## **Original Article**

## A Psychosocial Study on the Effects of Employee Characteristics and Workplace Ergonomics on Chronic Back Pain related to Work

Tam Jenn Zhuenga\*, Sharifa Ezat Wan Putihb, Noor Hassim

<sup>a</sup> Department of Health Negeri Sembilan, Jalan Rasah, Bukit Rasah, 70300 Seremban, Negeri Sembilan <sup>b</sup> University Malaya Medical Centre, Jalan Universiti, Lembah Pantai, 50603 Kuala Lumpur, Federal Territory of Kuala Lumpur

\* Corresponding author: jztan79@gmail.com

ABSTRACT: The study objective is to examine the effects of the identified attributes (i.e. employee characteristics and ergonomics) that influences the chronic back pain disabilities acquired and benefits awarded via the recognition of workplace relatedness. As these factors are considered in work-related chronic back pain, we hypothesized that the ascertainment of work relatedness would depend on employees' workplace conditions (poor ergonomic practices) and innate personal conditions (excellent pre-existing medical health). Two set of data was collected from a registry owned by a social security organization in 2012. Factor analysis and structural equation modeling (SEM) was used to analyze the data. As predicted, workplace conditions and employees' pre- existing medical health status mediated occupational back pain to develop disability and monetary benefit relationships. In conclusion, the results support the importance of obtaining workplace evidence and employees' pre- existing medical health status that produces stronger relationship in terms of the amount of benefits to be given compared to the lesser effects on disability. Both models with different samples showed consistent SEM results. The proposed model would be applicable in the heterogenous Asian setting and that occupational back pain consensus is the key element in providing effective social security protection.

Keywords - Chronic, Ergonomics, Low Back Pain, Occupational, Work

All rights reserved.