UNIVERSITI TEKNOLOGI MARA

ASSESSMENT OF ENVIRONMENTAL RISK FACTORS BETWEEN DIFFERENT HOUSEHOLDS IN LONGHOUSES WITH INCIDENCE OF SMEAR POSITIVE PULMONARY TUBERCULOSIS IN TATAU DISTRICT YEAR 2015-2019

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ABSTRACT

Pulmonary tuberculosis is infectious disease caused by bacteria that grows in a certain condition of environment. Physical conditions of a house that determine the quality of a house can become the environmental risk factors of *Mycobacterium tuberculosis* growth inside the house. The aim for this study is to determine the relationship between environmental factors of longhouse quality and incidence of smear positive pulmonary TB in the district of Tatau in 2015 until 2019. A total of 44 longhouses were chosen and a total of 88 units or *bilik* or households selected to conduct the environmental observation and measurement. A self-administered questionnaire survey will be distributed to 205 respondents from the 44 longhouses in which 4 or 5 individuals from each longhouse selected for the survey. Data analysis is done using statistical tests, the association will be proven significant to each other if the p value is <0.05.

Keywords: *tuberculosis, longhouse, environmental risk factors, smear positive TB*

CHAPTER 1

INTRODUCTION

1.1 Background

Tuberculosis (TB) still become a global public health issues for many years including in Malaysia. South East Asia was reported to have the highest number of cases which is 44% new cases detected in 2018 followed by 24% new cases coming from African region and 18% cases detected in Western Pacific (WHO, 2019). In the year 2018, 87% new TB cases were detected in countries with high TB cases. In the year 2018, countries like India, China, Indonesia, Philippines, Pakistan, Nigeria, Bangladesh and South Africa were responsible for two third of the new TB cases.

TB patient hospitalization and treatment can be burdensome and increasing the workload of healthcare workers. Healthcare workers workload increased when they work in TB care compared to other units than CDCs since they also have to do other job routine (Tavares et al., 2019). This has given no options for government but to carry out Directly Observed Treatment, Short- course (DOTS) strategy in combating TB since 2002 which proved to have given a better TB management and it has been established ever since. To control TB pandemic, using DOTS is the best option (World Health Organization, 1999) One of the components of DOTS is a system that can assess patient's treatment results by recording and reporting the progress. Health care worker or other assigned person including member of the family gives the prescribed medication to TB patient and monitor them swallowing the drugs (Ministry of Health Malaysia, 2016). For a single dwelling patient, village chief or longhouse chief (*Tuai Rumah)* can be the monitoring person. Involvement of community in patient's care could increase a positive outcome of TB treatment and increase cases detection (World