

CHAPTER 1

INTRODUCTION

1.1 Background

Tuberculosis (TB) is a major cause of ill health and one of the top 10 cause of death in the world (WHO, 2020). Adolescent TB cases has a fairly high risk to infect others thus is more likely to interfere with the academic and social development in adolescents (Setiawan, 2019). This is a major problem because adolescent is a pivotal phase in individual development cycles towards a healthy adulthood (Jannah, 2016). TB is more commonly found in high risk areas such as slums and dense residential area, for example boarding school and dormitory (Kemenkes RI, 2016). One of the more commonly found boarding school in Indonesia is Islamic Boarding School. This complex environment can be unhygienic and unhealthy, as well as the communal life in Islamic Boarding are some of the main reasons why TB is more pervasive. Nevertheless, it is a highly potential area for increased number of TB incidence especially if the residents do not practice a clean and healthy lifestyle to prevent pulmonary TB (Putri, 2017). The cleanliness of surrounding environment is the determining factor of TB transmission in which the ignorance of students living in a boarding school regarding this matter seems to be a risk factor (Asfiya, 2021). Furthermore, student behavior such as sharing the same room and personal equipment which were intended to express a sense of brotherhood, were in fact one of the causes of disease transmission in Islamic Boarding Schools (Puspitasari, 2018).

In 2011, WHO reported that adolescent tuberculosis (TB) cases accounts for 10-12% of total TB cases globally with more than 250.000 adolescent TB cases and 100.000 death cases caused by TB (Setiawan, 2019). In Indonesia, there were 420.994 new TB cases in 2017 (Infodatin, 2018). Nevertheless, until 2020 Indonesia is included

in WHO list of High Burden Countries (HBC) (WHO, 2020). In East Java, the prevalence of pulmonary TB cases still increase in recent years. Specifically in Bangkalan District, the prevalence of pulmonary TB in 2013 is around 0.5 and increased significantly to more than 0.6 in 2018 (Risksedas, 2018). These data showed that pulmonary TB is still a major concern as cause of ill health in Bangkalan. Furthermore, the prevalence of TB is still high among students in Islamic boarding school according to data from Biro Bina Sosial Setda Central Java (2015) in coordination meeting for pulmonary TB control in Islamic boarding school, where from 2011-2014 there are 197 students that undergo treatment for TB. Adolescents in Islamic boarding school who study and live in the same room with an index case have 29 time higher risk for pulmonary TB (Pan, 2018).

Prevention of pulmonary tuberculosis (TB) can be done with controlling the risk factors by maintain a clean and healthy environment and lifestyle as prevention practice (Kemenkes RI, 2016). However, studies showed that clean and healthy behavior as prevention practice of pulmonary TB in residential facility is still not great thus awareness of it still need to be maximized. Research conducted to adolescents in Islamic boarding school by Fatmawati (2016) and Zuhriya (2015) showed that the practice of clean and healthy behaviour among students is still low. Another cases of dense residential facilities, such as orphanage and prison respectively, showed that there is still overcrowding, sharing of personal items and poor ventilation that can contribute to TB incidents (Geoghagen, 2004; Cunha, 2016). However, these researches did not asses the factors that may be associated with the prevention practice. Several researches have been conducted to study the predicting factors of TB preventive behaviors in adults but the results still vary. Some research showed that education levels and knowledge have a statistically significant association with prevention practice of

pulmonary TB (Jahan, 2014; Puspitasari, 2022). While other study stated that gender can affect preventive behaviors of pulmonary TB among high school students (Sawangasuk, 2021) and age was significantly associated with practice on TB in adults (Noremillia, 2015). Some studies were found that analyse the factors affecting Perilaku Hidup Bersih dan Sehat (PHBS) in students of Islamic Boarding School in Central Java, although these researches did not include TB contact as the variables (Asfiya, 2021; Putri, 2017).

Based on the data stated above, the number of research conducted to adolescent in Islamic Boarding School especially in East Java about this topic is still low despite the high risk of tuberculosis (TB) in this setting. There were minimal research found that analyze the correlation between factors such as age, sex, education, information, TB contact and knowledge with the prevention practice of pulmonary TB. Thus, the researcher is interested to conduct a research to analyse the factors that affect prevention practice of pulmonary TB in adolescent at Pondok Pesantren Ar-Rohmani Al-Ishaqy and Pondok Pesantren Kramat in Bangkalan, Madura, especially to adolescent that live in the mentioned Islamic boarding school by using an improved questionnaire from several related researches.

1.2 Problem Formulation

What are the factors that affect prevention practice of pulmonary tuberculosis in adolescent at Islamic Boarding Schools?

1.3 Research Objectives

Based on the problems stated above, the purpose of this research is to:

1.3.1 General Objective

To investigate the factors affecting prevention practice of pulmonary tuberculosis in adolescent at Islamic Boarding School.

1.3.2 Specific Objectives

- a. To know the distribution of prevention practice of pulmonary tuberculosis in adolescent at Islamic Boarding Schools.
- b. To analyse the association between age and prevention practice of pulmonary tuberculosis in adolescent at Islamic Boarding Schools.
- c. To analyse the association between sex and prevention practice of pulmonary tuberculosis in adolescent at Islamic Boarding Schools.
- d. To analyse the association between education and prevention practice of pulmonary tuberculosis in adolescent at Islamic Boarding Schools.
- e. To analyse the association between information and prevention practice of pulmonary tuberculosis in adolescent at Islamic Boarding Schools.
- f. To analyse the association between TB contact and prevention practice of pulmonary tuberculosis in adolescent at Islamic Boarding Schools.
- g. To analyse the association between knowledge and prevention practice of pulmonary tuberculosis in adolescent at Islamic Boarding Schools.

1.4 Research Benefits

1.4.1 Theoretical Benefit

This research is expected to give more knowledge and understanding about the factors affecting prevention practice of pulmonary tuberculosis in adolescent at Islamic Boarding Schools.

1.4.2 Practical Benefit

This research is expected to provide an overview of factors that affect the prevention practice of pulmonary tuberculosis thus more exposure and education about pulmonary TB and its prevention practice can be given to adolescent at Islamic Boarding School.