

## Research Article

# Nursing Personnel Services in Handling Tuberculosis Patients at Darul Imarah Health Center Aceh Besar District

Nurliana\*, Agus Sholahuddin, and Tommy Hariyanto

Department of Social Sciences, University of Merdeka Malang, Malang, Indonesia

**Abstract.**

The quality of services of nursing staff in the management of tuberculosis (TB) patients at the Darul Imarah Community Health Center, Aceh Besar Regency due to the limited capacity of human resources in carrying out data collection is not yet known in reality. This research aims to describe (i) the services of nursing staff in treating tuberculosis patients and (ii) the supporting and inhibiting factors for nursing services in treating tuberculosis patients. A descriptive-qualitative approach was used through interviews, documentation, and observation techniques. The results show that to improve the quality of service at the Darul Imarah Community Health Center, Aceh Besar Regency, it is necessary to take steps to improve the quality of nursing staff services for TB patients.

Corresponding Author: Nurliana;  
email: nurliana.lia85@gmail.com

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## 1. Introduction

Public services such as the service of nursing staff for tuberculosis patients at the Darul Imarah sub-district level still encounter a number of people as sufferers, so the government needs to monitor the existence of the community according to individual specifications, regional and sufferer zones. In line with these developments, the service of nursing staff to tuberculosis patients is an activity that is carried out carefully in an effort to detect a disease that the government through medical and paramedical personnel has for a number of people who have every activity that benefits in a group or unit, and offers satisfaction even though the results not tied to a product physically, but as a real action in curing disease. In an effort to create a healthy society in the understanding that health is a human right, the 1945 Constitution of the Republic of Indonesia, which is described in article 28 H paragraph (1), states that "Health as a human right and at the same time as an investment, so it needs to be strived for, fought for and improved by each individual and by all components of the nation, so that people can enjoy a healthy life, and in the end can realize an optimal degree of public health".

It is important to improve a healthy society, it has become a national policy, with the consideration of helping to encourage the growth of national people who have

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resilience, fighting power, so as to be able to bond together the spirit of togetherness which is an asset in the life of the nation and state. According to Ngarawula Bonaventura et al [1], states that “strength in the spirit of unity and unity will be able to foster a spirit of nationalism so that it can make this nation richer and more competitive”. In this case all layers of society, stakeholders and all components involved in health activities that need to be carried out to anticipate health failures, because health is not the sole responsibility of the government, but in general as a joint responsibility of the government and society, including the private sector.

Services for nursing staff for TB patients in stages and integrated are carried out through collaborative activities between the relevant programs and activities to be carried out as field actions, meaning that the services for nursing staff for tuberculosis patients are carried out in accordance with the principle of decentralization within the framework of regional autonomy with districts/cities as the focus of management. program, which includes: planning, implementation, monitoring and evaluation as well as ensuring the availability of resources (funds, personnel, facilities and infrastructure). Basically, in the management of each health center must establish a work unit (team) that is responsible for managing the nursing staff service program for tuberculosis patients. Work units must at least have health workers with competence in the field of public health and non-health workers with certain competencies. Health Centers must appoint trained doctors, nurses and laboratory analysts who are responsible for the implementation of the Nursing Staff Service program for Tuberculosis patients. Hospitals must establish a DOTS (Directly Observed Treatment Shortcourse) Team who are responsible for implementing the nursing staff service program for Tuberculosis patients in the regions and spread out to gam pongs.

The study aim of the research are 1) To describe the services of nursing staff in treating tuberculosis patients; 2) To describe the supporting and inhibiting factors for nursing services in treating tuberculosis patients.

## 2. Research Methods

### 2.1. Research approach

In this research approach was carried out by Nursing Service in the Handling of Tuberculosis (TB) Patients (Study of Health Policy Implementation Based on the Regulation of the

Minister of Health of the Republic of Indonesia Number 67 of 2016 [2] concerning Tuberculosis Control) at the Darul Imarah Health Center in Aceh District, which is oriented towards a descriptive qualitative approach. research), in order to be able to describe social phenomena that arise in people's lives, especially with regard to the examination and treatment of Tuberculosis (TB) patients by describing social phenomena that arise in people's lives, especially with regard to dealing with them in accordance with the Regulation of the Minister of Health of the Republic of Indonesia Number 67 of 2016 concerning Tuberculosis (TB) control.

## 2.2. Research focus

The focus of research, it can change by itself and develop according to conditions in the field through the identification and formulation of problems according to the dimensions and indicators of field research as follows:

1. Nursing Staff Services in Handling Tuberculosis (TB) Patients at the Darul Imarah Health Center, Aceh Besar District, with the following dimensions and indicators:

TABLE 1: Dimensions and indicators of nursing services.

No	Dimensions	Indicator
1	Health Promotion	Commitment of Policy Makers; Improving the Integration of Program Implementation; Empowering the community;
2	TB surveillance	Active Data; Passive Data;
3	Drug Administration and Prevention of TB	Children under 5 (five) years old who are in close contact with active TB patients; People with HIV and AIDS (ODHA) who are not diagnosed Other Certain Populations.

Source: Article 6 (a, b, f) Article 7 (1) Article 9 paragraph (1), Article 15 Permenkes No 67 of 2016

2. Supporting and Inhibiting Factors for Nursing Services in Handling Tuberculosis (TB) Patients at the Darul Imarah Health Center in Aceh Besar District, with the following dimensions and indicators:

## 2.3. Research informants

Interactive methods, researchers deliberately choose in-depth interviews (In-depth Interviewing) and direct observation (Passive Participation), while non-interactive methods researchers are more oriented towards the existence of documents and/or archives in

TABLE 2: Dimensions and Indicators of nursing capacity.

No.	Dimensions	Indicator
1	Human Resources	Health workers; Non-Health Workers;
2	Availability of drugs and health supplies	Anti Tuberculosis Drugs; Vaccines for immunity;
3	Technology	Diagnostic; Risk control;

Source: Article 17 paragraph (2) Article 18 (1) Article 21 (ad) Permenkes No 67 of 2016.

research locations, so as to be able to make informants as work partners who provide information, The informants selected in this study totaled 9 (four) people consisting of:

TABLE 3: Research informants.

No	Informant Name	Number of Informants
1	Head of Disease Prevention and Control	1 (one) person;
2	Head of Health Center	1 (one) person;
3	Administration	1 (one) person;
4	Police Nurse	2 (two) people;
5	Laboratory staff	1 (one) person;
6	TB patient	3 (three) people;
	Amount	9 (nine) people;

Source: Data processed in 2020.

Thus the research informants who have been selected by the researcher are very dependent on the ability of the researcher to explore the needs of data and information as well as facts in the field which are needed as the perfection of scientific work in the form of an accurate thesis and can be used as a reference for further work.

## 2.4. Data analysis technique

Data were analyzed using several steps according to the theory of Miles, Huberman and Saldana [3], namely analyzing data in three steps: data condensation, presenting data (data display), and drawing conclusions or verification (conclusion drawing and verification). Data condensation refers to the process of selecting, focusing, simplifying, abstracting, and transforming data.

## 3. Results and Discussion

### 3.1. Nursing staff services in handing Tuberculosis (TB) patients at Darul Imarah Health Center, Aceh Besar District

#### 3.1.1. Health promotion

Research on the service of nursing staff to Tuberculosis (TB) patients at the Darul Imarah Health Center in Aceh Besar District is important to evaluate and improve the quality of care provided to TB patients in the region. This research can provide deeper insight into the factors that influence the service of nursing staff, the challenges faced, and the efforts that can be made to improve services and treatment outcomes for TB patients.

Health promotion on the one hand is an effort to increase the commitment of policy makers in increasing the integration of program implementation and on the other hand the ability to empower the community, through the vision, mission and health promotion strategy in carrying out program activities of the institution. This activity is carried out in accordance with the direction and objectives of the prevention that will be achieved is inseparable from the vision of health development that is oriented towards Mubarak [4] states as follows: The process of enabling individuals and communities to increase control over determinants of health and there by improve their health.

Health promotion is a systematic effort to improve public health through various strategies, programs and activities. The goal of health promotion is to encourage individuals and communities to take active steps to improve their health, both physically, mentally and socially. Characteristics of nursing staff: In this study, we can discuss the characteristics of nursing staff involved in treating TB patients, such as their education, training, and work experience. It is important to evaluate the level of qualifications and competence of nursing staff in providing effective TB care.

In the concept of organizational commitment, health promotion related to tuberculosis is related to the level of involvement of people with the organization where they work and are interested in staying in the organization. This is as Wibowo [5] state that "Organizational commitment is a level where individuals identify and are involved with their organization and or do not want to leave it".

Persuading promotional activities that are persuasive and encourage consumers to make purchases of the products offered, this is one pattern of promotion and many other ways that are done by creating a positive impression on the public so that promotions

can affect the behavior of individuals and/or community groups in the long run. long. Promotional activities are a means of communication between the government, the private sector/companies and consumers or potential customers.

Proposition 1 (one) is formulated as follows:

**Proposition 1 :** Health promotion designing and implementing well-targeted health education programs, including counseling, campaigns, and effective communication activities to increase public health knowledge and promote healthy behaviors. Build partnerships with local organizations, communities and other institutions involved in public health, such as educational institutions, non-governmental organizations and other government agencies, to increase the effectiveness of health promotion.

Practical implications, this helps Puskesmas in designing and implementing effective and sustainable health promotion programs. By adopting a collaborative approach, good health education, community outreach, ensuring the availability of resources, good monitoring and evaluation, and involving the community, health promotion efforts at the Darul Imarah Health Center in Aceh Besar District can have a positive impact on the health of the people served.

### 3.2. TB surveillance

Schematically it can be described the Health Surveillance network between the main units in the Ministry of Health and the Central Technical Implementation Unit (UPT Kemenkes), the research and development center (Puslitbang) and the data and information center, among the Darul Imarah Health Centers in Aceh Besar District government agencies in the Province responsible for the health sector) and the Darul Imarah Health Center in Aceh Besar District, and among the work units of the Darul Imarah Health Center in Aceh Besar District (government agency in the Regency/City that is responsible for the health sector).

Assessment of the attributes of the surveillance system shows that the system is not simple, inflexible, not acceptable, unstable, with poor data quality, even though the Predictive Positive Value is high and the timeliness of data collection is good. In line with the development of TB Surveillance, Article 9 of the Minister of Health Regulation Number 67 of 2016 concerning Tuberculosis (TB) Control states the following: In the implementation of TB Surveillance, active and passive data collection is carried out both manually and electronically; Active data collection as referred to in paragraph (1) is the

collection of data obtained directly from the public or other data sources; Passive data collection as referred to in paragraph (1) is the collection of data obtained from Health Service Facilities.

Health Surveillance (SK) is very important for decision makers in the health sector in the context of efforts to improve public health status as high as possible. The optimal implementation of Health Surveillance (SK) requires the participation of all sectors, especially all health service facilities belonging to the government or the community, health agencies both at the regional and central levels.

Proposition 2 (two) is formulated as follows:

**Proposition 2 :** TB surveillance is important in TB control efforts. Conducting regular TB surveillance and using the data obtained can help in better understanding the epidemiology of TB, identify high-risk areas or populations, and plan and implement appropriate interventions to reduce the burden of this disease.

Practical implications, TB surveillance is an effort carried out with the government and the community as well as stakeholders in the health sector in order to improve the ability to manage health data and information. decisions in health efforts, both local and national, and contribute to global commitments.

### 3.2.1. Drug administration prevention of TB

Prevention of tuberculosis (TB) in people's lives is carried out as an action through the availability of Health Service Facilities both in the form of places used to carry out health service efforts, or in supporting forms both promotive, preventive, curative and rehabilitative carried out by the Government, Regional Governments, private and/or or society. Provision of TB prevention drugs as according to Tjiptono [6] states that "Promotion is an element of the marketing mix that focuses on efforts to inform, persuade, and remind consumers and/or public about brands and products.

Early detection and treatment of active TB cases is very important to prevent the spread of the disease. People who have TB symptoms such as a cough that lasts more than two weeks, fever, weight loss, and ongoing fatigue should seek immediate medical care. People infected with active TB should follow preventive measures to prevent transmission to others. This involves keeping a distance from other people, covering your mouth when you cough or sneeze, and maintaining personal hygiene by washing your hands regularly. People who are at high risk of developing TB, for example

those who have direct exposure to people with active TB or those who test positive for tuberculin, can be given preventive therapy.

Proposition 3 (three) is formulated as follows:

**Proposition 3 :** The importance of adequate resources, competence of medical personnel, availability of drugs, prevention programs, external collaboration, and periodic monitoring and evaluation in TB control at the Darul Imarah Health Center in Aceh Besar District. By fulfilling this proposition, it is hoped that puskesmas can provide optimal services to TB patients and be able to reduce the burden of disease significantly.

Practical implications, It is important to ensure adequate accessibility of health services for individuals infected with TB. This can be done through approaches such as increasing the number and availability of community health centers or TB clinics, expanding the health service network in Darul Imarah District, Aceh Besar District or remote areas, and providing a mobile clinic approach to reach populations that are difficult to reach. These practical implications will help ensure that individuals infected with TB can easily access the diagnosis, treatment and care they need.

### **3.3. The capacity nursing staff in handing Tuberculosis (TB) patients at Darul Imarah Health Center, Aceh Besar District**

#### **3.3.1. Human resources**

Skills in TB management. Nursing staff must have skills in carrying out physical examinations and laboratory tests related to tuberculosis. They must also be able to understand the results of the test and make the appropriate interpretation. Skills in providing comprehensive care to TB patients, including administering medication regularly, monitoring drug side effects, and supporting patients during treatment are also critical. Experience in treating TB patients: Experience of nursing staff in caring for TB patients is also an important factor. With sufficient experience, they will become better trained in recognizing symptoms, managing complications, and providing psychological support to patients and families.

Cross-sectoral health is a recognized relationship between a part or parts of different sectors, formed to take action on a problem so that results are achieved in a way that is more effective, sustainable or efficient than the health sector. effectively as according to Widodo [7] states the following: Training is a series of individual activities in systematically increasing skills and knowledge so that they are able to have professional



performance in their field. Training is a learning process that enables employees to carry out current work according to standards.

Human Resources (HR) in the management of Tuberculosis (TB) patients at the Darul Imarah Health Center in Aceh Besar District are an important element in providing health services to TB patients. Adequate nursing staff capacity is needed to improve the quality of care, supervision and treatment of TB patients. The following is an explanation of the HR Capacity of Nursing Staff in managing TB patients at the Darul Imarah Health Center, Aceh Besar District. By having adequate and trained human resources for nursing staff, the Darul Imarah Health Center can provide optimal service in the management of TB patients. It is important to continue to increase the capacity of the nursing workforce through continuing education, training and support. Proposition 4 (four) is formulated as follows:

**Proposition 4 :** Lack of Qualifications and Knowledge of TB. Nursing staff may have limitations in the qualifications and knowledge needed to effectively manage TB patients. They may not have adequate understanding of TB, including the treatment, monitoring and prevention of this disease. This can affect their ability to provide appropriate and up-to-date care to TB patients. The Capacity of Nursing Staff in the Management of Tuberculosis (TB) Patients at the Darul Imarah Health Center, Aceh Besar District.

The practical implication is that Puskesmas human resources must provide ongoing training and development for nursing staff involved in TB management. This includes initial training in TB, screening, monitoring, treatment, and prevention of TB. In addition, further training and regular knowledge updates also need to be provided so that nursing staff remain skilled and up-to-date with the latest developments in TB management. Use of Guidelines and Protocols: Puskesmas must ensure that nursing staff use the guidelines and protocols established in TB control.

### 3.3.2. Availability of drug and health supplies

In line with the national target for the Availability of Medicines and Health Supplies at the Darul Imarah Health Center in Aceh Besar District with due observance of the National Strategy. By understanding this structuring, the goal to be achieved is to protect public health from TB transmission so that morbidity, death and disability do not occur but under controlled conditions.

In general, carrying out health activities requires competence as a reactionary ability that a person has in carrying out, mastering and completing actions according to his field of work which is based on abilities and skills in a professional, effective and efficient manner. Proposition 5 (five) is formulated as follows:

**Proposition 5 :** Providing training and updating knowledge to nursing staff at the Darul Imarah Health Center on the use of anti-TB drugs, supply management, and infection prevention measures will enhance their competence in managing TB patients and managing health supplies. Improving accessibility to the tools and equipment needed in TB control, such as tuberculin gauges, sputum sampling kits, and consumables, will strengthen the ability of nursing staff to perform services safely and effectively.

The practical implication is that the Puskesmas can also collaborate with referral centers or other institutions that provide special drugs or equipment that are more specific in TB control. This collaboration ensures accessibility to medicines and equipment that may not be available directly at the Puskesmas.

### 3.3.3. Technology

Health diagnosis is an inseparable part of the health service program in the hospital. The hospital is a health service institution that has a direct relationship with patients so that hospitals must provide safe, quality, non-discriminatory and effective health services, according to a person's perception or understanding that can be influenced by knowledge, attitudes, actions and demands for rules or policies. supporting a particular activity. In the various alternatives developed by the government as an integrated discussion, the government remains consistent. The formation of the National Integrated Movement (Gerdunas) for TB is one proof of the strong political commitment to expand the implementation of the DOTS strategy with the participation of various related sectors in TB control.

The quality of health services can be seen from the availability of health services that care about the needs and expectations of patients. Patient value can be a benchmark for the provision of health services. Fitriani [8] states the following: Being one of the conditions that must be fulfilled, to realize a comprehensive public health degree, improving health in Indonesia is aimed at being able to carry out the vision of "Healthy Indonesia" which is the hope for the Indonesian nation in the future. future in order to live in a healthy environment. Thus the population has a clean and healthy lifestyle that

allows them to be able to reach quality, fair and equitable health services in achieving optimal health.

Patient monitoring technologies, such as remote monitoring devices or wearable sensors, can assist nursing staff in continuously monitoring patient conditions. The device can measure a patient's health parameters, such as body temperature, heart rate or oxygen level, and provide early warning of changes that require medical attention. The application of this health provisioning technology at the Darul Ijarah Health Center can improve efficiency, accuracy, and quality of service in treating TB patients. However, it is also important to ensure that nursing personnel have sufficient training to use these technologies appropriately and effectively.

**Proposition 6 :** Puskesmas can adopt patient monitoring technology, such as remote monitoring devices or wearable sensors, to monitor the condition of TB patients in real-time. This technology will assist in monitoring health parameters, providing early warning of changes, and facilitating more regular interactions between patients and nursing staff. Puskesmas need to strengthen technology infrastructure, including stable internet access, adequate hardware, and regular maintenance. Adequate infrastructure will support the effective use of technology and overcome constraints associated with limited access.

Practical implications, Evaluation and Monitoring Community Health Centers need to conduct periodic evaluations and monitoring of the use of technology in TB control. This involves reviewing the performance of health information systems, the effectiveness of mobile applications, and the reliability of rapid diagnostic tools. This evaluation and monitoring will help identify problems or deficiencies in the use of technology and enable necessary improvements.

Based on propositions 1 (one) to 6 (six) as mentioned above, the major proposition is formulated as follows:

**Major Proposition :** Nursing Staff Services in Handling Tuberculosis (TB) Patients at the Darul Ijarah Health Center in Aceh Besar District, based on a policy implementation study based on the Regulation of the Minister of Health of the Republic of Indonesia Number 67 of 2016 concerning Tuberculosis Control.

Practical Implications, By taking these steps, the Darul Ijarah Health Center in Aceh Besar District can improve nursing staff services for TB patients in accordance with the Regulation of the Minister of Health of the Republic of Indonesia Number 67 of

2016. This will contribute to improving the quality of life of TB patients, effective disease management, and efforts to prevent the spread of TB in the community.

Prevent drug resistance and reduce the negative impact caused by Tuberculosis. Human Resources is also a factor that influences the development of an organization, a government institution can develop very rapidly if it has many competent human resources in their fields, the development of an organization and a government institution.

## 4. Conclusion and Suggestions

### 4.1. Conclusion

Based on the results of research and discussion regarding the Services of Nursing Staff in the Handling of Tuberculosis (TB) Patients at the Darul Ijarah Health Center in Aceh Besar District, it can be concluded as follows:

TB patients often face social stigmatization and psychological pressure. Health promotion in the management of TB patients requires collaboration between various members of the health team, including nursing staff. Research shows that the services of nursing staff who provide emotional and social support can help reduce stigmatization, increase patient motivation in taking treatment, and improve the patient's quality of life. Health promotion also emphasizes the importance of monitoring and evaluating TB control programs. Nursing staff services can play a role in collecting data, tracking and monitoring patient progress, as well as reporting results and challenges faced in tackling tuberculosis at the Darul Ijarah Health Center in Aceh Besar District.

Lack of Qualifications and Skills or Resources Nursing staff involved in TB control may not have sufficient qualifications and skills. They may not have sufficient understanding of TB, methods of monitoring, treatment, and prevention. This can hinder effective efforts to handle TB cases and reduce the quality of care provided.

It is important to carry out a thorough evaluation of human resources at the Darul Ijarah Health Center in Aceh Besar District so that this evaluation can involve interviews, surveys, observations, and analysis of existing HR performance data. By identifying relevant HR issues, it is possible to plan and implement strategies to increase the capacity and quality of services in the management of TB patients.

Limited tools and equipment at the Puskesmas may not have the tools and equipment needed to treat TB patients. This could include shortages of tuberculin measuring

devices, sputum sampling kits, or consumables such as respiratory protective masks or medical gloves. Limited maintenance and replacement of equipment. Funding constraints or lack of proper maintenance and replacement of equipment can be a problem in keeping the required equipment available.

Inadequate system integration, if the technology systems used in the Puskesmas are not properly integrated, there may be obstacles in exchanging information between systems. This can hinder the efficiency and quality of services provided. Data privacy and security, privacy protection and patient data security are important in the use of health technology. If adequate measures are not in place to protect patient personal data, this can raise legal and ethical issues.

## 4.2. Suggestions

Based on the discussion above, the following suggestions are concluded:

Nursing Services in Handling Tuberculosis (TB) patients at the Darul Ijarah Health Center in Aceh Besar District by means improve training and education, optimize healthcare team collaboration, improve monitoring and evaluation, improve patient care and education, use appropriate technology, encourage research and development, strengthen collaboration with communities

Nursing Capacity in Handling Tuberculosis (TB) patients at the Darul Ijarah Health Center in Aceh Besar District by means continuous training and education, increasing knowledge about infection prevention and control, interprofessional collaboration, improving communication skills, forming networks, increasing access to resources, evaluation and feedback.

In the orientation of policy implementation is a crucial thing in the study of public policy because it contains philosophical, historical and sociological so that it requires a certain theory in accordance with the specifications of the policies made by the government. The primary targets of health promotion efforts are patients, healthy individuals and families (households) as components of society. They are expected to change their unclean and unhealthy living behavior into clean and healthy living behavior (PHBS).

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