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# ANALYSIS OF PROVIDER-INITIATED HIV TESTING AND COUNSELING IN TUBERCULOSIS PATIENT AT A PRIVATE HOSPITAL IN JAKARTA

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### ABSTRACT

**Background:** *Stigma, lack of knowledge about HIV risks to oneself, openness, limited access to health services and aspects of gender inequality are determinants that influence the willingness to take HIV tests in the context of VCT. However, studies in the context of PITC have not been widely publicized in Indonesia, particularly studies in private hospitals. Analysis related to the reason that influence the willingness of health workers to carry out PITC in TB patients is important to do. The purpose of this study is to analyze the reason that influence the willingness of health workers to carry out PITC in TB patients.*

**Methods:** *This study is a quantitative study with cross-sectional design. The study was conducted at a private hospital in Jakarta. The sampling technique used total sampling techniques, where the entire population was sampled. the research sample obtained is 30 doctors who have TB patients in the private hospital during March to April 2019.*

**Results:** *The majority of doctors (46.7%) were sometimes willing to do the PITC in TB patients. The proportion of doctors who are always willing to do the PITC in TB patients is still low at 20%. On the other hand, there were 33.3% doctors were never willing to do the PITC on TB patients. The reason that influences the doctor's willingness to do PITC on TB patients is the possibility to explain (66.7%), automatically as requested in the rules (20,0%) and the severity of the TB case (13,3%).*

**Conclusions:** *The biggest reason that influences the doctor's willingness to do PITC on TB patients is the possibility to explain. Doctors are often difficult to explain the importance of HIV testing for TB patients due to the thick negative stigma associated with HIV testing. the government should encourage socialization regarding the importance of HIV testing for both TB patients and high-risk HIV groups. The key challenge to improving health care delivery is to improve the implementation and monitoring of effective interventions.*

**Keywords:** *Provider-Initiated Hiv Testing (PITC), TB-HIV, Private Hospital*

### INTRODUCTION

Tuberculosis (TB) and HIV infection are known to have a strong correlation. More than 60% of people with HIV actually suffer from TB during their lifetime [1,2]. In fact, TB is a major cause of morbidity and mortality in people with HIV [1,3,4]. Based on WHO data in 2017, the mortality rate due to TB-HIV cases was 13 cases per 261,000 population. The mortality rate for TB-HIV coinfection is four times greater

than for patients without TB. HIV is the main risk factor that causes TB to become active. In HIV positive patients, the possibility of having TB infection is found in more than 40% of patients, while the risk of reactivation of TB infection reaches 2.5-15% annually in patients with HIV. Nationally, the estimated HIV prevalence of TB patients is estimated at 6.2%. In the case of TB-HIV coinfection without TB treatment, 100% of patients with HIV (+) will die, while there is not found the case rate for TB with HIV (+) that can be cured by itself [4,5].

HIV prevention strategies emphasize surveillance to find people infected with HIV. Because TB is the most dominant HIV coinfection, it was decided to carry out an HIV surveillance strategy that was integrated with TB surveillance. The Ministry of Health has developed a TB-HIV collaboration program to reduce the burden of HIV on TB patients, including HIV testing and counseling, HIV prevention methods, preventive therapy with cotrimoxazole, support and care for HIV/AIDS, and antiretroviral therapy for TB patients. In addition, based on the 14th standard of the International Standard for Tuberculosis Care (ISTC), it is stated that HIV testing and counseling needs to be done for all patients with, or suspected of having TB. Unless there has been a negative confirmation of test results in the past two months. HIV testing is especially important as part of routine management in areas with high HIV prevalence in patients with symptoms and or signs of HIV-related conditions, and in patients who have a history of a high risk of HIV exposure. The Minister of Health Regulation No. 21 of 2013 concerning HIV and AIDS Prevention states that all TB patients are encouraged to carry out HIV testing through the HIV Test [4,6].

HIV test was initially carried out on a voluntary principle with the initiative of the client, or what is called client initiated Voluntary Counseling and Testing (VCT). However, the response to VCT was considered not optimal. For this reason, an integrated provider of HIV testing and counseling (PITC) or routine counseling and testing (RCT) was developed. One of them is done at health facilities that handle TB disease. In addition to PITC, in sub-Saharan Africa countries have also developed various models that bring VCT closer to society such as home-based VCT, mobile VCT, and routine VCT offerings [7].

Studies in the context of VCT conclude a number of factors that influence HIV testing, such as fear of HIV testing procedures and post-test consequences. Stigma, lack of knowledge about HIV risks to oneself, openness, limited access to health services and aspects of gender inequality are also determinants. Although there have been many studies on the factors that influence the willingness to take HIV tests in the context of VCT. However, studies in the context of PITC have not been widely publicized in Indonesia, particularly studies in private hospitals. Analysis related to the reason that influence the willingness of doctors to carry out PITC in TB patients is important to do. This is also one form of evaluation of the PITC program implementation in Indonesia [4].

The purpose of this study is to analyze the reason that influence the willingness of doctors to carry out PITC in TB patients.

## **METHODS**

### **Study Design**

This study is a quantitative study with cross-sectional design. The study was conducted at a private hospital in Jakarta. The study population was all doctors who had TB patients at the private hospital during March to April 2019. The sampling technique used total sampling techniques, where the entire population was sampled. So that the research sample obtained is 30 doctors who have TB patients in the private hospital during March to April 2019. The study exclusion criteria were doctors who were not willing to be research

respondents. But in this study all doctors in the private hospital were willing to become respondents. There were no drop outs in this study.

### Measurements

In this study, the dependent variable is the doctor's willingness to do PITC in TB patients. The dependent variable is a categorical variable. Divided into three categories: (1) always; (2) sometimes; and (3) never. The independent variable is the reason that influence the willingness of doctors. The independent variable is also a categorical variable. Divided into three categories: (1) the possibility to explain; (2) the severity of the TB case; and (3) automatically as requested in the rules. Research data are primary data obtained directly from private hospitals. Data was collected with a research instrument in the form of a questionnaire.

### Statistical Techniques

Researchers perform data processing using statistical applications. Univariate analysis is used to find out the frequency distribution of the dependent variable and the independent variable. In this study, both variables were categorical variables. Therefore, the proportion values for each category were used to describe the frequency distribution.

### RESULTS

The results of univariate analysis of the reason that influence the willingness of doctors to carry out PITC in TB patients can be seen in the following table.

Table 1. Reasons that influence the willingness of doctors to carry out PITC in TB patients in a private hospital in Jakarta

Reason	The doctor's willingness to do PITC in TB patients						Total	
	Always		Sometimes		Never		f	%
	f	%	f	%	f	%		
The possibility to explain	0	0,0	10	33,3	10	33,3	20	66,7
The severity of the TB case	0	0,0	4	13,3	0	0,0	4	13,3
Automatically as requested in the rules	6	20,0	0	0,0	0	0,0	6	20,0
Total	6	20,0	14	46,7	10	33,3	30	100,0

Table 1. shows that the majority of doctors (46.7%) were sometimes willing to do the PITC in TB patients. The proportion of doctors who are always willing to do the PITC in TB patients is still low at 20%. On the other hand, there were 33.3% doctors were never willing to do the PITC on TB patients. In addition, in table 1. It can also be concluded that the biggest reason which influences the doctor's willingness to do PITC on TB patients is the possibility to explain (66.7%), automatically as requested in the rules (20,0%) and the severity of the TB case (13,3%).

## **DISCUSSION**

If it is associated with socioeconomics, the Private Hospital located in a premium area, can be compared with a Puskesmas which is a community service at the village and sub-district levels, with free services, the implementation of HIV TB counseling tests can be carried out with high compliance, 100% implemented. The implementation is a general practitioner of government employees and the implementation of PITC HIV TB becomes an automated procedure. The approach to doctor practices in private hospitals must be improved so that compliance can be the same as the services at the Puskesmas and government hospitals.

Implementing PITC in TB clinical settings requires preparation at three main levels: first, national guidance for the PITC program and procedures must be formulated with input from involved programs, including HIV/AIDS, TB and laboratory services, most effectively through a TB-HIV coordinating body that involves all stakeholders; second, district and facility levels must organize administrative aspects such as recording and reporting, procurement (e.g., for rapid HIV test kits for the NTP) and links to care and services from one program to another; third, clinicians must be trained to communicate appropriate pre- and post-test information to their TB patients, including the benefits to HIV-infected TB patients of knowing their status so they can obtain HIV care and treatment and prevent the spread of HIV, and the patient's right to refuse testing. Clinicians must also understand and respond to patients' fears about stigma and discrimination associated with HIV. In some programs, the rapid HIV tests are performed by the health care providers in the clinic rather than by laboratory personnel. In those programs, the providers will need to be trained to conduct HIV testing. At all levels, programs will need to address human resource constraints, which may involve re-prioritization of tasks and in some settings incorporating lay counselors into the TB clinic at regular times for group education and individual counseling [8,9].

Planning for implementation and scale-up of PITC requires an effective mechanism for collaboration across multiple Ministry of Health program areas. This can most effectively be accomplished by establishing a national TB-HIV steering committee, with the national HIV/AIDS control program, the NTP and other stakeholders such as international non-governmental organizations who provide technical assistance and funding [8,10].

To maximise the potential benefit of PITC interventions, it is important to understand how PITC design and implementation processes shape the outcome of the intervention. It has been noted widely that the key challenge to improving health care delivery is to improve the implementation and monitoring of effective interventions [11,12]. Process evaluations alongside controlled trials could improve our understanding of the organisational and technical processes of successful implementation, yet few trials include such evaluations. A process evaluation of the delivery of PITC could contribute knowledge about when, how and why the PITC intervention worked or failed - evidence that is useful for understanding the outcomes of the PITC intervention in a specific context, for strengthening future implementation strategies, and for developing transferable lessons regarding barriers and facilitators to effective implementation [13,14,15,16].

## CONCLUSION

The biggest reason that influences the doctor's willingness to do PITC on TB patients is the possibility to explain. Doctors are often difficult to explain the importance of HIV testing for TB patients due to the negative stigma associated with HIV testing. The government should encourage socialization regarding the importance of HIV testing for both TB patients and high-risk HIV groups. The key challenge to improving health care delivery is to improve the implementation and monitoring of effective interventions.

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