Knowledge Level of Tuberculosis Treatment Supporters

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Abstract

Objective: Tuberculosis has been the major burden particularly in the low and middle countries. Indonesia as the second highest TB prevalence in the globe needed to take immediate actions to reduce the cases. TB treatment support is one of the most recommended strategies to help patients to complete their treatment and to prevent them from treatment interruption. This study aimed to identify the knowledge level of tuberculosis treatment supporters.

Methods: Our study was cross sectional descriptive study, involving a purposive sample of 49 respondents. The inclusion criteria were individuals, either females or males, during productive age, have been becoming the TB treatment supporters and agreed to participate in the study.

Results: The results revealed that supporter’s knowledge was the highest on the transmission mode of tuberculosis (93.8%) and the lowest on TB examination (68.6%). In addition, they comprehend most about their role to provide conseling to their patients and famiy (98.6%) and comprehend least about their role to identify the side effects of TB drugs (53.6%)

Conclusion: The knowledge of tuberculosis treatment supporters varied on different topics. We suggested supervision, regular trainings and monitoring of the TB treatment supporters for the success of the patient treatment.

Keywords: knowledge, treatment supporters, tuberculosis.

Introduction

Tuberculosis has been one of the leading causes of death worldwide. Moreover, it caused more deaths than HIV and Malaria (1). Despite its morbidity and mortality rates are apt to decline globally, the TB epidemic is relatively larger than previously predicted. As reported by the World Health Organization (WHO), the new TB cases in 2015 were approximately 10.4 million. Moreover, the number of TB deaths reached 1.8 million, including 0.4 million of TB death resulting from HIV (1).

TB incidence and mortality rates were higher in the low and middle income countries. WHO reported that 87 % of new TB cases were found in 30 high burden countries; with 61 of cases in Asia and 26 % of cases in Africa (2).

In 2014, World Health Organization passed a resolution of the new post-2015 Global TB strategy which components include patient support. This treatment support could help patients to complete their treatment and prevent them from treatment interruption. It also could prevent the TB transmission to the family and community. Moreover, it could help alleviate stigmatization and discrimination (3, 4).

A study conducted in Pakistan showed that the treatment success rate in patients supervised with family members reached approximately 73.5%. Nevertheless, the success rates were higher in patients supervised by lady health workers (93.15%), and community health workers (89.1%). This happened due to the higher TB related knowledge level compared to that of the family members (5).

Family members, however, could be better helping and supporting the TB treatment for the patients while patients return home. According to WHO, individuals who are accepted and accessible to the patients as well as accountable to the health system would fit as the treatment supporters. Furthermore, the expected results of TB treatment observation and supports could be achieved if family members could play this role.
through attentive programs and vigorous supervision and monitoring (6).

In order to optimize the roles of family members as the TB treatment supporters, the enhancement of their knowledge level would become the key. Thus, a study to identify the knowledge level of TB treatment supporters is of importance in order to develop programs for advancing their knowledge and roles for patient’s treatment.

Method

The design of this study was cross-sectional study, aiming to explore the knowledge level of the TB treatment supporters. A purposive sample of 49 respondents participated in the study with the following inclusion criteria: (1) male or female, (2) during a productive age period, (3) has been becoming a TB treatment supporter, (2) agreed to be involved in the study. Data were analysed using the frequencies and cross tabulations descriptive analysis.

Researchers adhered to the ethical standards, following the following principles of research ethics: respect for human dignity; respect for free and informed consent; respect for privacy and confidentiality; respect of justice and inclusiveness; and balancing harms and benefits (7).

Results

The results of the study showed that females accounted for the majority of the respondents (45; 91.8%). Over half of the respondents was at the middle adulthood period (28; 57.1%), followed with early adulthood (16; 32.7%), and late adulthood (5; 10.2%). Respondents were either immediate family (37; 75.5%) or non-family members of the patient (12; 24.5%).

More than three quarter of the respondents attended secondary education (38; 75.5%), whereas the remaining attended higher (9; 18.4%) and elementary education (2; 4.1%). Over half of the respondents were housewives (34; 69.4%). Meanwhile, some other respondents were civil servants (8; 16.3%), private employees (5; 10.2%), and unemployed (2; 4.1%).

Most respondents had trainings concerning TB treatment supports (47; 95.7%). Moreover, they had a good level of knowledge (33; 63.7%).

Details of the TB treatment supporters knowledge about the disease, and their roles in TB treatment are presented on the table 1.

<table>
<thead>
<tr>
<th>Components</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuberculosis</td>
<td></td>
</tr>
<tr>
<td>Definition, etiology, and TB’s characteristics</td>
<td>85.0</td>
</tr>
<tr>
<td>Signs and symptoms of TB</td>
<td>87.6</td>
</tr>
<tr>
<td>TB examination</td>
<td>68.6</td>
</tr>
<tr>
<td>Transmission mode of TB</td>
<td>93.8</td>
</tr>
<tr>
<td>Roles of TB treatment supporters</td>
<td></td>
</tr>
<tr>
<td>Ensuring that patient swallows the drugs</td>
<td>73.0</td>
</tr>
<tr>
<td>Identifying side effects of the drugs</td>
<td>53.6</td>
</tr>
<tr>
<td>Giving moral support to the patient</td>
<td>87.6</td>
</tr>
<tr>
<td>Reminding patient to re-check the sputum</td>
<td>67.0</td>
</tr>
<tr>
<td>Detecting TB’s suspect</td>
<td>94.0</td>
</tr>
<tr>
<td>Giving counseling to patient and the family</td>
<td>98.6</td>
</tr>
</tbody>
</table>

Discussion

Our study showed that most respondents were females. This finding was consistent with a study conducted in Bandung, West Java Indonesia showing that more TB supporters were females (84.4%) (8). Nonetheless, no studies have showed the differences between genders on the successful of the treatment program.

Our study also indicated that the TB treatment supporters were at the middle adulthood period. A qualitative study in South Africa revealed that middle aged-supporters were preferable because they are more experienced. The study indicated that younger supporters were more motivated, however, elder patients were culturally uncomfortable to be cared by an adolescent or a young adult (9).

Over three quarter of the supporters were the family of the patients. This result was consistent with a study conducted in Thailand showing that over half (59%) of the supporters were the family. Nonetheless, the study showed that family observation yielded lower success rate (89%) than observation by health workers (93%). The lower success rate among family observation might be caused by inconsistent practices in which patients were merely given medicines and asked to have their spouse supervise them to administer the pills (6).

Our study also revealed that most supporters had trainings concerning TB treatment supports (95.7%) and more than three quarter attended secondary education (75.5%). Educational background could directly influence the ability of treatment supporters in acquiring knowledge about tuberculosis. Supporters who attended secondary education were able to make logical reasoning and analysis. Trainings would, furthermore, improve their knowledge and understanding about tuberculosis. One study
mentioned that trainings were perceived as an incentives for becoming a supporter. The supporters viewed trainings as an invaluable thing that led them to personal growth (9).

Our study showed that over half of the supporters were housewives (69.4%). Their flexibility in time could gave them opportunities to be more focus on and spend more time to the patient. Nonetheless, no studies explored the association of supporters’ activities and the TB success rates.

Our study interestingly found that the supporters were more knowledgeable about the transmission mode of tuberculosis but were the least in TB examination. This might happen due to inadequate information that supporters received regarding the TB examination. According to A Guide for tuberculosis treatment supporters published by WHO, treatment supporters needed to understand the following aspects of tuberculosis: 1) definition and etiology, 2) symptoms, 3) mode of transmission, 4) treatment, 5) prevention of transmission 6) roles and tasks of treatment supporters, 7) ways to use TB treatment card, 8) was to administer the drugs and 9) side effects of TB drugs (4). Of the above aspects, no information related to TB examination was listed, and therefore, they had lower understanding on that particular aspect.

Last, our study indicated that the proportion of supporters’ knowledge on providing consultation with the patient and family was the highest, whereas the proportion of their knowledge on identifying the side effects of the treatment was the lowest. As detailed on A Guide for tuberculosis treatment supporters, the key role of supporters included to ensure that medication is taken regulary as scheduled for the full duration of the treatment and supporting the patient and family by listening and encouraging them (4). However, supporters also need to recognise the side effects of TB drugs so that they can take immediate actions required. When the side effects are harmful for the patient, the supporter need to stop the treatment and send the patient to the nearest healthcare facility.

The low proportion of supporter knowledge about the side effects of TB drugs reflecting the need of supervision and regular trainings for the supporters. A study in Senegal reported that professional supervision, training and monitoring of the supporter at every level of the study had increased the success cure rate by 12% (6). Thus, supervision, trainings and monitoring are the essential part of the TB treatment supports.

Conclusion

Our study aiming to identify the knowledge level of TB treatment supporters demonstrated that most supporters were females (91.8%), in the middle age period (57.1%), attended secondary education (75.5%), were housewives (69.4%) and were the immediate family of the patient (75.5%)

The results, furthermore, showed that most supporters had trainings regarding tuberculosis treatment supports (95.7%). In addition, they comprehend most on the transmission mode of tuberculosis (93.8%) and least on tuberculosis examination (68.6%). They understood most about their role to give counseling to the patient and family (98.6), but they understood least about their role in identifying the side effects of TB drugs (53.6%). Accordingly, the TB treatment supporters knowledge varied on different topics. We recommended supervision, regular trainings and monitoring of the TB treatment supporters for the success of the patient treatment.

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References


