

## Cost effectiveness of a multi-component school-based physical activity intervention targeting adolescents: the 'Physical Activity 4 Everyone' cluster randomized trial

While experts recommend children exercise regularly, few children (20%) meet physical activity requirements. This is extremely detrimental to global health, as lack of activity is estimated to account for 1.5 - 3.0% of healthcare costs among all people worldwide. Many believe that the structure, resources, and reach of the school system provides an excellent opportunity for intervention. However, not all these programmes are successful, so cost-effectiveness analyses are scarce and some of the existing studies have weak study designs. This study intended to examine the "cost and cost effectiveness of the Physical Activity 4 Everyone (PA4E1) intervention which was a multi-component intervention implemented in secondary schools located in low-income communities." 7<sup>th</sup> grade students in five schools were assigned to the intervention group and participated in the following:

- "Active PE lessons"
- "Personal PA plans" for each student
- An "enhanced sport" programme for all students
- "Recess and lunchtime activities" two or more times a week
- Coordination with parents and community physical activity providers

The authors determined the cost effectiveness for both the physical components and weight reduction. "In terms of physical activity, the ICER [Incremental Cost-Effectiveness Ratio] was \$56 per minute of MVPA [Moderate to Vigorous Physical Activity] gained and \$1 per MET [Metabolic Task Equivalent] hour gained per person. From a weight perspective, the ICER's were \$1,408 per BMI unit avoided and \$563 per 10 % reduction in BMI z-score." These findings qualify the study as cost-effective.

Reference: Sutherland R, Reeves P, Campbell E, et al. Cost effectiveness of a multi-component school-based physical activity intervention targeting adolescents: the 'Physical Activity 4 Everyone' cluster randomized trial. Int J Behav Nutr Phys Act. 2016;13(1):94. Published 2016 Aug 22. doi:10.1186/s12966-016-0418-2

World Obesity FederationCharles Darwin 2, 107 Gray's Inn Road, London, WC1 X8TZT: +442076852580E: enquiries@worldobesity.org

Registered charity number 1076981. Registered in England and Wales, 3802726. A company limited by guarantee.