

## **ANALYSIS OF IMPLEMENTATION OF PULMONARY TUBERCULOSIS PROGRAMME WITH DOTS STRATEGY IN PURWA AGUNG HEALTH CENTER, WAY KANAN REGENCY, 2022**

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**Abstract:** Indonesia is ranked 2nd with the highest TB sufferers in the world after India. At the Purwa Agung Health Center in 2021 the TB case finding coverage rate (CDR) is 46% with a TB treatment success coverage rate (TSR) of 90%. This study uses a qualitative method, with a descriptive design. The subject of this research is the researcher using informants. The results of this study indicate that political commitment in overcoming Pulmonary Tuberculosis already exists in terms of program policies, funding and human resource development. The existence of case finding activities with a diagnosis using microscopic examination of sputum, the presence of PMO and guaranteeing the availability of OAT with a clear distribution system. The Lung Tuberculosis recording and reporting system uses SITB/SITT.

**Keywords :** political commitment, recording, case finding, PMO, OAT

### **Introduction**

Pulmonary tuberculosis (TB) is still a major global health problem in the world. In March 1993 WHO declared TB as a global health emergency. It is estimated that 95% of TB cases and 98% of TB deaths in the world occur in developing countries. Worldwide about 19-43% of the population is currently infected with TB. It is estimated that the number of TB patients in Indonesia is around 10% of the total number of TB patients in the world (Kemenkes RI, 2017).

Indonesia is ranked 2nd with the highest TB sufferers in the world after India. Although there was a decrease in new TB cases, it was not fast enough to achieve the target of the END TB Strategy in 2020, namely a 20% reduction in TB cases between 2015 - 2020. In 2020 in Indonesia the number of TB cases found was 351,936 cases, a decrease when compared to all tuberculosis cases found in 2019 were 568,987 cases (Indonesian Health Profile, 2020).

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In 2020 the situation of TB cases in Indonesia was 824,000 cases, notified TB cases as many as 393,323 cases, confirmed RR/MDR TB as many as 7,921 cases, Enroll TB RR/MDR cases as many as 4,590 cases, TB cases in children 33,366 cases, TB cases with HIV 8,003 cases. , death due to TB 13,110 cases, TB treatment coverage rate (TC) was 48% and TB treatment success coverage rate was 83%. Based on the Tuberculosis Information System (SITB) the CDR, TC and TSR numbers in Indonesia tend to decrease, namely the CDR number in 2020 as many as 393,323 cases while in 2021 as many as 209,575 TB cases were found and treated. The TB treatment coverage rate (Treatment Coverage / TC) in 2020 is 43% with a National target of 80% and in 2021 it is 25% with a National target of 80%.

The success of TB treatment with DOTS is seen from the high rate of case finding and successful treatment of TB. In Lampung Province alone, the TB case finding coverage rate (CDR) in 2020 is 36% with a target of 70%, the TB treatment coverage rate (TC) in 2020 is 39% and in 2021 there will be a very significant decrease, which is only 14%, while the number TB treatment success coverage (TSR) in 2020 is 98% and in 2021 it will only be 68% (Provincial Health Profile Lampung, 2020).

In Way Kanan Regency in 2020 the TB case finding coverage rate (CDR) of 39% ranks in the 10 lowest district coverage, with a TB treatment success coverage rate (TSR) of 99% (Provincial Health Profile Lampung, 2020). At Purwa Agung Health Center in 2020 the TB case finding coverage rate (CDR) was 34% and in 2021 it was 46% with a TB treatment success coverage rate (TSR) in 2020 of 86%, increasing in 2021 by 90% (Health Profile Purwa Agung Health Center 2020/2021).

## Literature Review

Pulmonary tuberculosis is an infectious disease caused by the bacteria *Mycobacterium tuberculosis*, also known as acid-fast bacteria (BTA). Most TB germs are often found to infect the lung parenchyma and cause pulmonary TB, but these bacteria also have the ability to infect other body organs (extra-pulmonary TB) such as the pleura, lymph nodes, bones, and other extra-pulmonary organs (Kemenkes RI, 2020).

In early 1995, WHO (World Health Organization) and IUATLD (International Union Against TB and Lung Diseases) had recommended the DOTS (Directly Observed Treatment Short-course) strategy as a strategy in TB control and has proven to be the most economically effective control strategy. (cost-effective). There are five components in the DOTS strategy, namely: Political commitment from the government which is marked by the existence of special national TB programs and funding support in terms of facilities, infrastructure, equipment and trained health workers. Diagnosis of TB is done through microscopic examination of sputum in the presence of laboratory facilities and infrastructure, as well as competent laboratory personnel. TB treatment with a combination of Anti Tuberculosis Drugs (OAT) which is directly supervised by one trained Swallowing Drug Supervisor (PMO) for each patient during the treatment phase. Sustainability of OAT supplies with regular, comprehensive and timely drug supplies and standardized recording and reporting in the implementation of monitoring and evaluation of TB control programs with detailed patient treatment cards from sputum examination, drug use to completion (Kemenkes, 2011).

## Methodology

This study uses a qualitative method with a descriptive design. Qualitative research is a research procedure that produces descriptive data in the form of written or spoken words from the subject under study. This study aims to describe the process of applying the five

components of the DOTS strategy in the prevention of pulmonary tuberculosis at the Purwa Agung Public Health Center, Way Kanan Regency. The subject of this research is the researcher using informants.

Sources of data in this study consisted of primary and secondary data sources. Primary data was obtained by in-depth interviews and focus group discussions (FGD), while secondary data was obtained from documents related to research topics such as the Purwa Agung Health Center annual report, health profiles of Lampung and Way Kanan District, and TB control guidebooks and other literature. related to this research. The research was conducted in June – July 2022 at the Purwa Agung Public Health Center, Way Kanan Regency.

The primary data in this study were obtained by conducting in-depth interviews and direct FGDs with informants. Determination of informants using purposive sampling technique with the criteria of all people involved in the process of implementing the pulmonary tuberculosis control program with the DOTS strategy at the Puskesmas. The informants in this study consisted of 1 key informant, 4 main informants and 2 supporting informants. The key informants consisted of the Head of the Puskesmas, the main informants consisted of the Puskesmas doctor, the TB Health Center Program PJ, PMO and TB patients who were undergoing treatment, while the supporting informants consisted of the TB Program PJ of the District Health Office and TB Cadres.

The instruments used are in-depth interview guidelines, FGD guidelines and observation guidelines (documentation studies). Examination of the validity of the data in this study using triangulation techniques, meaning that in this study researchers used various data sources, methods and theories so that data and information could be interpreted consistently. The triangulation technique used in this research is the triangulation of methods, sources and theories.

The method of data analysis in this research was carried out by collecting data, namely primary data from in-depth interviews, FGDs and secondary data that had been obtained and then data analysis was carried out. After that, data reduction was carried out, namely the process of summarizing, choosing the main things, focusing on the important things and transforming the rough data that emerged from written notes in the field. Furthermore, the data is presented in the form of a narrative text, then conclusions are drawn based on an understanding of the data that has been presented and refers to the subject matter studied.

## **Findings & Discussion**

### **Political Commitment**

Political commitment in this case the Central and Regional Governments in supporting the Pulmonary Tuberculosis Control Program, this is in line with Presidential Regulation No. 67 of 2021 concerning Tuberculosis Management. Whereas the achievement of the TB Elimination target is carried out through the implementation of the National TBC Elimination Strategy, one of which consists of strengthening the leadership commitment of the Central Government, Provincial Governments, and Regency/City Governments. Strengthening the commitment is carried out through the preparation of Regional TB Elimination targets with reference to the National TB Elimination targets, provision of adequate budgets for TB control, fulfillment of the need for trained health human resources and regional-based TB control.

From the results of research on political commitment in terms of political commitment policies in the form of policies that support the Pulmonary TB Control Program, this can be seen from the Presidential Regulation and the Minister of Health Regulation regarding

Pulmonary TB Management and TB Management Guidelines. Management of Pulmonary TB in the RPJMD and SPM for Basic Health Services in Way Kanan Regency.

In terms of support for the Pulmonary Tuberculosis Management Program, not everything is running optimally. This can be seen from the funding support for case finding activities only comes from limited BOK funds so that it has an impact on the still low case finding rate (CDR). Funding in terms of procurement of facilities and infrastructure for TB diagnosis with the TCM method is also not optimal, this can be seen from TCM services in Way Kanan Regency which are only available at ZA Pagar Alam Hospital. So that the Puskesmas must send a sample of TB patients to the hospital if they want to do an examination with TCM, considering that the distance is quite far, it will cost money to deliver the sputum sample to the hospital and this has not been covered in the Puskesmas budget plan.

In terms of human resource development, it is also not optimal, this can be seen from not all TEAM members who are responsible for implementing the DOTS strategy receive special training. The training is representative only and is not held every year.

The lack of cross-sectoral cooperation and coordination in the prevention of Pulmonary Tuberculosis is also seen from the inactivity of TB Cadres in all Puskesmas working areas, this is related to the absence of incentives for TB Cadres. In the last three years the Puskesmas has no longer budgeted for Cadre transport money for activities in the field, this is because Cadre incentives can be budgeted through ADD. This is not too urgent because the number of TB patients in the area is also small.

### **TB Case Finding and Diagnosis**

The discussion in the article aims to find cases with the aim of getting TB patients through a series of activities ranging from screening of suspected TB patients, physical and laboratory examinations, determining the diagnosis, determining the classification of the disease and the type of TB patient, so that treatment can be carried out to recover so as to reduce the risk of transmission. This activity requires patients who understand and are aware of TB complaints and symptoms, access to health care facilities and the presence of competent health workers to carry out examinations of these symptoms and complaints (Permenkes, 2016).

In accordance with the circular from the Ministry of Health No. HK.02.02/III.1/936/2021 concerning Changes in the Pathway of Diagnosis and Treatment of Tuberculosis in Indonesia, that the National Strategy for Tuberculosis Control in Indonesia follows the latest developments in science and technology in the health sector where the diagnosis of pulmonary TB must use the Rapid Molecular Test (TCM). . All TB suspects must undergo a TCM examination at a health care facility that currently has a TCM device.

Based on the results of the study, it can be seen that the diagnosis of pulmonary TB at the Puskesmas has not been according to the latest standards, still using sputum microscopic examination due to the unavailability of TCM equipment at the Puskesmas. In this case, the Health Office seeks to facilitate by providing TCM networking services at the ZA Pagar Alam Hospital, so it is hoped that the Puskesmas can send samples of suspected pulmonary TB patients to the provided TCM referral hospital. Due to the distance from the Puskesmas to the TCM referral hospital which is far away with a travel time of approximately 2 hours, a fee is required for the sample delivery process and these costs have not been covered in the budget for activities at the Puskesmas so that the TCM examination is not carried out.

### **Drug Swallowing Supervisor (PMO)**

Supervisors of swallowing drugs are very important to ensure that patients swallow all the drugs given as recommended, with direct supervision to prevent drug resistance. PMOs

can come from health cadres, teachers, PPTI members, PKK, family members and other community leaders (Permenkes, 2016). ).

Based on the results of the study, it was found that the PMO's duties had not run optimally. This was because PMOs were not given special training to understand their duties and responsibilities as PMOs. Patients with PMO can increase cure rates and reduce the risk of dropping out or dropping out of treatment.

### **Availability of OAT**

Guarantee the availability of drugs on a regular basis, comprehensively and on time, is very necessary for the regularity of treatment. The main problem in this case is the planning and maintenance of drug preparations at various regional levels. Therefore, it is necessary to record and report good drug use, such as the number of cases in each category of treatment, cases handled in the past (to estimate needs), accurate data on preparations in each existing warehouse, and so on (Kemenkes RI). , 2014).

Based on the results of the study that the availability of OAT is guaranteed, this can be seen from the support for OAT funding from the APBD. The drug stock recording system is good, thus reducing the occurrence of OAT vacancies at the Puskesmas. The distribution system from the Pharmacy Installation of the Health Office is carried out directly by the Puskesmas staff who previously sent a letter of request for drugs. TB patients are given a drug taking card and given a schedule for taking medication once a week to avoid spilling the drug.

### **Recording and Reporting**

Recording and reporting systems are used for systematic evaluation of patient progress and treatment outcomes. The system consists of a laboratory register containing records of all patients whose sputum was examined, a patient medication card detailing drug use and follow-up sputum examinations. Each tuberculosis patient being treated must have a patient identity card that has been recorded in the tuberculosis record in the district.

Based on a circular from the Ministry of Health No.HK.02.02/MENKES/660/2020 concerning the Obligation of Health Service Facilities in Recording and Reporting Tuberculosis Cases, it is stated that the system for recording and reporting tuberculosis cases uses an online-based Tuberculosis Information System (SITB), or through integration. Hospital Information System (SIMRS) with SITT/SITB for Hospitals.

Based on the results of the study, it was found that the Lung Tuberculosis recording and reporting system at the Purwa Agung Health Center was already using SITB. The application of SITB in the recording and reporting of Pulmonary Tuberculosis is carried out starting in 2021, with the previous training in 2020. SITB is evaluated and monitored by the Health Office every month.

### **Reference**

- Dinkes Kabupaten Way Kanan.(2021). Profil Kesehatan Kabupaten Way Kanan Tahun 2020. Blambangan Umpu: Dinkes Kabupaten Way Kanan.
- Dinkes Provinsi Lampung. (2019). Profil Kesehatan Provinsi Lampung Tahun 2018. Bandar Lampung: Dinkes Provinsi Lampung.
- Dinkes Provinsi Lampung. (2020). Profil Kesehatan Provinsi Lampung Tahun 2019. Bandar Lampung: Dinkes Provinsi Lampung

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Dinkes Provinsi Lampung. (2021). Profil Kesehatan Provinsi Lampung Tahun 2020. Bandar Lampung: Dinkes Provinsi Lampung

Isna Lutfiyatul Faizah & Bambang Budi Raharjo. (2019). Penanggulangan Tuberkulosis Paru dengan Strategi DOTS (Directly Observed Treatment Short course). *Higeia Journal Of Public Health Research And Development*, 3 (3), 430-441. <https://doi.org/10.15294/higeia/v3i3/26951>

Rully Indrawan & Popy Yaniawati. (2014). Metode Penelitian Kuantitatif, Kualitatif dan Campuran. Bandung: Refika Aditama

Samhatul Inayah & Bambang Wahyono. (2019). Penanggulangan Tuberkulosis Paru dengan Strategi DOTS. *Higeia Journal Of Public Health Research And Development*, 3 (2), 223-233. <http://doi.org/10.15294/higeia/v2i3/25499>

Irianto, Koes. (2021). Epidemiologi Penyakit Menular dan Tidak Menular. Bandung: Alfabeta

Irwan. (2017). *Epidemiologi Penyakit Menular*. Yogyakarta: CV Absolute Media

Kemenkes RI. (2020). *Pedoman Nasional Pelayanan Kedokteran Tata Laksana Tuberkulosis*. Jakarta: Kemenkes RI

Kemenkes RI. (2020). *Surat Edaran No HK.02.01/MENKES/660/2020 tentang Kewajiban Fasilitas Pelayanan Kesehatan Dalam Melakukan Pencatatan dan Pelaporan Kasus Tuberkulosis*. Jakarta: Kemenkes RI.

Kemenkes RI. (2021). *Profil Kesehatan Indonesia 2020*. Jakarta: Kemenkes RI.

Kemenkes RI. (2021). Surat Edaran No HK.02.02/III.1/936/2021 tentang Perubahan Alur Diagnosis dan Pengobatan Tuberkulosis Paru di Indonesia. Jakarta; Kemenkes RI.

Perpres RI. (2021). *Peraturan Presiden No 67 Tahun 2021 tentang Penanggulangan Tuberkulosis*. Jakarta: Kemensekneg

Pusdatin Kemenkes RI. (2018). *Metode Penelitian Kuantitatif, Kualitatif dan Campuran*. Jakarta Selatan: Pusdatin Kemenkes

Rosiska, Mimi. Rizanda Machmud & Fitra Yeni. (2014). *Pelaksanaan Program Pengendalian TB dengan Menggunakan Strategi DOTS*. *Jurnal Kesehatan Medika Saintika*, 10(2), 13-21. <https://jurnal.syedzasaintika.ac.id>