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Research Article

Case Visit Activity Report An. S Patients with Short Stature Pulmonary Tuberculosis Through Family Medicine Approach

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ABSTRACT

Tuberculosis can occur in all age groups adults and children. Tuberculosis (TB) in children occurs in children aged 0-14 years and most common at ages 1-14 years. In the working area of the Cikupa Health Center, there are patients a daughter named An.S who was diagnosed with a new case of pulmonary tuberculosis and has stature short based on results plotting so that need done intervention through family doctor visit. Solving the problem pulmonary tuberculosis infection with short stature in An. S. A female patient, An.S , aged 2 years and 8 months, came with a complaint Cough with fever for 2 weeks. In addition, high growth was also obtained age-appropriate body The patient has received antibiotics and concoction but complaints do not improve. The patient's grandmother also had similar complaints. In this case, an intervention using a family medicine approach with Mandala of Health For get diagnosis holistic And done governance in a manner comprehensive. After the intervention of An.S showed improvement and is currently undergoing treatment. Height has increased from 84 cm to 86 cm also weight from 11.2 kg to 13 kg. The family has understood about TB disease and is willing to do screening and implement PHBS. Known sources of tuberculosis infection in An. S suspected of coming from the patient's grandmother. TB infection experienced by patients has an impact on inhibiting the patient's growth so that the patient's height does not increase. After comprehensive treatment and education, the patient's family understands tuberculosis, disease transmission and prevention so that it is hoped that the treatment will be carried out completely and can catch up with age-appropriate growth.

Keywords: *Diagnosis holistic, Mandalas of health, Medical family, Tuberculosis*

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Introduction

Doctor family is doctor Which responsible answer carry out service health personal, integrated, continuous and proactive Which needed by the patient in terms of being a member of a family unit and community patient That is at (Christina et al., 2023). Characteristic service covers enhancement degrees health (promotive), prevention (preventive), treatment (curative) and rehabilitative (Wijayanti, 2020). Family medicine is a multidisciplinary approach integrated to maintenance health thorough from units family (Shao et al., 2021).

Infectious diseases have been a health problem for a long time and have become wrong one world health program, SDGs (Sustainable Development Goals) on target number 3, namely achieving life Healthy And prosperous (Heo et al., 2021). Where Wrong only one ensure life Which Healthy And improve the well-being of the entire population of all ages by 2030. Communicable disease programmes covers end AIDS epidemic (Acquired Immune Deficiency Syndrome), malaria, fighting hepatitis, a disease that originates from water and subsequent tuberculosis called tuberculosis (tuberculosis) (Selvaraju et al., 2022).

tuberculosis is disease infectious consequence infection germs Mycobacterium tuberculosis with the most location in the lung which is usually the primary site of infection. Child TB is TB patients aged 0-14 years with age most common 1-4 years. Infection of this disease in children is an indicator of progress transmission of TB germs in the community (Heo et al., 2021). The majority of children become sick with tuberculosis after 1 year infected (Desai, 2022). Child TB without proper treatment can be a source of TB infection moment mature later (Sui et al., 2022).

Infection tuberculosis can happen on all group age in all country. Based on WHO (World Health Organization) data in 2020 an estimated 10 million people suffer from TB in worldwide consisting of 5.6 million men, 3.3 million women and 1.1 million children child. kindly global, Indonesia is country order third with total patient The most TB after India and China, and ranked first from amount proportion patients compared to the population (Qubro &

Nusadewiarti, 2020). Ministry of Health data shows the proportion tuberculosis on child from whole case in Indonesia the year 2010 until year 2015 No improved in meaning decreased cases which remained at around 9% in 2015. Child TB cases in 2021 in Indonesia as many as 22/10,000 in toddlers and 12/10,000 in children age 5-14 years (Swaminathan et al., 2010). Proportion of pulmonary TB cases children among new cases of pulmonary TB in 2020 as many as 1,551 cases out of 19,979 cases, with South Tangerang City occupying order First 442 cases followed by Tangerang City with 358 cases and Tangerang Regency with 357 cases (Badan Nasional Penanggulangan Bencana., 2021). In the work area Cikupa Health Center, period January 2022 - March 2022 there were 7 new cases of pulmonary tuberculosis child (Zargar et al., 2023). April 2022 - June 2022 found 4 new cases and increased in the period July 2022 - September 2022 14 new cases.

A number of predictable factor contributed to the increase in new TB cases at the Cikupa Health Center, including : season the causal transition immunity child decreasing and increasing visit public service health since the cases of the Covid-19 pandemic in Indonesia began to decline (Liu et al., 2020). On the spot Work Cikupa Health Center, available patient child Woman named An.S 2 years 8 months old diagnosed with new case of pulmonary tuberculosis since December 19, 2022 and the patient has started the treatment. Besides that, patients also have problems which growth based on the plotting results obtained the patient has stature short (Benetti et al., 2020). This case needs to do a family case visit Because This incident occurs in children with disabilities expected growth help finish problem patient. Series intervention required for An.S so that An.S Can healed from pulmonary tuberculosis and treated problem growth and not be a source of transmission to the surroundings (Briones-Claudett et al., 2020).

Methods

This article uses a case study design. The data research instrument used the family medicine intervention approach with the Mandala

of Health to get a holistic diagnosis and treatment in a manner comprehensive (Haryati et al., 2022). In this case study, several stages in between assessment, enforcement diagnosis, planning, implementation and evaluation. The sample taken in this study was a girl named An.S aged 2 years and 8 months who was diagnosed with a new case of pulmonary tuberculosis since December 19, 2022 and the patient has started her treatment. Sample selection was obtained based on predetermined criteria (Mirzai et al., 2020). Data collection method is done by 1) interview, a dapun questions asked during the interview included: patient identity, complaints and reasons for dating, medical history, history habits and socioeconomic history childbirth history prinal and growing flower, history nutrition and diet. 2) Physical examination, which is carried out as a whole head toe. 3) Examination Supporting activities carried out are the Mantoux test and examination laboratory hematology. 4) Observation, the data observed by the researcher are anthropometry and family PHBS. 5) Study documentation, carried out from assessment, diagnosis, intervention, implementation, and evaluation (Andani & Savitri, 2022).

Results and Discussion

On December 20, 2022, a girl aged 2 years and 8 months was examined with complaints of recurrent coughing since 2 weeks ago. Cough accompanied by phlegm of yellowish white mucus accompanied by a runny nose and fever, especially at night for about the last 1 month. The patient has been tested mantoux at the clinic but the results were negative on the 2nd day of examination (Akbaş & Yiğitoğlu, 2020). The patient had a history of being hospitalized in September due to a high fever and a radiological examination showed bronchopneumonia. The patient's mother complained that the child's height had not increased since the patient started solids (food ASI companion) so that the patient's mother consults a nutritionist. The mother said that even though she had been given a variety of food, from side dishes, fruit and had a good appetite and had no digestive problems, the child's height and weight had not improved. Then a repeat test was carried out

based on clinical and radiological complaints at the Cikupa Health Center and obtained positive results and started OAT therapy (anti-tuberculosis drug) on December 20, 2022. The intensive phase of OAT namely RHZ (Rifampin, Isoniazid, Pyrazinamide) 1x2 tablets taken every 06.00 in the morning and followed by breakfast at 07.00 in the morning. From the plotting results of pediatric patients, children with short stature (-2SD) were obtained (standard deviation). The patient has a schedule for regular large meals 3 times a day with a varied menu, namely white rice with carrot and egg vegetables, claw soup accompanied by drinking milk in the morning and afternoon before going to bed and milna porridge as a snack. On physical examination, good nutritional status was obtained with short stature. Other physical examination within normal limits (Mizushima et al., 2022). On supporting examination, a 10mm Mantoux test was found (positive). On December 26, 2022, the patient is scheduled for control at the Cikupa Health Center and given further therapy in the form of RHZ for 1 month.

Discussion

First visit the patient was carried out on December 20, 2022 at 15:00 WIB at An's house. S. Activities carried out in the form of anamnesis regarding patient complaints, physical examination and anthropometry, further study of the patient's and family's habits, the condition of the house and the surrounding environment, asking about the patient's diet, and the patient's and family's daily activities (Sari & Sari, 2020). During this visit, education was also carried out regarding the disease, signs and symptoms, risk factors, ways of transmission, drug consumption as recommended and complications that could arise. Education is also carried out regarding balanced nutrition and monitoring of the development and growth of An. S. The second visit was carried out on December 27, 2022 at 15:00 WIB at An.S's house . Activities carried out by anamnesis regarding current complaints, physical examination and anthropometry as well as providing fruit as a complement to micronutrients (Tiberi et al., 2019).

The third visit was carried out on January 4 2023 at 15:00 WIB at An's house. S. Anamnesis

and anthropometric evaluation were carried out, monitoring adherence to taking medication and improving complaints and providing masks for children and adults as a measure to prevent the spread of disease. The fourth visit was made on January 10, 2022 at 15:00 at An's house. S. Anamnesis and anthropometric evaluation were carried out, monitoring adherence to taking medication, improving complaints and installing a simple height meter in wall so that the mother can measure her own TB (Wu et al., 2020).

Medical management of TB in children consists of therapy and prophylaxis (Qo'imah et al., 2022). TB treatment is given to children who are sick with TB, while TB prevention treatment is given to healthy children who have contact with TB patients (primary prophylaxis) or children who are infected with TB without TB disease (secondary prophylaxis) (Isrul et al., 2018).

The principles of managing TB in children are that TB drugs are given in combination with drugs (Thakkar et al., 2021), should not be given as monotherapy, drugs are taken every day, provide adequate nutrition and look for co-morbidities, if any, are managed simultaneously (Kapoor et al., 2018).

Since 2016, the government's effort for TB has been launched to find and treat until cured TB (TOSS TB). This program aims to find, diagnose, treat, cure and stop TB transmission in the community. TOSS TB steps include: find symptoms, treat appropriately and quickly and monitor TB treatment until cured (Sufriyana et al., 2020).

The Ministry of Health has also made all puskesmas in Indonesia capable of providing TB treatment services (Kesharwani, 2020). In the TB program, drugs are given free of charge for six months for those who are sensitive to 20 months for those who are resistant Explanation on in line with the procedure applied to the case, viz gift therapy pharmacological form Phase intensive RHZ 1x2 tablets No XX and non- pharmacological therapy form education related to adherence to taking medication and control routine for evaluation therapy (Suri et al., 2019). After the complaint intervention was carried out by An.S showed improvement and is currently undergoing treatment. Height has

increased from 84 cm to 86 cm as well as weight from 11.2 kg to 13 kg. The family has understood about TB disease and is willing to do screening and implement PHBS (Quincho-Lopez et al., 2020).

Conclusion

Known source of infection Pulmonary tuberculosis infection in An. Suspected S originate from grandma patient paternal side . Grandma patient paternal side has symptoms cough for more than 1 year with thin stature. The patient's father lives with him grandma moment day work and stay at home with An. s moment weekend . Besides that An. S every 1 month visit grandma until appear symptom fever and cough cold more than 2 weeks since last visit. He knows internal and external factors in a manner holistic cause tuberculosis lungs accompanied stature short on An. S with approach mandala of health.

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