

Economic effectiveness of Ergonomics interventions

ABSTRACT

This review article attempts to explore the economic effectiveness of ergonomics. In this review, PubMed, EBSCO, and Web of Science were selected to find the related articles based on two keywords of ‘ergonomics’ and ‘economics’. Eleven full-text articles (1 in PubMed, 8 in EBSCO, and 2 in Web.Sci.) were included in the study. Articles show that ergonomics interventions have an association with economy and productivity; however, 3 out of 11 articles did not show a clear interconnection between ergonomics and economic benefits. All of the reviewed articles were conducted at workplaces and, also, were related to occupational ergonomics; however, in a single case, the ergonomics product design was reflected as a cost-benefit approach. The role of a healthy workforce and ergonomics design with regard to both employees’ efficiency and business growth is often neglected. According to reviewed papers, the role of ergonomics in green economics toward sustainability is inevitable. However, there are some challenges to persuade the industrial sectors’ managers about the economics side of ergonomics in which limited documents and the lack of ergonomics-economics models and procedures are critical. This review emphasized at least two approaches: (1) the necessity of publishing papers, including valid economics model about industrial ergonomics; (2) developing some economic tools to confirm the benefits of ergonomic product design. If some appropriate economic models or techniques merge into ergonomics intervention projects, whether industrial ergonomics or product design, more feasible and better outcomes will be obtained in which both employees and customers are satisfied.

Keyword: Ergonomics; Economics; Occupational health; Product design