The Relationship of Family Support to the Success of the Treatment of Tuberculosis (TB) Patients in Kediri

Fauzan Adima[1], Chatarina U. Wahjuni[2], Hari Basuki Notobroto[3], Shrimarti Rukmini Devy[4]

[1]Doctoral Student in Faculty of Public Health Universitas Airlangga
[2]Doctoral lecturer in Faculty of Public Health Universitas Airlangga
[3]Doctoral lecturer in Faculty of Public Health Universitas Airlangga
[4]Doctoral lecturer in Faculty of Public Health Universitas Airlangga
Email: fauzanadimadr72@gmail.com

ABSTRACT

The purpose of this study was to determine how the relationship of family support to the successful treatment of tuberculosis (TB) patients was established. The population in this study were all TB patients in Kediri city, East Java, totaling 400 patient cases. The sample in this study amounted to 200 were determined using simple random sampling with Slovin formula and analyzed using SEM. The results showed that family support influenced the successful treatment of tuberculosis (TB) patients.

BACKGROUND

Tuberculosis (TB) is an infectious disease that can infect various age groups and is the second leading cause of death in Indonesia. TB is an infectious disease caused by the bacterium Mycobacterium tuberculosis. This disease mainly attacks the lungs as a place of primary infection. In addition, TB can also attack the skin, lymph nodes, bones and the lining of the brain. TB is classified as very infectious and contagious through infectious droplets that are inhaled by healthy people. A Tuberculosis TB sufferer can transmit the disease to 10 people around him. WHO (2005) estimates that one third of the world's population is currently infected with M. tuberculosis. However, people infected with M. tuberculosis do not always have TB. The body's immunity is very important to limit infection, so it does not manifest as TB disease (BPN TB, 2011, Ministry of Health Republic of Indonesia, 2011; WHO 2010).

Assistance is a strategy that determines the success of community empowerment programs (Suharto, 2005). Social approach, which is to hold discussions, exchange ideas, and tell stories. Give opportunity to gather together with fellow sufferers to create their socialization. Spiritual approach, namely the nurse must be able to provide inner peace and satisfaction in relation to the creator according to belief, especially if the patient is sick or near death. The approach taken will not be separated from the role of the family as the closest person to the patient. The Republic of Indonesia Government Regulations No. 21 of 1994 concerning the Implementation of Prosperous Family Development states that the family has eight functions. The eight functions of the family that are fulfilled are as follows: religious, social, cultural, love, protecting, reproduction, education, economy and environment.

LITERATURE REVIEW
Family

Family is one of the important elements that motivates and encourages TB patients to take proper treatment (Subhakti et al., 2014).

The Success of TB treatment

The success of TB treatment is the absence of symptoms such as bloody cough, fever, loss of appetite and weight loss (Department of Health RI)

RESEARCH METHODS
Research Design

This research is explanatory research with quantitative descriptive analysis using SEM analysis with AMOS tool that aims to determine the relationship of family support to the success of the treatment of tuberculosis (TB) patients in Kediri.

Definition of Operational Variables

The family is the smallest unit of society consisting of the head of the family and the mother and child who live under one roof that is interdependent, which has indicators including: Religious, Socio-cultural, Love, Protect, Reproduction, Education, Economy and Environment. The success of TB treatment is the return of the health of patients with tuberculosis, such as before illness, indicators include: Coughing lost, weight gain, increased appetite, chills missing, and night sweats

Population and Samples
Population

The population in this study were all TB patients in the City of Kediri, East Java, totaling 400 patient cases.

Sample

The sampling technique in this study uses simple random sampling. The number of samples in this study was determined by the Slovin formula as follows:
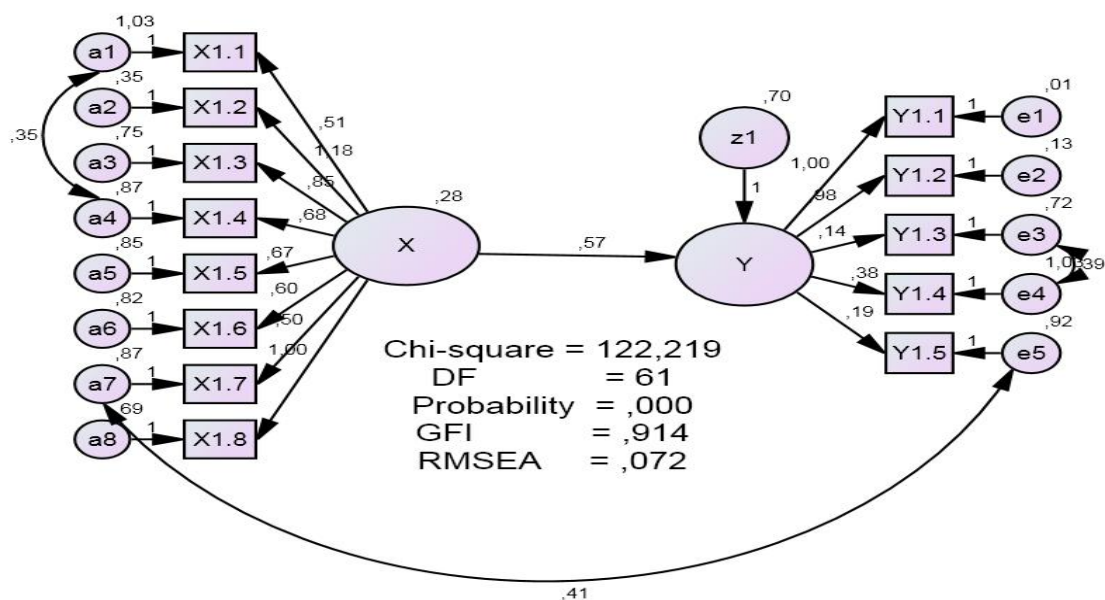
$$n = \frac{N}{1+Ne^2}$$
$$n = \frac{400}{1+400(5\%)^2} = 200$$

ANALYSIS RESULTS
SEM Analysis Results

Based on literature and operational definitions the research variables produce the following model structure:

X Family
X1.1 = Religious
X1.2 = Social culture
X1.3 = love
X1.4 = Protect
X1.5 = Reproduction
X1.6 = Education
X1.7 = Economy
X1.8 = Environment

Y Treatment success
Y1.1 = Coughing is missing
Y1.1 = weight gain
Y1.1 = Increased appetite
Y1.1 = feverishly lost
Y1.1 = Do not sweat at night
e1 = unobserved endogenous variable from the loading factor (endogenous latent variable) Y1
a1 = unobserved endogenous variable from the loading factor (endogenous latent variable) X
Z1 = unobserved variable for latent endogenous variables

Table 1. Goodness of-fit Index and SEM Model cut-off values

Criteria	Cut off value	Model Test Results	Information
Chi Square		122.219	Good
Probability	≥0.005	0.000	Not Goog
GFI	≥0.90	0.914	Good
RMSEA	≤ 0.08	0.072	Good

Source: Primary data processed in 2020

Table 2. Hypothesis testing

HIP		Variable		Estimate	Probability
H$_1$	Family	Againts	Success	0.571	0.000

At a significance level of 5%

DISCUSSION

Based on the results of the research showed that: 1) The family support formed by religious, socio-cultural, love, protect, reproduction, education, economy and environment. Family support reflected in the socio-cultural sector contributed the most while religion contributed the least. 2) the success treatment of tuberculosis (TB) which is formed by coughing is lost, weight gain, appetite increases, fever is lost and does not sweat at night. The success of TB treatment which is reflected in the cough missing has the biggest contribution while the increased appetite has the smallest contribution.

The results also showed that family support influenced the success of the treatment of tuberculosis (TB) patients. Family support is reflected in religious, socio-cultural, loving, protecting, reproductive, educational, economic and environmental, with socio-culture contributing the

most applied to the noble values   prevailing in society through family teaching goodness and preserving a culture that is considered good can increase success the treatment of tuberculosis (TB) patients is characterized by the coughing loss in the patient which means that the tuberculosis (TB) patient is said to be cured if the patient no longer coughs. This study supports research conducted by Febriana and Rahmi (2017) which states that the role of the family as PMO for pulmonary tuberculosis patients in supervising, motivating, ensuring repeat examination and giving eduation to tuberculosis patients will help the healing process of tuberculosis patients.

CONCLUSION

Family support given to tuberculosis (TB) patients influences the success of the treatment of tuberculosis (TB) patients. Which means that the recovery of tuberculosis (TB) patients requires family support, especially socio-culture which is applied to the noble values prevailing in society through family teaching goodness and preserving a culture that is considered good can increase the successful treatment of tuberculosis (TB) patients characterized by the loss of cough in patients.

SUGGESTATION

Based on the results of this study it is suggested that in preventing the increase of tuberculosis (TB) patients, it is expected that family support to improve religion reflected in the family teaches to obey religious teachings and adhere to the norms prevailing in the community so that the development of tuberculosis (TB) can be prevented. Further researchers are advised to examine the factors that cause the development of tuberculosis (TB) in the community, so that it will contribute to more useful knowledge.

BIBLIOGRAPHY

1. Febrina dan Rahmi 2017, Analisis peran keluarga sebagai pengawas minum obat (PMO) pasien TB paru. E-ISSN;2528-66510; Volume 3; No.2(Juni,2018);118-129
2. Kementerian Kesehatan Republik Indonesia. 2011. *Strategi Nasional Pengendalian TB di Indonesia 2010-2014.* Jakarta: Direktorat Jenderal Pengendalian Penyakit dan Penyehatan Lingkungan Kementerian Kesehatan Republik Indonesia.
3. Subhakti 2013. *Hubungan antara Pekerjaan, PMO, Pelayanan Kesehatan, Dukungan Keluarga dan Diskriminasi dengan prilaku berobat pasien TB Paru di Puskesmas Batua dan Puskesmas Tamamaung Kota makasar.* Jurnal Kesehatan Volume 4 Nomor 2
4. *Suharto*, Edi. *2005.* Membangun Masyarakat Memberdayakan Rakyat. Bandung: PT. Refika Aditama
5. WHO., 2014. *Global strategy and targets for tuberculosis prevention, care and control after 2015*, The Official text approved by the Sixty Seventh World Health Assembly, May 2014.