

Empowerment of Housewives in Early Detection of Children's Pulmonary Tb in The RW 8 Area, Putat Jaya District Surabaya

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Abstrak

Droplets from patients with TB bacteria who are not being treated can transmit the disease. TB sickness in children is still prevalent; at least 500,000 children worldwide die from TB each year. The transmission rate and danger of transmission are high in the 0 - 6 year age group and the 7 - 14 year age group. The purpose of this activity is to increase the knowledge of housewives in early detection of Tb disease in ana through counseling, material presentation, simulation and applying Tb screening examination directly to children, This activity was carried out by 20 housewives participants from empowerment and education through counseling proven to be able to increase the knowledge of housewives in screening Tb in children in the region who The number of screened 152 children consisting of cases not at risk 111 children, at risk / exposed: 26 people at risk 15 people.

Keywords: Housewives; Empowerment; Child Tb screening.

Abstrak

Penularan TBC melalui droplet dari pasien dengan bakteri TB yang tidak diobati dapat menularkan TB pada anak-anak , setidaknya 500.000 anak di seluruh dunia meninggal karena TB setiap tahun. Tingkat penularan dan bahaya penularan tinggi pada kelompok usia 0 - 6 tahun dan kelompok usia 7 - 14 tahun. Tujuan dari kegiatan ini adalah untuk meningkatkan pengetahuan ibu rumah tangga dalam deteksi dini penyakit Tb pada ana melalui penyuluhan, pemaparan materi, simulasi dan penerapan pemeriksaan skrining Tb secara langsung pada anak. Kegiatan ini dilaksanakan oleh 20 peserta ibu rumah tangga dari pemberdayaan dan edukasi melalui penyuluhan terbukti mampu meningkatkan pengetahuan ibu rumah tangga dalam skrining Tb pada anak di wilayah yang Jumlah anak yang diskriming 152 anak terdiri dari Kasus tidak berisiko 111 anak, berisiko/terpapar: 26 orang berisiko 15 orang.

Kata kunci: Ibu Rumah Tangga; Pemberdayaan; Skrining TB anak

INTRODUCTION

Community empowerment is a method of improving human resources, namely society, through increased creativity, competence, thinking power, and gradual action (S. I. Kurniawansyah and I. Sopyan, 2018). Because many housewives have not worked, they are one group that can be empowered to promote family health and carry out activities (Setyowati et al., 2018). Improving family health is one of the attitudes that can help them stay healthy and avoid diseases (Rakhmawati et al., 2021). The treatment protocol for tuberculosis in children differs from that of adult tuberculosis. Numerous aspects must be addressed while diagnosing childhood TB. In the process of diagnosing childhood tuberculosis, many factors must be considered. Children are very vulnerable to transmission of tuberculosis, especially if the child has a history of contact with positive pulmonary tuberculosis patients, both adults and children (Sugion et al., 2022). Tuberculosis (TB) is an infection of the lungs caused by the bacteria *Mycobacterium tuberculosis* (Suarnianti et al., 2021). Droplets from patients with TB bacteria who are not being treated can transmit the disease. TB sickness in children is still prevalent; at least 500,000 children worldwide die from TB each year. The number of tuberculosis cases in Indonesia remains rather high, ranking second to India (Puspitasari et al., 2015). Pulmonary tuberculosis (TB) is the leading cause of death in children, and it ranks third overall, following cardiovascular illness and acute respiratory infection (ARI) (Apriliasari et al., 2018). Children are an age that is very vulnerable to the transmission of Tuberculosis. The transmission rate and danger of transmission are high in the 0 - 6 year age group and the 7 - 14 year age group (Ministry of Health, 2019). According to Abkarizal Wahid's research (2021), children aged 5-14 years suffered from Tuberculosis more than children aged 0-5 years (Wahid et al., 2021). This study supports the findings of Karim MR et al. (2012), who found that tuberculosis is more common in children above five (Attah et al., 2018). A history of contact with adult TB sufferers, nutritional and immunization status, a weak immune system, low social and economic status, poverty, housing conditions that do not meet the criteria for a healthy home, population density, family size, malnutrition, and environmental cleanliness are all important risk factors in the transmission of TB disease to children (Ministry of Health, 2019). Patients with smear-positive TB are a source of transmission of tuberculosis. Coughing or sneezing from TB patients will spread germs into the air through droplet nuclei (sputum splashes). Approximately 3000 splashes of phlegm are produced during one cough (Wijaya et al., 2021) TB cases in children in Indonesia increased in recent years, with 44,702 cases discovered in (2017), 61,059 cases in (2018), and 63,111 cases in 2019 (Organization, 2020), and 832 cases documented from January to March 2020 (Organization, 2020). The increase in cases is due to active case discovery through various activities such as contact investigations and screening in high risk groups in East Java Province in 2019 (Sari et al., 2017), which was recorded at the Health Service Statistical Research Agency until December 2019 in Java East reached 54,863 people. The large number of tuberculosis infections has an impact on East Java's high death rate, which reached 1,125 cases. The city of Surabaya is in first place in East Java Province as the city that contributed the most tuberculosis cases, up to 7,007 cases, an increase compared to 2017, which was 6,338 cases. Then Jember, Sidoarjo and Pasuruan Regencies (Attah et al., 2018). Meanwhile, due to a

lack of diagnostic equipment and an insufficient system for registering and reporting child TB cases, the global number of child TB cases is still unknown (Apriliasari and colleagues, 2018). The risk factors for transmitting tuberculosis to children are the same as those for tuberculosis in general, and depend on the level of transmission, duration of exposure, and immune system (Rejeki et al, 2021). TB patients with negative smears are more likely to become infected than TB patients with positive smears, however TB patients with negative smears can still transmit TB disease. The results of research conducted by Apriliasari et al in 2018 found that the risk factors for TB in children were due to contact history, smoking status of family members, residential characteristics, parental education, parental income and parental employment. According to the findings of this study, children who live or have contact with individuals who have tuberculosis have a 1.33 times higher risk than those who do not live or have contact with people who have tuberculosis (Azzahrain et al., 2023). Based on the problems mentioned above, it is necessary to carry out community service in efforts to prevent the transmission of TB disease in children through empowerment and education activities for housewives in early detection of pulmonary TB in children (TB screening examination in children <14 years) in the Putat Jaya RW 8 RT Health Center 9 subdistricts of Putat Jaya Surabaya.

GENERAL DESCRIPTION OF THE COMMUNITY, PROBLEMS AND TARGET SOLUTIONS

General description

In the interim, the worldwide prevalence of child tuberculosis remains uncertain as a result of inadequate diagnostic instruments and a structure deficient in registering and reporting such cases (Apriliasari et al., 2018). Similar to tuberculosis in general, the risk factors for tuberculosis transmission to children depend on the degree of transmission, duration of exposure, and immune system (Rejeki et al., 2021). Although TB patients with negative smears have a higher risk of infection compared to those with positive smears, they are still capable of transmitting the disease. According to research conducted by Apriliasari et al. in 2018, the following residential characteristics, parental education, parental income, and parental employment were identified as risk factors for tuberculosis in children: contact history, smoking status of family members, and parental employment. The results of this research indicate that children who are exposed to or reside with infected individuals have a 1.33-fold increased risk of contracting the disease compared to their non-communicating or contact-free counterparts (Azzahrain et al., 2023). In order to prevent the transmission of tuberculosis to children, it is necessary to conduct community service in the Putat Jaya RW 8 RT Health Center's nine subdistricts of Putat Jaya Surabaya through education and empowerment activities for housewives regarding early detection of pulmonary TB in children (TB screening examination in children <14 years).

Problem

Based on the problems mentioned above, it is necessary to carry out community service in efforts to prevent the transmission of TB disease in children through empowerment and education activities for housewives in early detection of pulmonary TB in children (TB screening examination

in children <14 years) in the Putat Jaya RW 8 RT Health Center 9 subdistricts of Putat Jaya Surabaya.

Target solution

education and empowerment activities for housewives regarding early detection of pulmonary TB in children (TB screening examination in children <14 years).

METHODE

This community service activity was held in RW 8, Putat Jaya Village. Under the direction of the Putat Jaya Health Center, 20 housewives have participated. There was face-to-face counselling, material presentations and simulations of detecting TB cases and conducting direct examinations in the community.

Preparation Stage

This includes a coordination meeting with RW 8 RT 9, Putat Jaya Village, and preparing TB screening instruments for children. In this TB screening instrument for children, 7 questions describe the signs and symptoms children should be aware of.

Implementation Stage

In this stage, simulation is implemented to conduct TB screening.

Evaluation Stage

After receiving the TB screening analysis results for children in RW 8, each parent socialized and explained the findings to the STIKES William Booth Surabaya Community Service Implementation staff and the Community Health Center staff. In this activity, the Team also answers health concerns in the surrounding community and advises whether there are youngsters who are TB suspects or at risk of developing TB based on the screening results. Parents of children who have been deemed not at risk of tuberculosis are recommended to educate the local community about tuberculosis. Parents of children at risk for getting tuberculosis are recommended to educate families who reside in the same house as the child in order to prevent the child from contracting tuberculosis. Parents are encouraged to take their child to the local health clinic if their child is suspected of having tuberculosis. The Community Health Center and the sub-district can monitor the intervention's progress by reviewing the speakers' words using a distributed questionnaire.

RESULTS AND DISCUSSION

Tabel 1

Cataegory	Frekuensi	Prosentase {%}
No Risk	111	73
Risk of exposure to TB	26	17,1
Suspected (suspected)TB	15	9,9
Total	152	100

Based on the table above shows that of the 152 children who were screened for TB, there were 17.1% of children at risk of contracting TB disease, and 9.9% of children were declared

suspected of having TB. A housewife's position is essential because mothers are the closest to their children. TB control efforts include giving health education about TB to family members or others close to them and assisting in identifying people suspected of having TB and TB patients in their region (Deswinda et al., 2019). People's knowledge and attitudes concerning tuberculosis can be influenced by health education (Sinaga et al., 2020). Housewives' health education can boost knowledge and change attitudes among TB patients to take preventive actions to avoid infecting others (Dewi et al., 2019). According to a study conducted in El Salvador, health workers' use of video media in health education increased families' willingness to undergo TB screening and contact investigation procedures to determine whether other family members were infected or not. (Wahyuni et al., 2021). This can be increased by empowering housewives in the early identification of tuberculosis in children by screening for TB case detection, particularly in remote locations with limited access to health facilities (Siahaan et al., 2020). Aside from that, health education can help to lessen the negative family stigma associated with tuberculosis (Wilson et al., 2016). The most challenging obstacle in the tuberculosis management program for children is establishing a tuberculosis diagnosis. The Indonesian Ministry of Health established National Tuberculosis Control Guidelines in 2014, one of which uses a scoring system to govern the enforcement of childhood tuberculosis (Devi et al., 2018). This scoring system employs eight characteristics to diagnose tuberculosis. Tuberculosis contact, tuberculin test, body weight or nutritional condition, fever of unknown origin, chronic cough, enlarged lymph nodes (coll, axillary, inguinal), swelling of the bone or hip joint, knee phalanges, and chest x-ray are among these factors (Hartiningsih, 2018). Each criterion will be scored based on the patient's pulmonary TB state. Further action will be performed following the results of the final score computation utilizing the pediatric tuberculosis management algorithm (Masita & Amalia, 2018) (Mardiatun et al., 2019).

The homemaker was successful in scoring 152 children in RW 8, Putat Jaya sub-district, with the findings revealing that 111 respondents were not at danger of getting childhood TB, 26 respondents were at risk of contracting childhood TB, and 15 respondents were pronounced suspicious of child TB. Aside from that, this TB screening tool in children has been shown to be effective for use by housewives in eliminating children with TB, as evidenced by the discovery of children at high risk of getting TB and children labelled TB suspects. This tool also makes it easier for parents to spot the indications and symptoms of their child's risk of acquiring tuberculosis. (Febrina & Rahmi, 2018). Active and/or massive family and community-based TB patient discovery can be assisted by cadres from posyandu, village TB posts, community leaders and religious leaders (Aulia et al., 2020). TB control program efforts can be implemented well if there is participation from the family and people around them (Wahyuni et al., 2021). Finding sufferers through early detection by family and people around them is very significant in reducing morbidity and mortality due to pulmonary TB and its spread in the community (Hasir et al., 2022). In general, it is easy for housewives to understand and apply TB screening instruments to children (Hendiani, 2014). Therefore, the community service activities that have been carried out seek to

support the improvement of healthy living behaviour and increase the knowledge of housewives (Muhtar, 2013).

CONCLUSION

Community service projects aimed at empowering and educating housewives on early detection examinations using children's tuberculosis screening. This exercise is effective in detecting tuberculosis in children and can be used in different places to detect tuberculosis in children by approaching those closest to the child and family. Early detection activities, such as TB screening in children, undoubtedly necessitate community and local government collaboration. The community should be more concerned and aware of the necessity of screening for tuberculosis in children so that any incidences of tuberculosis in children in the region can be treated and tracked by health workers. Apart from that, cooperation between the community, health cadres and community health centres is needed to increase the level of health, especially regarding TB cases in children. The government should endeavour to accommodate the needs of community health centres and health cadres by providing the logistical support required to identify TB cases in children. The government should also assist community health centers, particularly health cadres concerned with tuberculosis, and housewives by giving direction or training, as well as the required money, in their efforts to decrease tuberculosis cases in children.

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