

Interventions to increase walking behavior

Williams DM, Matthews CE, Rutt C, Napolitano MA, Marcus BH

CRD summary

This review assessed walking promotion interventions to increase walking behaviour and concluded that theory-driven, mediated physical activity promotion programmes might be effective for increasing walking behaviour for public health. The limited search for trials, variation between them, limited synthesis, and poor reporting of the review process, suggest that these conclusions should be interpreted with caution.

Authors' objectives

To assess walking promotion interventions to increase walking behaviour.

Searching

PubMed and PsycINFO were searched from 1980 onwards; search terms were reported. The reference lists of included articles, and other reviews, were searched to identify additional articles.

Study selection

Randomised controlled trials (RCTs) that assessed the effects of walking promotion interventions on walking behaviour change were eligible for inclusion. Trials were excluded if they did not target walking behaviour, but measured walking outcomes, or assessed the effects of walking programmes on at least one targeted health outcome, such as obesity, and the control groups were requested not to increase their levels of walking.

The most commonly evaluated interventions were mediated interventions, such as telephone counselling or telephone prompts, either as the primary intervention or in addition to an intervention. Trials included one or more walking intervention compared with each other and/or a control. The inclusion criteria for outcomes were not explicitly stated, but in included trials the outcomes were self-reported changes in the amount of walking. Participants in the included studies were generally inactive healthy adults between 18 and 80 years of age.

The authors did not state how the papers were selected for review nor how many reviewers performed the selection.

Assessment of study quality

The authors did not state that they assessed validity.

Data extraction

The authors stated neither how the data were extracted for the review nor how many reviewers performed the data extraction.

Methods of synthesis

A limited narrative synthesis was reported.

Results of the review

A total of 14 RCTs were included in the review (n=2,589 participants).

Intensive walking promotion programmes were considered superior to control conditions, in three RCTs, one of which reported improvements over a 10-year period. Single trials found that brief telephone prompts increased walking behaviour, and that promoting moderate-intensity walking, as either single or multiple sessions per day, yielded an increase in total minutes of walking. The evidence for other interventions was inconclusive.

Authors' conclusions

Theory-driven, mediated physical activity promotion programmes might be effective for increasing walking behaviour for public health.

CRD commentary

The review question and inclusion criteria for the interventions were clear; criteria for participants and outcomes were less clear. The literature search was limited to two databases. It was unclear whether the search was restricted by language or whether unpublished studies were sought, therefore, language bias could have been present and some studies may have been missed. Details on the review methods, such as the number of reviewers involved in each stage of the review, were not reported and it is not possible to determine whether appropriate steps were taken to minimise bias and errors. There was no formal assessment of the validity of the included trials. Given the heterogeneity between the RCTs the decision to employ a narrative synthesis was appropriate, but only a limited synthesis was reported.

Given the limited search for trials, heterogeneity between them, and poor reporting of the review process, the authors' conclusions should be interpreted with caution.

Implications of the review for practice and research

Practice: The authors did not state any implications for practice.

Research: The authors stated that more research was needed to determine the relative efficacy of various theoretical models as well as the usefulness of programmes based on multiple theoretical models. More research was needed on mass media campaigns as a means for delivering the walking promotion and overall physical activity programmes and research was required to assess how to market and deliver internet-based or individually tailored mediated interventions on a population level.

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Record Status

This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.