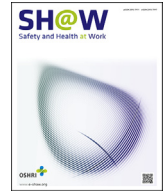




Contents lists available at ScienceDirect

Safety and Health at Work

journal homepage: www.e-shaw.org

Letter to the Editor

Response to “Ergonomic Intervention For Musculoskeletal Disorders in Construction Workers”



In Reply,

We'd like to respond to the comments on our recently published article “Use of Ergonomic Measures Related to Musculoskeletal Complaints among Construction Workers: A 2-year Follow-up Study” [1] and share our opinion on the topics mentioned. The methodological quality of the study is discussed and questions are raised regarding selection criteria, the reliability of the data gathered, and possible confounding factors that might have influenced the study results. Furthermore, we're asked how we monitored the workers and ensured that all workers used the ergonomic measures correctly. Finally, we're asked why we did not use qualitative methods to gain insight into barriers and facilitators for using ergonomic measures among the construction workers.

Based on the comments, we've got the impression that the commenters confused our implementation evaluation with an effectiveness evaluation of ergonomic measures for construction workers. We'd like to point out that the Dutch sectors' Health and Safety Institute implemented the national campaign “Lighter-Work(s)”, whose goal was to inform both workers and employers about ergonomic measures and to increase awareness about the use of those measures to decrease musculoskeletal disorders (MSDs) (see Introduction of the original article). Monitoring workers and intervening on the correct use of ergonomic measures was not the goal of the campaign. Other research projects have shed light on this approach [2]. The sectors' implementation allowed for an evaluation; we didn't design it as a randomized controlled trial as in other studies [3].

With respect to the comments about the methodological limitations of the study, we feel that we've covered the important topics in our discussion. We mentioned several sources of bias, confounding, and the limitations of our study design. Of course, we agree that the proposed development of reliable and valid instruments to gather job-specific information on the use of ergonomic measures would be valuable for both research and practice. However, the development of new instruments is not always feasible, and thus by adequately and transparently describing the questions, as we did, other researchers are provided with insight into how and what data was gathered. We'd like to point out that all occupations were asked about the same types of ergonomic measures

(horizontal and vertical transport, and the positioning and installing of materials), but in a job-specific way in order to increase the relevancy for the workers.

Overall, we think that the commenters were confused and misinterpreted our implementation evaluation with an effectiveness trial. We think both study designs are very distinct and serve different necessary (research) purposes [4]. Of course, the commenters are welcome to share other or remaining questions by sending a direct message.

Conflicts of interest

All contributing authors declare no conflicts of interest.

References

- [1] Boschman JS, Frings-Dresen MH, van der Molen HF. Use of ergonomic measures related to musculoskeletal complaints among construction workers: a 2-year follow-up study. *Saf Health Work* 2015;6:90–6.
- [2] Visser S, van der Molen HF, Sluiter JK, Frings-Dresen MH. Guidance strategies for a participatory ergonomic intervention to increase the use of ergonomic measures of workers in construction companies: a study design of a randomized trial. *BMC Musculoskelet Disord* 2014;15:132.
- [3] Van der Molen HF, Frings-Dresen MH. Strategies to reduce safety violations for working from heights in construction companies: study protocol for a randomized controlled trial. *BMC Public Health* 2014;14:541.
- [4] Craig P, Dieppe P, Macintyre S, Michie S, Nazareth I, Petticrew M., Medical Research Council Guidance. Developing and evaluating complex interventions: the new Medical Research Council guidance. *BMJ* 2008;337:a1655.

J.S. Boschman*, M.H. Frings-Dresen, H.F. van der Molen
*Coronel Institute of Occupational Health, Academic Medical Center,
 University of Amsterdam, Amsterdam, The Netherlands*

* *Coronel Institute of Occupational Health, Academic Medical Center,
 University of Amsterdam, PO Box 22660, 1100 DE Amsterdam,
 The Netherlands.*

E-mail address: j.s.boschman@amc.nl (J.S. Boschman)

Received 2 September 2015

Accepted 11 December 2015

Available online 18 December 2015