UNIVERSITI TEKNOLOGI MARA

"WORK RELATED MUSCULOSKELETAL DISORDER AMONG WORKERS OF PENANG PORT SDN BHD"

MOHD HAFIZ BIN AB RAHMAN

Project paper submitted in partial fulfillment of the requirements for the degree of

Bachelor in Environmental Health and Safety (Hons.)

Faculty of Health Sciences

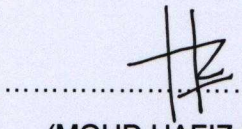
JUNE 2014

Declaration by Student

This project paper entitled *"WORK RELATED MUSCULOSKELETAL DISORDER AMONG WORKERS OF PENANG PORT SDN BHD"* is a presentation of my original research work. Wherever contributions of others are involved, every effort is made to indicate this clearly, with due reference to the literature, and acknowledgement of collaborative research and discussions.

This project was done under the guidance of En Abdul Mujid bin Abdullah (Project Supervisor) at the Mara University of Technology (UiTM). It has been submitted to the faculty of Health Sciences in partial fulfillment of the requirement for the Degree of Bachelor in Environmental Health and Safety (Hons).

Student's Signature:



(MOHD HAFIZ BIN AB RAHMAN)
Matric Number: 2009427876
I/C Number: 8501010-03-5677
Date: 01/08/2014

ACKNOWLEDGEMENT

I would like to take this opportunity to express my sincere gratitude to all who have contribute in this study.

First of all, I would like to deeply praise to Almighty Allah S.W.T. for His blessing and blissfulness for allowing me to complete this report in time and presentably.

In particular, I wish to express my sincere appreciation to my supervisor, En.Abdul Mujid bin Abdullah, for encouragement and guidance. I am also very thankful to all lecturer for their advice and recommendation on completing my final project, thank you for your constructive assistance.

Finally, my appreciation also goes to my beloved family especially to my wonderful parents and lovely wife who always give their support, loves, patience and understanding. Not forgotten, my friends who always been there whenever, wherever to support me in this thesis.

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Abstract

WORK RELATED MUSCULOSKELETAL DISORDER AMONG WORKERS OF PENANG PORT SDN BHD

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Introduction : Work-related Musculoskeletal Disorders (WMSDs) are common in the majority of industrial settings. A lot of industries, for example computer and other high tech industries involve considerable amounts of assembly work, which by nature is very difficult to automate. Acute and chronic work-related injuries may be attributed to excessive force demanded by the task (Chung et. al., 2003). Scientific evidence shows that effective ergonomic interventions can lower the physical demands of Manual Material Handling work task, thereby lowering the incidence and severity of the musculoskeletal injuries they can cause (NIOSH, 2007). Their potential for reducing injury related costs alone makes ergonomic interventions a useful tool for improving a company's productivity, product quality, and overall business competitiveness.

Methodology : This study was evaluated the musculoskeletal disorder problem and ergonomic risk assessment among manual handling in Penang Port Sdn Bhd employees at the Cargo and Container Department that involves manual handling located in Butterworth, Penang. A cross-sectional survey was conducted using face-to-face interviews, direct observation of the manual handling work.

Results : All were asked questions related working hours, frequency of working in a week, musculoskeletal disorder symptoms and awareness. Fifteen (15) (50%) of respondents were Malay, 4(13.3%) were Indian and 11 (36.7%) were Nepal. They have work of experience about 1-3 years about 9(30%), with the most of the respondents were length about 4-6 years comprises of 12(40%), then 7-9 years about 6(20%) and the long service of the respondents were about 10-13 years that 3(10%). For weight and height, majority of respondents (30%) were 66-70 kg and (36.7%) were 166-170cm respectively. Table 12 below shows the distribution of the study population.

Conclusion : In conclusion, ergonomic risk levels among workers are very high that consists of 86.7% of them. The prevalence on body part of musculoskeletal disorder