will appear many years later after primary tuberculosis. It usually occurs at the age of 15-40 years. It commences from an early attack, which is generally located in the apical segment of the superior lobe and inferior lobe. The attack will follow one of the following paths:

- 1) Re-absorbed and relapsed without leaving a defect.
- 2) The attack will expand and will heal immediately by pollinating fibrous tissue.
- 3) The nest will expand to form cheese tissue (caseorosa tissue) [2].

1.1.3. Diagnosis

a. Detection of disease in adults

The diagnosis of tuberculosis can be established based on clinical symptoms, physical exam, laboratory, radiologic and other investigations.

1. Clinical Symptoms

(a) Respiratory symptoms

1) Cough for more than 3 weeks / coughing blood up

The cough occurs due to irritation in the bronchi. This cough needs to remove inflammatory products. It occurs after the disease develops in the lung tissue for weeks or months of inflammation beginning. It starts from a dry cough (non-productive), and then causes inflammation becoming productive (produces sputum). The condition then causes the blood cough because there are broken blood veins.

2) Shortness of breath

On minor illness, it has not felt breathlessness. The breath is found in advanced disease, which its infiltration including half of the lung.

3) Chest pain

Chest pain emerges when the infiltration of inflammation has reached the pleura leading to pleurisy. It occurs friction of Pleural when the patient pulls or releases his breath.

(b) Systemic symptoms

1) Fever

The first examination of the patient's general condition is usually subfebrile resembling influenza. However, body heat can sometimes reach 40-41°C. The first fever attack can heal briefly, but it can then reappear. As the result, the patient never feels healing from influenza. This condition is greatly affected by the patient's immune system and the severe or mild infection of the incoming tuberculosis bacteria.

2) Other systemic symptoms: malaise, night sweats, anorexia, decreased body weight.

2. Physical examination

It is found conjunctival eye or pale skin or anemia, subfebrile, thin body or decreased body weight.

3. Laboratory Examination

(a) Bacteriological examination

The bacterial test is observed from sputum exam. The examination is a crucial matter because the diagnosis of TB can be ascertained by detecting Acid-fat Bacilli (AFB). In addition, the examination can also provide an evaluation of the given treatment. The examination can be done easily and inexpensively in Puskesmas. Nevertheless, it is sometimes difficult to get the sputum, especially patients who do not cough or who are non-productive coughs. When sputum has been obtained, AFB germs are sometimes hard to find. The new germs can be found if the involved bronchus in the disease opens out. As the result, the sputum containing the germs is easy to get out. It is estimated that there are 50% of the patients whose smear-positive sputum in Indonesia. However, the germs are not found in their sputum. The criteria of positive smear-sputum are at least 3 acid-fast bacterial smears are found in preparation. In other words, there are 5000 germs in a milliliter of sputum needed. The method of checking sputum is:

1. Direct examination with an ordinary microscope
2. Direct examination with staining Fluorencs microscope.
3. Examination with bacterial culture
4. Examination of drug resistance [2].

(b) Examination of resistance and bacterial culture

4. Chest x-ray examination

It is a practical way to find TB lesions because the sputum one is almost always negative. The TB lesions generally are located in the lung apex (apical of the segments in the upper lobe or apical of segment in the lower lobe), and can also affect the lower lobe of the inferior or the hilum part resembling a lung tumor. Other radiological features that often accompany pulmonary TB are pleural thickening (pleuritis), fluid mass at the bottom of the lung (pleural effusion/empyema), radiolusen shadow on the edge of the lung / pleura (pneumothorax). In addition, a CT Scan (Computed Tomography Scanning) is able to evaluate the processes near the lung apex, spine, abdominal chest border, incisions that can be made transversal, sagittal and coronal.

5. Other supporting examinations

(a) Blood test

The test cannot be used to support the diagnosis of pulmonary TB, because the results of the tests do not show a typical picture. Blood images can sometimes help determine the disease activity.

(b) Tuberculin test [2].

The test is an examination to show reactions of cellular immunity that occurs after 4-6 weeks. Patients have the first infection of TB bacillus. Numerous methods are applied, but the Mantoux method is often used. Robert Koch (1890) made Old Tuberculin from the culture filtrate of the TB bacillus. This study was subsequently continued by F.B. Siebert (1926) by purifying the results of culture obtained into Purified Derivate of Tuberculin (PPD). In addition to showing infection of tuberculosis bacillus, the tuberculin test can be used for:

1. Looking for groups with high risk for TB.
2. Giving a pre-vaccin before being injected with BCGc.
3. Using Tuberculous surveillance to find an incidence and prevalence of TB infection.

It is given intradermal using method of Mantaux, i.e. the test material is injected intracutaneously on the volar side 1/3 of the left forearm. The result can be acquired in 6-8 hours / 48 hours / 72 hours after giving injection.

1. The result is positive if the induration diameter is greater than 10 mm.
2. The result is negative if the induration is less than five mm, and it is doubtful if the induration diameter is between 5 and 10 mm.

b. Detection of Pulmonary TB in Children

Diagnosis of the pulmonary TB children is difficult to make. However, several of the following criteria can be indicators' children who are suspected pulmonic TB:

- 1) Having history of TB contact with smear positive.
- 2) Having a reaction of the fast redness (in 3-7 days) after giving immunization with BCG
- 3) Losing weight without clear causes or not gaining weight in a month even though treated with good nutrition.
- 4) Having the flu or fever longer or repeatedly without unclear causes
- 5) Coughing for more than three weeks
- 6) Enlarging specific superficial lymph nodes
- 7) Having phlyctenular conjunctivitis
- 8) Having a radiological picture of suggestive TB [5].

1.1.4. Disease Classification and Patient Type

Determination of the disease classification and TB patients requires a "special definition" which includes four matters:

a) Classification based on the affected organ

1) Pulmonary TB

The pulmonary TB is the one that attacks the lung tissue (parenchyma), not including the pleura and glands of the hilum.

2) Extra pulmonary TB

TB attacks other organs of the body besides the lungs, such as the pleura, lining of the brain, lining of the heart, lymph nodes, bones, joints, skin, intestines, kidneys, urinary tract, genitals and others.

b) Classification based on examination results of microscopic sputum

1) Positive-smear pulmonary TB

a) At least two of three early-morning sputum specimens from positive smear

b) A specimen of early-morning sputum results from positive smear and chest X-ray showing a picture of TB.

c) An early-morning sputum specimen resulting from positive smear and TB bacterial culture.

d) One or more positive sputum specimens after three early-morning sputum specimens on the previous examination resulting from negative smear and no breeding after taking antibiotics (non AOT).

2) Negative-smear TB

Patients with negative-smear are those who do not meet the definition of pulmonary TB, and positive acid-fast bacillia (AFB). Diagnostic criteria of pulmonary TB with negative AFB should include:

a) At least three sputum specimens resulting from negative smear

b) Abnormal chest X-ray showing a picture of TB

c) No improvement after giving antibiotic (anti-TB drugs)

d) Determined by the doctor to be treated

3) Classification based on the severity level of the disease

a) Pulmonary TB with negative AFB, positive chest X-ray is divided based on the severity level of the disease, i.e. severe and mild forms and or the patients with poor condition in general.

b) Extrapulmonary TB is divided based on the severity level, e.i.

(1) Severe extrapulmonary TB, for example: meningitis, pediatrics, bilateral exudative pleurisy, spinal TB, intestinal TB, urinary tract TB and genitals.

(2) Mild extrapulmonary TB, for example: lemfe gland, unilateral exudative pleurisy, bone (except the spine),

joints and adrenal glands.

4) Classification based on history of the previous treatments is divided into several types of patients, i.e.

a) New case

It includes patients who have never taken antibiotic (anti-TB drugs) or have already taken antibiotic (anti-TB drugs).

b) Relapse case

It includes patients who have previously been treated with TB, and have been declared, cured or complete treatment diagnosed again with positive AFB.

c) Case after stopping treatment

It includes patients who have been treated and have stopped the treatment for 2 months or more with positive smear.

d) Case after failure

It includes patient whose sputum test remains positive at the fifth month or more during the treatment.

e) Transfer patient case

It includes patients who are transferred to *Unit Pelayanan Kesehatan* (Health Service Unit), have another TB register to continue their treatment.

f) Other cases

It includes all cases that do not meet the above treatment. This group involves chronic cases, i.e. patients with the result tests indicate still positive AFB after completing the retreatment [6].

1.1.5 Complications

A pulmonary TB patient is the one who is not treated well. As the consequence, it causes complications. The complications are divided into two - an early complication and advanced complication [2].

a. Early complication:

1) Pleuritis

Pleuritis is inflammation or pleural cultivation. It can be caused by infection, injury or tumor. This condition can occur as a complication of lung disease, especially pneumonia or sometimes from TB disease. Pulmonary or

influenza has symptoms such as cough, heat, chills, sharp and stabbing pain that gets worse when the patients breathe both fast and shortly.

2) Pleural effusion

This type of pleurisy is characterized by implantation and exudation of serous fluid in the cavum pleura.

3) Empyema

Pus collection in a cavity, the term is most commonly used in the cavum pleura.

4) Laryngitis

Implantation of the acute or chronic laryngeal mucous membranes, laryngitis can accompany fever, cold, smoking, and exposure to smoke that irritates the larynx.

b. Further complications

1) Airway obstruction

2) Severe damage parengkim

3) Amyloidosis

The accumulation of glycoproteins such as wax called Amiloit, and occurs in various organs such as the heart, kidneys and liver. Amyloidosis can be classified in two types - occur primary or secondary. They occur when accompanied malignant abnormalities of chronic infection, and inflammation.

4) Lung carcinoma

Lung tumor or cancer.

1.1.6. Prevention

The best way to prevent TB so far is by diagnosing the infection cases quickly and it then provides an appropriate treatment and handling. Hospital treatment is recommended in the initial phase. In this case, the treatment can be avoiding the spread of the TB on the patients' environment. In addition, it makes patients possible to acquire the appropriate treatment, and the adequate rest, which can hasten their recovery period, and may be difficult to obtain in their environment.

In addition, there are several matters needed to be considered for reducing the possibility of infection, including:

a. Against TB infection

- 1) Prevention of infectious sputum, i.e. by isolating the patients, treating and should use good house ventilation
 - 2) Management of sputum by spitting on a container or a closed place.
 - 3) Process of heat processing a liquid or a food to kill Pathogenic bacteria to make them safe to eat (Pasteurization) because a lot of cows' milk containing TB.
- b. Increasing body resistance
- 1) Improve standards of living, i.e. eating healthy food, installing good ventilation, sleeping regularly, and doing exercise or playing sports
 - 2) Increase body's endurance by BCG vaccine.
 - 3) One of the other prevention methods is by BCG vaccination. Bacillus Calmette-Guérin (BCG) is a live attenuated vaccine derived from *Mycobacterium bovis* designed to cause an immune reaction to *Mycobacterium TB*, and is safe enough and very rarely leading to serious complications [3].
- c. Prevention with INH therapy rendered for :
- 1) All people contacting to Lung TB patients
 - 2) Patients whose thoracic photos being suspected TB for a long period of time.
 - 3) Inactive TB patients.

1.1.7. Treatments

Treatments of TB patients must be carried out by experienced doctors. These are important, particularly in cases of TB being resistant to the treatment. Tuberculosis drugs (OAT) are classified under two groups, i.e.

- a. Primary drugs: Isozianid (INH), Rifampicin, Ethambutol, Streptomycin, Pyrazinamide, show high effectiveness with toxicity that can still be cured with these drugs.
- b. Secondary drugs: Etionamid, Paraminosalisilat, Cycloserine, Amikacin, Karepreomycin and Kanamycin [7].

The Department of Health through the National TB Program has collaborated with hospitals, Civil-Society Organizations, private practice doctors, religious organizations. In addition, the department also hopes to cooperate to labors or workers, and entrepreneurs to eradicate pulmonary TB.

The detection of new patients and early treatments will benefit patients, companies and the National TB eradication program.

To overcome the TB problem in Indonesia, the DOTS strategy (Directly Observed Treatment Shour tcourse Chemotherapy) recommended by WHO is the most appropriate approach at this time, and it must be implemented seriously [8].

1.2 An Overview of Knowledge, Attitudes and Disease Prevention

1. Knowledge

Knowledge is a result of human senses or the results of someone's knowledge of an object through their senses (eyes, nose, ears, etc.). By itself, at the time of sensing until to produce the knowledge, it is extremely influenced by the intensity of attention and perception of the object. Most of one's knowledge is obtained through the senses of hearing (ears) and of sight (eyes). A person's knowledge of the objects has different intensity or level in broad outline divided into levels of knowledge including

a. Know

It means only as racial memory that has existed before after experiencing something.

b. Comprehension

It means that understanding an object is not only about the object. Not only can you mention it, but the person can also interpret about the known object correctly

c. Application

It is interpreted if the person who has understood the meant enables use or implies the known principle in another situation.

d. Synthesis

It shows a person's ability to put or summarize in a logical relationship from the components of knowledge possessed.

e. Analysis

It is the ability of a person to describe, and or separate, then look for relationships between components contained in a problem or known object.

f. Evaluation

It relates to a person's ability to make an assessment of a particular object [9].

2. Attitude

It is a person's closed response to a stimulus or a particular object involving the factors of his/her opinion, and emotion (happy - unhappy, agree - disagree, good - not good and so on) [9].

- a. A person's attitude towards an object is feeling of support or not support on a particular object.
- b. Attitude is the tendency of the potential to react in certain ways if the person faced with a stimulus requiring a response.
- c. Attitudes are cognitive, affective, and conative components that is mutual interacting and understanding, feeling and behaving towards objects.
- d. Attitude is as a certain order in terms of feeling (cognition), action predisposition (connotation) of someone towards an object in the surrounding area.
- e. Attitudes often obtained through personal experience, culture considered important, the attitude structure according to the triadic scheme consisted of three mutual supporting components support include as follow:

1) Cognitive Component

It is the one's beliefs about what is valid or true for the object of the trust attitude coming from what to see or to know from the object.

2) Affective Components

It is the one concerning a person's subjective emotional problem with an attitude object. In general, this component is equated with feeling of belonging to something.

3) Behavior component

Behavior component (conative) in the attitude structure shows how the person's behavior or his/her tendency to behave in him/herself related to the object of the attitude faced. It is related to the object of the attitude faced. This connection is based on the assumption of trust and feeling influencing most the behavior. The tendency to behave consistently and harmoniously shapes the person's attitude. Therefore, it is logical to expect that someone approaches or avoids other people or other objects. A positive attitude towards the value of health is not always realized in a real action. This is due to several reasons as follows:

- a) Attitude will be realized in an action depending on the situation at that time.
- b) Attitude will be followed or not followed by actions referring to the experiences of other people.
- c) Attitude will be followed by an action based on the amount or least of one's experience.

Value and in any society always apply the values that hold each person in carrying out community life [9]. Newcamb, one of the experts of social psychology, says that attitude is readiness or willingness to act, not an implementer of certain motives. Attitude has levels based on intensity. It includes as follow:

(1) Receiving

It means that a person or subject will accept the given stimulus (object).

(2) Responding

It means that giving answers or responses to questions or objects faced.

(3) Appreciating

It means that the subject or someone gives a positive value to the object or stimulus. Discussing with others and inviting or influence others.

(4) Responsibility

The highest level of attitude is to be responsible for what s/he believes [9].

Thus, it can be described that the attitude is an integral part of the relationship with behavior consisted of several components represented as:

- a. Condition components: related to beliefs, ideas and concepts
- b. Affection Components: related to a person's emotional life.
- c. Conation Components: related to the tendency to behave.

Attitude components are described as collection of thoughts, beliefs and knowledge, and the affective component can be a negative and positive evaluation.

Ma'rat argues that knowledge and feelings are a cluster in the attitude that can produce certain behaviors. As the result, it can be explained that the objects faced directly are related to one's thinking and reasoning. Here, the components of cognition assess these objects and relate to other objects around them; the effectiveness component then evaluates and produces a tendency to feel happy / unhappy or afraid / not afraid of certain objects.

Characteristics of attitude always include aspects of evaluation derived from the component of affection while events are not followed by emotional evaluation. Therefore, the attitude is relatively constant and rather difficult to change. There is a change in meaningful attitude and a strong pressure and can lead to changes in attitude through the process.

Knowledge, thinking and beliefs that can put pressure on good behavior in the form of a negative or positive evaluation, where the process takes place starting from the object faced directly related to one's reasoning. Here, the components of cognition describe the object and are also associated with surrounding objects, which mean person's reasoning against an object about its characteristics.

3. Prevention of disease

Understanding of prevention is to take an action before the incident. Some levels of disease prevention include as follow:

a. Primary prevention

The target is for healthy people in order to increase health status and special prevention of certain diseases.

b. Second level prevention (secondary prevention)

The main target is for people who are newly affected by early diagnosis and an appropriate treatment.

c. Third-level prevention (tertiary prevention)

The target for certain disease sufferers should not get worse or deformed and include rehabilitation [10].

2. Material and Method

2.1. Type of Study and Approach

The study is a descriptive survey using an observational approach aiming to find out knowledge and attitudes or independent variables with dependent variables for TB prevention.

2.2. Sample

The population in this study were all patients who were outpatient and residing in the work area of Health Center Batua in Makassar during the study. The number of patients visiting was approximately 104 people during the week. The samples in this study were 50 people - several outpatient patients and some of them visiting the health center.

2.3. Technique of Data Collection

Sampling technique is a sample selection process used in the study from the existing population. Thus, the number of samples will represent the entire existing population. This study used the random sampling technique utilizing the formula from Taro Yamne or Slovin illustrated as follows [11] :

Where:

n: number of samples

N: total population

d2: Precision (determined at 10% with a 95% confidence level)

3. Discussion

Based on the results of data processing carried out and adjusted to the purpose of the study, namely finding out the description of the knowledge and attitudes of the community in efforts to prevent TB in the Batua Public

Health Center in Makassar. The results can be described as follows:

3.1. Knowledge of TB Patients

The results indicate that 36 respondents have good knowledge about TB and prevention efforts (69.23%), and 16 respondents have less knowledge (30.77%). The respondents have good knowledge about TB because the respondents had received information previously through various mass media This is consistent with the opinion of Notoatmodjo that public knowledge about TB can also be obtained through various ways; one of them is by asking to health workers when visit health facilities or departments so that people's knowledge becomes better in the future [9].

Based on the results of the study found that there were 16 respondents (48%) who were less knowledgeable about TB. The lack of respondents' knowledge about tuberculosis was due to a lack of respondents using their senses to find out information from the health department about the disease because the knowledge is the result of this year after someone sensing certain objects. The sensing occurs through the five senses of man, sight, hearing, smell, taste, and touch. This is also in line to Shahibul's opinion that knowledge is everything known obtained from the contact of the five senses towards certain objects. It is basically the result of the process of seeing, hearing, feeling, and thinking that is the basis of humans and behaving and acting [12].

3.2. Attitude of the TB Patients

The results of data analysis indicate of 52 respondents, 36 respondents who had a positive attitude about TB and prevention efforts (69.23%), and only did 16 respondents have negative attitudes (30.77%)

The results found there were 36 respondents (69.23%) who have positive attitude towards TB because they had good knowledge about TB. This is in line with what Walgito states that the factor influencing one's attitude is knowledge, in which one's attitude is closely related to the level of knowledge. The better the knowledge the person has, the better their attitude. A person's attitude towards an object shows the person's knowledge of the object in question [13]. .

The results found there were 16 respondents (30.77%) had negative attitude towards TB because of the lack of their motivation of searching the existing information sources. One of the attitude components is cognitive one formed from information received, which is then processed to produce a decision to act [13].

The attitudes will be followed by an action based on more or less of one's experience. Value and in any society always applies the values that they hold in carrying out community life [9]. Newcamb, one of the experts in social psychology said that attitude is a readiness or willingness to act, not an implementer of certain motives.

4. Conclusions and Suggestion

Related to the above results, it can be concluded that 36 respondents (69.23%) have good knowledge about TB and it prevention efforts, and 16 respondents (30.77%) have less knowledge are. From 52 respondents, 36

respondents (69.23%) have a positive attitude about TB and its prevention efforts, and 16 respondents (30.77%) had negative one

Suggestion

1. It is necessary to give counseling about TB intensively and sustainably about tuberculosis, particularly the causes of the TB, modes of transmission, and prevention of TB.
2. It is necessary for the Health Office or related sectors to provide information in efforts to increase public knowledge in order to have better understanding of the TB.
3. It is necessary to build cross-sector cooperation, particularly local community leaders expected to assist efforts in the response to the spread of the TB.

5. Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare

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