Tuberculosis Knowledge and Attitude of Patients in Community Health Center in Payakumbuh

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Abstract

Background. Tuberculosis (TB) remains an issue in Payakumbuh. A good knowledge and attitude have a crucial role towards TB control. The objective of this study was to assess knowledge and attitude related to TB among patients in Payakumbuh with structured questionnaire. Methods. Adult tuberculosis patients were selected randomly from eight community health centers in Payakumbuh during February to April 2018. Data were analysed using descriptive statistics. Result. A total of 32 patients were participated in this survey. From the finding, 68,75% respondents were male and 31,25 % were female. Of them 65% of respondents got information about TB from health care professional. Over 80% respondents have known that TB is a communicable disease. The fact that TB is caused by bacteria was known by 75% respondent. Surprisingly only 31,25% respondents who answered that smoking is not the cause of TB. All of respondents believed that TB is curable. Majority of the respondents 90,625% said that the proper medication from community health center is the best way to treat the disease. Conclusion. This study shows that patients had good attitude toward TB while improvement of knowledge is still needed.

Keywords: *tuberculosis, attitude, knowledge, Payakumbuh*

INTRODUCTION

The success rate of treatment for Indonesian tuberculosis (TB) in 2015 was the lowest treatment success rate since 2008 at 85%. The province that have the highest treatment success rate is Lampung at 95.2% and the lowest is Central Kalimantan at 39.2%. West Sumatra is the 23rd province in the treatment success rate of TB in 2015, namely 77.5% (Kemenkes RI 2015). This figure is 10% lower than the success rate of West Sumatra treatment in 2010 (Dinkes 2015). Payakumbuh as one of the city in West Sumatera reached 68% of success rate in 2016.

Treatment success rates are influenced by the number of cure and the total number of treatments (Kemenkes RI 2015). The patient's knowledge and insight into the disease has an impact on the outcome and success of patient therapy (Chung, Chang, and Yang 2007) The higher the level of education, the younger age, and the absence of comorbidities, the higher the success rate of TB treatment (Sengul et al. 2015); (Akeju, Wright, and Maja 2017). Besides being late in diagnosing and failing TB therapy is also a result of low patient compliance in middle to lower income countries (Li et al. 2014).

TB treatment is carried out in a relatively long period of time, at least 6 months. In the treatment of chronic diseases, patient compliance is a serious matter that must be considered (Gebreweld et al. 2018). The longer the patient undergoes a therapy, the lower the patient's adherence (Tesfahuneygn, Medhin, and Legesse 2015) Low adherence with TB treatment is a barrier to the success of TB treatment (Yamazaki 1987) Non-adherence causes an increased risk of morbidity, mortality, drug resistance in patients, medical costs, and

affects the health care system (Jimmy and Jose 2011)

Non-adherence that often occurs in treatment is caused by forgetfulness (30%), having other priorities (16%), deciding to skip medication doses (11%), lack of information (9%), emotional reasons (7%), and 27% not expressing reasons for non-adherence (Bosworth 2012). In addition, non-adherence can also be caused by long-term drug use and drug regimens that are not understood by patients (Strand *et al*, 2013). Other factors that cause non-compliance are under 24 years old, have smoking habits, consume alcohol, not satisfied with the health workers's services, and long waiting times to be served in health facilities are significant as a factor that causes non-compliance in undergoing TB therapy (Tesfahuneygn, Medhin, and Legesse 2015) Patient compliance with treatment is the degree of accuracy of patient behavior in adherence with treatment guideline. It is also stated by WHO that the complete cure rate and treatment rate can be affected by patient non-compliance with treatment (Yamazaki 1987) A good knowledge and attitude have a crucial role towards TB control (Kaona et al. 2004): (Tolossa, Medhin, and Legesse 2014); (Kigozi et al. 2017). Less of knowledege and attitude towards TB contributed to TB control practices (Kigozi et al. 2017) Based on the facts above, this study was conducted to assess knowledge and attitude of TB patients in Community Health Center In Payakumbuh.

METHODS

Study Area

The study was conducted in Payakumbuh, West Sumatera Indonesia, between February and April, 2018. Payakumbuh City has 8 Community Health Centers that are located in 5 districts, they are West Payakumbuh, East Payakumbuh, North Payakumbuh, South Payakumbuh, and Lamposi Tigo Nagori. The estimated of total population is about 131.819 people.

Methods and Sampling

The study was observational-descriptive study using quistionnaire. Non probability sampling was used in this study. Every TB patients aged over 14 years old and on going TB medication in community health center during February and April, 2018 were selected as the sample of the study. Individuals were not included if they were TB patients with other complication, less than 14 years old, had mentally ill, and rejected to be respondent of this study. Due to logistical consideration, each community health center was visited once in a week during 12 weeks and only those included criteria of patients who attended on the day were approached.

Instrument

This study using quistionnaire from WHO that consist of four parts of questions. Each parts has several questions that patient should choose one best answer or several options, depends on the rule of each question. Part one is about Attitude In Finding Information On Health. It consists of two questions. Part two is about Patient's Understanding about TB. It consists of ten questions. Part three is about attitude toward TB. It consists of four questions. The last part is about Stigma of TB. This part consists of six questions.

RESULT AND DISCUSSION

Result

Profile of socio-demographic of the patients who participated in this study shows that male patients is 36,5% more than

female patiens. Almost all of patients is in productive age (less than 65 years old). Life style of patients who got TB is good that only 12,5% of patients who were a smoker. The socio demographic data is summarized in table 1.

Table 1. Sosio Demographic

Variable	Total (n =32)	
	n	%
Gender		
Male	22	68,75
Female	10	31,25
Age		
Productive	30	93,75
Non Productive	2	6,25
Education		
Basic	17	53,12
Intermediate-Up	15	46,88
Job		
Worker	10	31,25
Non-Worker	22	68,75
Life Style		
Smoker	4	12,5
Non-Smoker	28	87,5

Table 2. Diagnosed and Treatment Phase

Variable	Total (n = 32)	
	n	%
TB		
Sputum Smear +	6	18,75
X-Ray +	20	62,5
Gland	3	9,375
Relaps	1	3,125
MDR	1	3,125
Medication Phase		
Intensive	18	56,25
Intermittent	14	43,75

All patients of this study is categorized to five kinds of TB. They are, patients pulmonary TB with positif of sputum smear microscopy test; Pulmonary TB with X-Ray positive; gland TB, TB relaps, and Multi Drug Resistant (MDR) TB. The large propostion is Pulmonary TB with X-Ray Positive. The data of diagnosed and treatment phase of patients are shown by table 2.

Majority of patients visited health center unit or hospital when they got sick. It is linear with the frequency of visitation to health care unit that about 93,75%. Attitude

Table 3. Attitude In Finding Information On Health

Variables	Total (n = 32)	
	n	%
Visiting Health Care Unit when Get Ill		
Clinic	1	3,125
HC/Hospital	30	93,75
Traditional Clinic	1	3,125
Frequency of Visit		
≥ 2 in a year	30	93,75
Once a year	1	3,125
Less than 1 a year	1	3,125
At least 2 times in 5 years	0	0
Once in 5 years	0	0
Never in last 5 years	0	0

Table 4. Understanding About TB

Variables	Total (n=32)	
	n	%
Source of Information		
Newspaper/Magazine	4	12,5
Radio	0	0,00
TV	6	18,75
Bulletin Board	3	9,375
Brochure/Leaflet	3	9,375
Health Workers	21	65,625
Family /Friends	9	28,125
Teachers	0	0,00
Internet	1	3,125
TB as Cmmunicable Disease		
Yes	27	84,375
No	5	15,625
Cause of TB		
Smoking	22	68,75
Bacteria	24	75
Severity of TB		
Severe	28	87,5
Moderate	3	9,375
Mild	1	3,125
Degree of TB Cases in Payakumbuh		
Severe	17	53,125
Moderate	10	31,25
Mild	5	15,625

in finding information on health is summarized in table 3. More than half of the patients got information about TB fom health workers . One-fourth of patients got the information of TB from family or friends. Getting information from TV only 18,75%. Others got information from newspaper, bulletin board, and

brochure/leaflet. Only 3,125% patients who got information from internet. The interesting result was about the cause of TB, more than 60% patients believed TB is caused by smoking. Although they also believe TB was caused by bacteria (75%). Summarized of understanding about TB is shown in table 4.

Almost half (46,875%) of patients shocked when they knew having TB. About one-third of patients were afraid when knowing they got TB. Another feeling of patients when they were informed get TB were shame, very embarrassed, sad, and desperate. Fortunately, almost all patients tell their problem to health workers and they went to health center to know about their conditions. Attitude toward TB is summarized in table 5.

Table 5. Attitude Toward TB

Variables	Total (n = 32)	
	n	%
Feeling when know having TB		
Afraid	10	31,25
Shocked	15	46,875
Shame	6	18,75
Very Embarrassed	3	9,375
Sad and Desperate	7	21,875
Others	0	0,00
Person to tell about having TB		
Health Workers	26	81,25
Spouse	15	46,875
Parents	12	37,5
Children	15	46,875
Other family members	22	68,75
Close friends	7	21,875
No one	0	0,00
Action When Feeling The Symptom of TB		
Visit health center	30	93,75
Visit pharmacy	2	6,25
Visit tranditional facilities	1	3,125
Swamedication	1	3,125
Others	0	0
Cost of TB Treatment		
Free	32	100
Not too expensive	0	0
Expensive	0	0

Stigma about TB assessed attitude of people that surrounding the patients. Most of people who surrounded the patients supported and helped patient to go through their condition. While there were 9,375% and 12,5% people who still leaving and friendly but with avoidance to patients.

Almost half of patiens know that patients with HIV were riskier than others from TB infection. Only half of patients who felt getting enough information about TB. While 100% of patients wanted to know more about TB disease. Stigma about TB is summarized in Table 6.

Table 6. Stigma About TB

Variables	Total (n = 32)	
	N	%
Attitude of other people		
Leaving	3	9,375
Friendly but with avoidance	4	12,5
Supporting and helping	29	90,625
Others	0	0,00
HIV Positive Patient shoud be more careful with TB disease (with reason)		
Yes, because Patient with HIV is high-risky to be infected by TB	13	40,625
Yes, (not know the reason)	9	28,125
No,because patient with TB is not high-risky to be infected by TB	1	3,125
No, (not know the reason)	10	31,25
Getting Enough Information about TB		
Yes	18	56,25
No	14	43,75
Expect More Information About TB		
Yes	32	100
No	0	0
The Three Most Effective Media To Get Information About TB		
Newspaper/Magazine	3	9,375
Radio	4	12,5
TV	13	40,625
Billboard	4	12,5
Brochure/Leaflet	9	28,125
Health Workers	24	75
Family and Friends	9	28,125
Teachers	1	3,125
Internet	1	3,125
Anxiety towards TB		
Spreading TB to others	10	31,25
Long period of medication	6	18,75
Fear of relaps or not cure	2	6,25
Fear of die	6	18,75
Limitation in activity	3	9,375
Not worry	5	15,625

This study informed that TB patients in Payakumbuh had been aware to their health. It can be shown by the percentage of visitation to health center and their action towards their health and medical condition. Majority of patients knew that TB is communicable disease. It is similar to research that conducted in Eastern Ethiopia and South Africa, that the community knew that TB is trasmissible and crowded condition as a risk factor for TB spreading (Tolossa, Medhin, and Legesse 2014); (Kigozi et al. 2017). Although only 12,5% patients who were smoker but more than 60% patients believed that TB is caused by

smoking. It can make a sense because a study that conducted in Jogjakarta showed that 72% of TB patients there were tobacco consumption (Safa, Tabarsi, and Sharifi 2011). Ways to avoid TB were variant among patients, more than 70% patients believed avoiding hand shake with infected people could avoid Tb transmission. More than 80% were also believed covering mouth and nose while coughing and sneezing were the solution to avoid TB spreading. Even there 12,5% patients believed unsharing plate with patients can reduce the TB dispersion. Knowledge about causative and transmission of TB were also variant among patients in other study C (Kaona et al. 2004)

CONCLUSIONS

Knowledge and attitude towards TB among TB patients is important to know. It contributes to medication adherence and success rate of TB treatment. Mostly, TB patient in Payakumbuh know about severity and characteristics of TB disease. However, knowledge about cause, how to avoid, and the pattern of TB transmission were still low. Therefore, upgrading and strategy in sharing health education to patients and commnunity in Payakumbuh were essential to conduct.

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