

MODEL OF IMPROVING COMPLIANCE IN TREATMENT OF PULMONARY TUBERCULOSIS PATIENTS THROUGH CADRES IN BAITUSSALAM DISTRICT

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ABSTRAK

Berbagai model dan strategi intervensi dikembangkan berbagai peneliti untuk mendukung pengendalian dan kepatuhan pengobatan TB dan penyakit menular lainnya. Penelitian ini bertujuan menghasilkan rumusan model peningkatan kepatuhan pengobatan pasien TB sebagai bagian penting pencapaian kesembuhan dan eliminasi TB di Kecamatan Baitussalam Aceh Besar. Penelitian ini menggunakan desain penelitian kualitatif dengan pendekatan fenomenologi. Informan penelitian berjumlah 16 orang, terdiri dari satu orang pengelola TB Puskesmas, lima orang perawat fasilitator, lima orang penderita TB (yang sedang menjalani pengobatan, suspek, dan mantan penderita), dan lima orang keluarga penderita.

Pengumpulan data dilakukan dengan wawancara mendalam, focus group discussion (FGD), dan telaah dokumen. Hasil penelitian menemukan fenomena minimnya pengetahuan dan kemampuan perawat terhadap pelayanan konseling dengan peer group secara komprehensif. Belum kuatnya konsep program model pelayanan TB yang menekankan pada semua aspek baik fisik maupun psikologis penderita TB. Perumusan model self-esteem sebagai upaya peningkatan kapasitas perawat untuk meningkatkan kualitas hidup pasien TB. Penelitian ini menghasilkan rancangan modul self-esteem untuk meningkatkan kemampuan perawat dalam pelayanan TB melalui peer group.

ABSTRACT

Researchers have developed various models and intervention strategies to support the control and compliance of TB and other infectious disease treatments. This study aims to formulate a model for improving TB patient compliance to achieve TB cure and elimination in Baitussalam District, Aceh Besar. This study uses a qualitative research design with a phenomenological approach. The research informants numbered 16 people: one TB Health Center manager, five facilitator nurses, five TB patients (who are undergoing treatment, suspects, and former patients), and five patients' families. Data was collected through in-depth interviews, focus group discussions (FGD), and document reviews. The study's results found a phenomenon of minimal knowledge and ability of nurses in comprehensive peer group counselling services. The concept of the TB service model program that emphasizes all aspects of both physical and psychological TB patients is not yet strong. Formulation of a self-esteem model as an effort to increase nurses' capacity to improve TB patients' quality of life.

This study resulted in the design of a self-esteem module to enhance nurses' ability in TB services through peer groups.

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PENDAHULUAN

In 2020, an estimated 10 million people worldwide suffered from tuberculosis (TB), with 1.5 million deaths (WHO, 2022). TB is the 13th leading cause of death in the world and the second leading cause of infectious disease death after COVID-19. In Indonesia, the death rate from TB reached 150,000 cases (one person every 4 minutes) in 2022. The World Health Organization, through the Sustainable Development Goals (SDGs) agenda, is committed to ending TB cases worldwide by 2030 (John, 2019). TB is common in developing, tropical and subtropical countries (Khan et al., 2019). Factors that increase the risk of developing TB include poor physical health, unhealthy living and working environments, low social or economic status, and stigma and discrimination (Bhargava et al., 2021; Im & Kim, 2021; Kilabuk et al., 2019). The most vulnerable groups to TB include people living with HIV/AIDS, malnourished people, prisoners, miners, ethnic minorities, refugees, migrants, and people with drug dependence (Dememew et al., 2020; Kilabuk et al., 2019). TB not only affects physical health but also the quality of life of sufferers (Aggarwal, 2019).

Quality of life includes an individual's perception of their position in the context of culture and value systems, which is important as a goal of TB treatment (Hanekom et al., 2019). Patients with pulmonary TB often experience significant physical and psychological changes, such as weight loss, weakness, and decreased physical ability. These changes affect their self-esteem and quality of life. Pulmonary TB can interfere with the physical and psychosocial conditions of patients, reducing their self-esteem (Chen et al., 2023). Patients undergoing long-term treatment experience psychological stress that affects treatment compliance (Omar et al., 2020).

Pulmonary TB patients often face social stigma, such as being ostracized by family and society, which worsens their psychological condition (Mbuthia et al., 2020; Qiu et al., 2019). This condition affects their quality of life and the success of their treatment. Glasier and Gebbie (2006) emphasized the importance of quality of life in nursing services because it affects patient survival. Research shows that social support positively correlates with the quality of life of pulmonary TB patients. Ratnasari (2012) found that 68% of TB patients with good social support had a good quality of life. Other studies also show that depression

has a negative correlation with the quality of life of pulmonary TB patients, while social support improves their quality of life (Park et al., 2020).

In addition, various intervention models and strategies have been developed to support the prevention, control and treatment of TB and other infectious diseases. In the case of HIV/AIDS, Muslich's (2018) research aimed at developing a model for preventing relapse and increasing compliance with HIV/AIDS patients found that the model developed based on educational SMS telenursing can increase patient compliance with treatment, improve transmission prevention behaviour and reduce the risk of relapse of HIV/AIDS. Fresia (2017) found that providing education through audiovisual and tutorial methods (combined) about Antiretroviral (ARV) on compliance with HIV/AIDS patient treatment at Sadikin Hospital Bandung gave the best and most effective results in increasing compliance with treatment.

Susanto (2018) found an Integrative Psycho-Education model for type 2 Diabetes Mellitus patients at Moewardi Hospital, Surakarta. This model can increase compliance with treatment and quality of life of Diabetes Mellitus patients, especially type 2 who have received insulin therapy. The Diabetes Mellitus counselling model and SMS gateway for Diabetes Mellitus patients at Moewardi Hospital, Surakarta, are effectively able to increase dietary compliance, control, pill count, post-prandial blood sugar control (GDPP), HbA1c (Sucipto & Fadilah, 2017).

Self-esteem is fundamental in the context of mental health and quality of life. Self-esteem is a subjective evaluation of one's self-worth that influences how an individual thinks, feels, and acts (Jordan et al., 2020). High self-esteem is associated with happiness, good mental health, and a better quality of life (Mikkelsen et al., 2020). In the context of TB, low self-esteem can worsen patients' psychological and physical conditions, reduce treatment adherence, and increase the risk of stigma and discrimination. Research shows that increasing self-esteem can help patients cope with chronic diseases' emotional and psychological challenges, including TB (Suweni & Gentindatu, 2022). Intervention programs that focus on increasing self-esteem can provide emotional support, increase motivation for treatment, and strengthen social support from family and community (Orth & Robins, 2022).

TB patients need to be given the knowledge needed to be able to psychologically encourage them to grow a sense of confidence that the disease they suffer from can be cured. Growing self-confidence for TB patients is hoped to it will provide motivation and

support for the patient to want to undergo treatment therapy until they are cured. Peer groups (peer educators) are TB patients who have completed treatment. They are highly concerned for TB patients still undergoing treatment and want to follow in their footsteps. This study aims to develop a self-esteem model with a qualitative approach that can improve the quality of life of pulmonary TB patients in Keerom Regency and formulate and compile a self-esteem module and training model for health workers involved in the TB program.

METODE PENELITIAN

This study used a qualitative design with a phenomenological approach. This approach was chosen because it aims to understand the life experiences of individuals from their perspectives. This study was conducted in the working area of the Baitussalam Health Center, Aceh Besar Regency. The location was selected based on the consideration that TB services at the health facility were not optimal. The focus of this study was to develop a self-esteem model that could improve the quality of life of pulmonary tuberculosis patients and formulate and compile a self-esteem module and training model for health workers involved in the TB program. The research informants numbered 16 people: one TB Health Center manager, five nurse facilitators, five TB patients (who were undergoing treatment, suspects, and former patients), and five families of patients. The informants were selected using a purposive procedure with the criteria of tuberculosis patients undergoing first-line treatment for at least one month of treatment. They were domiciled in the research location area.

This study used three main methods for data collection: in-depth interviews, focus group discussions (FGDs), and document reviews. In-depth interviews were conducted with pulmonary tuberculosis patients, TB facilitators, and patients' families. These interviews aimed to explore participants' personal experiences, perceptions, and views related to the TB patients' self-esteem and quality of life. The interview guide was prepared with open-ended questions that focused on key themes such as knowledge of TB services, TB services with a self-esteem model, TB patient motivation, problems and complaints during TB, family support, prevention of TB germ resistance, and improving the quality of life of pulmonary TB patients. Interviews were conducted face-to-face in a comfortable and private health facility. Before the interview began, participants were explained the purpose

of the study and asked to sign a consent form. Each interview lasted 45 to 60 minutes and was recorded with a voice recorder to ensure data accuracy.

HASIL DAN PEMBAHASAN

The study results showed that the implementation of TB service standards in the Community Health Center was not optimal because the TB service standards were still focused on services that referred to case finding. TB diagnosis was carried out by sputum examination. Many TB patients stated that the implementation of counselling in peer groups had not gone well. Health facility services for TB patients were not stopped because if the drug were discontinued, drug resistance and transmission to others would occur. However, patients rarely visited TB health service facilities to take anti-tuberculosis drugs (OAT) and treatment monitoring was carried out electronically using non-face-to-face methods. Counselling services did not refer to a comprehensive peer group guidebook because the Community Health Center issued no specific guidelines. The number of nurses as facilitators was insufficient compared to the work area's broad scope.

Tabel 1. Deskriptif hasil

Respondents	Age (years)	Level of education	Marital status	Work
PP	42	Bachelor	Married	Government employees
PF1	50	Diploma III	Married	Government employees
PF2	37	Diploma III	Married	Government employees
PF3	30	Diploma III	Married	Government employees
PF4	32	Bachelor	Married	Government employees
PF5	35	Diploma III	Married	Government employees
PTB1	39	Elementary school	Single	Doesn't work
PTB 2	35	Junior high school	Married	Doesn't work
PTB 3	25	Elementary school	Married	Housewife
PTB 4	36	Junior high school	Married	Doesn't work
PTB 5	44	Elementary school	Married	Laborer
KTB 1	38	Bachelor Sarjana	Married	Private
KTB 2	32	Senior High School	Married	Private
KTB 3	35	Diploma III	Married	Government employees
KTB 4	36	Senior High School	Married	Private
KTB 5	34	Senior High School	Single	Private

Opinions about TB services at the Community Health Center.

"With the TB service at the Health Center, it can control TB patients until they recover, prevent transmission of TB patients/household contacts and prevent the occurrence of MDR TB, but for counselling with peer groups, the achievement is not clear because it is not yet focused" (PF1). "Currently, pulmonary TB services are running well; patients are served according to laboratory results, photos and referral results from the hospital. A model review is still needed to improve the quality of life through peer groups because counselling is only limited to education and counselling regarding physical conditions" (PF2).

Obstacles encountered while becoming a TB facilitator.

"Lack of initial knowledge of patients related to TB treatment and the long distance to the Health Center hinders patients from taking medicine" (PF1).

"The distance from the Health Center to their residence, and vice versa, patients sometimes complain about the cost of motorcycle taxis to the Health Center, besides the low education of people from the village, so it is difficult to understand the explanation" (PF2).

Explanation of efforts to improve the quality of life of TB sufferers.

"Providing information that TB can be cured, convincing that TB is not a cursed disease, but is caused by the bacteria *Mycobacterium tuberculosis*, convincing that by taking TB medication regularly, patients can recover and prevent transmission" (PF1).

"Good, because with the presence of peer group participants, TB patients can exchange information and experiences. And can provide information and experiences to each other during the TB program" (PF2).

Peer group participants' responses regarding efforts to improve the quality of life of TB patients.

"They must be very enthusiastic if given such information related to their illness and continue to make efforts to improve their quality of life from us" (PF4).

"Many TB patients always ask questions if they complain about their health problems during treatment, so we respond quickly to their questions" (PF5).

Assessment and evaluation related to quality of life in TB services through peer groups.

"Well, with the assessment and evaluation of the quality of life in TB services, it can motivate patients to follow treatment until they recover and can interact with the surrounding environment without feeling isolated" (PF1).

"Assessment and evaluation related to quality of life in TB services: can motivate patients to follow treatment regularly until completion, provide changes to improve quality of life and not feel inferior in society" (PF2).

Discussion

The results of this study indicate that pulmonary TB patients in Baitussalam Regency experience anxiety related to their disease, especially during the COVID-19 pandemic. Fear of exposure to the virus when visiting the Health Center to attend counselling through peer groups reduces their motivation, even though health protocols have been implemented. This anxiety often reduces the health status of TB patients and causes a lack of confidence in maintaining health during treatment (Panibatla et al., 2024). Interviews with TB program managers revealed that TB services experienced a decrease in activities and were not well scheduled during the pandemic. Previously, implementing counselling through small groups was not optimal and poorly structured. Services have not fully considered the quality of life aspects of TB patients, indicating the need for better training, strengthening, and monitoring (Kastien-Hilka et al., 2016). In addition, the number of human resources (nurses) in TB services is still lacking; only four people are available.

Observations at the Arso Health Center showed that the counselling facilities were quite adequate, with comfortable rooms. However, peer group service activities have not been scheduled routinely and are not structured in their implementation. TB services are still focused on examinations and drug administration only, and patient education has not included self-esteem elements in TB service standards. The results of the FGD showed that the implementation of counselling through peer groups has not been optimal, especially during the COVID-19 pandemic. Nurse facilitators do not understand the application of peer groups with a self-esteem model. Public understanding of TB is still very lacking, and some people still view TB as a made-up disease. Urgent economic needs make people reluctant to come to health facilities for TB treatment, so health workers have to visit patients' homes. The community focuses more on physical examinations and does not visit health services if there are no complaints.

The negative perception of the community towards infectious diseases such as pulmonary TB is caused by a lack of understanding about the disease (Mohammed et al., 2015). The stigma of the community towards pulmonary TB can cause low self-esteem, social isolation, and body image disturbance (Assefa et al., 2023). Therefore, negative stigma must be eliminated to control pulmonary TB disease experienced by patients. Support from all family members is critical in pulmonary TB patients' healing and recovery process. Family support can be in the form of positive praise for adherence to taking medication, accompanying treatment, and providing health information related to pulmonary TB. In addition to family support, the role of health workers in providing education and correct knowledge about pulmonary TB is vital (Situmeang et al., 2020). The information provided can reduce stigma and increase patient compliance with treatment (Gebremariam et al., 2021).

Health education by officers can help the community accept TB patients better and realize the importance of treatment (Kimani et al.). This education also helps reduce negative stigma and encourages patients to continue treatment until they recover (Davis et al., 2024). The results of the self-esteem model matrix show that the peer group program has not been implemented comprehensively. During the pandemic, peer group activities for TB patients were limited to examinations and drug administration. Health workers

often visit patients' homes because many patients are reluctant to visit the Health Center. TB service standards do not emphasize the aspects of patients' self-esteem and quality of life.

This study emphasizes the importance of a holistic approach to health services, which focuses on not only medical but also psychological and social aspects of patients. Increasing self-esteem through peer group counselling and strong family support is essential to improving the quality of life of pulmonary TB patients (Auliya et al., 2024). Implementation of a comprehensive self-esteem model can be an effective solution in overcoming psychosocial challenges and increasing the success of pulmonary TB treatment.

CONCLUSION AND SUGGESTIONS

This study successfully developed a self-esteem model that can be used to improve the quality of life of pulmonary TB patients in Keerom Regency. This model includes a specially designed self-esteem module and a training program for health workers involved in the TB program. Adequate psychosocial support, primarily through interventions that increase self-esteem, is expected to help patients overcome stigma, increase motivation to recover, and improve their psychological condition. This study also highlights the importance of social support from family and peer groups in the recovery process of TB patients. Implementing the self-esteem model will provide more holistic and patient-centred care, focusing on physical, psychological, and emotional aspects. These findings provide a strong basis for developing nursing interventions with a more effective self-esteem approach that can be adapted in other health service contexts.

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