



Pa'buritta Program as a TB Management Program Associated with Local Community Wisdom : A Qualitative Study

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ABSTRACT

Pa'buritta is an innovation program formed by Tuberculosis program managers in the working area of the Bululoe Health Center. This program implements TB control strategies actively both in case detection and in the treatment process by applying active case finding strategies. Primarily aimed to evaluate the pa'buritta program based on the theory of the health care system. This research is of a qualitative study using a content analysis approach. Data collection was carried out through in-depth interviews and observation. Program evaluation is based on system theory consisting of three main variables. The first variable is "input" with four sub-variables namely human resources, operational budget, facilities and infrastructure, and implementation time. The second variable is "process" with three sub-variables namely planning, implementation, and monitoring or evaluation. The third variable is "output" with two sub-variables, namely program success and patient satisfaction. The Pa'buritta program adopts an innovative concept and is expected to be able to answer TB control problems. However, there are still some deficiencies in this program, especially in terms of the availability of cadres and the operational budget. This research provides further understanding that the success of TB control does not only depend on the health sector, but more broadly requires multisectoral and multidisciplinary collaboration.

Keywords:

Tuberculosis
Program evaluation
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1. INTRODUCTION

Tuberculosis is an infectious disease caused by Mycobacterium tuberculosis and is currently still deemed a public health problem both in Indonesia and in the international world, hence the fact that it becomes one of the goals of sustainable health development (SDGs) [1]. Indonesia is ranked second as the country with the highest number of TB sufferers in the world after India. Globally, it is estimated that 10 million people suffered from TB in 2019. Despite the decrease in new TB cases, it is not fast enough to achieve the target of the 2020 END TB Strategy, which is to reduce TB cases by 20% between 2015-2020. In 2015-2019, the cumulative reduction in TB cases was recorded at a mere 9% [2].

The global commitment to ending tuberculosis is set forth in the End TB Strategy which targets a reduction in deaths from tuberculosis by 90% in 2030 compared to 2015, a reduction in the incidence of tuberculosis by 80% in 2035 compared to 2015, and zero households experiencing catastrophic costs due to tuberculosis in 2030 (WHO, 2019) [2]. The Ministry of Health is making various efforts to increase the number of discoveries and coverage of tuberculosis treatment, which includes conducting active case finding especially in at-risk groups, maximizing contact investigation activities and assisting the medication process until it is completely taken and the patient is cured by optimizing tuberculosis communication, information and education to the public [3].

In contrast to PCF (Passive Case Finding), ACF (Active Case Finding) is able to increase the number of active case finding evenly, help diagnose new cases earlier and reach high notification rates that are not detected among women [4]. This ACF strategy was later adopted by the Pa'buritta program as a TB control

program that focuses on a health service approach in the community, which was then carried out through contact investigations at the patients' home and assistance with taking medication by health workers.

The term "Pa'buritta", which means honourably inviting someone to attend an activity, is the local language of the Makassar tribe, South Sulawesi. This term was chosen as a form of local wisdom preservation and is expected to assist in reaching all aspects of society in the implementation of the program. The Pa'buritta program implements an active and massive TB case management strategy through activities carried out outside the health facility through outreach efforts and actions to bring services closer that are actively carried out by health workers or pa'buritta cadres. This program carries the concept of social trust by recruiting cadres from indigenous peoples who come from TB survivors or their families to reduce stigma and rejection [5]. Access to TB services, treatment delays, poor treatment outcomes, and the risk of TB transmission throughout families and communities are all adversely impacted by TB stigma [6][7][8]. This program has succeeded in reducing medication dropout cases but has not increased the coverage of TB suspects who receive standardized services. Consequently, an evaluation is necessary as an effort to measure the success of the program's implementation and to determine the causes and factors that influence it [9].

The systems approach views the organization as a whole, consisting of interrelated parts. In simple terms, this means that everything is interconnected and interdependent, and the interactions between these various elements will form a comprehensive and unified whole. If decomposed into a simpler form, parts or system elements can be grouped into several parts, namely input, process and output [10]. Therefore, this study aims to evaluate the Pa'buritta Program based on the theory of the health service system by looking at the input, process and output of the program before identifying the problems in the program.

2. METHOD

This qualitative study aims to evaluate the pa'buritta program as a TB control program at the Bululoe Health Center, South Sulawesi, Indonesia based on the theory of the health service system (input, process, output) with the content analysis method. Data collection was carried out through in-depth interviews, observation and document review. In-depth interviews were conducted to obtain more accurate information about the implementation of the pa'buritta program. The questions given in the interview included "How do you think the availability of human resources in implementing this program?", "What form of monitoring is carried out?", and "How are the benefits felt after the program?". The interview lasted 15 to 30 minutes. The location and schedule of the interview were determined by the informant.

The informants in this study were 22 people consisting of 5 health workers who served at the Bululoe Health Center and the Health Office, 2 TB cadres and 15 people from the Pa'buritta program target group. The health workers are the Head of the Bululoe Health Center, the Head of Bululoe Health Center Services, the Person in Charge of the Pa'buritta Program, the Bululoe Health Center Laboratory Assistant, and the TB Wasor of the Jeneponto District Health Office. Pa'buritta cadres are people domiciled in the working area of the Bululoe Health Center who are appointed by non-governmental organizations as partners providing TB cadres. The target group is TB sufferers who were found and treated during 2022 and at-risk groups who had gone through the screening and sputum examination stages by health workers. Informants were selected using a purposive technique by considering their willingness to participate in this study. Age, gender, distance of residence to health service center were taken into account to consider the diversity of informants from the target group.

The data collected from the recorded in-depth interviews was transcribed. The transcripts obtained were then simplified in matrix form before the keyword search process was carried out. Next, the researcher validated the data by cross-checking it, observing and reviewing the documents, then triangulating sources by cross-checking with other informants.

This research was conducted posterior to obtaining the permit from the Research Ethics Committee of the Faculty of Public Health, Hasanuddin University. Prior to conducting the interview, informants were asked to fill out written consent, and the researcher stated that he would maintain the confidentiality of the informants' identities and personal information.

3. RESULTS AND DISCUSSION

This study included 22 informants from various backgrounds, male and female, and the ages of the informants were varied to obtain diversity of information. This study's findings can be constructed in to three variable. The first variable is "input" with four sub-variables namely human resources, operational budget, facilities and infrastructure, and implementation time. The second variable is "process" with three sub-variables namely planning, implementation, and monitoring or evaluation. The third variable is "output" with two sub-variables, namely program success and patient satisfaction.

3.1. Variable 1. Input

Input evaluation is related to the utilization of several types of sources, such as Human Resources (man), budget (money), Facilities (materials and machines), and also methods (methods). The purpose of this

evaluation is to find out whether existing resources have been utilized in accordance with predetermined standards.

3.1.1. Human Resources

The availability of health workers at the community health center is considered sufficient, in contrast to the inadequate number of cadres. There are only two cadres available, while the working area of the public health centre consists of 24 hamlets. This imbalance is considered as one of the factors that impede the successful performance of the cadres.

"...To this day, the number of staff is considered sufficient, with the staff coming from the nursing profession. However, there should be one cadre per hamlet for the implementation to be effective, unlike now where there are only two cadres..." (Informant 1, Male, 53 years old)

In addition to the constraints regarding the number of cadres, another obstacle experienced was that not all cadres received training on the management of pulmonary TB cases which resulted in the performance of the cadres being considered less effective.

"...The cadres are not optimal in their performance. Sometimes we find sputum that is not suitable for smear testing..." (Informant 2, Male, 33 years old)

"...I never attended training, and after being recruited as a cadre, we were only taught our respective duties..." (Informant 3, Female, 31 years old)

Standards for the number and quality of health human resources for the prevention of tuberculosis are determined by looking at the availability of health workers and non-health workers who are trained or have certain qualifications [11]. The obstacle experienced in terms of manpower was the number of Pa'buritta cadres which only consisted of two cadres, and not all of them had received training on the management of pulmonary TB. Increasing the amount of human resources also necessitates educating more about strategies to manage cases of tuberculosis [12][13].

3.1.2. Operational Costs

The program's operational budget comes from the Health Operational Assistance fund which only includes incentives for health workers, while cadre incentives do not have a clear source of funding. For now, incentives for cadres are only in the form of self-help funds from program managers. Cadres are recruited voluntarily by third parties on the basis of social activities.

"...The health workers at the community health center are covered in the BOK (Health Operational Assistance). However, funding outside the community health center, which in this case is TB cadres, does not have a clear source of funds. As of now, there is only self-help funding from the program manager..." (Informant 1, Male, 53 years old)

The operational budget for pa'buritta cadres does not have a clear source of funds. Other research suggests that the role of TB cadres is influenced by factors of knowledge, motivation, facilities [14] and incentives [15]. One of the most crucial factors in the fight against TB is the issue of funding [16], [17].

3.1.3. Facilities

Facilities and infrastructure in the activities of the Pa'burita program have several obstacles. One of them is the unavailability of a proper and adequate sputum corner to prevent infection. Plus, the lack of smooth mobilization of the sputum pot to the hospital laboratory.

"...The existing facilities are inadequate. One of them is the corner of the phlegm. Currently, there is indeed a sputum corner, but it cannot be said to be feasible because it is still at risk of causing infection, and the location is still attached to the laboratory room..." (Informant 4, Female, 30 years old)

"...Delivery is still difficult because of cooperation with the post office for delivery to the hospital. Sometimes sputum isn't immediately delivered to a hospital laboratory, which shouldn't be the case..." (Informant 5, Female, 24 years)

Both inpatient and non-inpatient health centers must have a special examination room to examine patients who are at risk of transmitting disease [18], [19], but the Bululoe Health Center does not yet have a sputum corner that meets these qualifications.

3.1.4. Time

Pa'buritta program activities, especially in drug delivery, are in accordance with the set routine time, which is once every two weeks to a maximum of once a month. This frequency has been adjusted according to access to the patient's residence.

"...During these two months of treatment, I have been visited four times. Sometimes, they also monitor by phone, reminding me to take my medicine..." (Informant 6, Male, 57 years old)

"...Routine medicines were delivered before the previous drugs ran out, just as they had explained at the beginning of treatment..." (Informant 7, Male, 59 years)

The time for drug delivery to TB sufferers is set every two weeks or a maximum of once a month. The majority of TB sufferers stated that program managers routinely deliver drugs according to the previously specified time. With the use of this drug delivery system, they hope to lower the number of patients who stop their medications because they can't get to their healthcare providers on schedule or because they don't take their drugs as directed [20], [21].

3.2. Variable 2. Process

This evaluation places more emphasis on the implementation of programs in accordance with the utilization of resources such as personnel, funds and other facilities, namely to see whether they are in accordance with a predetermined plan or not.

3.2.1. Planning

In the program planning process, multi-sector collaboration between the Bululoe Public Health Center and village officials is carried out well through cross-sectoral mini-workshops held every quarter. Apart from that, there is also a framework of reference for the activity which contains the background of the activity, aims and objectives, method of implementation, and clear person in charge of the activity. In addition to the results of the interviews, it was also proven by document review.

"...Before carrying out this activity, we have made a commitment with the village government regarding TB control..." (Informant 1, Male, 53 years)

"...Documents such as TOR, SOP, and assignment decree are indeed available..." (Informant 2, Male, 33 years)

The program manager carries out activity planning by conducting cross-sector collaboration, which can be proven by the availability of TOR, SOP, and the team's Decree. The process of selecting and assembling a team is part of human resource planning [22].

3.2.2. Implementation

The division of tasks for implementing activities is contained in the Decree of the Pa'buritta Innovation Team which contains the names, positions and duties of each. Implementation of activities refers to the program's SOP. Everyone in the household are currently being monitored and those exhibiting the main symptoms will be sputum tested. It aims for early detection and limits spread [23], [24].

"...Everyone's duties are clear. There are people specialized for monitoring, delivering drugs, screening, etc. The implementation of the activity is also in accordance with the SOP, where all our contacts are screened, and those with symptoms will only have their sputum checked after experiencing a cough for two weeks..." (Informant 2, Male, 33 years old)

The implementation of activities is in accordance with the SOP and monitoring has been carried out both internally and externally by the head of the community health center or the health office.

3.2.3. Monitoring and Evaluation

From the results of interviews, it was found that monitoring by the head of the public health center was carried out either directly through field visits to the target group or indirectly through program meetings and monthly mini workshops. In addition to supervision by the head of the community health center, an

external evaluation was also conducted by the deputy superintendent of TB for Jeneponto Regency. This evaluation is carried out by the chief of disease prevention and control of Jeneponto District Health Office once every three months.

"...As heads of community health center, we usually monitor activities through program meetings and mini workshops which are held monthly. Here we carry out monitoring and evaluation related to the implementation of program activities, both inside and outside the building, including TB..."
(Informant 1, Male, 53 years)

"...TB has become regional MSS including the health office. Therefore, almost every quarter we visit the community health center, especially if the community health center does not reach the target. We find out what the actual problems are, considering that TB is a very complex disease and involves many people, including doctors, laboratory assistants, program managers who provide information, to monitor medication and side effects..." (Informant 8, Male, 42 years old)

Supervision and monitoring of the predetermined plans need to be carried out so that the target output can be achieved optimally [25]. Modern digital tools, like the SITB application, can be used for this monitoring [26], [27].

3.2. Variable 3. Output

This evaluation places more emphasis on the implementation of programs in accordance with the utilization of resources such as personnel, funds and other facilities, namely to see whether they are in accordance with a predetermined plan or not.

3.2.1. Program's Success

During the implementation of the Pa'buritta program, there was a change in cases in a more positive direction. This is illustrated by the decrease in the number of drop-out cases and the increasing coverage of standardized examination services for people suspected of having TB.

"Cases of discontinued treatment have decreased, and there has been an increase in standardized service performance. Previously, less than a hundred TB suspects were examined, now there are far more..."
(Informant 2, Male, 33 years old)

Through the results of interviews with the person in charge of the program, it is known that there has been a decrease in medicinal drop-out cases and an increase in service performance according to the standards of TB suspects compared to previous years. However, it was found from the results of direct observation that there were still two cases of discontinuation of treatment during 2022 due to the patient's inability to deal with the side effects of treatment. The potential for side effects related to the treatment has been discussed in lots of earlier research [28], [29].

3.2.2. Customer's Satisfaction

The target group also responded very well to this program considering some of the perceived benefits such as the ease of getting medicines regularly without having to go to the health center to consultations with health workers who are closer to the community.

"...The system seems very good, I as a patient feel satisfied. The medicine is delivered every month, which is very different than the way it was in previous years..." (Informant 9, Male, 32 years old)

"...Very good, we don't need to go to the community health center to queue to get TB treatment services, especially with such weak conditions that we are now in..." (Informant 10, Male, 42 years)

TB sufferers who were respondents in this study stated that the Pa'buritta program was very beneficial for them during treatment. Patient satisfaction is influenced by many factors, one of which is the quality of service from the health workers themselves [30].

4. CONCLUSION

Cooperation which is both multisectoral and multidimensional in nature is of an utmost importance to ensure the successful implementation of pulmonary TB control programs. The role of health workers, TB cadres, local government, and private institutions greatly influences the output of this program. The results of this study can be used as a reference for related parties, especially for the local government, to maximize the functions of monitoring, supervision and funding for TB cadres.

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