

UNIVERSITI TEKNOLOGI MARA

**KNOWLEDGE AND SELF-REPORTED
PRACTICES ON THE DISCARDED DISPOSABLE
MASKS DURING THE COVID-19 PANDEMIC: A
CASE STUDY IN PERAK**

MOHAMAD ARIEF HAFIZI BIN MOHD YUSOFF

Project submitted in fulfilment of the requirement for

The degree of

Bachelor in Environmental Health and Safety

(Hons.)

Faculty of Health Science

July 2023

ACKNOWLEDGEMENT

In the name of ALLAH, the Most Gracious, The Most Merciful

Assalamualaikum and Alhamdulillah, all praise to Allah S.W.T The Supreme Lord of the Universe. Peace and blessing to Nabi Muhammad S.A.W., all prophets and their families. I praise Allah S.W.T. for the strength and His blessings in completing my study.

Thousands of thanks and love to my parents, Mr Mohd Yusoff Bin Ab Rahman, Mrs and my beloved wife Mrs Hurul Ain Binti Mohd Saupi, for their support and encouragement through thick and thin of my study. My deepest gratitude and appreciation to my dearest supervisor, Dr Siti Rohana Binti Mohd Yatim, who spent her time and efforts guiding and advising me from the beginning till the end of my research journey. Not to forget, I would like to thank all the lecturers in the Department of Environmental Health and Safety, Faculty of Health Sciences, who always shared their thoughts, knowledge and advice throughout my study at UiTM Puncak Alam. Only God can reward all of you with goodness.

My sincere thanks and appreciation go to all the department, who fully cooperated and assisted me throughout my study. Special thanks to my friends from HS243, who always support and motivate my study. May our friendship last forever. Lastly, I would like to thank everyone directly and indirectly involved in this study. Thank You

TABLE OF CONTENTS

TITLE PAGE

DECLARATION BY STUDENT..... ii

INTELLECTUAL PROPERTIES..... iii

APPROVAL BY SUPERVISOR..... vi

ACKNOWLEDGEMENT.....vii

TABLE OF

CONTENTS.....viii

LIST OF

TABLES..... xi

LIST OF

FIGURES.....xii

LIST OF

SYMBOLS.....xiii

LIST OF

ABBREVIATIONS..... xiv

ABSTRACT.....xv

ABSTRAK..... xvi

CHAPTER 1..... 1

INTRODUCTION.....1

1.1 Background of Study..... 1

1.2 Problem Statement.....3

1.3 Research Objectives..... 5

1.3.1 General Objective..... 5

1.3.2 Specific objectives..... 5

ABSTRACT

The use of facemasks is mandatory to prevent the spread of the COVID-19 virus. Inadequate waste treatment creates substantial hazards of disease transmission to waste pickers, waste workers, health workers, patients, and the population at large. This study aims to assess knowledge and practices on discarded disposable masks (DMs) during the COVID-19 pandemic. The study area was conducted in Perak. A cross-sectional online survey of 385 Perak residents was conducted. The survey instrument consisted of demographic characteristics, 19 items on knowledge, and 18 items on practices, adopted from a previously published questionnaire. Pearson correlation analysis and Multiple Linear Regression were used to assess the association between the participants' demographic features and knowledge and practises, using a two-tailed test for survey findings. Self-reported knowledge revealed that 348 individuals, or 90.38% and have a good level of knowledge regarding the disposal of DMs while practices of the participants show mean rating of 1.95 ± 0.70 which is moderate practices. There were significant associations between gender and types of residence ($p < 0.05$) with knowledge. For practices showing gender and education level are significantly correlated which is ($p < 0.05$). Regression analysis for knowledge and practices in disposing DMs on the demographic show that gender and types of residence are significant to knowledge which is ($p < 0.05$) while gender and education level is significant to practices which is ($p < 0.05$). As a conclusion, taking precautions to notify as many individuals as possible is important in promoting the behaviour of the public to wear a mask. Social media is the most effective way to interact with the public. In addition, enforcement actions also need to be improved to educate and teach the public about the importance of proper disposable mask disposal.

Keywords: *COVID-19, Discarded disposable masks, Healthcare waste, Waste management.*

CHAPTER 1

INRODUCTION

1.1 Background of Study

Coronavirus disease 2019 (COVID-19) is an infectious disease caused by the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) virus. The COVID-19 pandemic is also known as the coronavirus pandemic. COVID-19 was first detected in Wuhan, China in December 2019. COVID-19 had a huge impact on the world when the virus failed to be curbed and spread to the whole world, including Malaysia. The World Health Organisation (WHO) announced a pandemic on March 11, 2020, and a public health emergency of international concern on January 30, 2020. (WHO, 2020). The first COVID-19 case was detected in Malaysia when 3 Chinese nationals who entered Malaysia via Johor were confirmed positive for coronavirus (2019-nCoV) on 23 January 2020. The World Health Organization (WHO) declared a coronavirus outbreak a world health emergency on 1 February 2020.

As of 21 June 2023, COVID-19 cases worldwide have been recorded, over 768,187,096 positive cases and 6,945,714 million deaths have been confirmed covid19 positive. Malaysia recorded a cumulative COVID-19 cases as of 21 June 2023 which is 5,122,019 positive cases and 37,118 positive cases have been reported dead (WHO, 2023).

The novel mode of transmission of COVID-19 coronavirus from an individual to through droplets from the nose or mouth that is spread When a COVID-19 patient coughs or sneezes. These droplets traverse the item and the surrounding surface. Others become infected with COVID-19 by contacting this material or