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Phenomenology Study of High Numbers of Multi Drug Resistant (MDR) Patients in Makassar City Post COVID-19 Pandemic, South Sulawesi Province Indonesia

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ABSTRACT

Tuberculosis (TB) is an infectious disease that is one of the ten main causes of death in the world. Indonesia is the country with the second highest number of TB sufferers in the world. The aim of this research is to identify the factors causing the high number of Tuberculosis sufferers after the Covid-19 pandemic in the city of Makassar. The research method used is qualitative research with a phenomenological study approach. The sample in this study was resistant tuberculosis (MDR) sufferers in several community health centers in Makassar City. The number of samples was 3 MDR sufferers for each Puskesmas sample. Sampling was random sampling based on data obtained from the Makassar City Health Center. Data processing was carried out through in-depth analysis and the triangulation method between researchers, families and patients suffering from tuberculosis. Research findings include fear of Covid-19 screening, stigma of "untreated" death in Covid-19 sufferers, low motivation to recover, discontinuation of treatment, and immunological diseases. Recommendations from the research results are motivation, preventing interruption of treatment regimens, handling comorbid diseases, and increasing maximum nutrition.

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Introduction

TB (tuberculosis) is a tropical infectious disease that often occurs in developing countries. Tuberculosis is a disease that is currently a big problem that requires a lot of budget to treat. Tuberculosis (TB), an infectious disease caused by micro tuberculosis bacteria, can be transmitted through phlegm splashes, when an infected person coughs or sneezes. This infection is not a hereditary disease and can be cured with regular treatment, at least 6 months assisted by medication monitoring (PMO). Although most TB germs attack the lungs, the bacteria can also attack other body organs.

Reports from the World Health Organization or WHO as of October 2022, Indonesia is currently the country with the second largest number of TB cases in the world with an estimated caseload of 969,000 with deaths at 144,000 or 16 people dying every hour. In the report, WHO said that deaths from tuberculosis or TB increased for the first time in more than a decade. The increase in

deaths due to tuberculosis is the impact of the Covid-19 pandemic which has affected testing and treatment services for TB patients. Quoting The Independent, Sunday (17/10/2021) around 1.5 million people died from TB disease in 2020. This number increased from the previous year, namely 1.4 million people. around 1.5 million people died from TB disease in 2020. This number increased from the previous year, namely 1.4 million people. Despite the increase in the number of deaths, WHO noted that new diagnoses of tuberculosis fell from 7.1 million to 5.8 million during the same period. Meanwhile, the number of people accessing preventive treatment also decreased by 21 percent to 2.8 million people.

Indonesia itself is in SECOND position with the highest number of TB sufferers in the world after India, followed by China, the Philippines, Pakistan, Nigeria, Bangladesh and the Democratic Republic of Congo in sequence. In 2020, Indonesia was in third place with the highest number of cases, so 2021 will clearly not be better. TB cases in Indonesia are estimated at 969,000 TB cases (one person every 33 seconds). This figure is up 17% from 2020, namely 824,000 cases. The incidence of TB cases in Indonesia is

354 per 100,000 population, which means that for every 100,000 people in Indonesia, 354 people suffer from TB. The death rate due to TB in Indonesia has reached 150,000 cases (one person every 4 minutes), an increase of 60% from 2020 when there were 93,000 deaths due to TB. With a death rate of 55 per 100,000 population.

Of the total 969,000 estimated TB cases in Indonesia, only 443,235 (45.7%) cases were found, while there were 525,765 (54.3%) other cases that had not been found and reported. In 2020, the number of undiscovered cases was 430,667 cases. This means that there is a significant increase in the number of undiscovered cases. Meanwhile, case discovery achievements increased from 2020, which was 393,323 cases.

The cost of treating TB in 2014, the average cost of treating TB cases was 228 US dollars. Meanwhile, the government estimates that the cost of treating MDR TB cases will cost up to 10,027 US dollars. Much bigger, considering that resistant TB drugs are much more expensive than regular anti-TB drugs. The duration of treatment can reach two years (who, 2015). According to Muhadjir (coordinating minister for PMK), the impact of economic losses due to TB reaches IDR 136.7 billion per year (Kompas, 2021)

According to data from the Ministry of Health (Kemenkes) for South Sulawesi province, the national TB case detection rate is around 48.3 percent in 2021, South Sulawesi is in ninth place, the number of cases is 15,088 cases. Makassar City is the region with the highest RR value (1.70), which indicates that Makassar City has a TB risk that is 70% higher than the average.

Method

This policy paper's recommendations are based on qualitative research using a phenomology study approach carried out in several health center work areas in Makassar City. The sample in this study was 10 (Ten Sufferers) with the inclusion criteria being MDR-TB (Multi Drug Resistant Tuberculosis) sufferers. Data collection, data analysis and recommendations for research results were carried out during the September-October period.

Findings

From research analysis, it was found that the factors causing the emergence of many MDR-TB after the Covid pandemic were:

1. Fear of Covid-19 Screening

Nearly all participants (97.2%) said that during the Covid-19 pandemic they were very afraid of coming to the hospital or community health center to get medicine, especially if they were coughing up phlegm and shortness of breath. They said that the fear of being tested for Covid-19 made them choose to stay at home. Another situation that supports this is that they prefer to take over-the-counter medicines to treat coughs and shortness of breath.

2. The Stigma of Death is "Untreated" in Covid-19 Sufferers

Reports on electronic media and social media regarding the large number of deaths during the post-covid-19 pandemic provide frightening information to sufferers. Rumors circulating that they were buried without clear protocols in accordance with their beliefs have made people who should receive TB treatment afraid to visit government hospitals or health centers. This has resulted in the emergence of many Dormant TB or MDR-TB sufferers after the Covid-19 pandemic.

3. Low Healing Motivation

Low levels of education, lack of information, and very low public recommendations for healing result in a lack of enthusiasm and

motivation for patients to visit health service facilities. This resulted in the emergence of MDR TB due to the interruption of treatment carried out by them which should have been continuous for six months.

4. Discontinuation of Treatment

The busyness of dealing with Covid-19, the lack of family and public support for TB sufferers are the factors causing the interruption of treatment or regimen for six months. The public stigma of TB as a very malignant disease makes them stay away and the communication process is not optimal.

5. Immunological Diseases such as HIV-AIDS

HIV-AIDS causes a very significant decrease in the body's immune system, resulting in resistance to several drugs consumed by TB sufferers.

Recommendation

1. Increased Motivation to Recover

The client's motivation to recover is one of the supporting factors that is very accurate in preventing the emergence of MDR. High motivation will increase the patient's enthusiasm for healing, thus encouraging optimal treatment. This is in line with research conducted by Dwi Sarwani, et al which was published in the *Journal of Public Health*, stating that various supports are needed, especially from the patient's family and environment, in order to motivate pulmonary TB sufferers that their disease can be cured and to undergo regular treatment.

2. Prevent Interruption of Treatment Regimen

Treatment regimens that are incomplete or interrupted before reaching 6 months or 9 months can trigger the emergence of MDR-TB. Making drugs in combination with just one or two drugs will help prevent treatment discontinuation. Another thing that can be done is to optimize medication-taking companions in the family, in the community, or from the community health center who deliver the medication every day while watching the patient take TB medication.

3. Management of Comorbid Diseases

HIV-AIDS and Diabetes Mellitus are one of the causes of the high number of MDR-TB in society. Early treatment of HIV-AIDS and Diabetes Mellitus will help reduce the number of MDR-TB sufferers. According to Trivianto G. Bawonte 2021 in the e-biomedicine journal said that Patients with HIV infection have poor or decreased immunity so they are susceptible to other diseases including TB.

4. Maximum Nutritional Increase

Adequate nutrition, including high and adequate protein requirements, will encourage the healing process of TB cases in Indonesia so that it will help prevent the emergence of MDR-TB disease.

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