TITLE: Musculoskeletal Injury Prevention Programs for Healthcare Workers: Clinical Effectiveness and Guidelines

DATE: 04 March, 2011

RESEARCH QUESTIONS

1. What is the clinical effectiveness of musculoskeletal injury prevention education programs for healthcare workers?

2. What are the evidence-based guidelines regarding musculoskeletal injury prevention for healthcare workers?

KEY MESSAGE

Evidence from the included publications suggests that educational programs for healthcare workers are effective for prevention of musculoskeletal injuries. No evidence-based guidelines were identified.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2011, Issue 2), University of York Centre for Reviews and Dissemination (CRD) databases, EBSCO CINAHL, Canadian and major international health technology agencies, as well as a focused Internet search. No filters were applied to limit the retrieval by study type. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2006 and February 23, 2011. Internet links were provided, where available.

The summary of findings was prepared from the abstracts of the relevant information. Please note that data contained in abstracts may not always be an accurate reflection of the data contained within the full article.
RESULTS

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by randomized controlled trials, non-randomized studies, and evidence-based guidelines.

The literature search identified two systematic reviews and five non-randomized studies regarding the clinical effectiveness of musculoskeletal injury prevention education programs for healthcare workers. No relevant health technology assessment reports, meta-analyses, randomized controlled trials, or evidence-based guidelines were identified. Other articles of potential interest are included in the appendix.

OVERALL SUMMARY OF FINDINGS

Results from the included systematic reviews provided evidence that training and education would be beneficial preventive measures of musculoskeletal injuries when combined with multi-component occupational interventions including ergonomic interventions.\(^1,2\) However, training alone was not found to be effective.\(^1\)

Efficacy of contextual training, where education was combined with practical training in a clinical setting, was evaluated in four of the included non-randomized studies.\(^3-6\) Results provided by these studies demonstrated that such interventions were effective in increasing knowledge and modifying healthcare workers’ practices.\(^3,4\) On the other hand, it was found that education on moving and handling techniques would only be beneficial if students learn in clinical settings that take safe patient handling seriously.\(^4\) In a fifth non-randomized study, a survey of 120 nursing staff found that the level of low back pain dropped as the level of education increased.\(^7\)
REFERENCES SUMMARIZED

Health technology assessments
No literature identified

Systematic reviews and meta-analyses


Randomized controlled trials
No literature identified

Non-randomized studies


Guidelines and recommendations
No literature identified
APPENDIX – FURTHER INFORMATION:

Guidelines (methodology not stated)


Additional references