

# RELATIONSHIP BETWEEN PSYCHOLOGICAL, INCENTIVES AND AVAILABILITY OF FACILITIES WITH PERFORMANCE OF THE TUBERCULOSIS CONTROL PROGRAMME

(Observational Study on Work Area of Banjarmasin City Health Office)

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## ABSTRACT

Tuberculosis (TB) is an infectious disease caused by *Mycobacterium tuberculosis*. The achievement of Pulmonary TB CDR in the working area of Banjarmasin City Health Office is still 49% in 2015 and increased by 52% in 2016. The low achievement of pulmonary TB CDR in Banjarmasin became a health problem related to the performance of P2TB officers in the Health Service Working Area City of Banjarmasin. This study aims to explain factors related to the performance of Proram Control Officers Tuberculosis in the Work Area of Banjarmasin City Health Office. This research is a quantitative research using cross sectional design. The population is all officers of P2TB in the working area of Banjarmasin City Health Office. The sample taken is a population of 57 people using total sampling technique. The results showed that the availability factor of the facility was related to the performance of the Proram Control Officer Tuberculosis ( $p$ -value = 0.049). While factors unrelated to officer performance are psychological factor ( $p$ -value = 1.000) and incentive ( $p$ -value = 0.260). The conclusion of this study is the relationship between the availability of facilities with the performance of Proram Control Officers Tuberculosis, but there is no relationship between the psychological and incentives with the Proram Control Officer Tuberculosis in the Work Area of Banjarmasin City Health Office.

**Keywords:** Tuberculosis, performance, officer of Tuberculosis Control Programme

## INTRODUCTION

Tuberculosis (TB) is an infectious disease caused by *Mycobacterium tuberculosis*. TB can attack various organs, especially the lungs (pulmonary tuberculosis). This disease can spread through the air when the sufferer coughs. The main symptoms of tuberculosis are cough with phlegm for 2 weeks or more. According to the World Health Organization (WHO) TB case in 2015, 6.1 million new TB cases. Six countries contribute 60% of total TB in the world namely India, Indonesia, China, Nigeria, Pakistan and South Africa (1).

The prevalence of Indonesian population diagnosed with pulmonary TB by health personnel in 2007 and 2013 was no different (0.4%). Meanwhile, the prevalence for South Kalimantan (0.3%) in 2013. While for TB case finding in all cases measured by Case Notification Rate (CNR) shows the trend in Indonesia has decreased over the last few years. This decrease is a decrease in CNR TB in all cases by 2014, from 129 per 100.000 population to 125 per 100.000 population by 2015. These data show a decline from 2014 to 2015 (2,3).

The strategies used to achieve the Lung TB prevention program are Directly Observed Treatment, Short- course (DOTS) strategy. The national indicator used in Lung TB prevention is Case Detection Rate (CDR) with 70% target. CDR calculation is the percentage of newly acquired TB smear positive patients who were found and treated for the number of new tuberculosis positive patients estimated in one particular area. CDR describes coverage of positive smear case invention in a particular region (4,5,6).

Based on data from the South Kalimantan Provincial Health Office, the achievement of CDR TB Lung in the Working Area of Banjarmasin City Health Office is still 49% in 2015 and increased by 52% in 2016-2017. Data from the Health Service of Banjarmasin City showed an increase of suspected TB of Pulmonary TB in 2015 with the number of suspects 6.667 persons to 6.791 people in 2016-2017. The increase in suspected TB of Pulmonary TB indicates that the presence of TB transmission has an impact on the high number of TB patients. In addition, smear positive pulmonary TB can cause community stigma and ostracism by the environment. The impact of the economic aspect is the decrease in income due to lost working time for 3-4 months for intensive treatment so that income will also decrease (7,8).

Based on these data, it can be seen that those who carry out the discovery of smear positive pulmonary tuberculosis cases are the officers of the Tuberculosis Control Program (P2TB). The performance factor of P2TB officers is the spearhead in the discovery of Pulmonary TB cases in Puskesmas. With the effort to improve the performance of P2TB officers in the discovery of Pulmonary Tuberculosis cases is expected to increase the finding rate of smear positive pulmonary TB cases so as to reduce the impact of the spread of pulmonary TB disease so as to realize the Indonesian government program free of TB in 2035 (4).

Gibson (1996) have three main factors related to officer performance. These factors are individual factors, psychological factors and organizational factors. Individual factors consist of abilities and skills, background: family, social level, experience; demographics: age, gender origin. Psychological factors consist of perception, attitude, personality, psychological, motivation. Organizational factors consist of resources, leadership, incentives, structure, job design (9).

Other studies on the performance of other studies conducted by Trisna and Ilyas (2013) mentioned that there is a correlation between psychological variables  $p$ -value 0,008 ( $<0.05$ ) with performance of program officer of Tuberculosis. And another study conducted by Maryati (2014) found that there is an  $p$ -value incentive relationship of 0.001 ( $<0.05$ ) with the performance of Pulmonary Tuberculosis Officers. Then a research conducted by Nuraini (2009) found that there is no relationship between the availability of facilities of  $p$ -value 0.129 with the performance of Tuberculosis officials (10,11,12).

## METHOD

This study used an observational design with cross sectional design. Cross sectional design is used to analyze and measure independent variables and bound together. Sample determination using total sampling technique that is the number of selected sample is total population. The sample was determined by using total sampling technique where all population of Tuberculosis control program officer in Puskesmas of Banjarmasin City was chosen for all research. The instrument used in this research is questionnaire checklist to know age, gender, psychological, incentive and availability of facility (13).

## RESULTS AND DISCUSSION

### A. Univariate Analysis

Based on the result of the research, the frequency distribution of program officer performance of Tuberculosis control is presented in table 1 below:

Table 1. Distribution of the frequency of variables studied in the Work Area of Banjarmasin City Health Office

No.	Variable	Frequency	Percentage (%)
<b>1</b>	<b>Performance</b>		
	Less	26	45.6%
	Good	31	54.4%
	<b>Total</b>	<b>57</b>	<b>100%</b>
<b>2</b>	<b>Psychological</b>		
	Low	16	28.1%
	High	41	71.9%
	<b>Total</b>	<b>57</b>	<b>100%</b>
<b>3</b>	<b>Incentive</b>		
	Not satisfactory	18	31.6
	Satisfactory	39	68.4
	<b>Total</b>	<b>57</b>	<b>100%</b>
<b>4</b>	<b>Availability of Facilities</b>		
	Incomplete	27	47.4
	Complete	30	52.6
	<b>Total</b>	<b>57</b>	<b>100%</b>

Based on table 1 can be seen from 57 respondents, with less performance (45.6%). While respondents with good performance (54.4%). According Mangkunegara, performance is the result of work both in quality and quantity achieved by workers in performing their duties in accordance with responsibilities (14).

Work assessment is used for performance improvement, compensation adjustments, placement decisions, training and development needs, career planning and development, handling staffing process, inaccuracies of information, preventing job design errors, fair employment, as well as facing external challenges (15).

Based on the results of the above research, it can be seen that the performance of Tuberculosis officers is still less 31 people (54.4%). The low performance of respondents is caused by the many factors that can affect the performance of the respondents in carrying out their duties. Factors that can affect the performance of respondents such as finding it

difficult to do Tuberculosis control program caused by the difficulty of maintaining Tuberculosis patients with long treatment. In addition, the lack of availability of computer and vehicle advice results in delays in recording and reporting. Therefore, this performance appraisal can be used to improve the performance of Tuberculosis officers in order to achieve program targets.

Based on table 1 can be known psychological respondent is based on education level of higher education (71.9%). This is because the level of education that has been taken by many respondents is the college (D3 / D4 / S1 / S2). Psychological is needed by someone. Through psychological, maturity and ability possessed can be expanded and developed (16).

Education is the level or stratum of the school who has ever achieved an individual with the final result gets a diploma. If high education will be more open to insight and seek to update science and quickly adjust to the existing renewal. According to

Notoatmodjo (1993), education in individuals / groups aims to seek improvement of the expected ability (17).

Based on table 1 can be seen from 57 respondents, with feel unsatisfactory to the incentives received (31.6%). While respondents who are satisfied with the incentives received (68.4%). Incentives become one of the motivations of a person in carrying out work. Incentives earned in the form of money / salary, promotion work and other awards are given in accordance with its performance. Incentives are divided into two: extrinsic and intrinsic incentives. Extrinsic incentives include financial (salary, wages and benefits), interpersonal incentives and promotional incentives obtained from direct sources. Intrinsic incentives include completion, achievement or achievement, autonomy and growth (9).

Incentives should be linked to employee performance levels. This means that incentives will increase the employee to achieve a high level of performance. The above results can be seen that the respondents were satisfied with the incentives received (68.4%). This result reinforces the theory of Timpe et al. (2000) which explains that incentives are an important factor that can affect performance, since incentives represent a measure of the employee's performance value (18,19).

Based on table 1 can be seen from 57 respondents, with availability of availability of incomplete means and infrastructure incomplete (47.4%). While respondents who answered the availability of facilities in full (52.6%). The availability of many suggestions not found in the respondents is the availability of computer advice (84.2%) and motor vehicle

/ car (89.4%) in order to carry out activities. While at present, the system of recording and reporting of computer-based Tuberculosis control program, officers enter data into recording and reporting system that is Integrated Tuberculosis Information System. The lack of availability of computer and vehicle advice requires employees to use private property.

The availability of facilities is one of the important factors in the organization. The availability of supporting facilities include workplaces, work equipment (facilities for work), transportation and funds. Support of facilities is needed by officers, especially field officers so that the availability of facilities and infrastructure will make it easier for officers to carry out their duties (9).

Based on the results of the research can be seen that the availability of facilities in this case is a means and infrastructure supporting the implementation of TB control programs. The availability of facilities and infrastructure can have an impact on the performance of Tuberculosis officials in performing their duties. This is because the availability of means is a factor that can affect one's behavior. Frequent delays in the implementation of tasks and the low performance of a program can be caused by the unavailability of the necessary infrastructure to carry out the task (20).

## B. Bivariate Analysis

This analysis is used to see the relationship of each independent variable with dependent variable that is psychological, incentive and resource availability with officer performance. The result of bivariate analysis can be seen in table 2 below:

Table 2 The relationship between the variables studied and the performance of the Tuberculosis Control Officer in the Work Area of Banjarmasin City Health Office

Variable	Performance Officer				Total		$\rho$ value
	Less		Good		N	%	
	n	%	n	%			
<b>Psychological</b>							
Low	7	43.8	9	56.7	16	100	1.000
High	19	46.3	22	53.7	41	100	
<b>Incentive</b>							
Not satisfactory	11	61.1	7	38.9	18	100	0.260
Satisfactory	16	41	23	59	39	100	
<b>Availability of Facilities</b>							
Incomplete	17	63	10	37	27	100	0.049
Complete	10	33.3	20	66.7	30	100	

Based on table 2 it is known that respondents with good performance on psychology with low education level (47.5%) and respondents with less performance at higher education level (66.7%). This means that officers who have good performance on respondents with psychological education at low levels. The result of statistical test using Chi Square test with 95% confidence level, it is known that the value of  $p$ -value is 1.000. Based on the value of  $p$  in the statistical test obtained the decision that  $H_0$  accepted ( $p > 0.05$ ) which means, there is no relationship between psychological performance of program officers controlling Tuberculosis.

Table 2 shows that respondents with good performance on satisfactory incentives (59%) and respondents with less performance on satisfactory incentives (41%). This means that officers who have good performance on respondents with incentive satisfactory.

The result of statistical test using Chi Square test with 95% confidence level, it is known that the value of  $p$ -value is 0.260. Based on the value of  $p$  in the statistical test, it is found that  $H_0$  is accepted ( $p < 0.05$ ) which means that there is no correlation between the incentive and the performance of the control program officer of Tuberculosis.

Based on table 2 it is known that respondents with good performance on the availability of complete facilities (66.7%) and respondents with less performance on the availability of incomplete facilities (45.2%). This means that officers who have good performance on respondents with the availability of complete facilities.

The result of statistical test using Chi Square test with 95% confidence level, it is known that the value of  $p$ -value is 0.049. Based on the value of  $p$  in the statistical test found that  $H_0$  is rejected ( $p < 0.05$ ) which means, there is a relationship between resources with the performance of program officers controlling Tuberculosis.

### **The relationship between psychological and performance of Tuberculosis Control program officer**

Based on the research results, it can be seen that there is no relationship between education level with the performance of respondents. The above results show that a person's educational level can not confirm the person's work. This is because the knowledge and experience of a person on the work done not only obtained from the education that has been run, but also can be obtained from training and reading books, leaflets, online guide books and other psychological media.

Based on the proportion between psychological relationship and the performance of program officer of Tuberculosis control, the result of the respondents with good performance is more on the respondent with the psychology at low education level (56.7%) and the respondents with the higher education level (43.8%). Psychological with low level of education that has been run by the respondents is background of high school graduates / SPK and SMK Health Analyst. While the level of higher education that has been run by the average respondents D3 / D4 / S1 graduates.

Differences of educational background that have been run by officers do not become an obstacle in carrying out the task. Psychologists with a high level of education can not be guaranteed to produce good performance or satisfactory. This research is in line with previous research which has been done by Dewi (2015) with  $p$ -value equal to 0,637 ( $p > 0,05$ ) so  $H_0$  is accepted which means there is no correlation between education level and officer performance in Tuberculosis program. Dewi stated that there is no correlation between education level and officer performance because there are some respondents who are high school / vocational high school graduates and there are also nursing graduates who have not too deep background about Tuberculosis prevention program (21).

In addition, research conducted by Ahwan (2014) with  $p$ -value of 0.775 ( $p > 0.05$ ),  $H_0$  accepted. Ahwan (2014) mentioned that the program officer controlling Tuberculosis which have high education level, same with officer having low education level. However, officers with a high level of knowledge contribute better than those with low levels of education. Education is the level or stratum of the school who has ever achieved an individual with the final result gets a diploma. According to Notoatmodjo (1993), education on individuals / groups aims to seek improvement of the expected ability (17, 22).

### **The relationship between incentives and performance of Tuberculosis control program officers**

The results of this study can be seen that there is no relationship between the incentives received respondents with the performance of respondents. Respondents mentioned that incentives would not be an excuse to do the job in accordance with their duties. If there is a better incentive in the form of material or non-material (speech or praise) is not a strong reason to do the job. This is

because the work that has been given is the responsibility that must be executed.

Field facts obtained on the respondents supported by the average respondents agreed as many as 31 people who mentioned that the award given does not impact my actions in the work of tuberculosis control program.

This is in line with the research conducted by Yuyun (2007), with p-value of 0.232 ( $p > 0.05$ ) where there is no relationship between incentives and the performance of Tuberculosis officials. This study says this is not in accordance with the theory put forward by Gitosudarmo, that the provision of incentives should be associated with employee performance levels. This means that with the incentives that increase, it will spur employees to achieve higher work performance (23).

#### **The relationship between the availability of facilities and the performance of the Tuberculosis Control Officer**

The availability of complete facilities can affect a person's performance. In this study, the average availability of facilities that are not available are computers and vehicles. The availability of computer and vehicle facilities is supported by the average respondent mentioning the absence of computer (84.2%) and special car / motor vehicle tuberculosis control program (89.4%). If the computer facilities and vehicles and other necessary facilities are not available completely, it will hamper the action so that the impact on the work is lacking.

This is in line with the research of Yuyun (2007) with p-value of 0.004 ( $p < 0.05$ ) so that the relationship between the availability of facilities with the performance of Tuberculosis program officers. In the research described that the required tools are laboratory equipment, recording format and reporting. A well-available means will improve the performance or outcome of an activity. Therefore, the availability of facilities is a thing that must be met in order that the desired result is in accordance with the target (23).

#### **CONCLUSION**

1. There is no correlation between psychological and performance of Tuberculosis Control Officer in Work Area of Banjarmasin City Health Office with p-value = 1.000.
2. There is no correlation between incentive and performance of Tuberculosis Control Officer in Work Area of Banjarmasin City Health Office with p-value = 0.260.

3. There is a relationship between the availability of facilities with the performance of Tuberculosis Control Officer in the Work Area of Banjarmasin City Health Office with p-value = 0.049.

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