JIMR: Journal Of International Multidisciplinary Research

http://azramedia-indonesia.azramediaindonesia.com/index.php/JIMR/index
DOI : https://doi.org/10.62668/jimr.v5i01.2586
Email : info@azramediaindonesia.com

Open Access

SOCIAL SUPPORT, PSYCHOLOGICAL RESILIENCE, AND QUALITY OF LIFE AMONG TUBERCULOSIS PATIENTS

Atika Yolanda Silaban[*1], Yusnilawati[2], Yuliana[3], Indah Mawarti[4], Febri Tri Andini[5]
[1,2,3,4,5] University of Jambi, Jambi City, Indonesia
[*]Corresponding Author: atikayolanda56@gmail.com

Info Article
Received :
01 April 2026
Revised :
04 May 2026
Accepted :
02 June 2026
Publication :
30 June 2026

Keywords:
Primary Healthcare, Psychological Resilience, Quality of Life, Social Support, Tuberculosis.

Kata Kunci:
Pelayanan Kesehatan Primer, Ketahanan Psikologis, Kualitas Hidup, Dukungan Sosial, Tuberkulosis.

Abstract: *Tuberculosis remains a major public health challenge in Indonesia, with psychosocial factors potentially influencing patients' quality of life during treatment. This quantitative correlational study with a cross-sectional design examined the relationship between social support, psychological resilience, and quality of life among 35 Tuberculosis patients at Kenali Besar Public Health Center, Jambi City, from November 2025 to February 2026 using total sampling. Data were collected using the MSPSS, CD-RISC-25, and WHOQOL-BREF questionnaires and analyzed with Spearman Rank tests. Most respondents were male (60.0%), aged 46–55 years (22.9%), had completed high school (60,0%), and reported high social support, psychological resilience, and quality of life (85.7% each). Social support was positively associated with quality of life ($r = 0.611$, $p < 0.001$), while psychological resilience showed an even stronger positive relationship ($r = 0.761$, $p < 0.001$). Strengthening both factors may improve quality of life and should be integrated into Tuberculosis management programs.*

Abstrak: Tuberkulosis tetap menjadi tantangan kesehatan masyarakat utama di Indonesia, dengan faktor psikososial yang berpotensi memengaruhi kualitas hidup pasien selama pengobatan. Studi korelasional kuantitatif dengan desain cross-sectional ini meneliti hubungan antara dukungan sosial, ketahanan psikologis, dan kualitas hidup di antara 35 pasien Tuberkulosis di Puskesmas Kenali Besar, Kota Jambi, dari November 2025 hingga Februari 2026 menggunakan total sampling. Data dikumpulkan menggunakan kuesioner MSPSS, CD-RISC-25, dan WHOQOL-BREF dan dianalisis dengan uji Spearman Rank. Sebagian besar responden adalah laki-laki (60,0%), berusia 46–55 tahun (22,9%), telah menyelesaikan sekolah menengah atas (60,0%), dan melaporkan dukungan sosial, ketahanan psikologis, dan kualitas hidup yang tinggi (masing-masing 85,7%). Dukungan sosial berhubungan positif dengan kualitas hidup ($r = 0,611$, $p < 0,001$), sedangkan ketahanan psikologis menunjukkan hubungan positif yang lebih kuat ($r = 0,761$, $p < 0,001$). Memperkuat kedua faktor tersebut dapat meningkatkan kualitas hidup dan harus diintegrasikan ke dalam program manajemen Tuberkulosis.

INTRODUCTION

Communicable diseases remain a major public health concern worldwide. Despite the epidemiological transition toward non-communicable diseases, tuberculosis continues to pose a significant health challenge in Indonesia. Tuberculosis remains one of the world's leading infectious causes of morbidity and mortality, with social determinants such as poverty, stigma, and mental health problems limiting access to healthcare and treatment adherence, indicating that biomedical interventions alone are insufficient without integrated socioeconomic approaches (Aemilianus Mau, Yustinus Rindu, Trifonia Sri Nurwela, Maria A. Making, 2024). According to the World Health Organization (WHO), millions of new Tuberculosis cases occur annually, making Tuberculosis one of the deadliest infectious diseases globally (Craig, G. M., Daftary, A., Engel, N., O'Driscoll, S., & Ioos, 2017).

Indonesia ranks second worldwide in Tuberculosis burden after India, with an estimated 1,082,000 incident cases reported in the 2023–2024 National Tuberculosis Inventory Study (world health organization, n.d.). The Indonesian Ministry of Health recorded approximately 860,100 Tuberculosis cases in 2024, an increase from 821,200 cases in 2023 (K. K. R. Indonesia., 2024). West Java reported the highest number of Tuberculosis cases, followed by East Java and Central Java (Katadata, 2024). In Jambi Province, 5,308 Tuberculosis cases were reported in 2022, with an incidence rate increasing from 382 to 425 per 100,000 population compared with the previous year (D. K. P. Jambi, 2023). Nationally, Tuberculosis remains a major public health problem, contributing to an estimated 1.09 million new cases and 125,000 deaths annually (Kementerian Kesehatan, n.d.).

Tuberculosis is an infectious disease caused by *Mycobacterium tuberculosis*, primarily affecting the lungs although it may involve other organs (Kaka, 2021). It is the second leading infectious cause of death after HIV/AIDS. Transmission occurs through airborne droplets expelled by infectious patients during coughing or sneezing. Early infection is often asymptomatic, while active disease commonly presents with persistent cough, hemoptysis, chest pain, fatigue, fever, and weight loss, symptoms that frequently develop gradually and remain unnoticed (world health organization, 2025).

Tuberculosis is curable through continuous treatment lasting six months to one year; however, strict adherence is essential. Treatment interruption allows bacterial regrowth, requiring patients to repeat the intensive treatment phase (Andri et al., 2020). Although anti-Tuberculosis medication is provided free of charge, indirect costs such as

transportation, nutritional support, and income loss create substantial financial burdens that may contribute to treatment discontinuation (Pradipta et al., 2021). Indonesia continues to face considerable challenges in Tuberculosis elimination. Treatment initiation for drug-sensitive Tuberculosis reached only 81% against the national target of 90%, while treatment success for drug-resistant Tuberculosis remained at only 58%, despite 889,000 Tuberculosis cases being notified in 2024 (Aji Muhawarman, ST, 2025).

Evidence from Brebes Regency demonstrated that 368 patients discontinued treatment and 98 died during 2023, highlighting the influence of non-medical barriers to treatment success (M. S. Indonesia., n.d.). Survivors of drug-resistant Tuberculosis have reported severe medication side effects, job loss, financial hardship, and persistent social stigma that undermined their hope of recovery (Tirto., n.d.). Patients frequently experience discrimination, including workplace dismissal, social isolation, and rejection by family members and communities (DetikHealth., n.d.).

In Jambi City, Tuberculosis remains a significant health concern. The Health Office recorded approximately 5,308 Tuberculosis cases in 2022, 2,356 cases in 2023, and 1,009 registered patients in 2024 (Leonardus Yoga Wijanarko, 2024). Routine surveillance identified Talang Bakung Public Health Center as having the highest number of Tuberculosis cases, followed closely by Kenali Besar Public Health Center (D. K. K. Jambi., 2024). Kenali Besar was selected as the study site because it provides better direct access to patients, enabling more comprehensive interviews, observations, and data verification.

Social support plays a crucial role in helping Tuberculosis patients cope with psychological distress and social challenges throughout treatment. Support from family members, friends, healthcare providers, and the surrounding community enhances patients' motivation, self-confidence, treatment adherence, and recovery outcomes (Kilima, S. P., n.d.). Social support encompasses emotional, informational, instrumental, and appraisal support, all of which have been recognized as essential in chronic disease management. Family support, in particular, has been shown to improve treatment adherence among Tuberculosis patients in Indonesia (Wulandari, R., Fitria, L., & Nurmala, 2020). However, stigma and discrimination remain widespread, discouraging patients from disclosing their illness and reducing access to essential emotional and practical support (Santosa, 2023). Patients often experience shame, fear of social exclusion, diminished self-esteem, and inadequate appreciation of their

recovery efforts (Surakarta & Of, 2023). Inadequate instrumental support, including transportation assistance, medication reminders, and treatment accompaniment, further increases the risk of treatment interruption, especially among economically disadvantaged patients (Halmahera et al., 2022). Participation in peer-support groups has been shown to improve hope, psychological well-being, and treatment commitment (Pulungan et al., 2025).

Psychological resilience is another important determinant of successful Tuberculosis recovery. Resilience enables patients to adapt to prolonged treatment, emotional distress, anxiety, and medication side effects while maintaining positive coping strategies. Patients with stronger resilience generally demonstrate better emotional regulation, problem-solving abilities, and treatment adherence (Wahyuni, 2021). Conversely, fear of stigma often delays healthcare seeking, reflecting reduced confidence in personal judgment regarding health decisions (Wahyudi, 2021). Difficulties in self-acceptance, feelings of shame, guilt toward family members, and poor self-control during lengthy treatment further reduce patients' quality of life and increase the likelihood of treatment discontinuation (Sari, 2022). Spirituality also contributes positively to resilience by providing hope, meaning, and emotional strength throughout long-term therapy (Susanto, 2021). Research has consistently shown that greater psychological resilience is associated with improved treatment adherence and better quality of life among Tuberculosis patients (Widiyawati, 2023).

Previous studies have further demonstrated that social support strengthens resilience and directly improves the quality of life of Tuberculosis patients. Individuals receiving adequate family and community support are more likely to complete treatment successfully and maintain better psychological well-being. Health experts have emphasized that Tuberculosis patients need support rather than avoidance (Medika., n.d.). Survivor-led community organizations have also illustrated the importance of peer support in sustaining patients' motivation throughout treatment (Jogja., n.d.).

Preliminary interviews with seven Tuberculosis patients undergoing treatment at Kenali Besar Public Health Center revealed varying psychosocial conditions. Three participants demonstrated relatively adaptive emotional responses, characterized by mild anxiety, acceptance of diagnosis, optimism regarding recovery, effective coping mechanisms, and adequate family support that promoted treatment adherence. In contrast, four participants reported severe anxiety, sadness, fear of stigma, concerns

about burdening their families, poor self-acceptance, reduced self-confidence, ineffective coping strategies, and insufficient family support, resulting in increased psychological distress and social isolation.

Considering the persistent burden of Tuberculosis, the psychosocial challenges experienced by patients, and the potential contributions of social support and psychological resilience to patient well-being, this study aims to examine the relationship between social support, psychological resilience, and quality of life among Tuberculosis patients at Kenali Besar Public Health Center, Jambi City.

METHOD

This study employed a quantitative correlational design with a cross-sectional approach to examine the relationships between social support, psychological resilience, and quality of life among tuberculosis patients (Sugiyono., 2013). The study was conducted at Kenali Besar Public Health Center, Jambi City, Indonesia, with data collection carried out from November 2025 to February 2026. The study population consisted of all Tuberculosis patients who had undergone treatment or follow-up care for at least two weeks at the health center. Total sampling was used to include all eligible participants. From 41 registered patients, five were excluded due to age below 10 years and one due to death prior to data collection, resulting in a final sample of 35 respondents.

Primary data were collected using structured questionnaires consisting of demographic characteristics and three standardized instruments: the Multidimensional Scale of Perceived Social Support (MSPSS) to measure social support, the Connor–Davidson Resilience Scale (CD-RISC-25) to assess psychological resilience, and the World Health Organization Quality of Life Questionnaire-BREF (WHOQOL-BREF) to evaluate quality of life across physical, psychological, social, and environmental domains. In this study, social support and psychological resilience were defined as independent variables, while quality of life was the dependent variable (Syapitri, H., Amila, N., Kep, M., Kep, S. & Aritonang, 2021).

Instrument validity was tested using Pearson Product Moment correlation by comparing the calculated r value with the r table value, while reliability was assessed using Cronbach's Alpha to determine internal consistency (Sugiyono, 2019). Data processing was performed using SPSS through four stages, namely editing, coding, data entry, and cleaning to ensure data accuracy and completeness (Nur, M. A. & Saihu,

2024). Data analysis consisted of univariate and bivariate analyses. Univariate analysis was used to describe the frequency distribution of respondent characteristics, social support, psychological resilience, and quality of life, while bivariate analysis employed the Spearman Rank (rho) test to examine the relationships between variables.

RESULTS AND DISCUSSION

Results

Univariate Analysis Results

Table 1. Distribution of Respondent Characteristics (N=35)

Variable	Category	Frequency (f)	Percentage (%)
Age (years)	Early adolescence (12–16)	5	14.3
	Late adolescence (17–25)	5	14.3
	Early adulthood (26–35)	4	11.4
	Late adulthood (36–45)	7	20.0
	Early elderly (46–55)	8	22.9
	Late elderly (56–65)	3	8.6
	Elderly (>65)	3	8.6
	Total	**35**	**100**
Gender	Male	21	60.0
	Female	14	40.0
	Total	**35**	**100**
Education level	Elementary school	2	5.7
	Junior high school	2	5.7
	Senior high school/vocational school	21	60.0
	University	10	28.6
	Total	**35**	**100**
Occupation	Laborer	7	20.0
	Entrepreneur	9	27.5
	Farmer	1	2.9
	Trader	1	2.9
	Civil servant	1	2.9
	Housewife	6	17.1
	Unemployed	10	28.6
	Total	**35**	**100**

Based on Table 1, among 35 respondents, the largest age group was early elderly (46–55 years), comprising 8 respondents (22.9%), while the smallest proportions were late elderly (56–65 years) and elderly (>65 years), each consisting of 3 respondents (8.6%). Based on gender, most respondents were male (21 respondents; 60%), while female respondents accounted for 14 respondents (40%). Regarding educational level, the majority of respondents had completed senior high school/vocational school (21 respondents; 60.0%), while the lowest proportions were elementary school and junior high school graduates, each with 2 respondents (5.7%). In terms of occupation, the

largest group was unemployed respondents (10 respondents; 28.6%), followed by entrepreneurs (9 respondents; 27.5%), laborers (7 respondents; 20.0%), housewives (6 respondents; 17.1%), while farmers, traders, and civil servants each accounted for 1 respondent (2.9%).

Table 2. Distribution of variables

Variable	Category	Frequency (f)	Percentage (%)
Social Support	Low	5	14.3
	High	30	85.7
	Total	**35**	**100**
Psychological Resilience	Low	5	14.3
	High	30	85.7
	Total	**35**	**100**
Quality of Life	Low	5	14.3
	High	30	85.7
	Total	**35**	**100**

Based on Table 2, the majority of respondents demonstrated high levels across all main study variables. For social support, 30 respondents (85.7%) reported high support, while 5 respondents (14.3%) reported low support. A similar pattern was observed for psychological resilience, where 30 respondents (85.7%) had high resilience and 5 respondents (14.3%) had low resilience. In terms of quality of life, most respondents also fell into the high category, with 30 respondents (85.7%), whereas 5 respondents (14.3%) were categorized as having low quality of life.

Bivariate Analysis Results

Table 3. Correlation between Social Support & Psychological Resilience on Quality of Life

Variable	Category	Quality of Life		Total n (%)	p-value
		(Low) n (%)	(High) n (%)		
Social Support	Low	2 (5.7)	3 (8.6)	5 (14.3)	<0.001
	High	3 (8.6)	27 (77.1)	30 (85.7)	
	Total	**5 (14.3)**	**30 (85.7)**	**35 (100)**	
Psychological Resilience	Low	4 (11.4)	1 (2.9)	5 (14.3)	
	High	1 (2.9)	29 (82.9)	30 (85.7)	
	Total	**5 (14.3)**	**30 (85.7)**	**35 (100)**	

Based on Table 3, there is a significant relationship between social support and quality of life among Tuberculosis patients. Most respondents with high social support had a high quality of life (27 respondents; 77.1%), while those with low social support were more likely to have a low quality of life (2 respondents; 5.7%). The statistical test showed a significant association with a p-value of <0.001. Similarly, psychological resilience was significantly associated with quality of life. The majority of respondents

with high resilience had a high quality of life (29 respondents; 82.9%), whereas those with low resilience tended to have a low quality of life (4 respondents; 11.4%). The relationship between psychological resilience and quality of life was also statistically significant with a p-value of <0.001. Results and discussion section contain about the results of the study that an answers analysis based on research objectives that have been stated in the introduction. Explanations can use pictures/graphs/tables to facilitate visualization. This section is an important part because it contains a clear description about results data and analysis of research data, interpretation of the findings in the field, the relevance of research results with relevant concepts, theories, or previous or other research results, or can even find new theories or modify that already exist and implications for scientific developments in their fields.

Discussion

The study involving 35 tuberculosis patients at the Kenali Besar Public Health Center in Jambi City found a significant relationship between social support and quality of life. Among 30 patients with high social support, most (27 respondents; 77.1%) had high quality of life, while 3 respondents (8.6%) had low quality of life. In contrast, among 5 patients with low social support, 3 respondents (8.6%) still had high quality of life, while 2 respondents (5.7%) had low quality of life. The Spearman Rank test showed a significant association between social support and quality of life ($p < 0.001$), indicating that better social support is linked to better quality of life among Tuberculosis patients. Social support refers to emotional, informational, and practical assistance from others that helps individuals cope with stress and health challenges (Sarafino, E. P., & Smith, 2014). Quality of life is defined as an individual's perception of their position in life influenced by physical, psychological, social, and environmental conditions ((1996)., 1996).

For tuberculosis patients, it is not only influenced by the condition of the disease but also by the support received during treatment. Previous studies show that patients with strong social support tend to experience better quality of life due to increased motivation, reduced stress, and improved treatment adherence (Safrina, & Ramadhani, 2025). Other research also confirms that social support reduces psychological burden and improves health outcomes in Tuberculosis patients (Tola, H. H., Shojaeizadeh, D., Tol, A., Garmaroudi, G., Yekaninejad, M. S., Ejeta, L. T., & Kebede, 2015). Informational support was the most dominant aspect, indicating that patients frequently

received education and guidance about Tuberculosis management, which helps reduce uncertainty.

Meanwhile, physical health was the highest quality-of-life dimension, showing that many patients could still maintain daily functioning during treatment. High scores were also found in perceived availability of help and access to information (97%), which strengthens coping ability. Satisfaction with health services was also high (94%), indicating that good healthcare quality contributes to better outcomes (Datiko, D. G., Jerene, D., Suarez, P., 2020). The buffering effect theory explains that social support reduces the negative impact of stress by improving coping ability and treatment adherence. However, some patients with high social support still reported low quality of life, suggesting that other factors such as disease severity, treatment side effects, and psychological condition also influence outcomes. Overall, social support has a significant positive relationship with quality of life in Tuberculosis patients.

The study also found a significant relationship between psychological resilience and quality of life. Among 30 patients with high resilience, 29 respondents (82.9%) had high quality of life, while 1 respondent (2.9%) had low quality of life. Among 5 patients with low resilience, 4 respondents (11.4%) had low quality of life and 1 respondent (2.9%) had high quality of life. The Spearman Rank test showed a significant relationship ($p < 0.001$), indicating that higher resilience is associated with better quality of life. Psychological resilience is defined as the ability to adapt, survive, and recover from stressful conditions while maintaining psychological functioning (Connor, K. N. & Davidson, 2003).

For tuberculosis patients, mental resilience is crucial because treatment is long-term, has side effects, and is often accompanied by psychological stress and social stigma. Quality of life is influenced not only by physical health but also by psychological coping ability. Previous studies show that patients with higher resilience tend to have better physical and psychological outcomes and improved quality of life (Moya, E. M., Biswas, A., Chávez Baray, S. M., 2022). Other research also confirms that resilience is positively associated with better coping, optimism, and treatment adaptation in Tuberculosis patients (Khan, A., Rehman, A., Ullah, I., 2021). The highest resilience dimension was self-competence (90%), showing strong belief in personal ability to overcome difficulties. The highest quality-of-life dimension was physical health (82%), indicating that many patients were still able to function daily during treatment. The highest resilience item was the belief in achieving goals despite

difficulties (100%), showing strong determination among all respondents. However, the lowest score was the ability to maintain focus under pressure (69%), indicating that some patients still experience psychological strain. The highest quality-of-life item was satisfaction with health services (94%), while the lowest was dependence on health services for daily activities (23%).

Resilience improves emotional regulation, optimism, and coping strategies, which enhances adherence and overall well-being. However, some patients with high resilience still had low quality of life, suggesting that physical condition, treatment duration, and external support also play important roles. Overall, psychological resilience has a significant positive relationship with quality of life in Tuberculosis patients, where higher resilience leads to better overall well-being.

CONCLUSION

Based on the study on the relationship between social support, psychological resilience, and quality of life among 35 Tuberculosis patients at the Kenali Besar Public Health Center in Jambi City, it can be concluded that most respondents were aged 46–55 years (22.9%), male (60.0%), had a high school education level (48.6%), and were mostly unemployed (28.6%). The majority of patients reported high social support (85.7%), indicating that they generally received good emotional, informational, and practical assistance from family and their surrounding environment during treatment. Similarly, most patients also showed high psychological resilience (85.7%), meaning they were able to cope with stress, adapt to their illness, and maintain optimism throughout the treatment process. In addition, the majority of respondents had a high quality of life (85.7%), indicating that they were still able to maintain good physical, psychological, social, and environmental well-being during Tuberculosis treatment. Statistical analysis showed a significant positive relationship between social support and quality of life ($p < 0.001$; $r = 0.611$), meaning that higher social support is associated with better quality of life. Likewise, there was a significant positive relationship between psychological resilience and quality of life ($p < 0.001$; $r = 0.761$), indicating a very strong association where higher resilience corresponds to better quality of life during Tuberculosis treatment.

REFERENSI

Aemilianus Mau, Y. R., Nurwela, T. S., Making, M. A., & D. (2024). SKRINING DAN EDUKASI PENYAKIT MENULAR DAN PENYAKIT TIDAK MENULAR PADA MASYARAKAT PERDESAAN. *IJCD: Indonesian Journal of Community Dedication, 2*(2).

Aji Muhawarman. (2025). AKSI NYATA PERCEPATAN ELIMINASI TUBERKULOSIS DI INDONESIA. Kementerian Kesehatan RI. https://kemkes.go.id/id/47510

Andri, J., Febriawati, H., Randi, Y., J, H., & Setyawati, A. D. (2020). PENATALAKSANAAN PENGOBATAN TUBERCULOSIS PARU. *Jurnal Kesmas Asclepius, 2*(1), 27–34. https://doi.org/10.31539/jka.v2i1.1164

Connor, K. N., & Davidson, J. R. T. (2003). DEVELOPMENT OF A NEW RESILIENCE SCALE: THE CONNOR-DAVIDSON RESILIENCE SCALE (CD-RISC). *Depression and Anxiety, 18*(2), 76–82. https://doi.org/10.1002/da.10113

Craig, G. M., Daftary, A., Engel, N., O'Driscoll, S., & Ioos, V. (2017). TUBERCULOSIS STIGMA AS A SOCIAL DETERMINANT OF HEALTH: A SYSTEMATIC MAPPING REVIEW OF RESEARCH IN LOW INCIDENCE COUNTRIES. *International Journal of Infectious Diseases, 56*, 90–100. https://doi.org/10.1016/j.ijid.2016.10.011

Datiko, D. G., Jerene, D., & Suarez, P. (2020). QUALITY OF LIFE OF TUBERCULOSIS PATIENTS AND ASSOCIATED FACTORS IN ETHIOPIA. *PLOS ONE, 15*(5), e0233358. https://doi.org/10.1371/journal.pone.0233358

DetikHealth. (2023, Februari 21). KISAH PASIEN TB RESISTEN OBAT, BELASAN TAHUN TERAPI DEMI KALAHKAN BAKTERI. *DetikHealth*. https://health.detik.com/true-story/d-6571023/kisah-pasien-tb-resisten-obat-belasan-tahun-terapi-demi-kalahkan-bakteri

Dinas Kesehatan Kota Jambi. (2024). LAPORAN TAHUNAN PROGRAM TUBERKULOSIS (TBC) TAHUN 2024. Dinas Kesehatan Kota Jambi.

Dinas Kesehatan Provinsi Jambi. (2023). PROFIL KESEHATAN PROVINSI JAMBI TAHUN 2022. Scribd. https://id.scribd.com/document/692421757/PROFIL-KESEHATAN-PROVINSI-JAMBI-2022

GWS Medika. (2023). MENANGKAL STIGMA PADA PENGIDAP TUBERKULOSIS. GWS Medika. https://gwsmedika.id/id/news-articles/menangkal-stigma-pada-pengidap-tuberkulosis

Halmahera, E., Abubakar, A., Blandina, O. A., & Cabu, R. (2022). KEPATUHAN PASIEN DALAM PENGOBATAN TUBERCULOSIS (TBC) DI PUSKESMAS KOTA MABA, HALMAHERA TIMUR. *Jurnal Inovasi Penelitian, 2*(1), 27–34.

Kaka, M. P. (2021). HUBUNGAN TINGKAT PENGETAHUAN DAN SIKAP KELUARGA DENGAN PERILAKU PENCEGAHAN PENULARAN PENYAKIT TUBERKULOSIS (TBC). *Media Husada Journal of Nursing Science, 2*(2), 6–12. https://doi.org/10.33475/mhjns.v2i2.40

Katadata. (2024). JAWA BARAT JADI PROVINSI DENGAN KASUS TBC TERBANYAK 2024. *Databoks Katadata*. https://databoks.katadata.co.id/demografi/statistik/6790af5d95790

Kementerian Kesehatan RI. (2023, Mei 31). KOMITMEN ELIMINASI TBC, MENKES TARGETKAN 90% PENDERITA TBC TERDETEKSI DI 2024. Direktorat Jenderal Pelayanan Kesehatan. https://upk.kemkes.go.id/new/komitmen-eliminasi-tbc-menkes-targetkan-90-penderita-tbc-terdeteksi-di-2024

Kementerian Kesehatan RI. (2024, Maret 25). MENKES TEGASKAN INDONESIA SERIUS TANGANI TBC. Kementerian Kesehatan RI. https://kemkes.go.id/id/menkes-tegaskan-indonesia-serius-tangani-tbc

Khan, A., Rehman, A., Ullah, I., & Khan, Z. (2021). PSYCHOLOGICAL DISTRESS, RESILIENCE AND QUALITY OF LIFE AMONG TUBERCULOSIS PATIENTS: A CROSS-SECTIONAL STUDY. *Journal of Public Health Research, 10*(3), 2200. https://doi.org/10.4081/jphr.2021.2200

Kilima, S. P., dkk. (2024). PERCEIVED ACCESS TO SOCIAL SUPPORT DURING AND AFTER TB TREATMENT: A QUALITATIVE STUDY. *Frontiers in Health Services, 4*, 1509539. https://doi.org/10.3389/frhs.2024.1509539

Mentari Sehat Indonesia. (2023, November 29). 98 PENDERITA TBC DI BREBES MENINGGAL DUNIA SEPANJANG 2023, INI PENYEBABNYA. Mentari Sehat Indonesia. https://www.mentarisehatindonesia.org/29-november-2023-98-penderita-tbc-di-brebes-meninggal-dunia-sepanjang-2023-ini-penyebabnya/

Moya, E. M., Biswas, A., Chávez Baray, S. M., dkk. (2022). RESILIENCE AND QUALITY OF LIFE AMONG PATIENTS RECEIVING TUBERCULOSIS TREATMENT. *International Journal of Environmental Research and Public Health, 19*(8), 4814. https://doi.org/10.3390/ijerph19084814

Nur, M. A., & Saihu, M. (2024). PENGOLAHAN DATA. *Sci. J. Sains dan Teknol., 2*(1), 163–175.

Pradipta, I. S., Idrus, L. R., Probandari, A., Lestari, B. W., & Diantini, A. (2021). BARRIERS AND STRATEGIES TO SUCCESSFUL TUBERCULOSIS TREATMENT IN A HIGH-BURDEN TUBERCULOSIS SETTING: A QUALITATIVE STUDY FROM THE PATIENT'S PERSPECTIVE. *BMC Public Health, 21*, 1903. https://doi.org/10.1186/s12889-021-12005-y

Pulungan, A. F., Khairunnisa, C., Herlina, N., Cot, A., Nie, T., Batu, M., Utara, A., & Aceh, P. (2025). HUBUNGAN STIGMA DENGAN KEPATUHAN PENGOBATAN TUBERKULOSIS PARU DI KOTA LHOKSEUMAWE. *Fakultas Kedokteran Universitas Malikussaleh, 3*(1).

Safrina, & Ramadhani, N. R. (2025). KEPATUHAN MINUM OBAT, LAMA PENGOBATAN DAN DUKUNGAN SOSIAL TERHADAP KUALITAS HIDUP PASIEN TUBERKULOSIS DI WILAYAH KERJA PUSKESMAS KUALA TUNGKAL II. *Prepotif: Jurnal Kesehatan Masyarakat, 9*(1).

Santosa, L. W. (2023, Agustus 24). KEMENKES: STIGMA MASIH JADI TANTANGAN PASIEN TB DALAM PENGOBATAN. *Antara News*. https://www.antaranews.com/berita/3696090/kemenkes-stigma-masih-jadi-tantangan-Penderita-tb-dalam-pengobatan

Sarafino, E. P., & Smith, T. W. (2014). *Health Psychology: Biopsychosocial Interactions* (8th ed.). John Wiley & Sons.

Sari, R., dkk. (2022). SELF-STIGMA AND QUALITY OF LIFE AMONG TUBERCULOSIS PATIENTS. *Sains Medika: Jurnal Kedokteran dan Kesehatan, 13*(2). https://doi.org/10.30659/sainsmed.v13i2.23351

Sugiyono. (2013). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Alfabeta.

Sugiyono. (2019). *Metode Penelitian Pendidikan (Kuantitatif, Kualitatif, Kombinasi, R&D dan Penelitian Pendidikan)*. Alfabeta.

Susanto, T., dkk. (2021). PSYCHOLOGICAL STRESS AND MEDICATION ADHERENCE AMONG TUBERCULOSIS PATIENTS. *Aisyiyah Surakarta Journal of Nursing, 4*(1), 15–21. https://doi.org/10.30787/asjn.v4i1.821

Syapitri, H., Amila, & Aritonang, J. (2021). *Buku Ajar Metodologi Penelitian Kesehatan*. Ahlimedia Book.

Terbesar Jogja. (2023). CERITA BRYAN, PENYINTAS TBC YANG SEMPAT DIKUCILKAN NAMUN BANGKIT DAN MENDIRIKAN YAYASAN. Terbesar Jogja. https://terbesarjogja.com/cerita-bryan-penyintas-tbc-yang-sempat-dikucilkan-namun-bangkit-dan-mendirikan-yayasan-terbesar-yogyakarta/

Tirto. (2023). KISAH PENYINTAS PENYAKIT TBC & UPAYA MERUNTUHKAN STIGMA NEGATIF. *Tirto.id*. https://tirto.id/kisah-penyintas-penyakit-tbc-upaya-meruntuhkan-stigma-negatif-gDQP

Tola, H. H., Shojaeizadeh, D., Tol, A., Garmaroudi, G., Yekaninejad, M. S., Ejeta, L. T., & Kebede, A. (2015). PSYCHOLOGICAL AND EDUCATIONAL INTERVENTION TO IMPROVE TUBERCULOSIS TREATMENT ADHERENCE AND QUALITY OF LIFE AMONG TUBERCULOSIS PATIENTS. *PLOS ONE, 10*(5), e0124577. https://doi.org/10.1371/journal.pone.0124577

Wahyudi, A., dkk. (2021). DELAY IN SEEKING TREATMENT AMONG PULMONARY TUBERCULOSIS PATIENTS IN INDONESIA. *Journal of Public Health Research, 10*(2). https://doi.org/10.4081/jphr.2021.2199

Wahyuni, S., dkk. (2021). SELF-EFFICACY AND MEDICATION ADHERENCE AMONG PULMONARY TUBERCULOSIS PATIENTS. *Journal of Public Health Research, 10*(2). https://doi.org/10.4081/jphr.2021.2201

Wijanarko, L. Y. (2024, Juni 3). RATUSAN KASUS TBC DI KOTA JAMBI DITEMUKAN HINGGA MEI 2024. *Radio Republik Indonesia (RRI).* https://www.rri.co.id/daerah/728270/ratusan-kasus-tbc-di-kota-jambi-ditemukan-hingga-mei-2024

Widiyawati, S. R. (2023). HUBUNGAN ANTARA RESILIENSI DAN KUALITAS HIDUP PENDERITA TUBERKULOSIS PARU DI RS MITRA SIAGA TEGAL [Skripsi/Tesis, Universitas Muhammadiyah Tegal].

World Health Organization. (1996). *WHOQOL-BREF: Introduction, Administration, Scoring and Generic Version of the Assessment*. World Health Organization.

World Health Organization. (2024). LAPORAN HASIL STUDI INVENTORI TB INDONESIA 2023–2024. World Health Organization Indonesia.

https://cdn.who.int/media/docs/default-source/searo/indonesia/non-who-publications/laporan-hasil-studi-inventori-tb-indonesia-2023-2024.pdf

World Health Organization. (2025, April 21). TUBERCULOSIS. World Health Organization. https://www.who.int/news-room/fact-sheets/detail/tuberculosis

Wulandari, R., Fitria, L., & Nurmala, I. (2020). FAMILY SUPPORT AND ADHERENCE TO ANTI-TUBERCULOSIS DRUG TREATMENT IN PATIENTS WITH PULMONARY TUBERCULOSIS. *Journal of Public Health Research, 9*(3), 183–188. https://doi.org/10.4081/jphr.2020.1824