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Head-load related musculoskeletal problems among the workers of brickfield

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The aim of the present study was to find out the head load related musculoskeletal problems among the brick field workers. This was a cross sectional study, carried out to accomplish the objective of the study. A total of 155 workers were selected from 12 brick fields of Savar upozilla, Dhaka. A modified Nordic questionnaire was used for data collection. This study found more male worker (70.3%) than female worker (29.7%) who carried load of bricks on their head. The average age of brick field worker was 34.42 ± 7.344 , mostly from 31-40 age groups. Majority (46.5%) of the workers could sign only. The workers started their work from morning 3 o'clock and worked average 8.38 ± 1.69 hours a day. Their average monthly income was BDT 9251.61 ± 2.38 . Majority (70.3%) of the workers was working more than 6 years and carried load on average 39.57 ± 5.91 kg. The minimum load was 20 kg and maximum 55 kg on each transfer time. Among them 89.0% were suffered from musculoskeletal problem. The musculoskeletal problem was more common among the workers in neck (92.0%), upper back (91.3%) and shoulder (62.3%). Other than pain, the worker also found to suffer from tingling sensation (18.8%), muscle fatigue/ weakness (12.3%), stiffness (7.2%), numbness (6.5%) and burning sensation (2.2%), especially in their neck, upper back, shoulder, lower back and hands. It was found that the working postures of workers were at high risk, as indicated by the REBA analysis (REBA score 10, 11). The difference of suffering from pain between male (95.4%) and female (73.9%); and in different age groups was found statistically significant (χ^2 15.313; $p=0.000$ and χ^2 5.649; $p=0.024$ respectively). The average load carried by the workers was found to be significantly high who had pain in neck (40.7 kg), upper back (40.3 kg) and shoulder (40.6 kg) ($t=5.249$; $p=0.000$; $t=3.145$; $p=0.002$; $t=2.207$; $p=0.029$ respectively). Further it was found that who had pain in right shoulder (41.6 kg) and who had no pain (38.5 kg), the average carrying load was significantly high ($F=4.299$; $p=0.015$). The average load carrying was also found significantly high with the severity of pain in terms of mild, moderate and severe ($F=12.667$; $p=0.000$). It can be concluded that the brick field workers carried excessive load on their head during work and most of them were found to suffer from musculoskeletal problems.

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