

Tuberculosis in Jayapura: Human Security Threat in International Relations Perspective

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Abstract: The concept of human security defines the purpose of human to be free from poverty, free from terror and free from disease. This paper aims to provide an overview of the infectious disease, tuberculosis (TB), as one of the threats to human security in the city of Jayapura. The method used to assess this study is qualitative research method that describes and illustrates findings in the form of data and figures about the disease both by elaborating primary data collection through interviews with staffs and patients in government-funded health care as well as through secondary data libraries, books, journals and the Internet. The results from this study depict that from 2013 to 2015 the number of tuberculosis patients who reported themselves and get treatment and medication in Jayapura city through public health centres had both increased and decreased significantly. This is due to several reasons i.e. the presence of doctors in the health centres that handled the cases, the rise of patients' awareness on the treatments, the availability of drugs for TB patients in clinics and assistance facilitating by USAID in Papua under the auspice of WHO. In the perspective of international relations, the increasing spread of tuberculosis in Jayapura has become the serious threat to human security and this requires crucial intervention of multi-stakeholders including local government through its health department covering the issue of the availability of accessible health centres, doctors and drugs for tuberculosis treatment. This also includes the promotion and raising awareness for local community relating to TB testing and maintaining one's healthy environment.

Keywords: *Tuberculosis, Human Security, the city of Jayapura*

1. Introduction

The concept of security has evolved since it has been influenced by the emergence of a variety of issues and actors that affects the definition of threat, levels and sectors security. Security has been classified into two main parts; traditional security and non-traditional security which both serve as the main concept of security concept. According to the traditional view, the security of the state and its efforts in maintaining the integrity of its territory is the *core values* of security itself. This approach simply defines a threat to the state is in the form of military threats and this should only be maintained through military means (Mutimer, 1999). However, the development of international issues such as global warming, the human rights standards, globalization and the trend of shifting conflict of *inter-state* into *intra-state*, which occurred after the end of the Cold War transformed the threat coverage to be complex and this eventually affect the concept of security itself.

In terms of non-traditional security, Buzan states that there are five important components in security, namely: (1) *the military security*, where the state in addressing threats to its citizens and its sovereignty through managing state's weapon capability used both offensively and defensively that might affect various interests in society and/or individual levels; (2) *the political security*, refers to the stability of the state as a political entity, the system ideology and the ideology that give legitimacy to the government; the use of military force when the political security of a country is undeniable threatened; (3) *the economic security*, the security component is related to the access to resources, finance and markets to sustain the level of prosperity and power of the state; although it is difficult to define the threat, yet the security level of a country can be measured by economic sector; (4) *societal security*, relates to any threats to one's identity in the form of traditions, language, culture, religion, national identity and customs. It can be said that a weak state is the state that is unable to protect its own identity; as a result, it leads to insecurity in-state as well as in the regional and international level; (5) *Environmental security*, this important component puts its concern on the preservation of the environment both locally and globally, so that its handling will be highly dependent on the security and political sectors (Buzan, Weaver and De Wilde, 1998).

The focus of non-traditional security view is not only to states but also to non-state actors, such as citizens, non-governmental organizations, independent groups, communities and so forth. Perception of non-

traditional security and the presence of non-state actors are also supported by experts' opinions that are known as '*the Copenhagen School*'. These experts expanded the *referent object* of security is not merely focused on the state itself, but also by incorporating the importance of human security (*human security*). In addition, Keizo Obuchi states that human security (*human security*) has two forms, namely: first, the non-state threats such as trans-national crime, environmental issues, the flow of refugees, *human trafficking*, and others; second, the increasing pressure on vulnerable social groups, for example, the poor, displaced people and so on (Luhulima, 2011). In addition, according to Shinoda, *the Human Security* deals with two major aspects of freedom or security against the threat of chronic such as famine and repression as well as it also concerns to the protection of the suffering that arises in everyday life. So, there are at least seven (7) categories, i.e. Economic, food, health, environmental, personal, community and *political security*. The concept of human security in this stage exposes the country's sovereignty on the sovereignty of the individuals.

One of the seven categories mentioned previously that becomes the focus of this study of this paper is health as this relates to a threat to human security. This relies on the data released by the WHO (World Health Organization) regarding to global emergency status in 1993 about the need for increasing vigilance among countries against lethal viruses attacking the nation/state as a result of globalization, including: HIV, AIDS, Zika, Ebola, Avian influenza, Mers, Tuberculosis (TB), and Malaria. It is fully recognized that viruses can be transmitted along with the migration of people from one place to another globally. One of the contagious diseases that become the focus of this study is Tuberculosis (TB); it was found on March 24, 1882 by a German, Robert Koch, after finding pathogenic tuberculosis that attacks human's lungs. The disease is air-borne spread and therefore it spreads rapidly throughout the world. Asia and Africa are two most vulnerable continents where most patients with TB bacteria TBC found. WHO estimates that TB has killed more than 2 million lives annually? Its estimation states that between 2002 and 2020, approximately 1 billion people will have been being infected developed into the disease and led to death. So, this is a serious threat to human security in the health sector. This has been a serious threat to a region including Indonesia for Indonesia is among the world's highest TB patients after India, China, South Africa and Nigeria as its TB-reported cases reached 1.569 cases/100.000 people in 2015.

The purpose of this research is to get an overview of TB as a threat to Human Security in the city of Jayapura as well as its prevention efforts that have been made by relevant parties in order to minimize and protect people against tuberculosis in this area. Papua, the most eastern region of Indonesia, has several endemic diseases including Tuberculosis, malaria, AIDS, Leprosy and other contagious diseases. TB, eventually, plays its role as it is estimated that every year its cases nor have not decreased in numbers neither diminished, however, in the strategy if TB control globally, it assures that by 2050, the world will have been being free of TB. Based on the data and information published by Ministry of Health of the Republic of Indonesia relating to Case Detection Rate, in 2011, there were 302 cases / 100,000 people. In other words, there were 9,511 TB cases reported among 29 cities and/or districts in Papua province. Jayapura City is one of 29 cities that shows the low cure rate (recovery rate) for it only ranged on 24% in 2010 (Ministry of Health, the Republic of Indonesia, 2015). For the year of 2013, it was suspected that there were 685 TB cases, as well as it increased to reach 1,569 cases. Meanwhile, in 2015 as the final year of MDGs, TB cases hit a peak to 1,601 cases (TB Report 2013-2015, Health Office in Jayapura). This can be so due Papua's endemic state in health.

2. Discussion

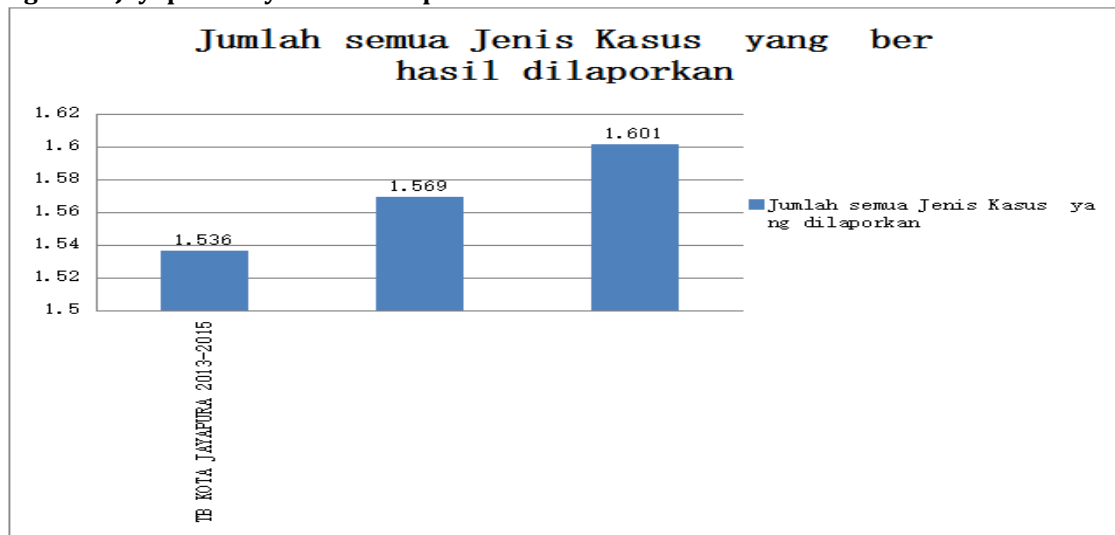
Jayapura City is the capital city that serves as the densest populous settlement in Papua province. It covers an area of 940 km², and has an estimated population of 273,928 in 2013 (USAID report on Health Services in Papua). This city consists of five sub-districts including North Jayapura, South Jayapura, Abepura, Heram and Muara Tami, with a distinct population density varies from one sub-district (districts) to others. As the centre of the provincial capital, this city has its endemic characteristics for contagious diseases. Regardless its noticeable maintained man-built environments, yet the maintenance for health problems caused by human-to-human transmitted disease in urban communities is inevitable disappeared. It is because the phenomenon of TB cases found in Jayapura is an iceberg-like, for it only shows the surface peak yet it has affected other aspects which are mostly unreported. In Indonesia, public health services run by the government consists of five levels: Central, Provincial, District/municipality, sub-district and village. In each level, there are several types of health service facilities which elaborate the concept of primary health service. This has been done

through primary public health centre (Puskesmas; for further reference, it is stated as PHC) as the basic main health service. This health service is supported by a bottom-up referral system to the upper facilities i.e. hospital in district level, or any other centres that provide secondary healthcare services. In Jayapura, there are several primary health care units and some of them are mentioned as follow:

- Public Health Centre/PHC North Jayapura
- PHC IMBI
- PHC Tanjung ria
- PHC Hamadi
- PHC Elli Uyo
- PHC Kotaraja
- PHC Abepura
- PHC Waena
- PHC Koya Barat
- PHC Abepantai
- PHC Skouw
- PHC Yoka
- Abepura Hospital
- Dian Harapan Hospital
- Muhammadiyah Health Center (MHC)
- Martin Indey Hospital
- Navy Hospital
- Provincial Hospital - Jayapura
- Wali Holle

Through its health services, the local government of Jayapura city is considered rather successful in collecting data about TB cases for each sub-district in its territory as well as in conducting regular case reporting. However, the results for TB treatments have not been achieved satisfactory as this can be seen in the bar chart below.

Figure 1: Jayapura City TB cases reported from 2013 to 2015

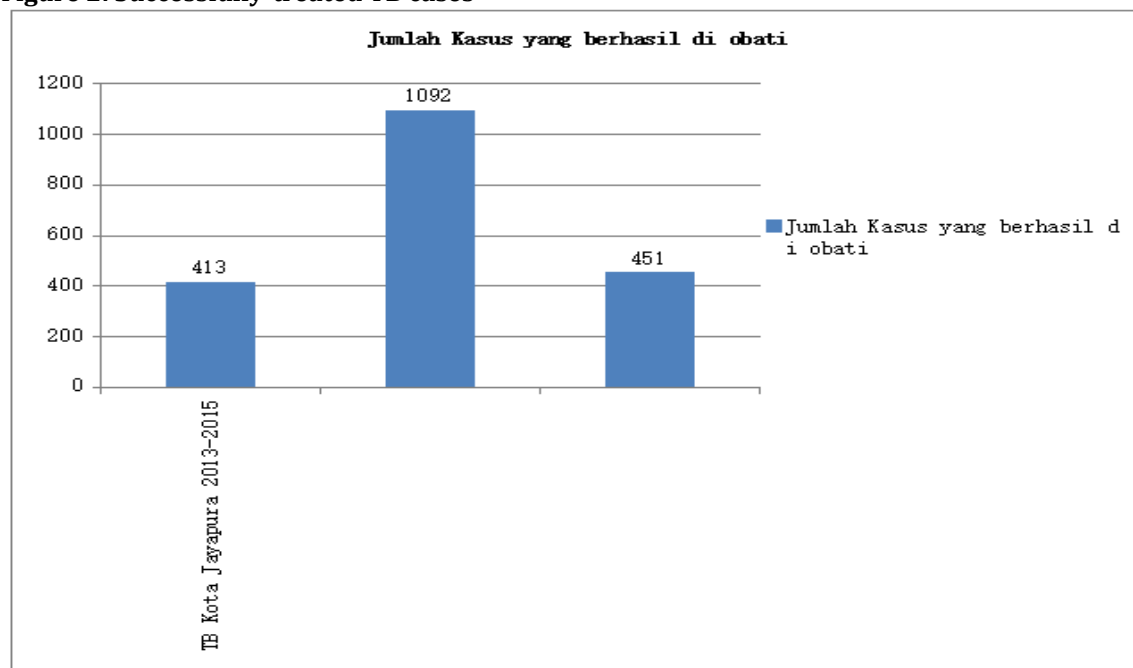


(Source: Primary Data published by Health Department of Jayapura city, TB-case Report 2013-2015)

We can see that Figure 1 depicts the number of all TB-reported cases in 2013-2015 in Jayapura which in its first year (2013), the patients contracted TB were 1,536 people. One year later, this increased insignificantly to 1,569 with the increase of 33 new cases reported. Surprisingly, in 2015, there was a similar increase in number (32 new cases) as the previous year, for the cases reached 1, 601. All these numbers in three years

consecutively were taken from the patients who reported themselves and undergo medical examinations and have treatment in several PHCs/puskesmas in Jayapura city. This can also be resulted from the rising awareness of TB patients due to the accessible service facilities, for instance, assistance for patients and doctors as well as the availability of TB drugs. Apart from the finding TB cases, in terms of strategy of Global prevention for Tuberculosis, one of indicators used is the improvement on DOTS Implementation and strengthening its qualified expansion. In addition, there is an urgent need to improve case detection and cure rates through focused-patient approach. As a result, this might increase the rate of access for all patients especially the poor and vulnerable ones. On the other hand, Figure 2 shows a reverse finding of the indicator mentioned previously as we can see that the local government in Jayapura has not handled TB cases significantly (poor handling) on its treatment . It can be seen from the data shows as for three years mentioned in the chart, the numbers of treatment cases for TB patients remained low.

Figure 2: Successfully-treated TB cases



(Source: Primary Data published by Health Department of Jayapura city, TB-case Report 2013-2015)

Based on figure 2, we can see that the numbers of TB cases that were successfully treated in Jayapura in three years (2013 - 2015). In 2013, there were 413 TB patients treated. Then one year later, the successful TB treatment rocketed to 1,092 which means that there were 679 new fully treated cases within two years. Nevertheless, this rate did not remain longer as in 2015, surprisingly, the number of successful treatment cases fell to 451 cases. The treatment success rate here refers to the number that indicates the percentage of new pulmonary TB patients having bacteriological-confirmed who completed the treatments either cured or complete whilst this was measured by comparing to those recorded new patients with similar cases. So, it can be stated that this figure is the sum of the fully-treated and cured cases. There are several factors that influence the success of TB treatment in Jayapura. They are discussed as follow:

A. Patient factors: There are three main causes that present in these factors: first, non-adherent patients in taking anti-TB drugs (OAT); second, patients who transferred to another PHC without reporting themselves to either the previous PHC or later (non-referral); third, resistant TB cases to OAT/drugs. These causes usually happen in Jayapura. Another finding also shows the worst scenario of potential transmission caused by half-treated TB patients. This is the reason for the first cause. The frequent cases show that some patients when they realized of TB symptoms accessed the nearest health centres. However, when the treatment has run well and their medical state gradually increased, they tend to stop the treatment. So, the non-adherent cases occurred. This may lead to the worst scenario of drugs resistance where patients are not longer can be

treated with the previous drugs but they can pose threats to other people. So, the risk of transmission will increase greatly.

B. Swallowing-Drugs watchdog factor (PMO): This is the case where the role of supervisor or watchdog is limited. This can be classified into two types: first, the absence of PMO at all; second, PMOs exist but they monitor the treatment less than expected. In this case, members of family and/or patients' inner circle play a crucial role in controlling TB patients in taking drugs regularly. If the role of supervising has not been done effectively until the complete healing, this may lead to the treatment failure and this may pose a threat to others in a greater rate.

C. Drugs factors: There are several causes in these factors; first, the supply of OAT (Anti TB) is disturbed so that TB patients delay their drugs intake and/or discontinue taking the medication; second, due to the poor storage, the quality of OAT declines.

In general, TB drugs are provided for free and can be accessed in public health centres nationwide. Yet, there are several reasons defining patients' discontinuity of undergoing TB treatments. One of them is that public awareness in general in accessing TB drugs remains low. This can be caused by either patients' lifestyle and/or mindset, or less supportive environment which somehow all of these lead to high prevalences of this disease. This may eventually lead to greater rate of TB cases and somehow this may pose a threat to human existence. Based on several interviews in Health Office of Jayapura, there is a fact found that TB cases information can be collected through government-funded outreach activities and these cases can be treated. In fact, local government has annually funded TB control programs. Government has adopted WHO's international standard known as DOTS strategy; DOTS refers to Directly Observed Treatment Shortcourse. This strategy emphasises on direct observation and short-term treatment in detecting and treating TB. Apart from the most-advanced drug treatments, there are several obstacles found. First, patients' limited knowledge on TB issues. Some patients do not have the awareness of the ongoing dangers of TB pandemic. The frequent cases found are most patients initially postpone their medical visit to any nearest public health centres. Yet, when their TBs are rather severe, patients start to access medical services. This patients' behaviour may lead to less-effective treatment in taking TB drugs.

Second, lack of commitment from TB patients during treatment. For TB patients, it is compulsory for them to undergo the treatment between six months to two years depending on the disease severity. However, in reality, there is a tendency of non-adherence for patients in following this treatment. So, there are several cases show the less-frequent drug taking among TB patients as well as the negligence. This may potentially affect to TB spread to others as these patients are still contracting the active TB. Another obstacle revealed is unhealthy lifestyle, poor nutrition and unhealthy environment. These may act as the contributing factors in TB proliferation. So, for health promotion, government has conducted frequent direct promotions nationwide. This can be in various forms including TB campaigns through mass media and posters on display in public places. Eradicating TB disease may also encounter another delicate obstacle; new TB strain that is resistant for TB drugs in some patients. This can cause rapid growth spread especially when it is airborne transmitted. On the other hand, another hindrance is undetected TB spread due to iceberg phenomenon which one patient may transmit TB bacteria to 10 -15 people per annum. This might help to explain TB has not been eradicated yet. So, it needs the engagement and collaboration of multi-parties stakeholders in controlling this disease comprehensively.

3. Conclusion

Tuberculosis (TB) has become one of life-threatening human disease, and it is believed that this has killed more than thousands and even millions of people per annum. TB poses a threat to human security because it is a disease that is transmitted through the air. Its characteristics for havingeasily- grown bacteria is in unhealthy environment. In handling TB cases, it needs the awareness of TB patients as well as supports from Health Office – Jayapura in order to decrease the numbers of people contracting TB. The numbers of all types of tuberculosis cases were reported between 2013-2015 where in 2013 showed that patients in the city of Jayapura were to 1,536 people. In 2014, this increased to 1,569 types of cases. By 2015 the numbers of reported cases were 1601. We can see the increase numbers of TB patients who visited health centres in Jayapura for undergoing examinations and treatments. This may also caused by the improvement on health service facilities including assistance on patients and doctors as well as the drugs availability.

There were several TB cases treated successfully in Jayapura in 2013- 2015. In 2013, there were 413 cases, whilst in 2014 there were 1, 092 cases. Yet, this rate declined in 2015 as there were 451 cases treated only. TB treatment success rate is the number that indicates the percentage of new patients having bacteriological confirmed pulmonary TB who completed treatment (either cured or complete treatment) among new TB patients. Thus, this figure is the sum of the numbers and figures of medicine complete cure. In the perspective of international relations, the increasing spread of tuberculosis in the city of Jayapura can pose a serious threat to human security that required serious treatment by stakeholders. This includes local government initiatives through the health department; by providing the available health centres, doctors and TB drugs. For public, it needs more promotion and raising awareness on the importance of TB testing and maintaining healthy environment.

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