The Relationship between Trust and Family Empowerment to Prevent Transmission of Pulmonary Tuberculosis

Nirmala Kusumaningrum Sunaryo¹, Joni Haryanto ², Florentina Sustini³

¹,² Faculty of Nursing, Universitas Erlangga, Surabaya, Indonesia
³ Faculty of Medicine, Universitas Erlangga, Surabaya, Indonesia

Abstract. Tuberculosis (TB) is infectious diseases directly caused by TB bacteria (Mycobacterium tuberculosis). Tuberculosis has been around for thousands of years and remains a significant issue of global health issues. This study aimed to analyze the relationship between trust and family empowerment in preventing pulmonary TB transmission. A cross-sectional design was applied in this study. The results showed that there was a relationship between trust and family empowerment to avoid the transmission of pulmonary TB (p-value = 0.028). Health workers needed to concern about this transmission of diseases and educated of family members on the transmission of pulmonary TB.

Keyword: trust, family, empowerment, tuberculosis, transmission

PENDAHULUAN

Tuberculosis (TB) is a directly infectious disease caused by TB germs (Mycobacterium tuberculosis). Tuberculosis has been around for thousands of years and remains a significant problem with global health problems. This causes morbidity in 10 million people each year and is one of the top ten causes of death worldwide (1). The government has provided regulations to deal with TB issues with the Indonesia program.

The number of TB globally in 2016 was 10.4 million cases, which is equivalent to 120 cases per 100,000 population (2). Indonesia ranks second-highest in the world, with 420,994 new cases in 2017 (3). East Java is the province with the second largest TB case in Indonesia, with several instances of 48,323 in 2017 (3). Cities in East Java, with the highest number of TB cases, were Surabaya City with 2,350 cases in 2016 (4).

The Sustainable Development Goals (SDGs) are sustainable development for 2030 with one of the goals of ending the global tuberculosis (TB) epidemic that was approved by the World Health Organization (WHO) in 2014 with the hope of TB deaths falling by 90% and TB incidence falling up to 80% in 2030 (5). To achieve this goal, Indonesia implemented a national program known as a Program Indonesia Sehat dengan Pendekatan Keluarga (PIS-
PK) to improve the quality of human life. PIS-PK is the Health Development program, which is then planned to be achieved through the Ministry of Health's Strategic Plan for 2015-2019, which is stipulated through the Decree of the Minister of Health R.I. Number HK.02.02 / Menkes / 52/2015 includes reducing the incidence of pulmonary TB and reducing the rate of transmission of pulmonary TB (6).

The family is the smallest unit of society consisting of the head of the family and other family members who gather and live in a household because of blood ties and marital ties or an adoption. Between families, one another is interdependent and interacts. If one or several family members have health problems, it will affect other family members and other families around them (7). Efforts to handle pulmonary TB disease, the family, has a vital role in the process of healing diseases, where family members can provide information about the condition, provide moral support, and prevent transmission of the disease.

Based on the TB prevalence survey results on knowledge, attitudes, and behavior of respondents in 2004, stated that family members caring for TB patients were found to be 96% and family members who covered the presence of TB patients in the family at home by 13%. Although most (76%) families knew about TB and the majority (85%) knew that TB could be cured, but only a small percentage (26%) could name two symptoms and the main signs of TB disease. As many as 51% of families can understand how TB is transmitted, and only a small proportion (19%) of families are aware of the free drugs available for TB sufferers (8).

This phenomenon illustrates that there are still many people with pulmonary TB found in the community. The possibility of transmission has occurred at the family level. Whereas, since 2010, the government has been implementing the DOTS strategy to monitor drugs drinking among patients. This activity not only performed by health workers but also carried out by family members at home.

Family empowerment in preventing transmission of pulmonary TB requires collaborative activities between family members who care for pulmonary TB patients, pulmonary TB patients, cadres, and health workers. The key to the success of a collaboration is trust, with the trust of people able to work well together, and the principle that there is a willingness between them to place common interests above personal interests. Trust is an energy that can make community groups or organizations survive. Trust values and responsiveness among family members will lead to cooperation and solidarity (9). Based on those problems, this study analyzes the relationship between trust and family empowerment in the prevention of pulmonary tuberculosis in the city of Surabaya.

METODE

This study uses a quantitative method with a cross-sectional design. This research was conducted in the work area of Perak Timur Community Health Center, Surabaya City, on May 15 to 31 the year 2019. The sampling technique in this study used sampling consecration to select samples. One hundred twenty-six samples were applied in this study. We collected the information directly from all samples by using questionnaires. The Chi-Square statistic was used to analyze the data with a significance level of $\alpha <0.05$

RESULTS

Frequency of trust

Table 1 showed the trust of respondents in the treatment of pulmonary tuberculosis. The findings showed that the majority of respondents were a high level of trust in tuberculosis treatment. Details were summarized in table 1.
Table 1: Frequency of trust in tuberculosis treatment

<table>
<thead>
<tr>
<th>Trust</th>
<th>Frequency</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low level</td>
<td>5</td>
<td>4.0</td>
</tr>
<tr>
<td>High level</td>
<td>121</td>
<td>96.0</td>
</tr>
<tr>
<td>Total</td>
<td>126</td>
<td>100</td>
</tr>
</tbody>
</table>

**Family empowerment**

Table 2 showed the level of family empowerment to prevent pulmonary TB. The findings described that more than half of respondents were enough of family empowerment (52.4%), while only 9.5% of them were well family empowerment. Details were summarized in table 2.

Table 2: Frequency of Family empowerment

<table>
<thead>
<tr>
<th>Family empowerment</th>
<th>Frequency</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well</td>
<td>12</td>
<td>9.5</td>
</tr>
<tr>
<td>Enough</td>
<td>66</td>
<td>52.4</td>
</tr>
<tr>
<td>Less</td>
<td>48</td>
<td>38.1</td>
</tr>
<tr>
<td>Total</td>
<td>126</td>
<td>100</td>
</tr>
</tbody>
</table>

**The relationship between trust and family empowerment to prevent pulmonary TB transmission**

Table 3 showed the relationship between trust and family empowerment to prevent pulmonary TB transmission. The findings described there is a positive correlation between trust and family empowerment to avoid pulmonary TB transmission with a p-value <0.05. Details were summarized in table 3.

Table 3: The relationship between trust and family empowerment to prevent pulmonary TB transmission

<table>
<thead>
<tr>
<th>Trust</th>
<th>Family empowerment</th>
<th>Total</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Well</td>
<td>Enough</td>
<td>Less</td>
</tr>
<tr>
<td>High</td>
<td>10</td>
<td>63</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>8.3%</td>
<td>52.0%</td>
<td>39.7%</td>
</tr>
<tr>
<td>Low</td>
<td>2</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>40%</td>
<td>60%</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>66</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>9.5%</td>
<td>52.4%</td>
<td>38.1%</td>
</tr>
</tbody>
</table>

**DISCUSSION**

One key to the success of family empowerment is trust; the trust people can cooperate well, and created the principle that their willingness among them to place the common interest above personal interests. This is consistent with the research of Cahyono (2015), which says that trust is an energy that can create groups of people or organizations persist. The values of trust and responsiveness among family members will lead to cooperation and solidarity (9). Cooperation in question is the cooperation in the prevention of pulmonary TB transmission.

Fukuyama (2002) argues that trust is hope that emerges in a community that behaves in a norm, honest, and cooperative based on norms that are shared for the benefit of other members of the population (10). Fukuyama (2001) defines social capital (including trust) as a set of informal norms or values that are shared by members of a group that enables cooperation (11).
Facilitate trust established their mutual relations and mutually beneficial cooperation (mutual benefit), thereby encouraging the emergence of the reciprocal relationship of the parties concerned. Without mutual trust that is evenly distributed between one person and another, the Family itself will disintegrative and trust it is "one of the most important synthetic strength in the family." Further said that trust is the basis for the actions of individuals.

The focus of empowerment makes individuals smart to become empowered and have the power to do the activities that have a positive impact, including responsibility for the health status of family members. Empowerment as a process in enabling individuals through the involvement and engagement between family members in the prevention of pulmonary TB transmission. The involvement and participation are needed mutual trust.

Trust is indispensable to maintain the continuity of cooperation so that livelihoods can be sustained in the long term (12). Siregar (2011) said that Trust increases a positive attitude individual. This attitude will encourage the confidence of people in making decisions. A positive attitude will transmit positive energy psychologically. In the future, the same, other people will also believe the same for these social actions (13).

Knowledge is a significant factor in the formation of a person's actions (over behavior). Family knowledge about the prevention of pulmonary tuberculosis is a vital factor for the establishment of work to prevent and cope with pulmonary tuberculosis disease because if someone does not know about an object, then the purpose would not interest him (14). The head of the families has an essential role in the prevention of disease among family members, particularly concerning their education and knowledge of disease (15). Family knowledge and attitudes about the dangers of pulmonary tuberculosis have a role in preventing disease. Sufficient knowledge and attitudes will enable a person to make prevention and protection against disease (16).

Trust had the most significant impact on good health in 22 studies, with every one-unit increase in trust resulting in the odds of having good health increasing by 32% (17). Lack of general trust in healthcare providers can lead to ignoring advice regarding diet, exercise, and smoking, for example (17), so that for preventing TB. The imitation of this research is Data collection uses questionnaires that tend to be subjective so that the honesty of the respondents determines the correctness of the data provided.

CONCLUSION

Based on these results, the researchers found associated with family empowerment trust in preventing pulmonary TB transmission. So families should increase family support in preventing pulmonary TB transmission.

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