

UNIVERSITI TEKNOLOGI MARA

**WORK-RELATED UPPER LIMB DISORDER
ASSESSMENT AMONG THE NON-CLINICAL
HEALTHCARE WORKERS AT THE HOSPITAL
TENGGU AMPUAN AFZAN**

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ABSTRACT

Work Related Upper Limb Disorder Assessment among Non-clinical Healthcare Workers at Hospital Tengku Ampuan Afzan

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The ergonomic issues not really are understood by the people in Malaysia because of lack of information and awareness especially at the workplace. The employers and employees both overlooked at the musculoskeletal disorder, one of the ergonomic health effects at the workplaces. The healthcare workers both clinical and non-clinical workers are exposed to the ergonomic hazards such as awkward postures, repetitive motion and overload of lifting objects. The study conducted to assess the upper limb disorder risk among the Radicare non-clinical health care workers at the Radicare, Hospital Tengku Ampuan Afzan and its relation with the health effect present, particularly those related to musculoskeletal disorder. Rapid Upper Limb Assessment (RULA) is the vital tool in the study to determine the risk level of the working posture. The Modified Standardized Nordic Musculoskeletal Disorder Questionnaire used to find out the body part affected with the musculoskeletal disorder (MSD) among the workers within 7 days. Neck is the most affected body part with MSD within 7 days with 84.1% had experienced it because most of the workers use their neck to look down during working. Mean for RULA scores among the workers is 5.45, Action Level 3 or Medium Risk which need to “further investigation and work posture need to be change soon”. There was significant correlation between work types and RULA scores, 0.049, p-value less than 0.05 using Spearman’s correlation test. There was a significant association between work type of clinical waste with the body part affected, low back, 0.001, p-value less than 0.05 using the chi-square association test. The work related upper limb disorder assessment among the Radicare, non-clinical health care workers can be concluded that the workers are exposed to the ergonomic hazards such as repetitive motion and awkward postures. The workers risk to the work related upper limb disorder such as low back pain and neckache.

CHAPTER ONE

INTRODUCTION

1.1 Background

Radicare (M) Sdn Bhd is a major provider of quality Integrated Facilities Management services to major Government hospitals in the Federal Territory of Kuala Lumpur, Selangor, Kelantan, Terengganu and Pahang. In addition, Radicare delivers the full range of integrated support services to private hospitals and other health care institutions in Malaysia (Radicare, 2008). The Radicare is giving the healthcare delivery and a service which is non-clinical support services includes the Clinical Waste Management; Cleansing; Linen & Laundry; Facilities Engineering Maintenance and Biomedical Engineering Maintenance. As the Radicare include the healthcare services, most of the works done using the manual handling. Manual handling can cause the ergonomic problems such as upper limb discomfort and pain, backache and muscles injury. According to the "Ergonomics in Healthcare" website, work related musculoskeletal disorders are most prevalent, most expensive, and most preventable workplace injuries in the United States. The injury rates for employees in healthcare facilities are often higher than the injury rates for other businesses in the United States Compared to other private industry sectors.

An ergonomic problem is not really well known by the people but it is the most problem occur among the public and workers. Ergonomic can be affected by the repetitive movement, overload lifting, the way of lifting, vibration, material manual handling, posture, and body movement. It is also the combination of many disciplines, including anatomy, physiology, medicine, psychology, orthopedics and sociology to achieve to making work easy and efficient,