

## Back Pain and the Observed Factors among Oil Palm Workers

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**Abstract - Direct and indirect costs of treating Musculoskeletal Disorders (MSDs) are on the increase and thus financially alarming. Back pain is one of the prominent diseases among oil palm workers. A cross-sectional study was conducted to identify the prevalence of back pain and the observed ergonomics risk factors. The two techniques used were (1) survey using modified Nordic Musculoskeletal Questionnaire (NMQ) and (2) site observation with recorded working activities. Subjective pain or discomfort on different body regions were used (no pain/ sometimes in pain/ always in pain) to determine the prevalence of MSDs symptoms. More than 100 oil palm workers participated in this study. However, there were only 88 completed survey forms returned. Result shows that the commonest region of complaint was lower back (99%) which consisted of 'always in pain' 18% and 'sometimes in pain' 81%. This is followed by upper back (85%) which consisted of 'always in pain' (8%), and 'sometimes in pain' (77%). The complaints of pain were also high at the area of right shoulder (81%) and left shoulder (78%). Awkward posture, excessive force, lifting heavy load are the observable problems that repeatedly occur while workers were performing their work duty. The prevalence of work-related complaint among oil palm workers is high. Due to that, it is important to carry out a systematic ergonomics risk assessment to effectively estimate the ergonomics risk factors that exist in all work processes.**

Index term - Back pain; posture; biomechanical exposure

### 1. INTRODUCTION

As Malaysia continues to develop and the requirement for „physical“ workers in the construction and plantation sectors are also on the rise, there has also been an increase in the number of MSDs that have been reported to Social Security Organization (SOCISO)[1]. Statistics show that in 2006 there are 15 cases of MSDs reported. The