

Comparison of musculoskeletal pain between depressed and non-depressed industrial workers and investigation of its influencing factors

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Abstract

Introduction: In the experience of pain, the sensory and the emotional components should be considered. Emotional components of the pain include a variety of emotional states which depression is the most important one. Thus, in this study, first, musculoskeletal pain was compared between depressed and non-depressed industrial workers and then other physical and demographic factors influencing the depression and musculoskeletal disorder were studied.

Material and Method: This cross-sectional and descriptive-analytical study was conducted in 2012, among 179 industrial workers in Shiraz city. In this study, the participants were selected through census. The data collection instruments were three questionnaires including Body Discomfort Chart (BDC), visual analogue scale type, Beck Depression Inventory (BDI) and demographic information questionnaire. The collected data were analyzed using SPSS software version 16. Mann-Whitney and Kruskal-Wallis statistical tests were employed for comparison of variables and Kendall correlation was used for determining the relationship between variables.

Result: Findings of the study showed that the maximum (19%) and the minimum (3.4%) pain were belonged to back and arm/forearm, respectively. Furthermore, 36.2% of participants had a low-to-acute level of depression. Comparison of musculoskeletal disorders between depressed and non-depressed workers with Mann-Whitney Test manifested a significant difference in head/neck, back, left hand/wrist, right hip and knee ($p < 0.05$). Also Kruskal Wallis statistical test showed no significant differences in depression level among various occupational groups, however, pain significantly differed among various groups in a way that its rate was higher for office workers, comparing to other groups.

Conclusion: The higher score of depression among workers with musculoskeletal pain can be due to failure in pain relief achievement. Psychological problems that occur following chronic pain are related to continuous discomfort, frustration and thinking about the pain. This situation causes the feelings of inadequacy and inefficiency and consequently the increase of probability of depression.

Keywords: Ergonomics, Depression, Pain, Industrial workers

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