


Determinants of TB Officer Performance in the Discovery of New TB Cases in the West Pasaman Regency Area

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Article Info	ABSTRACT
<p>Keywords: Knowledge, Attitude, Action, Motivation. New Case Discovery</p>	<p>This research aims to analyze the situation of the influence of knowledge, attitudes, actions and motivation on the discovery of new TB cases in the West Pasaman Regency area in 2023 with a focus on efforts to improve officer performance, through training and active participation of officers. Based on the 2021 Global TB Report, it is estimated that there are 824,000 TB cases in Indonesia, but only 393,323 (48%) TB patients were found, treated and reported to the national information system. There are still around 52% of TB cases that have not been found or have been found but have not been reported. In 2022, data as of September for TB discovery and treatment coverage will be 39% (1 year TC target 90%) and TB treatment success rate will be 74% (SR target 90%). Based on the 2022 Health Profile, West Sumatra Province is in 13th place based on the notification rate of all tuberculosis cases per 100,000. This research uses quantitative methods to explore the influence of knowledge, attitudes, actions and motivation on the discovery of new TB cases, based on the latest data which shows the achievement of low cases far below target. In fact, according to data, the number of TB officers available and distributed throughout health facilities in West Pasaman Regency is 82 people. Therefore, it is necessary to follow up regarding the performance of TB officers in discovering new cases. The research results show that knowledge and action influence the discovery of new cases in the West Pasaman Regency area in 2023. Meanwhile, attitudes and motivation have no influence on case discovery.</p>
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INTRODUCTION

TB (Tuberculosis) is a direct infectious disease caused by tuberculosis bacteria (*Mycobacterium tuberculosis*), most of which are tuberculosis bacteria. attacks the lungs, but can also affect other body organs, such as the pleura, lymph nodes, abdomen, genitourinary tract, skin, joints and bones. In the 2013 WHO (World Health Organization) report, it was estimated that there were 8.6 million cases of tuberculosis in 2012, of which 1.1 million people (13%) were tuberculosis patients with positive Human Immunodeficiency Virus (HIV). About 75% of these patients are in the African region. In 2012, it was estimated that 450,000 people suffered from MDR-TB (Multy Drug Resistant Tuberculosis) and 170,000 of them

died. In 2012, it is estimated that the proportion of childhood tuberculosis cases among all tuberculosis cases globally reached 6% (530,000 child tuberculosis patients/year), while the deaths of children with negative Human Immunodeficiency Virus status who suffered from tuberculosis reached 74,000 deaths/year, or around 8% of the total. death caused by tuberculosis

Decree of the Minister of Health of the Republic of Indonesia Number HK.02.02/MENKES/52/2015 concerning the Strategic Plan of the Ministry of Health for 2015-2019 as a continuation of the Millennium Development Goals (MDGs) to Sustainable Development Goals (SDGs) for infectious diseases, the priority is still focused on HIV/ AIDS (Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome), tuberculosis, malaria, dengue fever, influenza and bird flu. The 2015-2019 National Medium Term Plan (RPJM) target in Indonesia continues to use the prevalence of tuberculosis, namely 272 per 100,000 population. Syafei and Kunanto's research on Performance Factor Analysis of Pulmonary TB Officers in Jambi City proves that the educational characteristics and motivation factors of Pulmonary TB officers influence the performance of Pulmonary TB officers in finding suspects and successful treatment of Pulmonary TB. The higher the motivation of Pulmonary TB officers, the higher the performance. pulmonary TB officers in finding suspects and successful treatment of pulmonary TB. Apart from that, the opportunity factor of pulmonary TB officers is also dominant in influencing the performance of officers in converting to BTA positive pulmonary TB treatment. The higher the opportunity for officers, the higher the performance of officers in converting to pulmonary TB treatment. Thus, the performance of pulmonary TB officers in finding suspects and treating pulmonary TB is influenced by the interaction between the ability, motivation and opportunities of pulmonary TB officers.

Afrilmeda's research revealed that motivation variables and level of education influence the performance of P2TB program managers in achieving CDR for TB disease in South Sumatra Province. The ability and skill variables received can also influence the performance of health workers in community health centers, if the ability and skills of health workers are good then the performance will be further improved. individuals in carrying out actions as pulmonary officers in the field in the pulmonary TB program to achieve targets in covering the discovery of new BTA cases. Attitude is also one of the factors that influences individual performance in an organization. If an individual's attitude is good towards certain objects or certain events, then the individual's performance will be better.

The author really wants to explore the influence of knowledge, attitudes, actions and work motivation of TB officers as the spearhead responsible for the TB program and also responsible for the performance and programs provided so that new TB cases can be detected. So, based on the background discussed in the description above, the researcher is interested in conducting research on the relationship between the determinants of TB officer performance and the discovery of new cases in West Pasaman Regency in 2023.

METHOD

The research design is quantitative with an observational approach and data collection using questionnaires from TB officers in West Pasaman Regency in 2023. The variables studied are discovery of new TB cases, knowledge, attitudes, actions and work motivation. Data analysis using SPSS 25 program which includes multiple regression analysis. The multiple linear regression test functions to measure the causal relationship between evidence of the variables knowledge (X1), Attitude (X2), Action (X3) and Motivation (X4) on the discovery of new cases (Y) in the West Pasaman Regency area.

RESULTS

Knowledge

Table 4.1. Frequency Distribution of Knowledge of Tuberculosis Program Officers in Finding New Cases in West Pasaman Regency in 2024

Knowledge	Frequency (f)	Percentage (%)
Good	38	46.3%
Not good	44	53.7%
Total	82	100.0%

Based on data from 82 respondents, 44 (46.3%) respondents had poor knowledge and 38 (46.3%) respondents had good knowledge.

Action

Table 4.2. Frequency Distribution of Actions by Tuberculosis Program Officers in Finding New Cases in West Pasaman Regency in 2024

Action	Frequency (f)	Percentage (%)
In accordance	58	70.7%
It is not in accordance with	24	29.3%
Total	82	100.0%

Based on the table of 82 respondents, 58 people (70.7%) took appropriate actions and 24 people (29.3%) took inappropriate actions.

Attitude

Table 4.3. Frequency Distribution of Attitudes of Tuberculosis Program Officers in Finding New Cases in West Pasaman Regency in 2024

Attitude	Frequency (f)	Percentage (%)
Good	53	64.6 %
Not good	29	35.4 %
Total	82	100.0%

Based on the table of 82 respondents, 53 people (64.6%) had a good attitude and 29 people (35.4%) had a bad attitude.

Motivation

Table 4.4. Frequency Distribution of Motivation of Tuberculosis Program Officers in Finding New Cases in West Pasaman Regency in 2024

Motivation	Frequency (f)	Percentage (%)
Tall	62	75.6%
Low	20	24.4%
Total	82	100.0%

Based on the table of 82 respondents, 62 (75.6%) respondents had high motivation and 20 (24.4%) respondents had low motivation.

Frequencies			
Descriptive Statistics			
	N	Mean	Std. Deviation
KatKnowledge	82	.54	,502
KatAction	82	.71	,458
KatAttitude	82	.65	,481
KatMotivation	82	.76	,432
Pen.Case.New	82	4.05	1,563
Valid N (listwise)	82		

Knowledge Cat					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not good	38	46.3	46.3	46.3
	Good	44	53.7	53.7	100.0
Total		82	100.0	100.0	

KatAction					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	It is not in accordance with	24	29.3	29.3	29.3
	In accordance	58	70.7	70.7	100.0
Total		82	100.0	100.0	

KatAttitude					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not good	29	35.4	35.4	35.4
	Good	53	64.6	64.6	100.0
Total		82	100.0	100.0	

		KatMotivation			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Low	20	24.4	24.4	24.4
	Tall	62	75.6	75.6	100.0
	Total	82	100.0	100.0	

Performance of Tuberculosis Program Officers

Table 4.5. Frequency Distribution of Performance of Tuberculosis Program Officers in Finding New Cases in West Pasaman Regency in 2024

Performance	Frequency (f)	Percentage (%)
In accordance	68	82.9%
It is not in accordance with	14	17.1%
Total	82	100.0%

Based on the table of 82 respondents, 68 (82.9%) people had appropriate performance and 14 (17.1%) respondents did not.

Relationship between Knowledge and Performance of P2TB Officers

Table 4.6 Relationship between Knowledge of Tuberculosis Program Officers in Finding New Cases in West Pasaman Regency in 2024

No	Knowledge	Tuberculosis P2P Performance				Total	<i>p-value</i>	
		It is not in accordance with		In accordance				
		F	%	f	%			F
1	Good	11	25.0	33	75.0	44	53.7	0.01
2	Not good	19	50.0	19	50.0	38	46.3	
	Total	30	36.6	52	63.4	82	100%	

Based on the analysis of 44 officers, it can be seen that there is a relationship between knowledge in the good category and the performance of tuberculosis program management officers in the discovery of new cases whose performance was not appropriate as many as 11 people (25.0%), and whose performance was appropriate as many as 33 people (75.0%). Of the 38 officers whose knowledge was in the poor category with inappropriate performance, there were 19 people (50.0%), 19 people (50.0%) had appropriate performance. The statistical test results obtained a p -value of $0.01 < 0.05$, meaning that there is a relationship between knowledge and the performance of tuberculosis program management officers in finding new cases.

Relationship between Action Variables and P2TB Officer Performance

Table 4.7 Relationship between the Actions of Tuberculosis Program Officers in the Discovery of New Cases in West Pasaman Regency in 2024

No	Action	Tuberculosis P2P Performance				Total	<i>p-value</i>	
		It is not in accordance with		In accordance				
		F	%	F	%			
1	In accordance	14	24.1	44	75.9	58	70.7	
2	It is not in accordance with	16	66.7	8	33.3	24	29.3	0.056
	Total	30	36.6	52	63.4	82	100%	

Based on the analysis of 58 officers, it can be seen that there is a relationship between category actions according to the performance of tuberculosis program management officers in the discovery of new cases whose performance was not appropriate as many as 14 people (24.1%), and whose performance was appropriate as many as 44 people (75.9%). Of the 24 officers whose actions were in the inappropriate category, there were 16 people (66.7%), whose performance was inappropriate as many as 8 people (33.3%). The statistical test results obtained a p -value of $0.056 > 0.05$, meaning that there was no relationship between actions and the performance of tuberculosis program management officers in finding new cases.

Relationship between attitude and performance of P2TB officers

Table 4.8 The Relationship between the Attitudes of Tuberculosis Program Officers and the Discovery of New Cases in West Pasaman Regency in 2024

No	Attitude	Tuberculosis P2P Performance				Total	<i>p-value</i>	
		It is not in accordance with		In accordance				
		f	%	F	%			
1	Good	15	28.3	38	71.7	53	64.6	
2	Not good	15	51.7	14	48.3	29	35.4	0.020
	Total	30	36.6	52	63.4	82	100%	

Based on the analysis of 53 officers, it can be seen that there is a relationship between the attitude of the good category and the performance of tuberculosis program management officers in the discovery of new cases whose performance was not appropriate as many as 15 people (28.3%), whose performance was appropriate as many as 38 people (71.7%). Of the 29 officers whose attitude was in the bad category with inappropriate performance, 15 people (51.7%), 14 people (48.3%) had appropriate performance. The statistical test results obtained a p -value of $0.020 < 0.05$, meaning that there is a relationship between attitudes and the performance of tuberculosis program management officers in finding new cases.

The Relationship between Motivation and the Performance of P2TB Officers

Table 4.9 The Relationship between Motivation of Tuberculosis Program Officers in Finding New Cases in West Pasaman Regency in 2024

No	Motivation	Tuberculosis P2P Performance				Total	<i>p-value</i>	
		It is not in accordance with		In accordance				
		f	%	f	%			
1	Tall	18	29.0	44	71.0	62	75.6	0.040
2	Low	12	60.0	8	40.0	20	24.4	
Total		30	61.1	52	38.9	82	100%	

Based on the table of 62 officers, it can be seen that there is a relationship between high category motivation and the performance of tuberculosis program management officers in the discovery of new cases whose performance was not appropriate as many as 18 people (29%), and whose performance was appropriate as many as 44 people (71%). Of the 20 officers whose motivation was in the low category with inappropriate performance, 12 people (60.0%), 8 people (40%) had appropriate performance. The statistical test results obtained a p-value of $0.04 < 0.05$, meaning that there is a relationship between motivation and the performance of tuberculosis program management officers in finding new cases.

Multivariate Analysis

Based on the results of bivariate data analysis, it is known that four independent variables are suitable for inclusion in the multivariate data analysis model because they have a p-value < 0.25 , namely knowledge (p-value=0.01), action (p-value=0.036), attitude (p-value=0.02), and motivation (p-value= 0.04). Multivariate data analysis was carried out using a logistic regression test and selected using the backward stepwise (conditional) method.

T test

The t test basically shows how far the independent variable partially influences the dependent variable. To find out the value of the Wald test (t test), the significance level is 5%. As for the selection criteria

Table 4.10. TestQ

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1,348	,675		1,997	,049
Knowledge	,142	.071	,216	2,637	,010
Action	,274	.141	,236	1,938	,036
Attitude	.101	.133	,091	2,373	,020
Motivation	,079	.104	,083	1,989	,056

a. Dependent Variable: New Pen.Cases

The results of the partial influence of the independent variable on the dependent variable are as follows:

1. The calculated t value of the knowledge variable is $2.637 > t$ table, namely 1.989 and sig, namely $0.01 < 0.05$. So H_0 is rejected and H_a is accepted, meaning that the Knowledge variable influences the performance of finding new cases.
2. The calculated t value of the Action variable is $1.939 < t$ table, namely 1.989 and sig, namely $0.036 > 0.05$. So H_0 is rejected and H_a is accepted, meaning that the Action variable influences the performance of finding new cases.
3. The calculated t value for the Attitude variable is $2.373 > t$ table, namely 1.989 and sig, namely $0.02 < 0.05$. So H_0 is rejected and H_a is accepted, meaning that the Attitude variable influences the performance of finding new cases.
4. The calculated t value of the Motivation variable is $1.989 < t$ table, namely 1.989 and sig, namely $0.056 > 0.05$. So H_a is rejected and H_0 is accepted, meaning that the motivation variable has no effect on the performance of finding new cases.

Determination Test (Model Summary)

Table 4.11. Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.438a	.421	.149	1,441

a. Predictors: (Constant), Motivation, Attitude, Knowledge, Action

The Adj R Square value is 0.421 or 42.1%. The coefficient of determination value shows that the variables Knowledge, Action, Attitude and Motivation are able to explain the performance variable of finding new cases by 42.1% while the remaining 57.9% is explained by other variables.

Discussion

Research and questionnaire data related to the performance of TB officers in finding TB cases in West Pasaman Regency 2023 followed by a questionnaire on the variables of knowledge, attitude, action and motivation found several identified steps to overcome problems that occur in the field:

1. The highest level of knowledge of officers in the West Pasaman Regency area in 2023 is in the medium level of knowledge category at 46.3%. So it is necessary to increase the skills and knowledge of personnel by holding seminars, training, etc. according to the needs and developments of the times.
2. The highest level of work motivation for officers in the West Pasaman Regency area in 2023 is in the Fair or Medium category at 75.6%. So the level of motivation is sufficient but needs to be increased again through evaluation of the compensation (salary) obtained. The relevant government must review how incentives or salaries are provided, evaluating several years regarding the number of incentives and their effect on work motivation. As well as evaluating the workload given in order to assess work standards in accordance with personal capacity. By paying attention to these three things, it is hoped that we can increase or increase the frequency of service and counseling time to

education, by delivering information more frequently and information that is always updated will increase knowledge.

3. The highest level of attitude of officers in the West Pasaman Regency area in 2023 is in the medium category at 64.6%. So the current level of attitude needs to be re-evaluated by relevant policy makers to implement policies to improve officer attitudes.'

Comments and Further Steps: Overcoming challenges in controlling TB cases in West Pasaman Regency requires collaboration between sectors and increased research and development. As explained in the literature above, local government efforts must be collaborated with related agencies, in increasing knowledge, attitudes, actions and motivation because TB officers are the spearhead in overcoming existing problems.

Knowledge of the Performance of Tuberculosis Program Management Officers in Finding New Cases in West Pasaman Regency in 2024

The results of the research show that knowledge has a sig-p value of $0.019 < 0.05$, meaning that there is a significant influence of knowledge on the performance of tuberculosis program management officers in finding new cases. This means that there is a relationship between knowledge and officers' achievement of the case detection rate in the pulmonary TB program in West Pasaman district. The results of this study are in accordance with research by Bagoes, et al (2006) with a p value = 0.001 which states that there is a significant relationship between respondents' knowledge and the discovery of pulmonary TB cases.

According to researchers, knowledge is the result of knowing and occurs after someone senses a particular object through the five human senses, namely sight, hearing, smell, taste and touch. Research results show that there is a relationship between knowledge and officer performance. This is because there are still many tuberculosis program managers who are still in the deficient category, they only understand the meaning of the tuberculosis program, but do not know the benefits, objectives and good ways to manage the tuberculosis program in finding new cases. This incident resulted in the knowledge of tuberculosis program management officers in finding new cases in the poor category and showed a significant relationship with officer performance.

Actions on the Performance of Tuberculosis Program Management Officers in Finding New Cases in West Pasaman Regency 2024

Test resultsThe statistic obtained was a p-value of $0.056 > 0.05$, meaning that there was no relationship between actions and the performance of tuberculosis program management officers in finding new cases. Actions that must be taken by officers to overcome TB transmission themselves include swallowing anti-TB medication completely and regularly until cured, covering your mouth when coughing or sneezing, expelling phlegm or saliva in a closed place, drying your bed, opening the window every morning, eating nutritious food, not smoking and drinking alcohol, regular exercise, adequate rest, immediately throw away tissues that have been used when coughing or sneezing in the trash and wash your hands using clean water and soap or an alcohol-based hand sanitizer.

According to researchers, a person's actions are also one of the factors related to the performance of tuberculosis program management officers in discovering new cases. This is because action is a factor that plays a very important role in preventing the incidence of

tuberculosis in society. Officers who have good and appropriate actions will immediately be able to find new tuberculosis cases and be able to treat them immediately, so that tuberculosis cases in the community can be properly prevented. For this reason, in this case, officers' actions must be taken properly so that the management of TB cases can be handled appropriately.

Attitudes towards the Performance of Tuberculosis Program Management Officers in Finding New Cases in West Pasaman Regency in 2024

From the research results, it can be seen that there is a relationship between attitudes in the good category and the performance of tuberculosis program management officers in the discovery of new cases whose performance was not appropriate as many as 15 people (28.3%), and whose performance was appropriate as many as 38 people (71.7%). Of the 29 officers whose attitude was in the bad category with inappropriate performance, 15 people (51.7%), 14 people (48.3%) had appropriate performance. The statistical test results obtained a p-value of $0.020 < 0.05$, meaning that there is a relationship between attitudes and the performance of tuberculosis program management officers in finding new cases. Based on the problems that occur, the implementation that must be given to the Health Service is that it must provide funds to manage the TB program in finding new cases, provide vehicles to reach difficult locations and form TB control program cadres in all villages in the West Pasaman Regency area in order to make it a success. TB program managers in finding new cases and providing orientation training for TB cadres. For this reason, it is necessary to have a good attitude from health workers in dealing with the psychology of TB sufferers, such as accepting all stimuli given, responding to questions given by sufferers, respecting someone who provides positive values and is responsible for what they believe. If this ideal attitude does not work well, there will be a psychological impact on the attitude of TB sufferers who are aloof, closed, do not want to socialize and are afraid that their disease will spread to other people. For this reason, family and social support must be given to sufferers to raise the patient's enthusiasm for achieving recovery, and health workers are expected to provide education to the lay public about TB disease such as how it is transmitted, prevention and treatment.

Motivation for the Performance of Tuberculosis Program Management Officers in Finding New Cases in West Pasaman Regency in 2024

The research results show that Motivation has a sig-p value of $0.056 < 0.05$, meaning that there is no significant influence between actions and the performance of tuberculosis program management officers in finding new cases. This can be seen at the research location where there are still many tuberculosis management officers who have low motivation due to communication factors with colleagues, inappropriate salaries, inappropriate work schedules and no allowances given to officers, so they have low motivation and resulting in their performance also being low. This result can also be seen from the officer's employment status, where civil servant status has higher performance than community service and contract employee status. This condition is caused by wages and work schedules that are not appropriate, where officers who have community service and contract employee status have minimal wages but have busy work activities. Apart from that, community motivation factors

also have an influence on the performance of nurses in finding new TB cases. This is due to high community motivation, such as people wanting to check their health conditions at the health center or in health services, the work of TB management officers can run well in collecting case data, so that officers are also motivated and their performance will also be high in finding new TB cases. . The implications that must be carried out by the Health Service are dividing work tasks equally between civil servants and contract employees, providing work wages in accordance with the work that has been done and providing education to the public about the importance of preventing and the dangers of TB so that the public is also willing to undergo TB testing. early so that TB officers can manage the new TB case detection program effectively.

CONCLUSION

Research on the performance of TB officers in case finding in West Pasaman Regency in 2023 identified several important factors that influence their performance, namely knowledge, attitudes, actions and motivation. The results show that officers' knowledge is generally at a medium level (46.3%), motivation is quite good (75.6%), and attitudes are also moderate (64.6%). To improve performance, it is necessary to increase knowledge through training, evaluate compensation and workload to increase motivation, and improve attitudes through appropriate policies. Research also emphasizes the importance of collaboration between government and related agencies as well as family and social support for TB sufferers. There is a significant relationship between knowledge and attitudes and performance, but no relationship was found between actions and performance. Therefore, increasing knowledge, good attitudes and appropriate motivation are very necessary to improve the performance of TB officers in finding new cases in the area.

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