

A systematic review of intervention to reduce musculoskeletal disorders: hand and arm disorders

ABSTRACT

Despite with countless number of incidence related to musculoskeletal disorders among workers, there are lot of studies that come out with interventions in order to reduce musculoskeletal disorders. Musculoskeletal disorders continue to give a large impact and challenge towards employer and employee in many different sectors. This article had reviewed the literature that related to intervention to reduce musculoskeletal disorders of the hand and arm. 5 databases were reviewed to identify studies related to intervention to reduce musculoskeletal disorders of the hand and arm among workers. In order to identify and classify research studies, specific keywords (ergonomic, musculoskeletal disorder, hand and arm disorders, occupation, injury, intervention and prevention) were identified and used in a systematic search to guide the discovery of relevant studies. Included studies were reviewed and interventions were assessed. As overall, 312 titles were discovered during the search and only 6 studies that were related to hand and arm disorders and met inclusion criteria. Within these 6 studies, this review identified ergonomic interventions in terms of training, program and workstation redesign. The positive outcomes after the implementation of these interventions, there were significant reduction related to hand and arm disorders among workers. As conclusion, interventions that had been implemented in these 6 studies and significant reduction of musculoskeletal disorders, there is need to do further research in order to propose ergonomic designs for the workers in workplace.

Keyword: Interventions; Ergonomic; Musculoskeletal disorders; Hand and arm; Literature review