

# Knowledge of Supervision on Treatment About Prevention and Infection of Tuberculosis

Upik Rahmi\*

Nursing Program Study  
Universitas Pendidikan Indonesia  
Bandung, Indonesia  
\*upikrahmi@upi.edu

**Abstract**—The World Health Organization (WHO) recommends treatment for tuberculosis with the Directly Observed Treatment Short course chemotherapy (DOTS) strategy, one of which is in the form of a health worker. It is very important to ensure that the patient has swallowed all the medicines given as directed by direct supervision by the health worker. The purpose of this research is to find out the health worker knowledge of swallowing drugs about the treatment and prevention of tuberculosis infection. Method This research uses descriptive quantitative research using frequency distribution. The research sample consisted of 43 respondents using accidental sampling with univariate analysis presented in the frequency distribution table. Results of this study of 43 respondents found as many as 38 people (88.4%) have good knowledge, this is influenced by the level of education of respondents and the provision of health education routinely for tuberculosis sufferers and health worker. Conclusion, the health worker knowledge of swallowing drugs about the treatment and prevention of tuberculosis infection is good.

**Keywords:** health worker, knowledge, tuberculosis

## I. INTRODUCTION

TB occurs in every part of the world. In 2018, the largest number of new TB cases occurred in the South-East Asia region, with 44% of new cases, followed by the African region, with 24% of new cases and the Western Pacific with 18%. In 2018, 87% of new TB cases occurred in the 30 high TB burden countries. Eight countries accounted for two thirds of the new TB cases: India, China, Indonesia, the Philippines, Pakistan, Nigeria, Bangladesh and South Africa [1].

In Indonesia, the incidence of TB cases is 842,000 per year and notification of TB cases is 569,899 cases, so there are still around 32% of the cases that have not been verified either unreached, undetected or not reported. From this incident rate the TB burden is calculated in each province and district / city [2]. Healthy behaviour is as, "every action taken by an individual to find treatment [3]. This is based on a model of a particular cultural picture that influences people's health behaviours. Which consists of signs and symptoms of the disease, the cause of the disease and the prognosis of the disease [4]. This is interpreted by individuals and / or other people related to health problems, to deal appropriately through recommended therapies [4].

TB treatment requires knowledge both from the sufferer and from the companion to take medicine [5]. Since 1993, WHO has published international TB treatment guidelines, which aim to provide a national TB program (NTP) and the medical profession with evidence-based practical guidance on effective TB case management [6].

## II. MATERIALS AND METHOD

### A. Materials

Tuberculosis (TB) is caused by the bacteria (*Mycobacterium tuberculosis*) that most often attacks the lungs. TB can be cured and prevented. TB spreads from person to person through the air. When people with pulmonary TB cough, sneeze or spit, they push TB germs into the air. One needs to breathe in only a few of these germs to become infected. About a quarter of the world's population has latent TB, which means people have been infected by TB bacteria but have not (yet) been sick with this disease and cannot transmit the disease.

### B. Participants and Study

Design Across-sectional based survey study (quantitative and observational) was conducted employing self-administered questionnaire at the Public of health, Indonesia. The participants were is health worker of drug therapy Tuberculosis male and female. The participants were informed in advance about the objective of the study. The research sample consisted of 43 respondents.

### C. Data Collection Methods

A self-administered and bilingual questionnaire (Sundanese and bahasa) was developed. The population 187 participant TB patients. The questionnaire was piloted on 43 participants and modified as per the need and further validated. The survey questionnaire was divided in two sections. The first section involved the questions about the demographic details of the participants. While, the second section pertained to the questions covering the knowledge of volunteer about therapy and prevention of Tuberculosis. Statistical analysis is data collected were tabulated in MS Excel sheet, and analyzed.

**III. RESULTS**

**A. Characteristics of Subjects**

A total of 43 patients with TB were included in the study, including 15 males (34.9%) and 28 females (65.1%). Age-related trends were consistent across the behaviour participant young adult (20–40 years), late adult (41–59 years) and elder cases (≥60 years). In addition to age, education, occupation, family income, living in the same house, relationship with participant were also found to be associated with behaviour therapy. Factors associated with behaviour therapy.

**TABLE I. CHARACTERISTICS OF SUBJECTS**

Characteristic	N (43)	%
<b>Age</b>		
Early adult (20-40)	34	79,1
Late adult (41-59)	9	20,9
Elderly (≥60)	0	0
<b>Education</b>		
Elementary	6	14
Primary high school	8	18,6
Senior high school	21	48,8
Higher Education	8	18,6
<b>Worker</b>		
House wife	16	37,2
Government	3	7
Private	13	30,2
Enterpreneur	11	25,6
<b>Sex</b>		
Male	15	34,9
Female	28	65,1
<b>Income (Rp.)</b>		
500.000-1.000.000	10	23,3
1.000.000-3.000.000	23	53,5
3.000.000-5.000.000	10	23,3
<b>Live at home</b>		
Yes	39	90,7
No	4	9,3
<b>Relationship</b>		
Parent	7	16,3
Husband	3	7
Wife	15	34,9
Son	13	30,2
Sibling	5	11,6

**TABLE II. KNOWLEDGE OF SUPERVISION ON TREATMENT ABOUT PREVENTION AND INFECTION TUBERCULOSIS (TB)**

Knowledge	N=43	(%)
Good	38	88,4
Enough	3	7
Less	2	4,6
Total	43	100

Source: primary data.

**IV. DISCUSSION**

Improving patient knowledge about TB is an important component and the main goal of TB treatment and companion knowledge of taking medication [7]. Health workers are often the main source of information about TB for patients [8]. Effective communication about the causes of TB, its symptoms, treatment, and how it is spread is very important,

especially in countries like Indonesia where the disease is still very much [9]. Nurses also influence patient knowledge and compliance by changing patient stigma about TB treatment [10]. In addition to knowledge about TB prevention and infection, health workers must also have knowledge about TB drugs [5].

Health worker is one of the TB treatment health workers, because health workers need to provide health education to improve the knowledge and attitudes of patients towards TB disease [11], because knowledge is the basis for any practice and for controlling TB. Clinical experience and health education affect one's level of knowledge [12].

Social closeness between health workers (companion taking drugs) and patients will increase knowledge and adherence to TB infection prevention behaviour [9]. This is because if the lack of knowledge about national and international TB guidelines and treatment will affect the treatment of TB patients [5]. He right behaviour of health workers will influence the treatment of TB patients [3] and patient satisfaction with TB services and care [13], this is also influenced by the closeness of patients with health workers, health workers for TB care compliance [9].

**V. CONCLUSIONS**

Most of the well-informed Health worker were influenced by the level of education of respondents who were mostly high school / equivalent and good health education by health workers, especially nurses who handled the TB program.

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