

# Artikel\_6.pdf

*by* Lembunai Tat Alberta

---

**Submission date:** 01-Sep-2022 09:11AM (UTC+0700)

**Submission ID:** 1890379257

**File name:** Artikel\_6.pdf (97.25K)

**Word count:** 5200

**Character count:** 29539



RESEARCH ARTICLE

URL of this article: <http://heanoti.com/index.php/hn/article/view/hn51002>

19  
**Family Support and Prevention of Transmission of Tuberculosis in the Work Area of the Surabaya City Health Center**

Lembunai Tat Alberta 1), I. Utari Widyastuti 2

<sup>1(CA)</sup>Diploma IV Program, Nursing Department, Poltekkes Kemenkes Surabaya, Indonesia;  
albertalembunaitat@gmail.com (Corresponding Author)

<sup>2</sup>Diploma III Program, Nursing Department, Poltekkes Kemenkes Surabaya, Indonesia;  
dwiutariwidyastuti@yahoo.co.id

ABSTRACT

Family support and factors affecting it are expected to minimize pulmonary tuberculosis transmission. The study aimed to analyze the factors that influence family support for the prevention of transmission of pulmonary tuberculosis. This study was a cross-sectional study, with a sample of 110 pulmonary tuberculosis patients who were treated at the public health center in Surabaya. The instrument used for data collection was a questionnaire. The data analysis used was descriptive analysis and *Partial Least Square (PLS)*. The family support everything is good (71%-86.4%). Most and almost of the factors receiving support and supporting factors were in the good category (67.3% and 93.6%). Composition and structure of social networks support from neighbors and friends (95.5%), they have a very close relationship (64.5%). There was a relationship between the factors of recipient support, support providers, composition and structure of social networks on family support in the prevention of pulmonary tuberculosis transmission with p-values of 0.002, 0.000, and 0.000, respectively. Factors of recipient support, support providers, composition and structure of social networks affect family support in the prevention of pulmonary tuberculosis transmission. Nurses must support families in providing support for the prevention of pulmonary tuberculosis transmission.

**Keywords:** family support; tuberculosis; prevention of transmission

INTRODUCTION

Background

Pulmonary tuberculosis is an infectious disease that is still the most major public health problem in the world because it causes morbidity, disability, and high mortality. Prevention of pulmonary tuberculosis is all health efforts that prioritize promotive and preventive aspects, without neglecting the curative and rehabilitative aspects aimed at protecting public health, reducing morbidity, disability, or death, deciding on transmission, preventing drug resistance, and reducing the negative effects caused by pulmonary tuberculosis<sup>(1)</sup>. The national tuberculosis control program targets are elimination by 2035 and Indonesia free from tuberculosis by 2050.

The World Health Organization (WHO) report in the Global Tuberculosis Report 2015, in 2014 the incidence and mortality rates caused by tuberculosis are still very high and even become one of the five deadly diseases in women aged 20-59 years. Based on the results of the 2013-2014 prevalence survey the prevalence of tuberculosis with bacteriological confirmation in Indonesia was 759 per 100,000 population aged 15 years and over and the prevalence of smear tuberculosis was positive at 257 per 100,000 population aged 15 years and over. Data as of May 17, 2018, shows the number of new pulmonary tuberculosis cases in Indonesia in 2017 amounted to 420,994 cases<sup>(2)</sup>. Pulmonary tuberculosis is also the number one cause of death among infectious diseases and ranks third as a cause of death at all ages after cardiovascular disease and acute respiratory infections. The number of pulmonary tuberculosis cases in East Java ranks second in Indonesia after West Java province with the number of tuberculosis case findings as many as 40,185 cases. Cases of pulmonary tuberculosis in Surabaya occupy the highest rank in East Java wherein 2016 found 5428 cases of pulmonary tuberculosis in the city of Surabaya<sup>(3)</sup>.

One of the national strategies for the prevention of pulmonary tuberculosis is to increase community independence in tuberculosis control. The activities carried out in tuberculosis control are health promotion, tuberculosis surveillance, controlling risk factors, finding and handling tuberculosis cases, providing immunity, and administering preventive medicine<sup>(1)</sup>. The Healthy Indonesia Program with a family approach is a program

organized by the government in this case the Ministry of Health to realize Indonesian people who behave in a healthy manner, live in a healthy environment, and be aware of the importance of health. There are 14 criteria for a healthy family in a healthy Indonesia program with a family approach, namely: following the family planning program, mothers giving birth in a health facility, infants getting complete basic immunizations, infants getting exclusive breastfeeding, infants getting growth monitoring, pulmonary tuberculosis patients getting standardized treatment, sufferers hypertension does not get medication regularly, people with mental disorders get treatment and are not neglected, no one smokes, becomes a member of National health insurance (JKN), has access to clean water facilities, uses healthy toilets<sup>(4)</sup>.

As a social system, a family is a small group consisting of individuals who are closely related to each other, interdependent, and organized in a single unit to achieve certain goals<sup>(5)</sup>. The family is an important component to succeed in the government program in realizing a healthy Indonesian society including the success of a tuberculosis-free Indonesia program. Patients with pulmonary tuberculosis in the family will bring negative impacts both physically, mentally, and socially. This is because the treatment and cure of pulmonary tuberculosis requires a long time and requires attention from other family members. If the pulmonary tuberculosis sufferer in the family is not known and the disease is not treated it will be a source of transmission for those around him, especially family members. It is said once a cough can produce about 3000 sputum sparks and every positive BTA will infect 10-15 other people (Widoyono, 2008) in (Marwansyah, 2015)<sup>(6)</sup>. It is also said that patients with suspected pulmonary TB who have cough symptoms more than 48 times/night will infect 48% of people who come in contact with patients with suspected pulmonary TB, while patients with suspected pulmonary TB who have coughed less than 6 times/night will infect 28% of people who contact with patients with suspected pulmonary tuberculosis (Ministry of Health of the Republic of Indonesia, 2016) in Siregar PA, et al (2018)<sup>(7)</sup>. Tuberculosis patients who do not undergo treatment or do not routinely take medication are at risk of experiencing treatment failure and resulting in a higher risk of transmission to others. The low level of drug adherence is one of the obstacles to TB control (Hadifah, 2014) in Marwansyah (2019)<sup>(8)</sup>.

Family support is verbal or non-verbal information, suggestions, real help or behavior provided by people who are familiar with the subject in their environment or the form of presence and things that can provide emotional benefits and affect the recipient's behavior (Smet, 1994) in (Christine, 2010) as quoted (Munawaroh AA, et al, 2016)<sup>(9)</sup>. Family support is attitude, action, family acceptance of family members in the form of informational support, appraisal support, instrumental support, and emotional support. Family support in the prevention of pulmonary TB transmission includes information support, assessment support, instrumental support and emotional support in preventing pulmonary TB transmission. One of the factors that influence family support in preventing pulmonary TB transmission is social support which consists of factors such as recipients of support, providers of support, composition and structure of social networks.

### Purpose

This research was conducted to determine the factors that influence family support consisting of recipients of support, providers of support, composition and structure of social networks in the prevention of transmission of pulmonary tuberculosis in the working area of the Surabaya City Health Center.

### METHODS

The research describes phenomena in the form of a relationship between one phenomenon and another<sup>(10)</sup>. This research was an analytic observational study with a cross-sectional approach, which was conducted from May to October 2019. The population was tuberculosis patients who underwent examinations at the Gading Community Health Center (Puskesmas), Perak Timur and Tambak Rejo Surabaya Indonesia. The sample size was 110 tuberculosis patients who met the inclusion criteria as research subjects. Inclusion criteria were patients who suffer from pulmonary tuberculosis who are actively undergoing treatment at the Gading Community Health Center, Perak Timur and Tambak Rejo Surabaya Indonesia in June -August 2019, aged 20-70 years. The data collection instrument in this study was a questionnaire about characteristics, status in the family, long suffering from pulmonary tuberculosis. Before use, first, the validity and reliability of the questionnaire were tested from 20 pulmonary tuberculosis patients. Instruments regarding patient characteristics include age, gender, education, status in the family, length of suffering. The instrument on pulmonary tuberculosis client's perception of factors related to social support recipients consists of 12 questions and pulmonary tuberculosis client's perception of factors related to social support providers consists of 5 questions which are measured using a Likert scale with choices: strongly agree (3), agree (2), disagree (1), and strongly disagree (0). The total factors related to social support recipients score : 15 - 36 and total factors related to social support providers score: 5 - 15, with higher scores indicating a higher level of related to social support. Pulmonary tuberculosis client's perception of factors related to the composition and structure of social networks consists of 5 questions that are family members/friends who often provide support, number of family members living in the house, the number of special friends you have, number of interactions with family / friends and familiarity of sibling relationships with family/friends. The instrument on family support includes information support, emotional support, instrumental

support, assessment support consisting of 5 questions each which are measured using a Likert scale with choices: always (3), often (2), sometimes (1), never (0). The total family support score: 0 - 15 with higher scores indicating a higher level of family support. The instrument on prevention of pulmonary tuberculosis transmission consists of 10 questions which are measured using a Likert scale with choices: always (3), often (2), sometimes (1), never (0). The total prevention of pulmonary tuberculosis transmission score: 3 - 30 with higher scores indicating a higher level of prevention of pulmonary tuberculosis transmission.

Descriptive analysis including frequency, percentage was used to describe characteristics, pulmonary tuberculosis client's perception of factors related to social support recipients, pulmonary tuberculosis client's perception of factors related to social support providers, pulmonary tuberculosis client's perception of factors related to the composition and structure of social networks, family support and prevention of pulmonary tuberculosis transmission. Data analysis Partial Least Square (PLS) was used to determine the correlation between factors related to social support recipients, factors related to social support providers, factors related to the composition and structure of social networks and family support in the prevention of pulmonary tuberculosis transmission with a p-value <0.05 which was considered significant.

This research had received ethical approval from the Ethical Commission of Poltekkes Kementerian Kesehatan Surabaya No. EA/003/KEPK-Poltekkes\_Sby/V/2019

## RESULTS

Table 1 shows the results that the age of people with pulmonary tuberculosis ranges from 21 years and almost half are aged 41-50 years, mostly female and mostly as the head of the family. Almost half have primary school and senior high school education levels while the rest have junior high school and college education levels.

Table 2 shows that almost all of the information support, instrumental support and assessment support for pulmonary tuberculosis patients are good (80%, 83.6%, 86.4%) while emotional support is mostly good (71%).

Table 1. Characteristics of patients with pulmonary tuberculosis (n = 110)

Characteristics	Frequency	Percentage
Age		
21 - 30	19	17.3
31 - 40	21	19.1
41 - 50	35	31.8
50	35	31.8
Gender		
Male	69	62.7
Female	41	37.3
Level of education		
Primary school	37	33.6
Junior High School	19	17.3
Senior High School	42	38.2
College / university	12	10.9
Status in family		
Head of the family	64	58.2
Family members	46	41.8

Table 2. Family support of pulmonary tuberculosis patients

Family support variable	Category			Total	
	Good	Enough	Less	Frequency	Percentage
Information Support	88 (80%)	20 (18.2)	2 (1.8%)	110	100
Emotional Support	78 (71%)	27 (24.5%)	5 (4.5%)	110	100
Instrumental Support	92 (83.6%)	12 (10.9%)	6 (5.5%)	110	100
Assessment Support	95 (86.4%)	14 (12.7%)	1 (0.9%)	110	100

Table 3 shows that the relevant factors of support mostly good (67.3%), supporting factors almost all good (93.6%). Table 4 shows the composition and structure of social networks factors of patients with pulmonary tuberculosis. The composition and structure of social networks almost all subjects were accompanied by outsiders (95.5%), most family members were 4-6 people (50.9%), almost half had special friends of 1-3 people (48.2%) and interact more than 5 times a day (38.2%) and most have very close relationships (64.5%).



Table 3. Recipient factors and supporting factors for pulmonary tuberculosis patients

Recipient factors and supporting factors	Frequency	Percentage	Amount	
			Frequency	Percentage
Recipient of support				
Good	74	67.3		
Enough	36	32.7	110	100
Less	0	0		
Supporting factors				
Good	103	93.6		
Enough	7	6.4	110	100
Less	0	0		

Table 4. The composition and structure of social networks factors of patients with pulmonary tuberculosis

Social network composition and structure factors	Number (n)	Percentage (%)	Amount	
			Number	Percentage
The party who gives support				
Main family	5	4.5	110	100
Neighbors/friends	105	95.5		
Number of family members living in same house				
1-3 people	42	38.2	110	100
4-6 people	56	50.9		
> 6 people	12	10.9		
Number of special friends				
1-3 people	54	49.0	110	100
4-6 people	29	26.4		
> 6 people	27	24.6		
Number of interactions with family/friends				
< 3 times a day	31	28.2	110	100
3-5 times a day	37	33.6		
> 5 times a day	42	38.2		
Relationship intimacy				
Not familiar	8	7.3	110	100
Ordinary	31	28.2		
Very familiar	71	64.5		

The results of the PLS test showed a significant effect with p values of 0.002, 0.000, and 0.000 (<0.05). These results indicate that there is a significant influence between supporting recipient factors, supporting factors, composition factors and social network structure on family support in preventing transmission of pulmonary tuberculosis.

## DISCUSSION

### Family Support in Preventing Pulmonary TB Transmission

Family support for family members including support for family members who suffer from pulmonary tuberculosis is important for people with pulmonary tuberculosis. Family support is all forms of assistance received by family members of pulmonary tuberculosis patients both in the context of treatment and prevention of pulmonary tuberculosis transmission. Family support for pulmonary tuberculosis patients includes information support, emotional support, instrumental support and assessment support.

Appraisal support provided by the family to patients with pulmonary tuberculosis in the form of attitudes shown in the form of accepting the patient's condition, respect, give confidence, praise, and enthusiasm for pulmonary tuberculosis sufferers. In implementing this support it is not too difficult to do so the results obtained tend to be good. While the instrumental support provided by families to patients with pulmonary tuberculosis in the form of concrete actions, among others, by preparing facilities both facilities, energy, time, and money. In providing this support, not all families can likely do so given the limitations possessed by family members in the form of limited knowledge, and socio-economic limitations. The results of this study are no different from the results of a study conducted by Irawati C et al (2020) which showed most of the families support pulmonary tuberculosis sufferers<sup>(11)</sup>. Other research conducted by Kusumoningrum TA. et al (2020) showed no different

results where information support, appreciation support, and instrument support tended to be in a good category, except for more emotional support in the less category<sup>(12)</sup>. Family support provided to pulmonary tuberculosis sufferers in the form of information support, assessment support, instrument support, and emotional support<sup>(13)</sup>. Family support, which involves emotional concern, assistance, and affirmation, will make pulmonary tuberculosis patients not lonely in dealing with situations and family support can empower pulmonary patients during the treatment period by continuing support, such as reminding patients to take drugs and be sensitive to pulmonary tuberculosis sufferers if they experience side effects from pulmonary tuberculosis drugs. What is meant by a family, in this case, is family members themselves, neighbors/live nearby, voluntarily provide support to patients with pulmonary tuberculosis. Family support is one of the important factors that influence adherence to pulmonary tuberculosis treatment, where the nuclear family and extended family function as a support system for family members<sup>(14)</sup>.

Appraisal support gets the best results compared to other support. Assessment support includes depicting the situation, respecting pulmonary tuberculosis sufferers, giving trust, giving praise and encouragement to family members who suffer from pulmonary tuberculosis. These results indicate mutual respect and provide trust, enthusiasm, and praise among family members both healthy and suffering from pulmonary tuberculosis. Emotional support gets the most results compared to other supports. Emotional support includes: accompanying sufferers when they are in control of a health facility, giving special attention, listening to complaints, participating in feeling. These results indicate that not all members of the nuclear family can accompany family members of pulmonary tuberculosis patients both at the time of control to the facility or at home, not all family members can pay special attention and share what is experienced by pulmonary tuberculosis sufferers. Instrumental support gets the most results compared to other support. Instrumental support includes: preparing facilities, costs, time, place, and finding solutions to overcome the problem of pulmonary tuberculosis transmission. These results indicate limitations, especially socio-economic limitations in the family so that it has difficulty in providing instrumental support to family members who experience pulmonary tuberculosis problems.

#### Factors that Influence Family Support in the Prevention of Pulmonary TB Transmission

Family support in preventing transmission of pulmonary tuberculosis is influenced by the support recipient factor, the supporting factor and the composition and structure of social networks factors. The support recipient factor is a family member who suffers from pulmonary tuberculosis while the supporting factor is another family member who does not suffer from pulmonary tuberculosis. Factors in the composition and structure of social networks among others family members who often provide support, the number of family members who currently live at home, the number of special friends they have, the number of interactions with their families, and the intimate relationship with their families. A good perception is shown by family members who suffer from pulmonary tuberculosis as recipients of support and family members who do not suffer from pulmonary tuberculosis as support providers. Similarly, based on the composition and structure of the social network, more support is given by neighbors or friends, but the relationship is very close. This condition shows a positive thing for the family supporting the treatment and prevention of pulmonary tuberculosis transmission. These results are not much different from the results of research conducted by Tristiana et al (2019) who found that the experience of pulmonary tuberculosis clients during treatment requires a variety of support from themselves, others (family, neighbors, friends, and health workers)<sup>(13)</sup>. Results This is somewhat different from the results of research conducted by Mujahidin (2015) where the practice of preventing pulmonary TB transmission that is closing the mouth when sneezing/coughing and spitting practice in special places that have been given disinfectant and closed conducted by pulmonary tuberculosis sufferers is still lacking<sup>(15)</sup>. Even with different cases, a similar study was conducted by Safitri MG and Citra AF (2019) with the results which stated that there was a large enough social support to cause high breastfeeding self-efficacy for breastfeeding exclusive breastfeeding<sup>(16)</sup>. The theory of social support illustrates the influence of the factors of recipient support, factors of support, and social support working as an inseparable part of a person. Social support obtained by an individual comes from himself, close family members, friends, relatives, health workers, members of other social groups such as churches and communities<sup>(17)</sup>. Another theory says that the characteristics of social support are also influenced by social networks including the number of members of social networks that are felt to be supported emotionally, instrumentally, and financially, if there are members of a support network experiencing health problems. It was also said that social support came from non-kin social networks friends, neighbors, godparents, godchildren, friends at work<sup>(18)</sup>.

Social support felt by someone is influenced by himself as a recipient of support, others as a factor providing support, and the composition and structure of social networks. In this case, the recipients of support are patients with pulmonary tuberculosis and the providers of support are family members/friends/neighbors. The results showed that the perception of support both as recipients of support and perceptions of providers of support tended to be in a good category. This is because pulmonary tuberculosis sufferers have adapted to their illness so that they feel they can overcome the problem including implementing preventive measures for pulmonary

tuberculosis disease transmission. Besides, pulmonary tuberculosis sufferers feel that many family members support themselves in carrying out prevention measures for pulmonary tuberculosis. Related to the composition and structure of social networks, the results of the study show that those who provide support are dominated by neighbors/friends. This is related to the mindset, where someone tends to be closer and free to ask help from friends or neighbors compared to the nuclear family. The bustle of the nuclear family may also be one of the reasons that tuberculosis sufferers feel the support from neighbors/friends rather than the nuclear family.

#### The Influence of Receiving Support Factor, Providing Support Factor, Composition and Structure of Social Networks Factors on Family Support in the Prevention of Pulmonary Tuberculosis Transmission

There is a significant influence of recipients of support for family support. The results of this study do not differ greatly from findings in research conducted by Kamenov K, et al (2016) which says that social support is influenced by recipient factors of support: gender, age, and accompanying illness<sup>(19)</sup>. According to Crofton, et al (2007) in Noviyani E, et al (2015) prevention of pulmonary tuberculosis transmission by pulmonary tuberculosis sufferers, among others, covering their mouths when coughing or sneezing, adhering to the treatment program<sup>(20)</sup>. Wahyuningsih (2016) found a relationship between perceptions of pulmonary tuberculosis patients about the prevention of transmission and efforts to prevent transmission of pulmonary tuberculosis. The more positive perception of pulmonary tuberculosis sufferers the better the prevention of transmission efforts undertaken. Ivancevich et al (2006) in Wahyuningsih (2016) said that perception involves knowledge with a process that starts from interpreting objects, symbols, and people based on experience so that they can influence behavior and shape attitudes<sup>(21)</sup>. The significant influence between the factors receiving support for family support in the prevention of pulmonary tuberculosis transmission is due to the optimal understanding of pulmonary tuberculosis sufferers about transmission on prevention. This is reinforced by the support of the health center that provides special services to provide health education to patients with pulmonary tuberculosis.

There is a significant influence of support providers on family support in preventing pulmonary tuberculosis transmission. The results of this study are not much different from the results of research conducted by Nastiti AD (2020) which states that there is a relationship between family support and compliance with pulmonary tuberculosis treatment control<sup>(22)</sup>. Another study conducted by Skiles MP, et al (2018) found a positive impact of providing social support to tuberculosis patients who were not compliant with treatment<sup>(23)</sup>. In research on HIV prevention, it is found that peer support is important to combat social isolation, support access to knowledge, and prevention of HIV<sup>(24)</sup>. It is said that patients with pulmonary tuberculosis who get high family social support are 20 times more likely to be obedient than respondents who get low family social support (Muna & Soleha, 2014) in (Putri MH 2020)<sup>(18)</sup>. In this case, all family members play a role in providing support social to patients, such as reminding control, taking medicine on time, and paying attention to patient complaints. This form of support makes individuals feel comfortable, confident, cared for, and loved by the family so that individuals can deal with problems well<sup>(18)</sup>. Lenders of support in this study were nuclear family members, friends/neighbors, work colleagues. The results showed the perception of support from the provider of support was greater (93.6%) than recipients of support (67.3%). This can occur relationships and a high level of intimacy between the sufferer with his social environment both with family members and with friends/neighbors.

There is a significant influence on the composition and structure of social networks on family support. The results showed that almost all pulmonary tuberculosis sufferers were accompanied by neighbors/friends (95.5%), the number of family members was mostly 4-6 people (50.9%), almost half had special friends of 1-3 people (48.2%), and interact more than 5 times a day (38.2%) and most have very close relationships (62.2%). According to Cohen & Hoberman (in Isnawati & Suhariadi, 2013), as quoted by Adnan AZ, et al (2016) social support refers to the various resources provided by a person's relationships. Closeness and friendships with others are considered aspects that provide emotional satisfaction in an individual's life. According to Sarafino (1994) in Adnan AZ, et al (2016), social support is the provision of comfort, care, appreciation, or assistance felt by an individual received from another person or group. Social support makes individuals feel comfortable, loved, valued, and helped by others or a group. Social support is the provision of information both verbally and non-verbally, providing behavioral assistance or material obtained from close social relationships, which makes individuals feel cared for, valued, and loved<sup>(25)</sup>.

The composition of social networks in this study includes the number of family members who live at home and the number of special friends owned by pulmonary tuberculosis sufferers. The structure of the social network in this study includes and the structure of the social network includes the number of interactions and the level of familiarity between patients with pulmonary tuberculosis with family members and neighbors/friends. The influence of the composition and structure of social networks on family support is likely due to frequent interactions between sufferers and their social environment. This is reinforced by the very high level of familiarity between people with pulmonary tuberculosis and the social networks that support it.



## CONCLUSION

Family support is influenced by the support recipient factor, the support factor and the composition and structure of social networks factors is an important part that affects the prevention of transmission of pulmonary tuberculosis both among family members and in the community. Health workers must play an active role to support patients and their family to support each other in preventing the transmission of pulmonary tuberculosis.

## REFERENCES

1. Kemenkes RI. Regulation of the Minister of Health of the Republic of Indonesia No. 67 of 2016 concerning Tuberculosis Control. Jakarta: Kemenkes RI; 2017.
2. Kemenkes RI. Center for Data and Information of the Ministry of Health Tuberculosis. Jakarta: Kemenkes RI; 2018.
3. Dinkes Kota Surabaya. Profile of Surabaya City Health in 2016. Surabaya: Dinkes Kota Surabaya; 2017.
4. Kemenkes RI. Healthy Indonesia Program with Family Approach. Jakarta: Kemenkes RI; 2017.
5. Padila. Family Nursing. Yogyakarta: Nuha Medika; 2015.
6. Marwansyah, et al. Influence of Family Empowerment of Pulmonary TB Patients on the ability to carry out Family Health Tasks in the Puskesmas Martapura and Puskesmas Astambul in Banjar District. Health System Research Bulletin. 2015;18(4):407-419.
7. Siregar PA, et al. Analysis of Factors Related to The Incidence of Pediatric Pulmonary Tuberculosis in Sibuhuan General Hospital. Epidemiology Periodic Journal. 2018;6(3):268-275.
8. Marwansyah. Self-efficacy in adherence to taking Anti Tuberculosis Medication. Journal of Health. 2019;10(3):405-412.
9. Munawaroh AA, et al. Analysis of family support in the independence of the elderly in Payungsari Village, Pedes District, Karawang Regency. Journal of Family Welfare and Education. 2016;3(2):50-54.
10. Budiman. Health Research. PT Refika Aditama; 2011.
11. Herawati C, et al. The role of family support, health workers and Perceived stigma in improving adherence to taking medication in patients with pulmonary TB. Journal of Indonesian Public Health. 2020;15(1).
12. Kusumoningrum TA, et al. The relationship of family support and medication adherence to the recovery of tuberculosis (TB) sufferers in Bantul Regency. Respati Scientific Forum Journal of Public Health. 2020;5(1):29-35.
13. Tristiana RRD, et al. Experience of Pulmonary TB Clients undergoing Intensive Phase Treatment at Puskesmas Taji in Magetan Regency. Indonesian Journal of Community Health Nursing. 2019;8(1).
14. Putri MH. Family support as an important factor in medication adherence in patients with pulmonary tuberculosis. Wellness & Healthy Magazine. 2020;2(1):127-134.
15. Mujahidin. Description of the practice of preventing pulmonary TB transmission in families in the working area Puskesmas Kedung Wuni in Pekalongan Regency. Fikkes Journal of Nursing. 2015;8(2):87-100.
16. Safitri MG. Perceived Social Support and breastfeeding self-efficacy in breastfeeding mothers exclusively breastfed. Journal of Psychology. 2019;12(2).
17. Anosike AA. The Influence of Social Support on Perception of Nurse Caring and Patient Satisfaction among CHF Patients in the Emergency Department. Adelphi University; 2015.
18. Denison JA, Mitchell MM, Maragh-Bass A, Knowlton AR. Caregivers' Support Network Characteristics Associated With Viral Suppression Among Hiv Care Recipients. Aids And Behavior. 2017;21(12):3599-3606.
19. Kamenov K, Cabello M, Caballero FF, Sabariego CA, Raggi C, Anczewska A, Pitkänen M, Ayuso-Mateos TJ. Factors Related To Social Support In Neurological And Mental Disorders. Plos One. 2016;11(2).
20. Noviani E, et al. Efforts to Prevent Pulmonary Tuberculosis Transmission from Adults to Children." Padjadjaran Nursing Journal. 2015;3(2).
21. Wahyuningsih BD. Relationship between the perception of pulmonary Tuberculosis patients about prevention of transmission with efforts to prevent transmission of pulmonary TB. Journal Stikes Williambooth. 2016.
22. Nastiti AD, Kurniawan C. Relationship of family support with compliance control of pulmonary TB patients. Hang Tuah Stikes Nursing Scientific Journal Surabaya. 2020;15(1).
23. Skiles MP, Siân LC, Angeles G, Mullen S, Senik T. Evaluating The Impact Of Social Support Services On Tuberculosis Treatment Default In Ukraine. Plos One. 2018;13(8).
24. Febres-Cordero B, Brouwer KC, Rocha-Jimenez T, Fernandez-Casa Nueva C, Morales-Miranda S, Goldenberg SM. Influence of Peer Support on Hiv/Sti Prevention And Safety Amongst International Migrant Sex Workers: A Qualitative Study At The Mexico-Guatemala Border. Plos One. 2018;13(1).
25. Adnan AZ, et al. The Influence of Social Support on The Self-Esteem of Teenagers in Wonoayu Village, Wajak Sub-District. Journal of Psycho-Islamika. 2016;13(2).



## ORIGINALITY REPORT

24%

SIMILARITY INDEX

19%

INTERNET SOURCES

17%

PUBLICATIONS

7%

STUDENT PAPERS

## PRIMARY SOURCES

1	<a href="http://jurusankebidanan.poltekkesdepkes-sby.ac.id">jurusankebidanan.poltekkesdepkes-sby.ac.id</a> Internet Source	2%
2	<a href="http://ejournal.poltekkes-smg.ac.id">ejournal.poltekkes-smg.ac.id</a> Internet Source	2%
3	"1st Annual Conference of Midwifery", Walter de Gruyter GmbH, 2020 Publication	2%
4	HAROLD D. GREEN, JOAN S. TUCKER, DANIELA GOLINELLI, SUZANNE L. WENZEL. "Social networks, time homeless, and social support: A study of men on Skid Row", Network Science, 2013 Publication	1%
5	<a href="http://jurnal.syedzasaintika.ac.id">jurnal.syedzasaintika.ac.id</a> Internet Source	1%
6	<a href="http://scifes.fkm.ui.ac.id">scifes.fkm.ui.ac.id</a> Internet Source	1%
7	<a href="http://www.world-today-news.com">www.world-today-news.com</a> Internet Source	1%

8	<a href="http://ejournal2.litbang.kemkes.go.id">ejournal2.litbang.kemkes.go.id</a> Internet Source	1 %
9	<a href="http://theicph.com">theicph.com</a> Internet Source	1 %
10	Submitted to Vietnam Commercial University Student Paper	1 %
11	<a href="http://kb.psu.ac.th">kb.psu.ac.th</a> Internet Source	1 %
12	Bisepta Prayogi. "The Correlation between knowledge and self-efficacy in preventing the spread of Pulmonary Tuberculosis", Jurnal Ners dan Kebidanan (Journal of Ners and Midwifery), 2017 Publication	1 %
13	<a href="http://journal.unnes.ac.id">journal.unnes.ac.id</a> Internet Source	1 %
14	Submitted to Badan PPSDM Kesehatan Kementerian Kesehatan Student Paper	1 %
15	<a href="http://www.ncbi.nlm.nih.gov">www.ncbi.nlm.nih.gov</a> Internet Source	1 %
16	<a href="http://eprints.umg.ac.id">eprints.umg.ac.id</a> Internet Source	1 %
17	Alya Olivianira, Isna Hikmawati. "The Correlation Between Social Support and Self-	<1 %

# Regulation toward Academic Procrastination in Students of Universitas Muhammadiyah Purwokerto", Proceedings Series on Health & Medical Sciences, 2022

Publication

18

Harold D. Green, Lynn Atuyambe, Sarah Ssali, Gery W. Ryan, Glenn J. Wagner. "Social Networks of PLHA in Uganda: Implications for Mobilizing PLHA as Agents for Prevention", AIDS and Behavior, 2010

Publication

<1 %

19

sdbindex.com

Internet Source

<1 %

20

media.proquest.com

Internet Source

<1 %

21

www.thejhpb.com

Internet Source

<1 %

22

Suwarsi Suwarsi, Nurwijayanti Nurwijayanti. "Analysis of Behaviour, Social Support and Motivation of Jumantik Cadre to Dengue High Fever (DHF) Entomological Index in the Pesantren 1 Public Health Center Kediri City", Journal for Quality in Public Health, 2021

Publication

<1 %

23

Kusuma Wijaya Ridi Putra, Pipit Festi Wiliyanarti, Faida Annisa. "ANALYSIS OF PREVENTION BEHAVIORS OF PULMONARY

<1 %



# TUBERCULOSIS TRANSMISSION QUESTIONNAIRE (PBPTTQ)", Nurse and Health: Jurnal Keperawatan, 2020

Publication

24

Nanang Muhibuddin, Endah Susanti, Astri Yunita. "Influence of Health Belief Model and Motivation with Prevention of Pulmonary Tuberculosis Transmission in Public Health Center Gurah Kediri Regency", Journal for Quality in Public Health, 2021

Publication

<1 %

25

[ejournal-kertacendekia.id](http://ejournal-kertacendekia.id)

Internet Source

<1 %

26

[garuda.kemdikbud.go.id](http://garuda.kemdikbud.go.id)

Internet Source

<1 %

27

Ratih Indriyani, Hendro Prakoso Handjaya, Ayoub Gougui. "Measuring Employee Performance of Shuttle Cock Industry in Surakarta, Indonesia", SHS Web of Conferences, 2020

Publication

<1 %

28

Rico Kurniawan, Ryza Jazid Baharuddin Nur, Sayekti Yuliyanti, Dion Zein Nuridzin, Neng Tine Kartinah. "Healthy family index assessment through community-based health information system approach", International Journal of Public Health Science (IJPHS), 2021

Publication

<1 %

29	<a href="https://aisel.aisnet.org">aisel.aisnet.org</a> Internet Source	<1 %
30	<a href="https://jurnal.untag-sby.ac.id">jurnal.untag-sby.ac.id</a> Internet Source	<1 %
31	<a href="https://www.scribd.com">www.scribd.com</a> Internet Source	<1 %
32	Submitted to Udayana University Student Paper	<1 %
33	<a href="https://clinicaltrials.gov">clinicaltrials.gov</a> Internet Source	<1 %
34	<a href="https://journal.oiu.edu.sd">journal.oiu.edu.sd</a> Internet Source	<1 %
35	<a href="https://www.surveymonkey.co.uk">www.surveymonkey.co.uk</a> Internet Source	<1 %
36	<a href="https://core.ac.uk">core.ac.uk</a> Internet Source	<1 %
37	<a href="https://insightsociety.org">insightsociety.org</a> Internet Source	<1 %
38	<a href="https://newinera.com">newinera.com</a> Internet Source	<1 %
39	<a href="https://www.researchgate.net">www.researchgate.net</a> Internet Source	<1 %
40	Lembunai Tat Alberta, Dwi Adji Norontoko, Irfany Nurul Hamid. "Student's Perceptions	<1 %

About Online Learning at The Nursing  
Department of the Sutomo Campus  
Surabaya", International Journal of Advanced  
Health Science and Technology, 2022

Publication

41

[ejournal.gunadarma.ac.id](http://ejournal.gunadarma.ac.id)

Internet Source

<1 %

42

[onlinelibrary.wiley.com](http://onlinelibrary.wiley.com)

Internet Source

<1 %

43

[www.pnas.org](http://www.pnas.org)

Internet Source

<1 %

44

[www.wjir.org](http://www.wjir.org)

Internet Source

<1 %

45

"Tuberculosis", Springer Science and Business  
Media LLC, 2004

Publication

<1 %

46

Sebastianus Kurniadi Tahu, Yohanes Dion.  
"Preventing Tuberculosis in Families of East  
Timor Expatriate Tuberculosis Patients in  
Indonesia", KnE Life Sciences, 2022

Publication

<1 %

47

Spreen, M.. "Rare Populations, Hidden  
Populations, and Link-Tracing Designs: What  
and Why?", Bulletin of Sociological  
Methodology/Bulletin de Mé thodologie  
Sociologique, 1992.

Publication

<1 %



---

Exclude quotes      On

Exclude matches      Off

Exclude bibliography      On