

## Knowledge of Prevention Tuberculosis Disease in Makassar City of South Sulawesi Province

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### ABSTRACT

*Tuberculosis is caused by Mycobacterium tuberculosis, with the incidence rate in Indonesia ranked third after China and India and attacked all age groups of people. According to the World Health Organization (WHO) it was reported that Indonesia was one of the 22 countries in the world that has a high burden of TB lungs and ranks third after China and India for TB cases. The incidence of TB cases Lung with BTA (+) in South Sulawesi Province (2013) reported as many as 8,902 cases found in the male type as many as 5,259 cases (59.08%) and in the female sex as many as 3,643 (40.92%) The purpose of this study was to find out the knowledge picture of tuberculosis disease prevention knowledge of the people of Makassar City from aspects knowledge of tuberculosis disease source control, knowledge of tuberculosis disease agent control, and knowledge of increasing body resistance to tuberculosis disease. The type of research was descriptive. The research population was a community domiciled in the Makassar city area. A sample of 335 people was obtained by multi-stage sampling. Research results Overview of knowledge of tuberculosis disease prevention of the people of Makassar City aspects of controlling the source of tuberculosis disease in general category good; Aspects of increasing the body's resistance to tuberculosis disease in general category good; description of the prevention of tuberculosis disease prevention of the people of Makassar City in general category good.*

**Keywords:** Knowledge, Control, Disease Sources, Disease Agents, Endurance

### INTRODUCTION

Tuberculosis or abbreviated TB is caused by *Mycobacterium Tuberculosis* that can attack all organs of the human body, a disease that attacks the lung organs. According to the *World Health Organization* (WHO) in 1998 has reported that Indonesia is one of the 22 countries in the world that a high burden on tuberculosis and ranks third after China and India of TB cases.

The incidence of tuberculosis cases with BTA (+) in South Sulawesi Province (2013) was reported as many as 8,902 cases in male types as many as 5,259 cases (59.08%) and in the female sex as many as 3,643 (40.92%). The field of disease prevention and environmental health of Makassar City Health Office (2014), the number of new cases of BTA Lung TB (+) in 2013 as much as 72.44% (found 1,811 patients from as many as 2,500 targets), this number increased from 2012 with the number of sufferers as many as 1,324 out of 1,641 targets. When compared to the 2013 target of 70% then the achievement rate exceeds the target with a percentage achievement of 72.44% (Makassar City Dinkes, Health Profile 2014).

The description of the infectious diseases mentioned above, is the result of interaction between the host factor (human), agent (cause of disease) and environment (environment). Host factors relate to human knowledge, attitudes, motivations and behavior in controlling aspects of the spread of disease and immunity, while the actor agent deals with the species, its virulence, its resistance, and factor environment is related to waste management, waste management, clean water provision, and environmental management (Noor, 2008).

Based on the data, the purpose of this research was to determine the knowledge about the prevention of tuberculosis disease from the aspect of controlling the source of tuberculosis disease agent and knowledge of tuberculosis disease prevention of makassar city community.

### MATERIAL AND METHODS

Based on the research study design was an analytic survey. The population in this study was all community domiciled in makassar city area both healthy and sick or suffering from tuberculosis disease that has been diagnosed by doctors. The sample in this study was a portion

of the community that has suffered from tuberculosis disease and who do not suffer from tuberculosis domiciled in the working area of Makassar City Puskesmas as many as 335 people by multi-stage sampling technique which is a way of sampling that is done through stages. The technique is as follows:

- a. The first stage, using all sub-districts in the makassar city area, which is as many as 14 sub-districts.
- b. The second stage, determining the number of samples of each sub-district by comparing the number of tuberculosis cases to the total population of BTA tuberculosis (+) multiplied by the number of samples to be studied (335 people).
- c. The third stage, from the sub-district determined call centre community which has the highest number of cases of tuberculosis as a place of data collection.

**Table 1.** Number of Research Samples Per Puskesmas in People in Makassar City

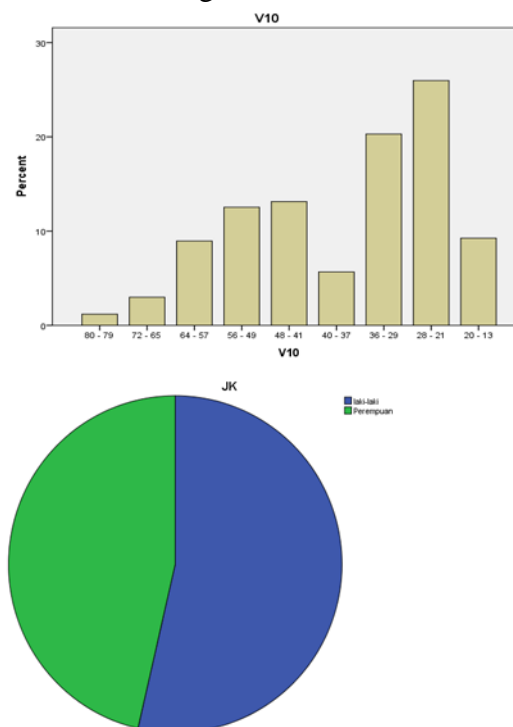
No	District	Tb. Paru BTA (+)	Puskesmas	Sampel
1.	Ujung Tanah	66	Pattigalloan	13
2.	Tallo	193	KalukuBodoa	37
3.	Bontoala	85	Layang	16
4.	Wajo	43	Tarakan	9
5.	Ujung Pandang	50	Makassar	10
6.	Makassar	169	MacciniSawah	32
7.	Mamajang	79	Cendrawasih	15
8.	Mariso	148	Pannambung	28
9.	Tamalate	241	Tamalate	45
10.	Rappocini	201	Kassi-kassi	38
11.	Panakkukang	182	Pampang	35
12.	Manggala	124	Antang	24
13.	Biringkanaya	90	Sudiang	17
14.	Tamalanrea	85	Tamalanrea	16
		1.756	Total sampel	335

In this study, the variables to be analyzed are knowledge of tuberculosis disease prevention from aspects of knowledge of tuberculosis disease control, knowledge of tuberculosis disease agent control and

knowledge of increasing the body's resistance to tuberculosis disease. The analysis technique in this study, using computer with univariate analysis that aims to find out the picture of the variable above.

## RESULTS AND DISCUSSION

Based on the results of age groups that have been analyzed in the field, obtained graphs such as the image below.

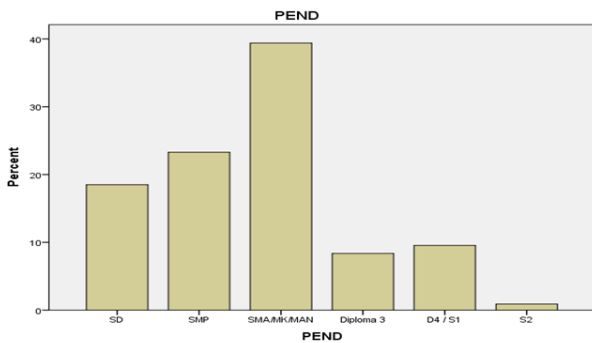


**Figure 1.** Distribution of respondents of makassar city community Based on age and gender

Figure. 1 shows that of the 335 respondents of makassar city community there are as many as 4 people (1.2%) who have an age of 80 - 73 years; as many as 10 people (3.0%) who have ages 65 - 72 years; as many as 30 people (9.0%) aged 57 - 64 years; 42 people (12.5%) aged 49 - 56 years; as many as 44 people (13.1%) aged 41 - 48 years; as many as 19 people (5.7%) who have a lifespan of 37 - 40 years; as many as 68 people (20.3%) aged 29 - 36 years; as many as 87 people (26.0%) who have ages 21 - 28 years; and as many as 31 people (9.3%) who have ages 13- 20 years.

Based on the data, it can be concluded that the most respondents are aged 21-28 years.

Figure. 1 shows that of the 335 respondents of makassar city community there were 179 people (53.4%) who have a male gender and as many as 155 people (46.3%) who have a female gender. Based on the data it can be concluded that respondents who have a male gender are relatively the same number as those who have a female gender

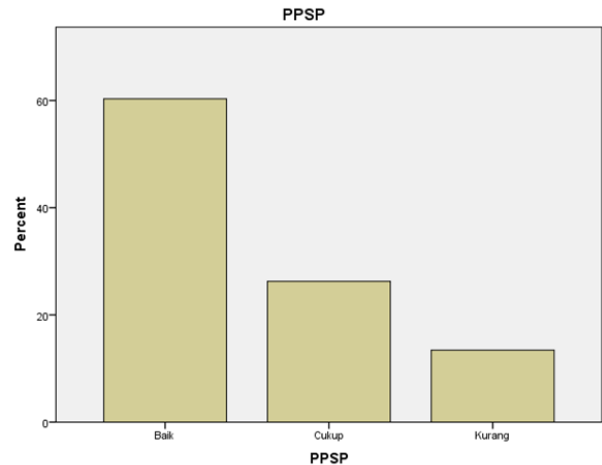


**Figure 2.** Distribution of Makassar City Community Response Based on Education in 2016

Figures. 2 show that of the 335 respondents of makassar city community there were as many as 62 people (18.5%) who had the last elementary education; as many as 78 people (23.3%) who had the last junior high school education; as many as 132 people (39.4%) who have the last high school education / MK / MAN; as many as 28 people (8.4%) who had the last education D3; as many as 32 people (9.6%) who had the last education D4 / S1; and as many as 3 people (0.9%) who have the last education S2. Based on the data, it can be concluded that the most respondents who have the last education are high school / vocational / MAN or equivalent.

**Univariate Analysis**

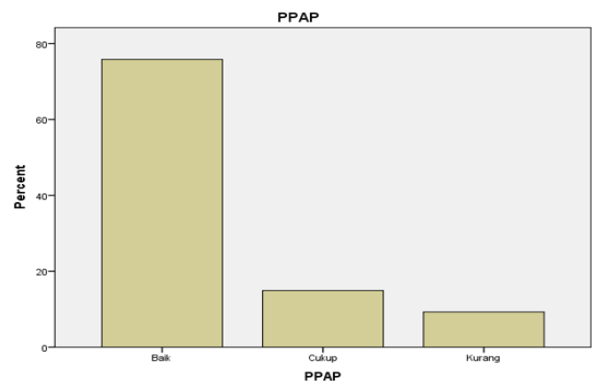
**1. Knowledge of the people of Makassar City in preventing tuberculosis infectious diseases aspects of disease source control**



**Figure 3.** Distribution of Knowledge of The People of Makassar City in Prevention of tuberculosis Disease Aspects of Disease Source Control in 2016

Figure3 shows that of the 335 respondents of the makassar city community who have knowledge of controlling the source of tuberculosis disease category less than 45 people (13.4%); The category is enough as many as 88 people (26.3%) and the good category as many as 202 people (60.3%). Based on the data it can be concluded that most respondents have good category Of tuberculosis Disease Control Knowledge.

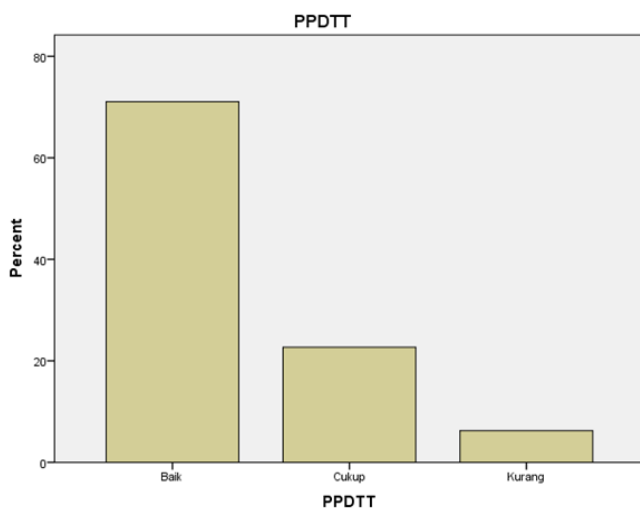
**2. Knowledge of Makassar City Community in prevention of infectious diseases of tuberculosis aspects of disease agent control**



**Figure 4.** Distribution of Knowledge of The People of Makassar City in The Prevention of tuberculosis Disease Aspects of Disease Agent Control In 2016

Figure. 4 shows that of the 335 respondents of the people of Makassar City who have knowledge of tuberculosis disease control category less than 31 people (9.3%); The category is enough as many as 50 people (14.9%) and the good category as many as 254 people (75.8%). Based on these data it can be concluded that most have knowledge of the control of good category tuberculosis disease agents.

### 3. Knowledge of the People of Makassar City in the prevention of Infectious diseases of tuberculosis aspects of improving endurance



**Figure 5.** Distribution of knowledge of the people of Makassar City in the prevention of tuberculosis disease aspects of increasing endurance in 2016.

Figure. 5 shows that of 335 respondents to the people of Makassar City who have Knowledge of Increasing Endurance to tuberculosis disease category less as many as 21 people (6.3%); The category is enough as many as 76 people (22.7%) and the good category as many as 238 people (71.0%). Based on these data it can be concluded that most respondents have knowledge of increasing the body's resistance to tuberculosis disease in the good category.

## DISCUSSIONS

### 1. Knowledge of Controlling The Source of tuberculosis Disease Of Makassar City Community

Based on the results of the study figure. 3 shows that of 335 respondents to the people of Makassar City who have knowledge of controlling the source of lung disease category less than 45 people (13.4%); The category is enough as many as 88 people (26.3%) and the good category as many as 202 people (60.3%). From the data it can be concluded that most respondents have knowledge of controlling the source of tuberculosis disease category GOOD.

The knowledge of the people of Makassar city referred to in this study is all knowledge that can control the source of transmission of tuberculosis disease so that the chain of transmission of the disease can be decided. The knowledge is if the sick community will seek treatment to the doctor and on health care facilities such as clinics, health centers and hospitals; Not sleeping in a room with people with tuberculosis; know the clinical symptoms of tuberculosis disease; know how to transmit tuberculosis disease; knowing that if treatment is interrupted then the old tuberculosis disease is concealed; knowing that tuberculosis germs can be turned off using antibacterials both physical and chemical; Knowing that the development of tuberculosis germs is related to the sanitation of unhealthy home environments' and so on.

### 2. Knowledge of Control of tuberculosis Disease Agent Of Makassar City Community

Figure. 4 shows that of the 335 respondents of the people of Makassar City who have knowledge of tuberculosis disease control category less than 31 people (9.3%); The category is enough as many as 50 people (14.9%) and the good category as many as 254 people (75.8%). Based on these data it can be concluded that most have knowledge

of good category tuberculosis disease control agents.

The knowledge of the people of Makassar city referred to in this study includes the causes of tuberculosis disease, transmission of tuberculosis disease, the habitat of tuberculosis germs, how to destroy tuberculosis germs, transmission media for tuberculosis germs and so on.

3. Knowledge of Increasing Body Endurance against Tuberculosis in Makassar City Community.

Figure. 5 shows that of the 335 community respondents in Makassar City who have knowledge of increasing body resistance to tuberculosis in the less category, 21 people (6.3%); enough category as many as 76 people (22.7%) and good category as many as 238 people (71.0%). Based on these data, it can be concluded that most of the respondents have knowledge of increasing body resistance against tuberculosis in the GOOD category.

The knowledge of the people of Makassar city referred to in this study includes: protecting themselves from the spread of tuberculosis germs, consuming healthy food, drinks, good household waste management, the dangers of smoking to health, eradication of disease vectors, healthy environmental sanitation, rest sufficient, the effect of stress on health, the benefits of exercise for the human body and so on.

## CONCLUSION

Based on the results of the research and discussion in this study, it can be concluded that the description of the level of knowledge of tuberculosis disease prevention from the aspect of controlling the source of tuberculosis disease in the Makassar City community is generally in the Good category. Aspects of controlling tuberculosis disease agents in Makassar City are generally in the Good category. Aspects of increasing body resistance against tuberculosis

in Makassar City are generally in the Good category.

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