

Pain Intensity, Functional Disability and Physical Activity among Elderly Individuals with Chronic Mechanical Low Back Pain

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Abstract : Chronic Mechanical Low Back Pain (CMLBP) is prevalent in the aging population; some studies have documented the association among pain intensity, functional disability and physical activity in the general population but very few studies in the elderly. This study was designed to investigate the association among pain intensity, functional disability and physical activity of elderly individuals with CMLBP in the University College Hospital (UCH), Ibadan, Nigeria and also to determine the difference in physical activity, pain intensity and functional disability between males and females. A total of 96 participants diagnosed with CMLBP participated in this cross-sectional survey. They were conveniently sampled from selected units in the UCH, Ibadan, Nigeria. Data on sex, marital status, occupation and duration of onset of pain of participants were obtained from the participants. The Physical Activity Scale for the Elderly, Visual Analogue Scale and Oswestry Disability Questionnaire were used to measure the physical activity, pain intensity and functional disability of the participants respectively. Data was analysed using Spearman correlation, independent t-test; and α was set at 0.05. Participants (25 males, 71 females) were aged 69.64 ± 7.43 years. The majority (76.0%) of the participants were married, and over half (55.2%) were retirees. Participants' mean pain intensity score was 5.21 ± 2.03 and mean duration of onset of low back pain was 63.63 ± 90.01 months. The majority (67.6%) of the participants reported severe to crippled functional disability. Their mean functional disability was 46.91 ± 13.99 . Participants' mean physical activity score was 97.47 ± 82.55 . There was significant association between physical activity and pain intensity ($r = -0.21, p = 0.04$). There was significant association between physical activity and functional disability ($r = -0.47, p = 0.00$). Male (87.26 ± 79.94) and female (101.07 ± 83.71) participants did not differ significantly in physical activity ($t = 0.00, p = 0.48$). In addition, male (5.48 ± 2.06) and female (5.11 ± 2.02) participants' pain intensity were comparable ($t = 0.26, p = 0.44$). There was also no significant difference in functional disability ($t = 0.05, p = 0.07$) between male (42.56 ± 13.85) and female (48.45 ± 13.81) participants. It can be concluded from this study that majority of the elderly individuals with chronic mechanical low back pain had a severe to crippled functional disability. Those who reported increased physical activity had reduced pain intensity and functional disability. Male and female elderly individuals with chronic mechanical low back pain are comparable in their pain intensity, functional disability, and physical activity. Elderly individuals with CMLBP should be educated on the importance of participating in physical activity which could reduce their pain symptoms and improve functional disability.

Keywords : elderly, functional disability, mechanical low back pain, pain intensity, physical activity

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