Ergonomic risk assessment of manual handling tools by oil palm collectors and loaders

ABSTRACT

Oil palm workers are exposed to ergonomics problems in their routine works. Although many technological advances have been developed, a large number of workers are still using manual handling tools in their daily work. A study was done to identify and solve the problems or issues of material handling effect on oil palm collectors and loaders during their daily work activities. A cross sectional study was done in an oil palm plantation in Negeri Sembilan, Malaysia. Twenty five workers were selected randomly to participate in this study. Musculoskeletal symptoms were recorded using Modified Nordic Questionnaires and awkward postures of the workers were assessed using Rapid Entire Body Assessment (REBA). Result showed that 61% of workers were exposed to high risk level and 39% to very high risk level of working posture problems. In conclusion, majority of oil palm collectors and loaders need to correct their working posture as soon as possible. The manual handling activities need to be improved with respect to correct procedure for health and safety concerns.

Keyword: Manual handling; Postural analysis; Oil palm plantation; Oil palm collector and loader; REBA