

PREVALENCE OF LOW BACK PAIN AND
ASSOCIATED FACTORS AMONG TAXI DRIVERS
IN JOHOR BAHRU

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TAXI DRIVERS IN JOHOR BAHRU

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ABSTRAK

Sakit belakang di bahagian bawah merupakan masalah muskuloskeletal yang paling umum yang dialami oleh pemandu teksi di sektor pengangkutan. Masalah ini sering dikaitkan dengan aktiviti duduk bagi tempoh masa yang panjang semasa memandu, getaran seluruh badan (Whole Body Vibration) dan pengendalian barangan yang perlu diangkat secara manual. Statistik menunjukkan bahawa terdapat lebih kurang 73,893 orang pemandu teksi di negara ini dan dianggarkan 10.5% daripadanya di Johor Bahru. Ini mungkin kerana pembangunan pesat di kawasan bandar serta terletak berdekatan dengan jalan utama keluar masuk Singapura. Objektif utama kajian ini adalah untuk menentukan prevalens masalah sakit belakang di bahagian bawah dan faktor-faktor yang berkaitan di kalangan pemandu teksi di Johor Bahru pada tahun 2012. Saiz sampel untuk kajian ini adalah 228 responden dan hanya 224 responden telah bersetuju menjawab soal selidik, dengan memberi kadar respon sebanyak 98.2%. Keputusan kajian menunjukkan bahawa prevalens masalah sakit belakang di bahagian bawah dalam tempoh kajian 12 bulan adalah 49.1%. Sebahagian besar responden adalah dari etnik Melayu (84.4%) dan bukan perokok (90.2%). Kajian telah menunjukkan prevalens sakit belakang di bahagian bawah yang tinggi di kalangan responden yang memandu teksi jenis Wira (55.5 %), dan dari etnik India atau lain-lain (56.0%). Kajian menunjukkan hubungan yang signifikan di antara masalah sakit belakang di bahagian bawah dan status perkahwinan. Status Jisim Berat Badan (BMI) yang tidak normal menunjukkan perkaitan yang signifikan dengan masalah sakit belakang di bahagian bawah. Kajian ini juga menunjukkan hubungan yang signifikan di antara masalah sakit belakang di bahagian bawah dan pengendalian secara manual, yang meliputi mengangkat barang berat, membongkok, dan memusingkan badan. Masalah sakit belakang di bahagian bawah menunjukkan prevalens yang tinggi di kalangan pemandu teksi yang tidak puas dengan pekerjaan mereka (66.7%) dan di antara mereka yang tidak mempunyai sokongan di tempat kerja (53.8%). Kajian ini juga mendapati bahawa pemandu-pemandu teksi peka mengenai masalah sakit belakang di bahagian bawah dan keperluan untuk pencegahan dan rawatan awal. Oleh itu, intervensi yang berkesan perlu dilaksanakan untuk mengurangkan prevalens masalah sakit belakang di bahagian bawah di kalangan pemandu-pemandu teksi untuk mengekalkan mereka di sektor pengangkutan dan seterusnya meningkatkan produktiviti.

ABSTRACT

Low back pain is one of the common musculoskeletal disorders affecting taxi drivers in the transportation sector. The problem is frequently associated with prolonged sitting while driving, whole body vibration and manual handling of goods to be delivered. There are approximately 73,893 licences issued for taxi drivers in Malaysia and 10.5% of them are based in the Johor Bahru, most probably due to located in town and near to Singapore. The main objective of this study was to determine the prevalence of low back pain and associated factors among taxi drivers in Johor Bahru for the year 2012. The sample size required for this study was 228 respondents but only 224 respondents were managed to be approached for administration of assisted questionnaire. The response rate of this study was 98.2%. Results showed that the prevalence of low back pain in the past twelve months was 49.1%. Majority of the respondents were Malay (84.4%), and non-smokers (90.2%). The prevalence of low back pain was higher among those who drove Wira taxis (55.5%), Indian and other ethnicities (56.0%). There was a significant association between low back pain and marital status. Abnormal Body Mass Index (BMI) status was significantly related to low back pain as well, supporting the postulated hypotheses. The study also revealed significant association between low back pain and manual handling, which includes lifting, bending and twisting the lower back. There was a higher prevalence of low back pain among taxi drivers who are not satisfied with their work (66.7%) and among those who lack support at work (53.8%). It was also found that the taxi drivers are highly aware of the low back pain problem and in need for early prevention and treatment. Therefore, necessary interventions need to be implemented to reduce the prevalence of low back pain among taxi drivers to retain them in the job and enhance productivity.

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ABBREVIATION

UUM	Universiti Utara Malaysia
WHO	World Health Organization
MSD	Musculoskeletal Diseases
OSHA	Occupation Safety and Health Act
PRECEDE	Predisposing Reinforcing and Enabling Constructs in Educational Diagnosis and Evaluation
SPSS	Statistical Package for The Social Sciences
WHO	World Health Organization
BMI	Body Mass Index
CI	Confidence Interval
OR	Odds Ratio
<	Less
>	More
	More or equal to the
\pm	Plus minus
%	Percentage
χ^2	Chi-square
n	Number of samples
et al.	Other authors
m	Metre
kg	Kilogrammes

CHAPTER 1

INTRODUCTION

1.0 Background of the Study

Pain in the lower back is one of the major syndromes alleged in the modern living era. Almost everyone experience low back pain at some point in their lives. This pain varies from mild to severe. The pain can be short-lived or long-lasting. Lower back pain is a common concern in the industrialized nations affecting at nearly 70% worldwide (Thiago et al., 2012). In the United States, the number of prevalence suffering from low back pain is estimated to be 18% with an annual increase of 15% to 20% (Steven et al., 2001). Low back pain is usually self-limiting with a total of 50% affected and recovered within two weeks (Hulshof et al., 2007). Lower back pain stands as the most common reported problem after headache and tiredness (Gallais., 2008). Reports found more than 70% of the population in developed countries suffers from low back pain (William et al., 2009).

British Medical Journal (McIntosh & Hall, 2008) published an article stating, 30% of European workers reported that their job was the main factor causing low back pain and this prevalence rates differ from countries ranged between 13% and 44%. The pain is multifactorial and could be associated with both occupational and non-working related factors. These non-working related factors may include age, gender, smoking status, anthropometric measures, physical fitness level and medical history (Mark et al., 2009). Psychosocial factors, both either work or non-working related has been associated with low back pain as well (Anderson et al., 1997).

1.1 The Research Problem

In Malaysia, according to Deros et al. (2010), in Journal of Work Posture and Back Pain Evaluation had stated that there are only few studies of low back pain in Malaysia compared to worldwide where there are much research had been conducted. So far, the inadequate literature search did not publish any research or studies conducted on ergonomic

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