



HOW DOES SELF EFFICACY OF TUBERCULOSIS PATIENTS CORRELATE WITH THE IMPLEMENTATION OF STANDARD OPERATIONAL PROCEDURE OF TREATMENT?

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ABSTRACT

Tuberculosis (TBC) treatment should be consistently done by patients and be interrupted since it will: 1) have an impact on drug and bacterial resistance, 2) take longer treatment, 3) impact on saturation to patients, and 4) increase the doses of the drug. Given the complexities of the above fact, the present study was designed to uncover the correlation between self-efficacy and the implementation of standard operational procedure of treatment. A total sample of 100 respondents were recruited purposively. The instrument employed in this study was a set of questionnaire. The data were analyzed using Spearman Rank Analysis test. In this study, p-value $0,000 < 0,05$ was obtained. The result of this study indicated that there was a relationship between self-efficacy and the implementation of standard operational procedure of treatment encountered by tuberculosis patients. Patients with pulmonary TBC who had high self-efficacy will be able to implement the standard operational procedure at home, including the ethics of coughing, environmental health, smoking prohibition, personal protective equipment, regular taking medicine and nutrition consumption. These are significant in the treatment and prevention of transmission processes. This study has set as a practical perspective in preventing transmission of Tuberculosis within families and communities.

Keywords: self-efficacy, knowledge level, treatment, tuberculosis patient

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INTRODUCTION

Lung disease has a serious impact on the respiratory system that causes patients with difficulty breathing, difficulty in activity and lack of oxygen, pulmonary TB disease if not quickly detected and treated it will cause death (Dewi, 2016; Kelly, 2019). Tuberculosis (TB) is a disease with a very high risk of transmission (Madacki, Mas Fiol, & Brosch, 2019) When coughing or sneezing, the patient spreads germs into the air in the form of sputum droplets (droplet nuclei), in one cough can produce 3000 sputum splash, transmission from pulmonary TB disease can occur in a humid room (Ministry of Health of the Republic of Indonesia, 2011). There are still many people who do not know the epidemiology of TB transmission and the community's lack of awareness of TB sufferers who live around their homes so that it is the most dangerous source of transmission (Rakhmawati, Nilmanat, & Hatthakit, 2019). Transmission of this disease will be more rapid in vulnerable people and weak immune system, it is estimated that a person with BTA Tuberculosis (+) will be able to transmit it to 1-10

people in the vicinity. Families who live in the same household (Sejati, Sofiana, 2015), families with TB Lungs are more likely to contract because they cannot avoid contact with patients (Nurfadilah et al, 2014). Conditions in the house that do not meet the requirements such as lack of air ventilation, room humidity and occupancy density in the house become a medium of transmission of Tuberculosis (Iwan et al, 2018)

In 2017 in various parts of the world there were 2.8 million cases of pulmonary TB findings and in Indonesia in 2017 there were 1.2 million cases of TB findings. In East Java there are 123,414 TB sufferers (.Subuh, Wiendra, & Asik surya, 2017). In 2018 the number of patients with pulmonary TB in Bondowoso Regency was 1138 patients with pulmonary TB who received medication or anti-tuberculosis drugs (OAT) in Wonosari sub-district as a densely populated area with 134 pulmonary TB patients who had received services at the nearest health facility (District Health Office Bondowoso, 2018).

Patients with pulmonary TB often feel excluded in the social and family environment, so they consider themselves less able to do something useful because they suffer from pulmonary TB disease as a result the individual has a level of self-efficacy that is lacking in him (Sedjati, Fitria, 2013). Self-efficacy is something that can guide the patient's independence to be increased in terms of regularity of taking medication, prevent transmission, prevent infection and overcome physical symptoms (Noorratri D. E et al, 2016). Lung TB patients who have high self-efficacy will be able to implement healing procedures in daily life so that they can prevent transmission to other families (Jauhar, Nursasi, & Wiarsih, 2019). Standard Operational Procedures for patients with pulmonary TB which include wearing a mask when communicating with others, removing phlegm in its place, closing the mouth when coughing or sneezing, using a handkerchief that is washed every day and knowing follow-up in overcoming physical symptoms is an attitude of self-efficacy that is it is important to be able to minimize transmission to other family members (Novianti, et al, 2015).

The application of self-efficacy must also be accompanied by an understanding and application of standard operational procedures for patients with pulmonary TB in daily life, so that the risk of transmission of the disease to family members who are at home can be minimized or avoided (Sedjati, 2013). Researchers want to know Is there a relationship between self-efficacy in the application of Operational Procedure Standards in pulmonary tuberculosis patients in Wonosari Health Center, Wonosari District, Bondowoso Regency?

METHOD

This study deployed a cross sectional approach. Samples of patients with pulmonary tuberculosis who were doing treatment at the Wonosari Puskesmas Wonosari Subdistrict Bondowoso Regency were recruited. This study was carried out from April to May 2019. The instrument used in this study was a questionnaire. Spearman Rank statistical test with a significance level of $p < 0.05$ was used to analyze the data.

RESULTS

Table 1.
Characteristics of Self-Efficacy in TB Patients (n=100)

Self-Efficacy of TBC Patients	f	%
Low	23	23
Quite	32	32
Good	45	45

The table above shows that some respondents have good self-efficacy of 45 respondents (45%) and quite as many as 32 respondents (32%), there are respondents who have low efficacy of 23 respondents (23%). In particular, the research explains the concept of self-efficacy of 3 aspects, namely Self-Value, Self-Confidence and self-regulation.

Table 2.
Frequency of Self-Value in TB Patients

Self-Value of TBC Patient	f	%
Below Average	18	18
Average	60	60
Good	22	22

The results show that respondents have less self value as many as 18 respondents (18%), quite as many as 60 respondents (60%) and good as many as 22 respondents (22%).

Tabel 3.
Frequency of Self-Confident of TBC Patient (n=100)

Self-Confidence of TBC Patients	f	%
Below Average	20	20
Average	61	61
Good	19	19

The results showed that respondents had less self confidence as many as 20 respondents (20%), quite as many as 61 respondents (61%) and good as many as 19 respondents (19%).

Tabel 4.
Frequency Distribution of Self-Regulation in TB Patients (n=100)

Self-Regulation of TBC Patients	f	%
Below Average	12	12
Average	33	33
Good	55	55

The results show that respondents have less self-regulation of 12 respondents (12%), quite as many as 33 respondents (33%) and good as many as 55 respondents (55%).

Table 5.
Characteristics of SOP Application Levels in TB Patients (n=100)

Procedure Implementation on TBC Patients	f	%
Below Average	26	26%
Average	32	32%
Good	42	42%

Table 5 shows that the implementation of SOP is categorized as good voiced by 42 respondents (42%) and enough voiced by 32 respondents (32%), however, 26 respondents (26%) contended that the SOP is below average.

Spearman Rank statistical test analysis with significance level $p < 0.05$ indicated p value 0,000. It means that there is a relationship between self-efficacy and the application of SOP of tuberculosis patients in Wonosari Puskesmas Wonosari District Bondowoso District.

DISCUSSION

The results of the study in table 1 show that several respondents have good self-efficacy (32 and 42%, respectively), and 23% of the respondents possess low self-efficacy. Good self-efficacy can simplify the role of officers and families in providing knowledge and helping TB patients in understanding about TB disease so that the application of SOP goes well. Prevention of TB is not only treated but prevented the spread of others around him (Berthel, Cooper, & Fotouhi, 2019).

Self-efficacy also helps the process to become an active individual motivated, behavior in the learning process by planning, directing, monitoring themselves and evaluating themselves at the level of success in the process of treating TB disease. (Furin, Cox, & Pai, 2019) so that researchers assume the process of efficacy in self-regulation, confidence and good self-esteem are the basis for applying SOPs well so as to minimize the process of treatment and prevention of tuberculosis. The level of education becomes one of the sources of self-efficacy, (Setia I, Yustini et al, 2018) it can be a supporter of patient self-efficacy. The level of SOP implementation is good as many as 42 respondents (42%) and quite as much as 32 respondents (32%), respondents who have less levels of 26 respondents (26%).

Respondents who have good SOP application are very important, especially in the management of Tuberculosis treatment and prevention of TB transmission at home, this is evidenced from the patient's understanding of the understanding, causes of transmission, signs and symptoms, prevention, treatment, Supervision of Drug Swallowing (PMO), treatment monitoring treatment, treatment and side effects of drugs. Implementation of Operational Standards The implementation of Tuberculosis treatment includes the treatment, prevention and treatment of taking medication so that a good understanding and management of the patient is needed (Rakhmawati et al., 2019). Good self-efficacy can have a good effect on prevention and treatment behavior.

Analysis of Spearman Rank statistical test with significance level $p < 0.05$ with the results of p value 0.000 which means there is a relationship between self-efficacy in the application of SOP in TB patients in Wonosari Health Center, Wonosari District,

Bondowoso District. The results showed that self-efficacy in patients with pulmonary TB had a strong good impact in the application of the Standard Operating Procedures for TB patients during the home. Lung TB sufferers who have good self-values will be able to implement SOP in their daily lives. The good confidence possessed by TB sufferers will have an impact on the application of ethical cough that is in accordance with the standards, the use of PPE (Personal Protective Equipment) every time it communicates with others and does not expel phlegm or spit in any place.

TB patients who have a good level of self-regulation can manage boredom during treatment and maintain good environmental health for TB sufferers so as to minimize the risk of transmission to the community around their homes, patients who have a good self-regulation process will be able to monitor themselves in the treatment process so as to minimize the risk of dropping out of treatment. The process of good self-regulation in TB sufferers will also make sufferers know about nutrition that is nutritious for themselves so that it will speed up the healing process (Handiyani et al., 2019). Implementation of Standard Operating Procedures for tuberculosis patients while at home include cough ethics, environmental health, no smoking, use of personal protective equipment, regular medication and nutrition are important in the management of treatment and prevention of transmission of Tuberculosis germs in the family and community.

CONCLUSION

Respondents who have good self-efficacy include values, beliefs and settings can apply Standard Operating Procedures well so that they can be applied in daily life that is useful to accelerate the healing process and minimize the transmission of pulmonary TB to others.

REFERENCES

- A. M. Kelly. (2019). Tuberculosis. *Nursing Clinics of North America*, 54(2), 193–205. <https://doi.org/10.1016/j.cnur.2019.02.008>
- D. Noorratri, A. Margawati, M. Dwidiyanti, 2016, *Improving Self Efficacy and Physical Self Reliance of Patients with Pulmonary Tuberculosis through Mindfulness* : Nurse Media Journal of Nursing
- Diana, Mubasyiroh, and Supardi, 2014, *Hubungan pengetahuan dan sikap dengan kepatuhan berobat pada pasien TB Paru yang rawat jalan di jakarta tahun 2014* : Media Litbangkes
- Dinas Kesehatan Kabupaten Bondowoso, 2018. <http://dinkes.bondowosokab.go.id>
- E. Noviyanti, S. Fatimah, I. Nurhidayah, F. Adistie, 2015, *Upaya Pencegahan Penularan TB dari Dewasa terhadap Anak*. Fakultas Keperawatan Universitas Padjajaran, vol.3, no. 2
- F. Sejati. 2013, *Hubungan antara efikasi diri dan dukungan sosial dengan kebermaknaan hidup pada penderita Tuberculosis paru di balai pengobatan penyakit paru-paru (BP4) Yogyakarta* : Jurnal fakultas psikologi.

- H. Handiyani, A. S. Kusumawati, R. Karmila, A. Wagiono, T. Silowati, A. Lusiyan, & R. Widyana. (2019). Nurses' self-efficacy in Indonesia. *Enfermería Clínica*, S1130862119301263. <https://doi.org/10.1016/j.enfcli.2019.04.030>
- I. Setia Budi, Yustini, I. Purnama, D. Septiawati, 2018, *Analisis Faktor Risiko Kejadian penyakit Tuberculosis bagi masyarakat daerah kumuh Kota Palembang* : Jurnal Kesehatan Lingkungan Indonesia
- J. Furin, H. Cox & M. Pai. (2019). Tuberculosis. *The Lancet*, 393(10181), 1642–1656. [https://doi.org/10.1016/S0140-6736\(19\)30308-3](https://doi.org/10.1016/S0140-6736(19)30308-3)
- J. Madacki, G. Mas Fiol, & R. Brosch . (2019). Update on the virulence factors of the obligate pathogen Mycobacterium tuberculosis and related tuberculosis-causing mycobacteria. *Infection, Genetics and Evolution*, 72, 67–77. <https://doi.org/10.1016/j.meegid.2018.12.013>
- Kemendes RI , 2017, *Modul pelatihan penanggulangan Tuberculosis bagi petugas kesehatan di fasilitas kesehatan tingkat pertama*, Jakarta, Dinkes provinsi Jawa timur .
- Kementrian Kesehatan Republik Indonesia, 2011, *Pedoman Nasional Pengendalian Tuberculosis*, Jakarta, Bhakti Husada
- M. Jauhar, A. Nursasi, & W. Wiarsih. (2019). Evaluation of impact self-management counseling on health-seeking behavior's self-efficacy pulmonary tuberculosis outpatients. *Enfermería Clínica*, S1130862119301913. <https://doi.org/10.1016/j.enfcli.2019.04.072>
- Noorratri, Margawati, & Dwidiyanti, 2016, *Faktor yang mempengaruhi Efikasi diri pada pasien TB Paru* : Journal ilmiah keperawatan dan kesehatan, edisi 23
- Noviyanti, Fatimah, Nurhidayah, & A. Fanny. 2015, *Upaya Pencegahan Penularan TB dari Dewasa terhadap Anak* : Fakultas Keperawatan Universitas Padjajaran, vol.3, no. 2 (Agustus).
- Nurfadilah, Yovi, & Restuastuti, 2014, Hubungan pengetahuan dengan tindakan pencegahan penularan pada keluarga penderita Tuberculosis Paru di ruang rawat inap paru RSUD Arifin Achmad Provinsi Riau
- S. J. Berthel, C. B. Cooper, & N. Fotouhi. (2019). Tuberculosis. Dalam *Annual Reports in Medicinal Chemistry* (hlm. S0065774319300053). <https://doi.org/10.1016/bs.armc.2019.05.004>
- S. Sejati. 2015, *Faktor-faktor terjadinya Tuberculosis* : Jurnal Kesehatan Masyarakat
- W. Rakhmawati, K. Nilmanat, & U. Hatthakit. (2019). Moving from fear to realization: Family engagement in tuberculosis prevention in children living in tuberculosis Sundanese households in Indonesia. *International Journal of Nursing Sciences*, 6(3), 272–277. <https://doi.org/10.1016/j.ijnss.2019.06.002>