

Title: Impact of a population based intervention to increase the physical activity promoting practices of childcare services: learnings for large scale implementation in childcare.

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Introduction: Interventions that are able to be successfully implemented across the childcare setting, even if only moderately effective, have the potential to positively impact on the physical activity levels of large numbers of children each year. There is considerable scope to improve practices that promote physical activity within childcare services. Few studies have reported the effectiveness of interventions to increase implementation of evidence based policies and practices in this setting, particularly at a population level.

Methods: A three month intervention was offered to all childcare services (n=338) located within one region of New South Wales. Randomly selected childcare services in the remainder of the state (n=268) acted as a comparison group. The intervention, delivered at the organisational level, sought to increase physical activity promoting practices within childcare services that have been suggested to promote child physical activity. Implementation strategies employed to support adoption of the intervention components included provision of staff training, resources, incentives, follow-up support and performance monitoring and feedback. Nominated supervisor self-report outcome measures for physical activity policy, delivery of fundamental movement skills sessions, structured physical activity, staff involvement in active play and provision of verbal prompts, small screen recreation, sedentary activity, staff physical activity training and were collected by telephone survey with childcare service managers at baseline and at 15 months post baseline.

Results: Compared with the comparison area, the study found significantly greater increases in the prevalence of intervention services with a written physical activity policy (49% vs 38%, $p < 0.01$); with policy content referring to placing limits on small screen recreation (82% vs 65%, $p < 0.01$); and with staff trained in physical activity (76% vs 43%, $p < 0.01$).

Conclusions: Findings of this trial provide an important contribution to the limited literature regarding the implementation of population-wide physical activity promotion programs and the adoption of such programs in childcare services. The intervention was effective in improving a number of policies and practices associated with promoting child physical activity. Adoption of a broader range of practices may require more intensive and prolonged intervention support.