Reviewer's report

Title: Diet, physical exercise and cognitive behavioural training as a combined workplace based intervention to reduce body weight and increase physical capacity in health care workers - a randomized controlled trial

Version: 2 Date: 27 April 2011

Reviewer: Evan Atlantis

Reviewer's report:

The report presents findings of a cluster randomised trial to determine whether a 3-month lifestyle program improved a broad range of health outcomes in overweight female health workers compared with three (monthly) 2-hr health education seminars (control intervention). The lifestyle program showed significant benefits in weight/BMI, % body fat, blood pressure, and cardiorespiratory fitness. The authors’ concluded that their findings “show the great potential of workplace health promotion among this high-risk group” but long-term effects remain to be investigated.

The submitted paper has the potential to add new knowledge on this topic; I raise several issues and suggestions for improvements.

Major:
This paper was difficult to read, lacking both structure and logical flow. Furthermore, I respectfully suggest that the authors’ seek help with correct English grammar/usage.

The power calculation for sample size is not adequate. It does not account for the degree of correlation within clusters (intracluster correlation); and it does not report the standardised mean difference (effect size) anticipated between the experimental and control intervention groups.

The statistical analyses are also questionable. Why not use ANCOVA to determine significant between group differences in change (pre-post) or post means adjusted for baseline mean, and covariates? I suggest rethinking about the most appropriate model needed to answer the research questions.

The novelty of the study’s findings is not emphasized. What does this study add to the existing knowledge-base?

Minor:
Abstract

The use and interpretation of “early retirement” throughout is unclear.
Should be 98 subjects randomised to an intervention OR control
The description of the lifestyle program is not sufficiently informative (i.e., dose,
components).

Introduction
Correct the typographical/EndNote errors throughout.
I would use ‘non participation in the workforce’.
The statement that there is no “gold standard for weight loss maintenance” is misleading. Several consensus statements exist for individualised interventions, and for taxes, tariffs, and trade laws policies, and the built environment.
Papers by Atlantis E et al, and Karin Proper could strengthen the study’s rationale.
Tables 1 and 2 should be merged succinctly.
I hope these comments are helpful.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
'I declare that I have no competing interests'