UNIVERSITI TEKNOLOGI MARA

DIFFERENCES IN DEVELOPING RISK OF MUSCULOSKELETAL DISORDERS BETWEEN CASHIERS OF A SUPERMARKET IN SEPANG WHO WORK ON WEEKDAYS AND WEEKENDS

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

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ABSTRACT

Musculoskeletal disorders (MSDs) are conditions where there are injuries or inflammatory at human body that can affect musculoskeletal system of the body, especially at muscles, nerves, tendons, joints, cartilage, and spinal discs. Meanwhile, work-related musculoskeletal disorders (WMSDs) are conditions in which the work environment and performance of work contribute significantly to the condition and/or the condition is made worse or persists longer due to work conditions. Awkward and static postures, repetitive motions, weight handling and absence of resting period for recovery during working days are among factors that can cause MSDs among workers. Many studies conducted in the past had shown a prevalence of MSDs among cashiers, particularly cashiers at supermarkets. Their job tasks generally force them to be surrounded with risk factors of MSDs which can lead to developed MSDs symptoms in a long-term. Most importantly, due to surge in customers on weekends, cashiers who have work shift on the weekends require more repetitiveness movement and faster pace of work as they handle goods from crowds of customers, resulting to higher probability of them to develop risk of MSDs compared to cashiers who have work shifts on weekdays. Mann-Whitney U Test was used to verify the differences in the risk development of MSDs for the cashiers' weekdays and weekends work shifts. The result of this study shows that the REBA score obtained by the cashiers who had work shift on the weekends was higher compared to REBA score obtained by cashiers who had work shifts on the weekdays. The main findings in this study depicts a clear difference in the risk development of MSDs between supermarket cashiers who work on weekdays and weekends.

Keywords: *Musculoskeletal disorders, cashiers, work shifts, REBA*

CHAPTER 1

INTRODUCTION

1.1 Background

Musculoskeletal disorders (MSDs) are injuries or disorders of the muscles, nerves, tendons, joints, cartilage, and spinal discs (CDC, 2020). It is often characterized by persistent pain, mobility limitations limiting the ability of employees to perform work (WHO, 2021). They are considered as one of the consequential occupational health problems affecting employees, employers, and the community. In Malaysia, MSDs are on the rise as the country progresses towards industrialization (Bz et al., 2018). According to the SOCSO study from 2014, MSDs was an upward trend due to its exponential rise of cases that was approximately 34 times increments from the previous six years (SOCSO, 2014). In 2016, the number of cases continually escalated to 1,607 cases depicting a constant rise in cases of MSDs among workers (SOCSO, 2016). To make matters worse, MSDs are the biggest cause of disability worldwide and according to WHO 2021, the disability caused by MSDs has been showing an exponential growth in its number of cases and is expected to continually increase in the next decades (WHO, 2021).

The main symptom of MSDs is work-related musculoskeletal pain that is predominantly arisen from various factors, such as physical, psychosocial, and individual aspects. Awkward and static postures, repetitive motions, weight handling and absence of resting period for recovery during working days are among the common elements that cause MSDs among workers (Coenen et al., 2014). They are also known as ergonomic risk factors, by which they are workplace situations that place workers under biomechanical stress causing them to develop musculoskeletal pain over time (n/a, 2008). MSDs that are often perceived around neck, shoulder, arm