

LITERATURE REVIEW: SCALING UP TUBERCULOSIS CASE-FINDING IN COMMUNITY SETTING

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ABSTRACT

Introduction: Total number of TB deaths are very large. The study result is effective in the control and treatment of TB disease, but there is not discussed the detection of TB in the community order. This study aims to examine the literature, articles, journals and research related to the discovery of TB cases in the order of a community wide scale. **Methods:** The method used in this research method in the journal article searches the database using key words, then after the data obtained, are reviewed research journal articles. Search results are obtained 43 articles and 11 articles that met the criteria of articles / journals were examined in this study. Later articles / journals are reviewed design, sampling, treatment, and outcome. **Results:** The results of the literature review of articles / journals expressed increasing skills in personnel non-medical and increased not only in the understanding of TB cases, but also skills in training, deployment and supervision taking sputum on the power of non-medical as well as the expansion of the area of screening in the community need to be expanded not only in patients with lung disease. **Conclusion:** The increase in non-medical personnel skills in the case-finding /detection of TB cases and TB screening area expansion can reduce the incidence of TB and increase the rate of discovery/detection of TB cases.

Key words : *tuberculosis, case detection, early detection*

INTRODUCTION

Tuberculosis (TB) is a disease caused by the *Mycobacterium tuberculosis* that is transmitted by droplets from one person to another. Lately handling of TB experienced many challenges which are in height incidence of TB-HIV, MDR-TB and MDR DM. Number of TB patients in Indonesia mecapai 5.8% of the total number of people with TB world (MOH, 2011). World Health Organization (WHO) in the Annual report on global tuberculosis (TB) Control in 2003 stated there were 22 countries classified as high-burden countries on tuberculosis (TB). Indonesia is ranked third after India and China in the accounts for tuberculosis (TB) in the world. Total number of TB deaths are very large even though TB is a disease that can be prevented and treated and its spread can be prevented with proper identification and treatment to people affected by TB.

World Health Organisation recommends a strategy to Stop TB through DOTS (Directly Observed Therapy Short Course) to control TB. This strategy is known as the direct supervision of a treatment carried out in health centers and hospitals involved.

Lots of studies on interventions to control tuberculosis and prevent the occurrence of MDR TB. The discovery of the case is an issue that is important in controlling the spread of TB. The stigma of the disease TB is still a barrier to screening TB community. Various interventions have been given to increase public knowledge about TB and decrease the stigma of TB in the community. Studies Arshad et al (2014) have analyzed the intervention and community-based TB control is the result that community-based interventions are effective in the detection and treatment of TB disease, but has not discussed the detection of TB in the community setting. WHO on global TB (2015) raised a theme "Reach, Treat and Care". Need a strategy for finding data "lost" so that they can be treated quickly and do not infect other people. This study aims to examine the literature, articles, journals and research related to scaling up TB case-finding in community setting.

METHOD

The search strategy literatures that is relevant to the topic done using EBSCOhost databases, Proquest, Springerlink, Science direct and Sagepub restricted from January 2013 to March

2016. The key words are: "screening" "tuberculosis", "case detection", "prevention". Full text articles and abstracts were reviewed to select the literatures in accordance with the priority criteria. Priority in this review is to choose research primarily aimed at discovery or early detection of TB cases in the community setting as well as provide relevant outcomes. Articles used as a sample are further identified and are presented in Table 1.

RESULT

The research reviewed in this article in accordance with criteria that are using pre post amounted to 2 studies and quasy eksperiment 3 studies, cross sectional 4studies and RCT 2 studies. The intervention used in the study were examined in this literature is by using CCW (Community Health Worker), the use of financial incentives, traditional healers and pharmacists and peer educator. The expansion of the research community in this literature review is broadening screening in postnatal care, household, patients with lung disease, as well as migrants. All the results showed a significant result in increasing numbers of TB case-finding and detection. One of the main components in the discovery of a case or the detection of TB cases in the scope of the community, namely the use of components outside community health workers such as health workers (CCW) (Uwimana et al, 2013), a peer educator from fellow sufferers of TB (Mukungo & Kaboru, 2014), traditional healers (Colvin, et al, 2014) as well as the involvement of civil society organizations. In remote areas, the number of health workers is limited and the distance of health facilities that pretty much become an obstacle in tuberculosis case so that the role of traditional healers such as shamans (Colvin, et al, 2014) as well as community health workers (Uwimana et al, 2013) is indispensable in the treatment of TB. Social culture is also one factor that affects the community about their health and health-seeking behavior, so it is necessary to consider the role of community leaders and traditional leaders in the handling of cases of TB. This is because the success of TB control one of which is a strong social support as well as the election of community leaders who are considered capable of influencing the public related to health (Rodger, 2002). Utilization of health workers in the community is not a new thing in

a variety of health center programs to reach out to the wider community. But in an effort to increase the discovery / TB case detection remains to be done awareness coordinator TB regional to provide training not only the delivery of health education about TB, but also needs to provide training, deployment and supervision taking sputum by health workers and the community designated for TB case detection (Colvin , et al, 2014) as well as the financial incentive for TB case finding (Lee, Chi, Yang, Lo, & Cheng, 2015).

Associated with the expansion of the community area which screening for tuberculosis case besides performed in endemic areas are also on the entire household (McCreesh1, et al., 2016; Harstad et al., 2014; Lorent et al., 2014), patients with pulmonary disease (Gama et al., 2015; Shah1, et al., 2015), patients with post-natal (Ndwiga et al., 2013) and migrants (Schepisi, et al., 2013). Screening migrants from TB endemic countries need to be done during the medical examination with a verbal screening to obtain the data (Schepisi, et al., 2013). Even the study of Gama et al., (2015) suggested that a history of chronic disease a person one could TB recorded in health passport so it is easy to identify individuals suffering from TB. TB screening in the entire order of the household is to consider the local context to identify areas that may be the transmission of TB so it is easier to implement appropriate interventions and can reduce the incidence of tuberculosis (McCreesh1, et al., 2016). It also can increase the discovery / TB case detection, diagnosis and shorten the delay it easier to bring patients to the health service (Lorent, Choun, Thai, & Kim, 2014). Expansion in the area of post natal is to improve discovery / detection of TB cases in pregnant women and prevent transmission to the child.

DISCUSSION

Research that has been explored in the articles in this paper indicate a need for increased skills in the power of non-medical such as health workers, traditional healers, peer educators, community leaders, cadres not only in the understanding of TB cases, but also skills in training, deployment and supervision of decision sputum in non-medical personnel. Besides financial incentives still need to be given to be more active in the discovery / detection of TB cases. The expansion of the community not only in endemic areas but also a

whole needs to be done to map the places / sites that could potentially be a TB transmission. Besides the expansion in other cases, such as in pregnant women also may be one way to reduce the incidence of TB.

TB disease mostly occurs in the community who are poor, marginalized who experience barriers to access to health services, here the role of community nurses needed to be with the health cadre and personnel non-medical designated for more intensive survey and discovery / detection of cases, especially in remote areas , In addition community nurses also need to make training to improve the skills of non-medical personnel in the discovery / detection of TB cases is not only the knowledge about the disease tuberculosis but also skills in recognizing cases of TB and collecting sputum. Apart from the context of increasing skills of non-medical personnel, nurses can also conduct a survey of TB disease in other cases such as post natal services, also on migrants from TB endemic countries.

CONCLUSIONS

The results of the literature review on the research we have done in the 11 journals of TB case-finding in the community need to be awareness coordinator TB regional to provide training not only the delivery of health education about TB, but also needs to provide training, deployment and supervision taking sputum by health workers and the community designated for TB case detection as well as the financial incentive for the discovery of a case. And also need to expand the area of discovery / TB case not only in patients with pulmonary disorders but also migrants, post natal area and also the entire household for mapping a risk of transmission of TB. Nurses need to do passive and active case finding in community (especially in vulnerable areas).

There are some suggestion from this review. The first is need to undertake training of TB screening and sputum collection to non-medical personnel and evaluated for effectiveness and efficiency. The second is need to do screening total households and made mapping areas that are at high risk for experiencing TB transmission. The last is need to do TB screening at airports, especially on migrants coming from TB endemic areas.

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