

【Review Article】

Interventions to Reduce Sedentary Time among Adults: A Systematic Review

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Abstract

Objective: The present study systematically reviewed the effectiveness and current trend of interventions for reducing sedentary time among adults.

Methods: Studies published from January 2000 to January 2014 were identified by literature searches in international and domestic multiple databases. Terms for “sitting”, “sedentary”, “television”, “screen time” and “intervention” were used. Studies were included if they were conducted for adult population and measured sedentary behavior, its-related variables as primary or secondary outcomes, and published from journal with peer-review. After examining and careful reviewing studies searched, characteristics of studies included (study design, sample, measure of sitting, intervention, and results) were extracted and summarized. Also, methodological quality of the included randomized controlled trial (RCT) was assessed.

Results: Total of 18 studies (pre-post design: n=5, quasi-experimental design: n=6; RCT: n=7) met the inclusion criteria. The score of methodological quality among RCT showed some variability (2-6points/7points). Majority of included studies utilized either one or combinations of environmental intervention, organizational approach, and behavioral theory-based individual/group program at office or home setting. Device-based measurement of sedentary time via accelerometers was used as outcome evaluation in most of studies. Regardless of study designs and intervention components, most studies found the positive effects on reducing sedentary time and its related variables.

Conclusion: The present findings suggest that, to date, the conducted interventions for reducing sedentary time appear to be effective. Some methodological limitations were also found. Thus, further high-quality intervention studies would be required.

Key words: sedentary behavior, sitting time, workplace, ecological model, behavioral change

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