

# Voluntary Counselling and Testing (VCT) Visit among Tuberculosis Patients in Pulogadung Sub-district Primary Health Centre

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**Abstract** *Background:* Based on Indonesian Ministry of Health Regulation no. 74 year 2014, Voluntary Counseling and Testing (VCT) is an obligatory national program for all lung tuberculosis (TB) patients. However, according to annual report year 2016 of Pulogadung Sub-District Primary Health Care, East Jakarta, Indonesia; there were only 175 out of 237 (73.8%) TB patients who have been checked for their Human Immunodeficiency Virus (HIV) status, but the target of the program was 100%. However, a community diagnosis to investigate this shortage for about two years has not been done before. *Objective:* To explore related-factors that causes the low number of VCT among TB patients in Pulogadung Sub-District Primary Health Care. *Methods:* In-depth individual interviews were performed on twenty TB patients that had not done VCT along with Focus Group Discussion (FGD) on eight TB officers from seven villages under Pulogadung Primary Health Care. Thematic keywords were found and analyzed qualitatively. *Results:* From the TB patients, it was found that the majority of them knew about TB but only some of them knew about HIV. Most of them did not know the correlation between TB and HIV. Patients were not willing to take VCT because they felt that they were not in the risk of HIV. Meanwhile, there were still TB officers who only gave HIV education to risky TB patients. *Conclusion:* In conclusion, TB patients who had not done VCT felt they did not have risky behaviors to HIV. This was also because of lack of HIV counseling from TB officers to TB patients.

**Keywords** HIV, Tuberculosis, VCT

## 1. Introduction

According to the Indonesian Ministry of Health, the

main roles of primary health care are to prevent transmitted diseases and provide health education to the community. Some of direct transmitted diseases are TB and HIV-AIDS. In 2014, Indonesian Ministry of Health published a regulation that obliged all TB patients to undergo VCT to check their HIV status. However, based on Pulogadung Sub-District Primary Health Care, East Jakarta, Indonesia annual report in 2016, there were 237 new cases of TB patients, and only 175 patients (73.8%) of them checked their HIV status through VCT provided in the Pulogadung Primary Health Care, while the actual target according to the regulation of Indonesian Health ministry was 100% of TB patients who have checked their HIV status [1, 2].

This community diagnosis report was done to address any related-issues which cause not all of the TB patients checked their HIV status. In-depth questions were done to the TB patients who had not checked their HIV status and focus group discussion (FGD) was done to the TB officers, focusing on how their approach towards TB patients to ensure them to check for their HIV status through VCT.

## 2. Materials and Methods

This report was done through descriptive study using data collected through open-ended questions to patients and TB officers, as well as other related information from Pulogadung Sub-District Primary Health Care on May 2017.

### 2.1. Source of Data

Primary data was taken from Pulogadung Sub-District Primary Health Care patients suffering from tuberculosis lung whose HIV status had not been checked through VCT (Voluntary Counseling and Testing). There were twenty

TB patients underwent in-depth interviews in May 2017.

Twenty TB patients went through interview process individually. The aim of the data collection was to know the perception of patients towards tuberculosis, HIV, whether TB or HIV were correlated to each other, reasons why or why not all TB patients should be checked regarding their HIV status, and why they had not checked their HIV status yet. There was also data collection regarding the demographic status of the patients, such as name, gender, age, level of education, work status, TB status, and category of TB therapy.

Another source of the primary data was FGD to TB officers. There were eight TB officers coming to the Focus Group Discussion coming from Pulogadung Sub-District Primary Health Care, Cipinang, Jati, Jatinegara Kaum, Kayu Putih, Pisangan Timur, Pulogadung, and Rawamangun Villages. The data collected from the FGD were: how the TB officers told the patients about TB and HIV; how they motivated TB patients to check their HIV status, and what they did to assure the patients to check their HIV status.

Secondary data was taken from Pulogadung Sub-District Primary Health Care annual report in 2016.

## 2.2. Data Analysis

Collected data was arranged using Microsoft Word and Microsoft Excel. The interview was also recorded and the transcripts were made. Thematic keywords and/or issues were taken manually.

## 3. Results

### 3.1. Demographic of TB Patients

Sixteen out of twenty TB patients were male with the range of age from 23 years old to 68 years old. The level of education was ranging from uneducated to bachelor degree. More than half of the TB patients worked informally, while there were two patients who were unemployed. Fifteen out of twenty TB patients were married and there were three TB patients who were unmarried. The rest were divorced. Some of the TB patients had been diagnosed as TB between the ranges of 6 months and 3 weeks before interview.

Currently, nineteen out of twenty TB patients were treated with Category 1 TB treatment, while only one patient was currently on Category 2 treatment. All the TB patients lived around 50 to 3000 metres from Pulogadung Sub-District Primary Health Care.

### 3.2. Knowledge about TB

Majority of the informants stated that Tuberculosis is a disease where the patients get chronic cough with phlegm

(can be white, yellow, or green) or coughing blood. However, there were still informants who did not understand about TB such as stated by Mr. RC, 25 y.o, high school, working as supplier *"I got this disease through common cold because I am currently working as a night guard"* and Mr. O, 57 y.o, uneducated, and unemployed *"I do not understand what is tuberculosis because it is a medical term"*.

### 3.3. Knowledge about HIV

Some of the informants stated that HIV is a disease caused by virus. Mrs. EN, 25 years old, Diploma, administration staff stated, *"A transmitted disease that can attack body immune system, usually occurs in people with regular sexual intercourse"*

On the other hand, Mr. BS, 60 years old, unemployed, stated *"I do not understand about HIV, and I have never been to doctor. My friend said it can be transmitted through drink or smokes from cigarette"*.

### 3.4. Relationship between TB and HIV

The informants had more or less the same knowledge of the relationship between TB and HIV. Most of them said that they did not know whether there was a relation between those two diseases. Besides, there was also an informant, who said that there was no relation between TB and HIV. On the other hand, one informant had a good knowledge about TB and HIV *"HIV patients have abnormal and weak body immune system, so that they are prone to get lung diseases"* as told by Mr. AM, 41 years old, vocational school, and tailor.

### 3.5. Obligation of HIV Testing

Most of the informants said that they did not know that all TB patients are required to do HIV testing. Some of them said they did not get the information, while the others said that they should undergo an examination, as told by Mr. Z, 33 years old, high school, and market trader, *"I do not know much about it, maybe because they want to know whether the disease is severe or not"*.

However, there were still informants who confidently said that the examination was unnecessary, *"TB patients do not have to check their HIV status because the symptoms is itchiness, and cough does not need to be checked"* as delivered by Mrs. EN, 25 years old, vocational school, and administration staff.

### 3.6. Reasons for not Checking HIV Status

One of the major underlying reasons that the informants have not done the HIV testing yet was that they felt they did not have the risk factors for HIV disease, as said by Mr. AM, 41 years old, vocational school, and tailor *"I have never changed my partner or abused drugs"*.

In addition, other reasons were lack of knowledge of the informants that TB patients should check their HIV status and felt that there was no relation between TB and HIV. Furthermore, there were also some informants who have not been able to perform HIV testing due to several internal factors, such as they did not have time and money to do it. Social issue was also one of the main reasons as delivered by Mr. S, 50 years old, high school, laborers and motorcycle taxi driver who have not done HIV testing because *“Afraid that I will be less confident”*.

### 3.7. Demographic of TB Officers

There are seven TB officers from villages and one TB officer from the sub-district primary health care. All of the TB officers were female and married. Their work length was between 4 years and 37 years.

### 3.8. TB Education to Patients

All TB officers explain the definition of TB disease, symptoms, how the disease transmitted, treatment and duration of treatment. Officer TR, 28 years old, stationed at Jatinegara Kaum stated, *“TB patients were given explanation about the transmittable disease, from the symptoms to 6-month therapy”*. Duration of treatment still need to be emphasized as stated by Officer L, 57 years old, stated at Pisangan *“But, patients are not continuing their treatments after 2 months because they feel like they are getting better already and the sputum test was negative. This is where patients become hard headed, stubborn and hard to accept to take the drugs”*.

Not only to the patients, some officers also educated the family member about patients' condition, Officer E, 41 years old, stationed at Kayu Putih *“I am not only giving education to the patients, but also to the family accompanying them. Because, some of the patients have low level of confidence after being told that they are suffering from TBC”*.

### 3.9. HIV Education to Patients

Some of the officers did not directly explain about HIV, rather ask the patient first if they have the risk factor and then ask them to do VCT. Officer HS, 35 years old, *“I asked them first regarding the patients' risk factors, history of needle injury, lifestyle, and others related to HIV-AIDS. If there is a risk factor, then I will educate them to go to VCT in Pulogadung Sub-District Primary Health Care”*. Some officers did not give education about HIV and only educate the patient after they did VCT and HIV test, Officer L, 54 years old, stationed at Jati 2, *“I educate the patients after VCT and HIV testing has been performed. If the result is positive, I educate how the medication and the relationship between TB and HIV”*.

Another officer gave education about TB-HIV twice,

Officer J, 35 years old at Cipinang said, *“Patient was educated twice, after they meet the doctors at Pulogadung Sub-District Primary Health Care and when they meet me again”*.

### 3.10. Why Patients are not Checking their HIV Status

As explained by officers, most patients think that they did not have risk factor for HIV. Some patients worry they did not have time and money, and TB patients felt inferior and offended when they asked to do HIV test. *“Patients feel like they never did any HIV related risk behaviors. They also have prestige, for example as a Hajj. He is teaching about religion thus he felt offended when he was asked to check his HIV status”* as explained by Officer L from Jati 2.

### 3.11. Encouraging TB Patients for HIV Testing

Most of the officers did the counseling again and how important it was for the patient, as said by Officer J from Cipinang, *“Explained again regarding the importance to do HIV testing to TB patients so that the treatment is not in vain”*. Some officers explained that examination is free, *“Tell them that this HIV testing is free of charge or covered by BPJS”*, stated by Officer S from Pisangan Timur 2. TB officer from Pulogadung even stated that the examination is mandatory by government as stated in Ministry of Health Regulation, *“First, explained that this HIV testing is a government regulation where it is stated on Ministry of Health Regulation. In addition, it is free of charge”*.

## 4. Discussion

### 4.1. Analysis from TB Patients and TB Officers

Based on the answers from in-depth interviews to TB patients and FGD to TB officers, it was known that most patients knew about tuberculosis by describing the symptoms of tuberculosis, transmission of the disease, and the length of treatment. However, although most of the patients have a good understanding on tuberculosis, the same fact was not true for the knowledge about HIV. Some of TB patients did not know about HIV: its definition, caused of HIV, transmission of HIV, and most importantly, the relationship between TB and HIV. The reasons of the poor knowledge about HIV and relation of TB – HIV were that some of TB officers did not directly educate TB patients about HIV. Some officers only educate TB patients about HIV after they were tested for HIV through VCT or if the patients had some risk factors. Only officer at Pulogadung Sub-District educated TB patients about HIV regardless of having risk factors or not. In addition, the officer explained about the national regulation about VCT among TB patients. By this way, the achievement of HIV

testing through VCT among TB patients at Pulogadung Sub-District had reached 100%; whereas in other villages, especially Rawamangun and Cipinang Villages, not all TB patients were directly recommended to do VCT. Therefore, there were only five out of seven villages that directly sent TB patients to do HIV testing through VCT. This fact made the rate of HIV testing through VCT was only 71.4%.

The differences of educating TB patients between the Sub-District and Villages have a substantial negative impact on the success of HIV testing. To improve the education process among TB patients, it would be a great idea if the officers have a standard education media such as posters, flipcharts or pamphlets that contain all of the required information about tuberculosis, HIV, the relation between TB and HIV, as well as the national program for HIV testing through VCT.

#### 4.2. Education of TB and HIV

It is known that most TB officers have done varied educational media to spread information about TB. In addition, this is in line with the answers of some informants who already knew about TB. Knowledge of TB symptoms dominates among their answers. The informants correctly mentioned that the symptoms of TB infection include chronic cough more than two weeks, night sweats, weight loss, decreased appetite, cough with white-green sputum and sometimes blood. There were also symptoms such as difficulty of breathing. Informants' knowledge was largely limited to symptoms and length of treatment. On the other hand, respondents still did not know the organs that can be infected with TB and its complications.

Based on the research of Fuady et al. in Jakarta about the knowledge and perception of women about TB infection, it is stated that the level of education of the patients affect the level of knowledge of TB. The higher the education, the better the knowledge of TB is [3]. Other studies conducted in Buleleng in 2013 by Made Suadyani et al and in Nigeria by Ojedokun et al 2014 regarding medication adherence said that the higher a person's education, the better adherence towards TB treatment [4, 5]. Regarding education, informants have varied educational range. This is also comparable to the study that some informants with a good level of education (senior high school and diploma graduate) were mostly well-informed about TB infection, TB symptoms and length of TB treatment, which was 6 months; while some respondents with lower education level (junior high school or lower) have limited knowledge of TB. This proves that educational level can affect knowledge of TB and medication adherence.

All TB patients should be tested for HIV as recommended by WHO in accordance to the Indonesian Ministry of Health Regulation in 2014 [6]. The diagnosis of HIV in TB patients should be straightforward because of the availability of quick and free diagnostics examination for HIV infection. The Stop TB Partnership's Global Plan

to Stop TB had a target, that by 2015, all patients with TB should be tested for HIV [6]. But in reality, even at Pulogadung Sub-District Primary Health Centre, in 2016, only 73% patients with TB patients underwent HIV examination. Health care provider should recommend HIV testing and counseling for patients that is known or suspected to have TB and can be done at the same time while sputum samples or chest radiograph are obtained. In addition, according to Ministry of Health Regulation No.74 Year 2014, TB patients need to do HIV examination, except if they reject to do HIV examination. The facility for HIV VCT should be integrated with the service of clinic for tuberculosis [7]. Thereafter, the number of TB patients performing VCT will be 100%.

#### 4.3. Relationship between TB and HIV

As stated by the WHO, there is a relation between TB and HIV [6]. When people have both TB and HIV infection, it is called TB-HIV co-infection. People with HIV have higher risk of developing TB than people without HIV, which is estimated 26 to 31 times greater and people living with HIV have TB as the most common illness [7]. Because of the high number of TB-HIV cases in Indonesia, the Ministry of Health has developed a program called Voluntary Counseling and Testing (VCT). This program obligated all TB patient to check their HIV status whether they have a risk factor of HIV or not [7].

However, in Pulogadung Sub-District Primary Health Centre especially in their village health centres, it was found that most of the people who have not done HIV testing, did not know about the relationship of TB and HIV even also some of them said there was no relation at all between TB and HIV. Fortunately, there were a few of the informants who already knew about the relation of TB and HIV. This result shows that there is a variety level of knowledge about the relation of these two diseases.

This result may explain the reasons why in Pulogadung Sub-District Primary Health Centre area especially in villages' area, the number of TB patients that undergo HIV testing was not 100%. TB patients would not aware to do the HIV testing if they did not know the reason why it should be done. Therefore, in order to solve this problem, TB patients should be aware that there is an obligation from the Ministry of Health Regulation No.74 Year 2014 to check their HIV status through VCT [7]. This can be done by giving more education to TB patients about the relationship of TB and HIV and asks all TB patients without exception to perform the HIV testing.

#### 4.4. Gap of Exploration Result

Based on TB patients and TB officers, there are still some gaps of information between them. First of all, majority of the TB patients knew about tuberculosis lung disease along with the symptoms and the therapy. There

was only one patient that did not know regarding the length of TB therapy. Based on the FGD to the TB officers, there was also one TB officer that did not tell TB patients regarding the length of treatment, which was minimally six months, as recommended by the International Standards for Tuberculosis Care (ISTC) [8]. Both the TB officer and TB patient were living in the same villages.

The second topic is regarding the education of HIV infection in TB patients. Some of the patients did not know about HIV: its definition, the transmission route, the symptoms, and even the therapy. Others knew about the transmission route of the HIV, which was through needle stick, drug-users, and changing sex partners. In concordance, some of the TB officers actually did not tell patients regarding the HIV infection examination unless they had risk factors, such as changing sex partners or drug-users. TB officers from the village health centres usually refer the patients to the Pulogadung Sub-District Primary Health Care so that TB patients can get more education on HIV infection. Based on the Ministry of Health Regulation, 2014, all TB patients need to do HIV examination, which can be done by VCT. Education about HIV and their risk factors to all TB patients should be done in Villages Health Care, not just referring the TB patients directly to the Sub-District Health Care.

The last gap is regarding the education of relationship between TB-HIV. Most of the TB patients answered they did not know regarding the relationship of TB-HIV and they consider both of the diseases did not correlate with each other. This is one of the reasons why they did not want to check their HIV status, along with another reason that most of TB patients felt they did not have risk factors to get HIV infection. It was stated clearly in Ministry of Health Regulation, 2014, that all TB patients should check their HIV status without exception.[7]. Some of the TB officers told the correlation between TB and HIV when they had the risk factors thus resulting in lower VCT achievement.

## 5. Conclusions

To conclude, there are still gaps of information, especially regarding HIV and relationship between TB and HIV among TB patients and TB officers. This disparity makes TB patients do not want to check their HIV status since they felt that they never had risk factors for getting HIV infection, even though it was stated clearly in Indonesian Ministry of Health Regulation 74 year 2004 that all TB patients, regardless of risk factors, need to go through Voluntary and Counseling Testing (VCT) to check their HIV status.

## 6. Recommendation

Some of recommendations to increase the awareness of TB patients to check their HIV status can be done by training TB officers and having the same information media and guidelines both in sub-district as well as villages primary health care, distributed to all health care services about TB (including the synonyms, such as TBC and “*flek paru*”), HIV, and TB-HIV. TB officer from Pulogadung Sub-District need to train the TB officers from seven villages about educating TB patients about TB, HIV, and especially the correlation between those diseases. Furthermore, the mandatory regulation from Indonesian Ministry of Health should be emphasized during the counseling time.

## Acknowledgements

The authors would like to thank Pulogadung Sub-District Primary Health Care along with the Villages for their continuous support throughout the research process.

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