

UNIVERSITI TEKNOLOGI MARA

A STUDY OF PROLONGED STANDING AND WORK-RELATED MUSCULOSKELETAL DISORDER AMONG CASHIERS AT HYPERMARKET

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

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Declaration by Student

Project entitled A Study of Prolonged Standing And Work-related Musculoskeletal Disorder Among Cashier At Hypermarket 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. The project was done under the guidance of Mdm. Nadiatul Syima Mohd Shahid as Project Supervisor and and Tn. Hj Hashim Ahmad as Co-supervisor. 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).

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In the name of Allah, The Most Gracious, The Most Merciful.

Read! In the name of your Lord, Who has created,

Who has taught by the pen,

Surely, Unto your Lord is the return

Alhamdulillah, all praise to Allah, The Most Generous, Peace and blessing to Nabi Muhammad S.A.W, all the Prophets, their families, friends and all the Muslims.

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Abstract

A Study of Prolonged Standing and Work-related Musculoskeletal Disorder (WMSD) Among Cashier at Hypermarket

Rukiah binti Chandra

Musculoskeletal disorders (MSDs) were recognized as having occupational etiologic factors as early as the beginning of the 18th century. Work-related musculoskeletal disorders (WRMDs) are increasingly prevalent in the Malaysian workforce. Canadian Center for Occupational Health and Safety (CCOHS) in 2005 claims that WMSDs are known as leading causes of significant human suffering, loss of productivity, and economic burdens on society. Objectives of this study were to determine time (hours) of standing among cashiers, to classify the musculoskeletal disorder among cashiers and to identify association between prolonged standing and musculoskeletal disorder among cashiers. A cross sectional study was conducted to see the prevalence of MSDs among standing cashiers. The questionnaire was edited from previously used and validated questions including the Standardized Nordic Questionnaire for the Analysis of Musculoskeletal Symptoms (Kuorinka et al, 1987) and the Rapid Upper Limb Assessment (RULA) (McAtamney & Corlett, 2004) were distributed to respondents participated (n=60). Significant difference ($p = 0.001$) of mean of time (hours) between standing and sitting cashiers were recorded. However, risk is not significantly associated with prolonged standing ($p=0.417$) among standing cashiers. Significant association of prolonged standing and MSD in last 12 months at low back $p=0.035$, ankle $p=0.001$ and knees $p=0.003$. As conclusion, advance hazard analysis and administrative control are recommended to reduce the risk faced by cashier while perform their job.

Keywords: Ergonomic, Cashier, Prolonged Standing, RULA, Musculoskeletal Disorder.