

ABSTRACT SUBMISSION AIC 2016: #21

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1. Title:

Effectiveness of childcare physical activity interventions: Systematic review

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a. Background and aims

The impact of trials that are delivered under 'real world' circumstances may be of particular interest to policy makers and practitioners as they can provide a more realistic approximation of intervention effect size when delivered in the community. This review aimed to identify whether intervention effect sizes differ according to pragmatic and non-pragmatic study designs in trials of physical activity interventions undertaken in centre-based childcare services.

b. Methods

Data sources were Cochrane Central Register of Controlled trials, MEDLINE, EMBASE, PsycINFO, ERIC, CINAHL, SCOPUS, SPORTDISCUS. Studies selected included randomized controlled trials conducted in centre-based childcare including an intervention to increase objectively measured physical activity in children aged less than six years. Data were converted into standardized mean difference and analysed using a random effects model.

c. Results

A total of 6132 publications were retrieved from the database searches. After screening of titles and abstracts, 64 publications were considered potentially eligible. Based on the full text review, 47 publications were excluded resulting in 17 trials for inclusion in the review. Overall interventions significantly improved child physical activity (SMD =0.44; 95% CI:0.12-0.76). Non-pragmatic (SMD 0.80, 95% CI:0.12-1.48) but not pragmatic interventions (SMD 0.10, 95% CI:-0.13-0.33) improved child physical activity.

d. Conclusion

Evidence gaps remain regarding effective implementation of childcare-based physical activity interventions. Greater attention to implementation theory and evidence is required if pragmatic trials are to deliver their potential for improvement in community wellbeing.