

THESIS

**FACTORS AFFECTING PREVENTION PRACTICE OF PULMONARY
TUBERCULOSIS IN ADOLESCENT AT ISLAMIC BOARDING SCHOOLS**



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INTERNATIONAL CLASS MEDICAL PROGRAM

FACULTY OF MEDICINE

UNIVERSITAS AIRLANGGA

SURABAYA

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IR – PERPUSTAKAAN UNIVERSITAS AIRLANGGA

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To fulfil the requirements for the undergraduate stage of the Medical Studies Program

Faculty of Medicine Universitas Airlangga

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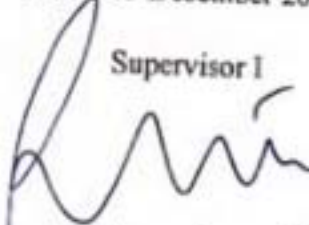
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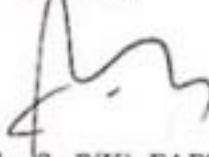
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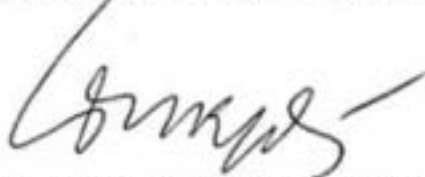
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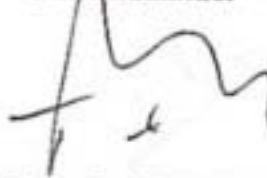


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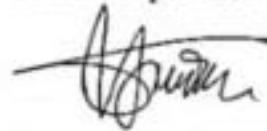


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NOTE OF GRATITUDE

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Surabaya, 13 Desember 2022



Poppy Azura Putri

**FACTORS AFFECTING PREVENTION PRACTICE OF PULMONARY
TUBERCULOSIS IN ADOLESCENT AT ISLAMIC BOARDING SCHOOLS**

SUMMARY

Tuberculosis (TB) is a major cause of ill health and one of the top 10 cause of death in the world. Adolescent TB cases has a fairly high risk to infect others thus more likely to interfere with the academic and social development in adolescents. TB is more commonly found in high risk areas such as dense residential area, for example Islamic boarding School. 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. Student's ignorance regarding cleanliness of surrounding environment and behavior of sharing personal equipment are risk factors of disease transmission in Islamic Boarding School especially for pulmonary TB.

Prevention of pulmonary TB can be done with controlling the risk factors by maintaining a clean and healthy environment and lifestyle as prevention practice. Studies conducted in Islamic Boarding School did not assess the factors that might associated with prevention practice. There have been few studies gathered predicting factors of TB preventive behaviors but only in adults. This resulted in a gap of knowledge of predicting factors of TB preventive behaviors in adolescent, especially Islamic Boarding Students. Hence, this research intended to analyze the correlating factors with the 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.

This study was a quantitative analytic study with a cross-sectional approach to study on the factors affecting prevention practice of pulmonary TB in adolescent at

Pondok Pesantren Ar Rohmani Al-Ishaqy and Pondok Pesantren Kramat, Bangkalan. The respondents who met the inclusion and exclusion criteria are selected thoroughly. Here the research instrument that used was questionnaire, which was classified into 3 section, demographical information, knowledge measurement, practice of adolescent to prevent pulmonary TB. A total of 90 respondents are collected. This study analyzed: age, sex, education, information of pulmonary TB, TB contact, knowledge of pulmonary TB with the prevention practice of pulmonary TB. This study has been given ethical clearance and approval from the ethic committee of Faculty of Medicine Universitas Airlangga and has implemented the ethical principles. The data was analyzed in univariate, bivariate and multivariate. All data were collected using Microsoft Excel 2016 software and analyzed using IBM SPSS Statistics Version 23 with a significance value of $p < 0.05$.

The result showed majority of students have poor prevention practice of pulmonary TB (80%). This study found a significant association between sex and prevention practice of pulmonary TB ($p = 0.022$). Similar result was found using Logistic Regression test that sex was the only factor that significantly affected the prevention practice of pulmonary TB ($p\text{-value} = 0.006$). It was obtained that compared to male, female was 0.191 times more likely to do good prevention practice of pulmonary TB meaning that male was better at conducting prevention practice of pulmonary TB.

Based on the result, the study showed no association between age, education, information, environment, knowledge and prevention practice of pulmonary TB in Islamic Boarding School. There was a significant association between sex and prevention practice of pulmonary TB where male have better prevention practice than female.

**FACTORS AFFECTING PREVENTION PRACTICE OF PULMONARY
TUBERCULOSIS IN ADOLESCENT AT ISLAMIC BOARDING SCHOOLS**

ABSTRACT

Background: Tuberculosis (TB) is a major cause of ill health in which adolescent and dense residential area, such as boarding school are both high risk of TB infection. The practice of pulmonary TB prevention is still low among students in Islamic Boarding School.

Methods: This was a quantitative analytic study with a cross-sectional approach to analyse the association between age, sex, education, information, TB contact, knowledge and prevention practice of pulmonary TB in adolescent at Islamic Boarding School using a questionnaire.

Results: This study found that majority of students have poor prevention practice of pulmonary TB (80%). This study found a significant association between sex and prevention practice of pulmonary TB ($p=0.022$) and no association between age, education, information, TB contact and knowledge with prevention practice of pulmonary TB. Multivariate analysis showed that sex was the only factor that significantly affected the prevention practice of pulmonary TB ($AOR=0.191$, $p=0.006$, $95\% CI=0.171-2.149$) where female was 0.191 times more likely to do good prevention practice of pulmonary TB compared to male. There were no association between age ($AOR=0.608$, $p=0.440$), education ($AOR=0.263$, $p=0.242$) and information ($AOR=8.914$, $p=0.056$) with prevention practice of pulmonary TB.

Conclusion: This study showed no association between age, education, information, TB contact, knowledge and prevention practice of pulmonary TB in Islamic Boarding School. There was a significant association between sex and prevention practice of pulmonary TB where male have better prevention practice than female.

Keywords: prevention practice, tuberculosis, adolescent, Islamic Boarding Schools

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LIST OF ABBREVIATION

AAFB	: Alcohol and Acid-Fast Bacillus
ART	: Antiretroviral Therapy
BCG	: Bacillus Calmette–Guérin
BKKBN	: Badan Kependudukan dan Keluarga Berencana Nasional
BMI	: Body Mass Index
CI	: Confidence Interval
DST	: Drug Susceptibility Testing
FDC	: Fixed Dose Combination
HBC	: High Burden Countries
HIV	: Human Immunodeficiency Virus
IPT	: Isoniazid Preventive Therapy
Kemenkes RI	: Kementerian Kesehatan Republik Indonesia
<i>M. Tuberculosis</i>	: <i>Mycobacterium tuberculosis</i>
MDR-TB	: Multidrug Resistent Tuberculosis
OAT	: Oral Anti-Tuberculosis
OR	: Odds Ratio
PHBS	: Praktik Hidup Bersih dan Sehat
RI	: Republik Indonesia
Riskesdas	: Riset Kesehatan Dasar
SD	: <i>Sekolah Dasar</i>
SMP	: <i>Sekolah Menengah Pertama</i>
SMA	: <i>Sekolah Menengah Atas</i>
TB	: Tuberculosis
TST	: Tuberculin Skin Test
WHO	: World Health Organization
WRD	: WHO-recommended Rapid Diagnostic