UNIVERSITI TEKNOLOGI MARA

SPATIAL-TEMPORAL ANALYSIS OF TUBERCULOSIS IN BINTULU AND KUCHING DIVISION FROM 2013 TO 2017

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Project submitted in fulfillment of the requirements for

the degree of

Bachelor in Environmental Health and Safety

(Hons.)

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DECLARATION BY STUDENT

Project entitled "Spatial-Temporal Analysis of Tuberculosis in Bintulu and Kuching from 2013 to 2017"is a presentation of our original research work. Whenever contributions of others are involved, every effort is made to indicate this clearly, with due reference to literature, and acknowledgement of collaborative research and discussions. The project was done under the guidance of Project Supervisor, Mohd. Izwan Masngut. It has been submitted to the Faculty of Health Sciences in partial fulfilment of the requirement for the Degree of Bachelor in Environmental Health and Safety (Hons).

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TABLE OF CONTENTS

ABSTRACT

Tuberculosis (TB) is one of the various airborne diseases and is ranked among the top 10 causes of death globally. TB remains a global public health problem of enormous dimension and also has been responsible for more deaths than any other infectious disease. In Malaysia, Sarawak is one of the 3 states that were reported with highest TB cases. The aim of this study was to analyse the incidence of TB in Kuching and Bintulu division from 2013 to 2017. This study found that Bintulu (n=1175) and Kuching (n=2620) have highest number of TB cases in Sarawak where risk factors such as age, gender, nationality, level of education, occupation and health status such as diabetes mellitus, smoking and HIV status are deemed to contribute to the progression of the disease in the divisions. The spatial-temporal maps also show that crowded areas such as Bintulu town and Petra Jaya are the hotspot of the disease. The findings in this study show that the disease is still a problem in Sarawak and the policy maker and government should implement comprehensive control measures to eradicate TB.

Keywords: *Tuberculosis, risk factors, spatial, temporal, age, gender, nationality, level of education, occupation, health status.*