

The Association Between Risk Factors and Low Back Pain among Commercial Vehicle Drivers in Peninsular Malaysia: A Preliminary Result

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To determine the risk factors associated with complain of low back pain. A cross sectional study was done beginning June 2004 until August 2005. Seven hundred and sixty commercial vehicle drivers from 11 bus companies in central, northern and eastern regions in Malaysia participated in this study. Modified Nordic questionnaire was used to determine the prevalence of low back pain; Maestro human vibration meter was used to measure the personal vibration dose values of lateral, anterior-posterior and vertical axes. Modified OWAS was used to assess the awkward posture of the driver torso namely, bending forward movement, leaning, sitting straight and twisting. Profile



of Mood States (POMS) was used to evaluate the mood states of bus drivers with complain of low back pain. A high prevalence of low back pain (60.4%) among Malaysian commercial vehicle drivers was found. Logistic regression analysis controlling for age, income, education level and non occupational activities revealed that following were related to low back pain: Tension – anxiety [1.080, 95% CI 1.041 - 1.121], depression dejection [1.047, 95% CI 1.023 - 1.072], anger - hostility [1.053, 95% CI 1.027 - 1.081], fatigue [1.132, 95% CI 1.089 - 1.177] and confusion [1.114, 95% CI 1.061 - 1.169] of POMS, length of employment [1.001, 95% CI 1.0-1.003], steering wheel adjustment [1.521, 95% CI 1.101 - 2.101], perception of exposing to vibration [1.943, 95% CI 1.389 - 2.719]. In conclusion, combinations of risks lead to high increase of low back pain complain among Malaysian bus drivers.