

UNIVERSITI TEKNOLOGI MARA

**EXPOSURE OF WHOLE-BODY
VIBRATION AMONG MALE
FOODPANDA RIDER IN PUNCAK
ALAM, SELANGOR**

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

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ABSTRACT

Given the ever-evolving nature of the food industry, particularly during the epidemic, many customers have demanded convenient and uncomplicated solutions, such as an online delivery option and it's gives advantages to food delivery services. Food Panda delivery is one of those delivery services that get the opportunities to build up more advanced. A cross-sectional study determined the relationship between the demographics background and symptoms while riding. The reading was measured by a vibration meter. A rider accessed it using a vibration meter representing their movement. A set of questionnaires was also distributed to all riders in Puncak Alam. The third trip had the longest journey to completing order. Based on the comparison with ISO 2631, acceleration in X, Y and Z axes still below the TLV values. According to the association between discomfort or pain at shoulder region and age, $X^2 (2) = 6.525$, $p = 0.017$, upper back pain and BMI $X^2 (2) = 6.525$, $p < 0.01$ LPB and BMI is $X^2 (4) = 9.548$, $p = 0.027$ and back pain with working hour $X^2 (3) = 10.429$, $p = 0.009$. The vibrating impacts pose a greater threat to motorcyclists. As much as feasible, precautions must be taken to prevent extended vibration exposure.

Keyword: *Whole-Body Vibration (WBV), Food Panda, symptoms, shoulder, upper back pain, lower back pain*

CHAPTER 1

INTRODUCTION

1.1 Background

Nowadays, food riders are becoming popular, and growth increased significantly during the Covid-19 pandemic. Given the ever-evolving nature of the food industry, particularly during the epidemic, many customers have demanded convenient and uncomplicated solutions, such as an online delivery option and it's gives advantages to food delivery services. The government declared that food delivery services are a part of essential services during the pandemic. Food delivery services are a service that delivers food from the restaurant to the customer's address. Food Panda delivery is one of those delivery services that get the opportunities to build up more advanced. In Puncak Alam, demanding food delivery by Food Panda services is higher because it is one of the developing areas in Selangor. A food delivery rider gathers food or meals from different restaurants and fast foods to bring home (Buncaras et al., 2022). A motorcycle is one of the significant personnel modes of transport and the source of employment even more during the pandemic phase. A motorcycle is mainly a vehicle used to deliver food to customers. Motorcycles are often used for commuting in dense traffic and poor-conditioned roads. Thus, the repetitive loading on the musculoskeletal system of the rider leads to risk factors associated with musculoskeletal disorders (Tony et al., 2020). Whole-body vibration (WBV) is transmitted to the whole body by the surface supporting it, for example, through a seat or the floor. Traveling over uneven surfaces is commonly experienced by drivers, riders, operators, and passengers in a mobile plant. Operating or riding in a self-propelled moving vehicle causes vibration, which operates on the human and contributes to or develops physical or mental ill health (Edwards, 2016). WBV comes in two types;