Community Perceptions with TB Friendly Readiness during the Covid-19 Period: Lessons Learned from Depok, West Java, Indonesia

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ABSTRACT

Tuberculosis (TB) friendly area will reduce society's stigmatization and increase adherence to treatment for TB patients. The encouragement of the surrounding environment can motivate patients to recover, and it can realize the goals of the SDGs and the Indonesian government to eliminate TB. The government’s commitment is needed to build governance in developing TB-friendly areas. The study aimed to Know the community’s perception of TB-friendly readiness during the COVID-19 period. The method employed was explanatory research with quantitative method; An online survey was conducted on 230 respondents from the general public from various provinces and 40 TB suffers in the city of Depok to describe the frequency distribution of respondents’ perceptions of knowledge, attitudes, behavior, prevention, and development of TB-friendly villages. The results revealed that Overall (100%) of the respondents had good knowledge about TB, but attitudes (50.9%) and behavior (41.3%) towards TB prevention were still poor. Observations showed that the occupancy of TB patients in densely populated areas still lacked ventilation and lighting. In conclusion, Depok City is not ready for human resources and organizational culture in developing TB-friendly sites. The synergy of communication, coordination, and community involvement is an essential pillar in developing TB-friendly villages. Improved communication, information, and education (IEC) for changes in people's positive attitudes and behavior towards TB prevention.

KEYWORDS

Tuberculosis, prevention, elimination, friendly TBC

1. Introduction

Tuberculosis is an infectious disease that contributes to the number one death globally and has become a global emergency. The situation is exacerbated by the fact that there are still undetected patients, and TB treatment is not running, impacting drug resistance. ¹ The incidence rate of TB in Southeast Asia is 220 per 100,000 population with an incidence rate of drug-resistant TB of 9.2 per 100,000 population and TB treatment coverage of around 73%. The World Health Organization’s 2030 target is a 90% decrease in the number of deaths due to TB, a reduction in the incidence of TB cases by 80% (new cases per 100,000 population per year), a 35% decrease in the number of deaths due to TB, and a 20% decrease in the incidence of TB cases. In 2020 (Global TB Report, 2020).²

In 2020, TB sufferers in Indonesia reached 8.5% of the world’s TB patients and positioned Indonesia in the second-highest rank of TB cases after India. It is estimated that there are one in 3 TB cases that have not been touched by the TB program, which is a factor in the difficulty of eliminating TB. Other factors such as poverty, weak political commitment, especially funding, inadequate TB services in health facilities, poor recording and reporting, non-standardized drugs, stigmatization, and discrimination against TB sufferers that still occur in the community are new findings obstacles to eliminating TB.³

West Java has the highest number of case notifications compared to other provinces, namely 379/100,000 population. This figure is exacerbated by a decrease in treatment success from 81.15% (2018) to 77.6% (2019), away from the national tuberculosis success

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achievement of 90%. Considering the number of case notifications and the success of tuberculosis treatment are indicators of TB control, this should be the government’s attention.4

Depok City is 1 of 27 Cities/Regencies in the West Java region that experienced an increase in TB cases to 171/100,000 from 161/100,000 population in 2018. In 2020, the Depok City Health Service stated that TB cases totaled 2746. This means that the number of TB cases decreased compared to 2019, which amounted to 4965 topics towards the end of the year. This finding follows the results of the 2020 report regarding the discovery of suspected TB cases following the Minimum Service Standards (SPM) of only 18.03% and the discovery of all TB cases only 42.09%, very far from the achievement of the MSS indicator, which is 100%. Data accompany the report results on the success of TB treatment in Depok City from 2020 to November, which only reached 82.10%, lower than the indicator of treatment success, which was 90%.

The success of treatment is influenced by adherence to taking medication. TB patients will obey when they know well, following the theory that knowledge affects behavior.5 Good knowledge about TB needs to be owned by the community considering the stigma on TB sufferers occurs in an environment that does not understand how the transmission process, causes, and prevention of TB is. This stigmatization and discrimination became more complex during the Covid-19 pandemic, and not a few people thought that being exposed to TB would be exposed to Covid-19. A study of 190 respondents stated there were 55.8% or a total of 106 people who have the stigma of TB.6

Regarding stigmatization, three things often occur discrimination, prejudice, and stereotypes. When stigma is formed and spread in the social environment, it will affect the health behavior of TB sufferers. Therefore, the community must have the correct information about TB and an environment and culture that encourages positive knowledge, attitudes, and behaviors of TB sufferers. Stigma arises from the lack of understanding from a group of people who spread to the environment, so it is essential to understand and deal with the stigma with the contribution of stakeholders such as TB program implementers or policymakers, even related stakeholders.7 The results of the study in Ghana state that a positive perspective built by stakeholders will become an opportunity and reduce the threats that arise among TB patients so that they can create a policy and improve TB programs.8

Therefore, this study aims to analyze public perceptions of the readiness of the city of Depok in developing TB-friendly village governance from various aspects.

3. Methodology
The method used is a quantitative research method that uses a descriptive quantitative analysis approach. The quantitative process was carried out by using an online survey using Google forms to measure knowledge, attitudes, and behavior, with a total of 52 items (24+28) statements in the questionnaire for 230 respondents from the general public spread throughout Indonesia and 40 TB patients in the city of Depok. Quantitative analysis was carried out to describe all respondents’ frequency distribution of answers.

4. Results and Discussion
4.1 Results

4.1.1 Quantitative Data Analysis
The results of the online questionnaire research of the general public obtained 230 respondents Most of them were from West Java (40%), age the highest was in the age range of 25-35 (44.75%), the most recent education was bachelor degree (37.4%). Most of the occupations were private employees (33%).

A. Distribution of Characteristics of Respondents (Society)

| Variable          | N   | %   |
|-------------------|-----|-----|
| **Age**           |     |     |
| 14-24             | 36  | 15.7|
| 25-35             | 103 | 44.7|
| 36-46             | 57  | 24.8|
| 47-57             | 31  | 13.5|
| 58-69             | 3   | 1.3 |
| **TOTAL**         | 230 | 100 |
| **Last Education**|     |     |
| SMP               | 2   | 0.9 |
| SMA/SMK           | 34  | 14.8|
| D1                | 2   | 0.9 |
The highest proportion of age 25-35 is 44.7%, the most increased education is bachelor degree 37.4% most domicile in West Java 40%. The highest proportion of work as private employees is 76 people 33%, and respondents do not work two people (0.9%).

4.2 Description of Knowledge, Attitudes, and Behavior of Respondents (Society)

Table 1.2 Description of Knowledge, Attitudes, and Behavior of Respondents

| Variable          | Amount (n) | Percentage (%) |
|-------------------|------------|----------------|
| Knowledge         |            |                |
| Lack of           | 0          | 0              |
| Enough            | 0          | 0              |
| Good              | 230        | 100            |
| TOTAL             | 230        | 100            |
| Attitude          |            |                |
| Good              | 113        | 49.1           |
| TOTAL             | 230        | 100            |
Well behaved 58.7%), there are 41.3% of people who misbehave. 100% of the people have good knowledge about TB. 49.1% good attitudes and 117 bad attitudes (50.9%).

### 4.3 Distribution of Respondents Characteristics (TB Patients)

| Variable                        | Amount (n) | %   |
|---------------------------------|------------|-----|
| **Behavior**                    |            |     |
| Good                            | 113        | 58.7|
| Bad                             | 117        | 41.3|
| **TOTAL**                       | 230        | 100 |

| Variable                        | Amount (n) | %   |
|---------------------------------|------------|-----|
| **Age**                         |            |     |
| 14-24                           | 9          | 22.5|
| 25-35                           | 12         | 30  |
| 36-46                           | 8          | 20  |
| 47-57                           | 5          | 12.5|
| 58-69                           | 6          | 15  |
| **TOTAL**                       | 40         | 100 |

| Variable                        | Amount (n) | %   |
|---------------------------------|------------|-----|
| **Last Education**              |            |     |
| Elementary School               | 2          | 5   |
| Junior                          | 4          | 10  |
| SMA / SMK                       | 29         | 72.5|
| D3                              | 2          | 5   |
| S1                              | 3          | 7.5 |
| **TOTAL**                       | 40         | 100 |

| Variable                        | Amount (n) | %   |
|---------------------------------|------------|-----|
| **Employment**                  |            |     |
| Not / Not Working               | 5          | 12.5|
| IRT                             | 15         | 37.5|
| Student / Student               | 3          | 7.5 |
| Teacher / Lecturer              | 1          | 2.5 |
| Private Employees               | 11         | 27.5|
| Freelance                       | 1          | 2.5 |
| Labor                           | 4          | 10  |
| **TOTAL**                       | 40         | 100 |

| Variable                        | Amount (n) | %   |
|---------------------------------|------------|-----|
| **Treatment**                   |            |     |
| (1)                              | 3          | 7.5 |
| Two (2)                         | 8          | 20  |
| Three (3)                       | 7          | 17.5|
| Four (4)                        | 3          | 7.5 |
| Five (5)                        | 5          | 12.5|
| Six (6)                         | 7          | 17.5|
| > 6                             | 7          | 17.5|
| **TOTAL**                       | 40         | 100 |

| Variable                        | Amount (n) | %   |
|---------------------------------|------------|-----|
| **TB Experience Previous**      |            |     |
| Yes                             | 19         | 47.5|
| No                              | 21         | 52.5|
| **TOTAL**                       | 40         | 100 |
30% of respondents are aged 25-35 years, the highest level of education is SMA SMK 72%. Most occupations are housewives, 37.5%. Most of the 2nd TB treatment respondents were 20%, as many as 47.5% respondents had a previous TB history, and 52% had been exposed to TB.

4.4 Description of Knowledge, Attitudes, and Behavior of TB Respondents

| Variable   | Amount (n) | Percentage (%) |
|------------|------------|----------------|
| Knowledge  |            |                |
| Lack of    | 0          | 0              |
| Enough     | 0          | 0              |
| Good       | 40         | 100            |
| TOTAL      | 40         | 100            |
| Attitude   |            |                |
| Good       | 20         | 50             |
| Bad        | 20         | 50             |
| TOTAL      | 40         | 100            |
| Behavior   |            |                |
| Good       | 20         | 50             |
| Bad        | 20         | 50             |
| TOTAL      | 40         | 100            |

100% of TB patients have good knowledge. 50% of TB sufferers have good attitudes, and 50% have bad attitudes. There are still 50% of TB patients who are misbehaving.

TB patients most aged 14-24 years is 33.3%, with an education past high school / vocational 79.1%, worked as a housewife (37.5%), in the treatment in the 2nd and 6th (20.8%), and 62.5% of TB patients had had TB before. (Table 4). TB patient 100% good knowledge, attitude both 45.8% and poor 54.2% against tuberculosis, as well as well-behaved 54.2% and poor 45.8% of the cases of tuberculosis (Table 5)

5. Discussions
The problem of TB has become a global problem and a complex one that can not be addressed by the organization independent (Emerson and Nabatchi, 2015). It takes the readiness of various arrangements, both individuals and groups, as an organization (Saragih, 2015). One of the factors that influence organizational readiness is government commitment. This study shows that Depok city stakeholders have not synergized to eradicate TB through policies or regulations to help TB sufferers. Therefore, needed, collaboration governance is primarily during the Covid-19 pandemic. Collaboration governance can be carried out in the development and decision-making with concepts at the organizational level and academics, entrepreneurs, media, and communities (Ansell and Gash, 2007). Utilization of this model is expected to increase a sense of togetherness and become a form of intelligent use of power as the implementation of culture and local wisdom through skills, systems, and structures to achieve the target, namely community welfare (Baihaki et al., 2020).
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The development of TB-friendly areas requires the readiness of infrastructure aspects, facilities, and infrastructure to prevent and treat TB. In this study, the informant stated that the infrastructure aspect of the TB program at the health facility level was still hampered. The crowded environment and housing for TB sufferers and lack of lighting make it difficult for TB patients to recover. Infrastructure is not a fixed or closed but dynamic system that develops according to the policies or needs of an organization. As the case at the health Center Bara Baraya, difficulties in accessing homes patients' are low levels of education, awareness of treatment, and lack of family care for the TB treatment process cause complex problems in the treatment process for TB patients. The government is thinking of alternatives to reach out with MoRoTi (Motor Ramah Orang dengan Tuberkulosis) which aims to mobilize preventive and promotive activities across sectors. Dewi's research, 2020 confirms the importance of this commitment related to infrastructure. Because molecular rapid test kits (TCM) are still limited in the city of Depok, to overcome the problem of drug-resistant TB through the use and access of TCM tools, it is necessary to improve the specimen delivery system, appropriate records, and reports. Policies and establish a referral network for utilization (Dewi, 2018).

This section is a comparative or descriptive analysis based on the study results, previous literature, etc. The results should be offered in a logical sequence, given the most important findings first and addressing the stated objectives. The author should deal only with new or essential aspects of the results obtained. It should address the relevance of the findings in the context of existing literature or contemporary practice.

5.1 Limitations
During the pandemic, the city of Depok is often included in the red zone area, so the data collection process is carried out online for both quantitative and qualitative. It made observations, but very limited, to see how the TB service process and the environmental situation of TB patients were.

6. Conclusion
Public perception is characterized by the presence of patients who misbehave, of course, there is still a need for readiness in aspects of human resources, communication, information, and education (KIE). To change attitudes and positive behavior of the community towards TB prevention, but still not ready for inter-agency coordination and communication which causes various efforts to eliminate TB to be not optimal. Therefore, the determination of regional leadership policies as a legal basis, the role of academics in carrying out the tri dharma of higher education, community/cadres in providing information media about TB, as well as advocacy by looking at the presence of the public in conveying information related to TB problems in collaboration with the private sector in providing advertisements. TB services aim to build good governance in implementing TB-friendly villages in Depok City.

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