

UNIVERSITI TEKNOLOGI MARA

**RELATIONSHIP OF
OCCUPATIONAL NOISE AND
SLEEP DISTURBANCE AMONG
FOGGING MACHINE
OPERATOR AT PERAK
TENGAH DISTRICT HEALTH
OFFICE.**

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Project submitted in fulfillment of the requirements for
the degree of
**Bachelor in Environmental Health and Safety
(Hons.)**

Faculty of Health Sciences

Januari 2021

ACKNOWLEDGEMENTS

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. Li Bin Suhai and

my lovely wife Mrs Sai'datul Solehah Binti Mohamad Nor for their support and encouragement through thick and thin of my study. My deepest gratitude and appreciation to my dearest supervisor, Dr. Abdul Mujid Bin Abdullah who spent her time and efforts in guiding and advising from the beginning till the end of my research journey. Not to forget, I would like to thank all the lecturers in Department of Environmental Health and Safety, Faculty of Health Sciences who always share their thoughts, knowledge and advice throughout my study in UiTM Puncak Alam. Only God can reward all of you with goodness.

My sincere thanks and appreciation go to all the staff from the department who gave their full cooperation and assisted me in many ways throughout my study. A special thanks to my friends from HS243 who always give me support and motivation while completing my study. Lastly, I would like to thank everyone who involved directly and indirectly in this study. Thank You.

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ABSTRACT

A cross-sectional study was conducted to find out the relationship between the effects of noise in the workplace and sleep disorders on the operator of the fogging machine at the Perak Tengah District Health Office. This study was conducted on 60 inspectorate unit staff at the Perak Tengah District Health Office consisting of Assistant Environmental Health Officers, Public Health Assistants, General Workers, and Drivers. Data were collected using self-controlled questionnaires and sound values from 10 machines were measured using sound level meter tools. From the study data conducted, the mean value of sound exposure to the fogging machine operator is 120.45 dB (A). The highest reading is 124.9 dB and the lowest is 116.60dB. From this data, it can be concluded that there are statistically significant differences in sleep disorders between exposed and non-exposed groups ($U = 278$, $p = .003$). The value of Chi-Square is 9.604, its significance level is 0.022, less than the probability level of 0.05. Thus, we can conclude that there is a significant relationship between noise and sleep disturbances among employees.

CHAPTER I

INTRODUCTION

1.1 Background

Noise is an unwanted sound rated as unpleasant, loud or disturbing to the hearing. Physically, noise is difficult to distinguish from sound, as both are vibrations that pass through a medium, such as air or water (Elert, & Glenn.2016). Sounds that one person does not like are not necessarily considered the same for others. For example such a loud musical sound may be liked by some people but not for some (Talbot, 1995). There are many previous studies stating that this loud noise will cause hearing impairment and hearing loss. (Mokhtar et al., 2007).

Occupational noise can be defined based on the amount of acoustic energy received by the hearing system of employees while they are working in the industry. According to WHO (2003), they are now concerned with stress in the workplace and other psychosocial factors are now major occupational health problems, combined with other traditional occupational problems as well as exposure to physical, chemical and biological hazards. Employees may experience a variety of health problems, such as anxiety, depression, physical symptoms, malaise or burning due to prolonged stress at work. (Cohen, Denise and Gregory, 2007).

There many criteria can be associated with sleep disturbance. It includes sleep disturbances and sleep disorders of initiating and maintaining sleep (DIMS, insomnias), disorders of sleep–wake schedule, disorders of excessive somnolence (DOES), and