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Analysis of Community Health Center Performance on Tuberculosis Control Programs

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ABSTRACT

Purpose of the study: To explore and analyze the implementation of the Tuberculosis control program using the DOTS strategy at the Satelit Community Health Center. This research aims to identify factors that support and hinder the implementation of the program, evaluate the effectiveness of approaches that integrate Islamic values in health education.

Methodology: This research uses a qualitative method with a case study design. The population in this study were all individuals involved in the tuberculosis control program at the Satellite Health Center. The data collection technique in this research uses in-depth interviews with guided questions that have been prepared in advance. Data obtained from interviews were then analyzed using thematic analysis method.

Main Findings: This research shows that the implementation of the Tuberculosis control program at the Satelit Community Health Center has gone well even though it still faces various challenges. The success of the program is greatly influenced by political commitment, the performance of the Medication Monitor, as well as adequate facilities and training support. The integration of Islamic values in health education has proven effective in increasing patient compliance and community participation.

Novelty/Originality of this study: The novelty of this research lies in the holistic approach in evaluating the performance of community health centers in managing tuberculosis, which includes the use of information technology to improve data recording and reporting, intensive training for medical staff in tuberculosis case management, as well as improving the infrastructure of community health centers to support more efficient services.

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1. INTRODUCTION

Tuberculosis is one of the infectious diseases that is a serious challenge in the field of global health, caused by the bacteria Mycobacterium tuberculosis [1], [2]. Although drugs are available to cure it, tuberculosis remains a major problem, especially in countries with high poverty rates and limited health systems. Health programs that focus on tuberculosis aim to reduce the prevalence of the disease by increasing early detection through appropriate diagnostic tests, providing effective treatment, and closely monitoring patients during the treatment process to prevent further transmission [2]–[4]. Prevention efforts, such as vaccination and community education, are also important components of the global strategy to control the spread of tuberculosis.

The performance of health centers, as the spearhead of public health services, plays a central role in the success of tuberculosis health programs. Evaluation of health center performance includes various aspects, such

as response time in the diagnosis process, accuracy in providing treatment, patient compliance with treatment regimens, and efficiency in case management [5]–[7]. Improving the performance of health centers not only increases the accessibility of health services for tuberculosis patients, but also has the potential to reduce the rate of treatment failure and the development of drug resistance, which are serious challenges in efforts to control tuberculosis at the local and global levels [4], [8], [9].

In the context of tuberculosis research, innovation often occurs in the development of new health center performance evaluation methods or more effective intervention approaches to improve tuberculosis case management. A holistic evaluation approach can include the application of information technology to improve data recording and reporting, staff training in tuberculosis case management, and improving health center infrastructure to support more efficient services. Innovations in this research are expected to produce stronger evidence to support decision-making in efforts to improve the public health system related to tuberculosis [10]–[12].

Tuberculosis remains a significant global health burden, especially in countries with high levels of poverty and limited health infrastructure. Despite advances in tuberculosis treatment and prevention, key challenges remain related to early detection, timely treatment, and effective case management at the community health center level, which is often the main access point for communities. Evaluation of the performance of community health centers in managing tuberculosis is crucial in ensuring fair and quality access to health services, as well as in efforts to reduce the rate of treatment failure and drug resistance [6], [13]. Therefore, in-depth research on the factors that influence the performance of community health centers in dealing with tuberculosis is very important to optimize tuberculosis case management at the community level.

The novelty of this research lies in the holistic approach in evaluating the performance of community health centers in managing tuberculosis, which includes the use of information technology to improve data recording and reporting, intensive training for medical staff in tuberculosis case management, as well as improving the infrastructure of community health centers to support more efficient services. In addition, this research also proposes an innovative approach to improve interventions in tuberculosis case management at the community health center level, with the aim of improving treatment outcomes and reducing the rate of treatment failure and the development of drug resistance. Thus, this research not only explores the factors that influence the performance of community health centers in the context of tuberculosis, but also presents concrete solutions to increase the effectiveness of public health programs in dealing with this disease.

The implications of the results of this study are very important for policy makers and health practitioners, because they can provide strategic guidance to improve the effectiveness of tuberculosis programs, optimize the use of available resources, and improve community access to quality health services. Implementation of the findings from this study in the field can contribute significantly to reducing the burden of tuberculosis, especially in communities that are most vulnerable to this disease. The purpose of this study was to gain a deeper understanding of the factors that influence health center performance in managing tuberculosis, as well as to evaluate the impact of various proposed intervention strategies on tuberculosis treatment outcomes at the community level. Thus, this study is expected to provide valuable insights into global efforts to control and eliminate tuberculosis as a significant public health problem.

2. RESEARCH METHOD

2.1 Type of Research

This research uses a qualitative method with a case study design. Qualitative research aims to gain an in-depth understanding of social phenomena or certain symptoms through an inductive approach, which focuses more on a complete picture of the phenomenon being studied [14]–[16]. Case study as a research design focuses on exploring a problem with detailed boundaries, uses in-depth data collection, and includes various sources of information to gain a comprehensive understanding of the case being studied, which includes related programs, events, activities and individuals. In the context of this research, the case studied is the implementation of the Tuberculosis program with the DOTS strategy at the Satelit Public Health Center.

2.2 Population and Sample

The population in this study were all individuals involved in the Tuberculosis control program at the Satelit Community Health Center. The research sample was selected purposively, namely by establishing special criteria for informants who were deemed capable of providing relevant information related to the implementation of the program. The selected informants included the Head of the Satelit Community Health Center, Tuberculosis program holders at the Community Health Center, Tuberculosis patients, Medication Monitors, and Tuberculosis cadres. This sample selection aims to obtain comprehensive and in-depth information about the implementation and challenges faced in the Tuberculosis control program in the research area [17]–[19].

2.3 Data Collection Techniques

The data collection technique in this research uses in-depth interviews with guided questions that have been prepared previously. Interviews were conducted with informants who had been selected based on certain criteria to gather information regarding the implementation of the Tuberculosis program with the DOTS strategy. Recording equipment is used to record interviews, which are then transcribed into text data. This technique allows researchers to obtain rich and detailed data, which is important for further analysis in qualitative research [3], [20].

2.4 Data Analysis Techniques

Data obtained from interviews was then analyzed using the thematic analysis method, which involves identifying patterns or themes that emerge from the data. This process begins with interview transcription, then the researcher re-reads the data thoroughly to understand the context and content. After that, the researcher carried out coding to identify themes that were relevant to the research objectives [15], [21], [22]. These themes are explained further to understand the relationship between the various aspects that appear in the data, as well as to explain the phenomenon under study comprehensively. This technique allows the researcher to construct a rich and in-depth narrative regarding the research findings.

2.5 Research Procedures

The research procedure begins with preparations which include determining the research location at the Satelit Community Health Center, as well as the time for the ongoing research. The initial stage of the research involved selecting informants based on purposive criteria, followed by data collection through in-depth interviews using guided questions. The data was obtained and transcribed for further analysis. Next, the data was analyzed using the thematic analysis method to identify and explore main themes relevant to the research [23], [24]. This procedure is designed to ensure that the data collected is valid and can provide in-depth insight into the implementation of the Tuberculosis program at the Satelit Community Health Center.

3. RESULTS AND DISCUSSION

Satelit Community Health Center has various health workers, including general practitioners, nurses, midwives, and environmental health workers. These health workers are very important in supporting the Tuberculosis program, especially in the process of detection, treatment and patient monitoring. However, the distribution and number of health workers is often an obstacle in providing optimal services, especially with the high number of cases that must be handled.

The success of the Tuberculosis control program at the Satelit Community Health Center was greatly influenced by the political commitment of the Community Health Center management and the local government. This commitment is reflected in budget allocations, facility support, and policies that support disease control efforts. However, several obstacles that still exist include the need to increase resources and program sustainability for more optimal results. Detection of Tuberculosis cases at the Satelit Community Health Center is carried out through sputum examination and chest X-rays, with the support of health cadres who are active in education and early detection in the community. The main challenges faced are limited equipment and facilities for more sophisticated examinations, as well as the need for further training for health workers to increase diagnostic accuracy.

Distribution of Tuberculosis drugs at the Satelit Community Health Center is carried out regularly according to national guidelines, with strict monitoring of patient compliance to prevent drug resistance. Medication Supervisors (PMO) play an important role in ensuring patients follow their medication regimen correctly. Obstacles faced include logistical problems and delays in drug distribution to remote areas. PMO performance determines the success of Tuberculosis treatment [9]. They are responsible for monitoring and ensuring patients take medication regularly as well as providing moral support. Despite PMOs' best efforts, they often face challenges such as a lack of incentives and support from the health system. Strategies to increase PMO motivation and performance are needed to achieve more optimal results.

Recording and reporting of Tuberculosis cases at the Satelit Community Health Center is carried out using a system regulated by the health service. The data collected includes information regarding detection, treatment, and treatment outcomes [25]–[27]. Although this system works well, there are gaps in reporting due to limited human resources and technology. Increased capacity in recording and reporting is needed to ensure accurate and up-to-date data. Supporting factors for the Tuberculosis control program at the Satelit Community Health Center include the commitment of health workers, support for government policies, and the active role of health cadres. However, there are inhibiting factors such as limited facilities, lack of trained health workers, and logistical obstacles in drug distribution. Better coordination between the various parties involved as well as improved resource allocation are needed to overcome these obstacles.

Tuberculosis disease has a significant long-term impact not only on the infected individual but also on society as a whole [28]. On an individual level, untreated or incompletely treated Tuberculosis can cause serious complications such as permanent lung damage, drug resistance, and even death. Apart from that, Tuberculosis also affects the quality of life of patients by reducing productivity and causing an economic burden due to medical costs and loss of income. At the societal level, the uncontrolled spread of Tuberculosis can pose a huge public health burden, slow economic progress, and exacerbate social inequalities [29]. These long-term impacts emphasize the importance of effective, sustainable, and integrated coping strategies, including prevention, early detection, appropriate treatment, and ongoing education and support for patients and communities [30].

The integration of Islamic values in the Tuberculosis prevention program at the Satelit Health Center is carried out with a humanist approach and respects local culture. Health education is often delivered using relevant religious narratives, which can increase patient awareness and compliance with treatment. This approach is effective in increasing community participation in health programs and supporting the patient's healing process. The results of this research have important implications for public health policy and clinical practice at the Satelit Community Health Center and other regions that face similar challenges in controlling Tuberculosis [31]. Findings on the importance of political commitment, timely distribution of medicines, and the role of PMOs indicate the need for further support from government and other stakeholders to strengthen local health systems. In addition, approaches that integrate Islamic values in health education can be adapted in areas with similar cultural contexts to increase community compliance and participation in health programs. Capacity building in terms of training of health workers, diagnostic facilities and logistics management is also needed to achieve better results in controlling Tuberculosis.

This study is in line with the study conducted by Sabaté et al [13]. The study discussed tuberculosis. However, the study has not conducted an analysis of the health center performance on the tuberculosis control Program as conducted by this study. So this study is a difference from previous studies. This research provides a new contribution by revealing the effectiveness of an approach that integrates Islamic values in the Tuberculosis prevention program at the Satelit Community Health Center. Previous research has emphasized the importance of cultural aspects in health, but this research specifically shows how Islamic values can be used practically to increase patient compliance with Tuberculosis treatment. In addition, this research also highlights the strategic role of PMOs and the challenges they face, as well as providing concrete recommendations for improving the system for recording and reporting Tuberculosis cases, which have not been widely discussed in previous research. These findings add new insights that can be implemented in health programs in various regions with similar demographic and cultural characteristics.

The implementation of the Tuberculosis control program at the Satelit Community Health Center is going well even though there are challenges that need to be overcome. Continued efforts to improve health facilities, strengthen political commitment, and provide training and incentives for health workers are needed. Apart from that, approaches that integrate Islamic values have proven to be effective and can continue to be developed to support the success of health programs in the community.

4. CONCLUSION

This research shows that the implementation of the Tuberculosis control program at the Satelit Community Health Center has gone well even though it still faces various challenges. The success of the program is greatly influenced by political commitment, the performance of the Medication Monitor (PMO), as well as adequate facilities and training support. The integration of Islamic values in health education has proven effective in increasing patient compliance and community participation. Obstacles such as limited diagnostic facilities, logistical problems in drug distribution, and a lack of trained health workers still need to be overcome. For this reason, continuous efforts and better coordination between the various parties involved are needed as well as increased resource allocation to achieve more optimal results in controlling Tuberculosis. These findings not only provide new insights for the Satelit Community Health Center but can also be adapted in other areas with similar characteristics.

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