Cost Effectiveness of an Elementary School Active Physical Education Policy

Less than half of US children spend an hour engaged in moderate to vigorous physical activity every day. Studies report varying effects of increased physical activity on BMI, but scientific consensus shows lack of activity is a major risk factor for obesity. Experts recommend that schools should fulfil at least half of the daily requirement. Most US children attend a physical education class, so restructuring the curriculum to include more moderate to vigorous exercises [MVPA] is a promising and presumably cost-effective intervention. This study used the Childhood Obesity Intervention Cost Effectiveness Study modelling framework to determine the cost-effectiveness of increasing active time in physical education classes for 75% of children primary school children across the Unites States.

Overall, "national implementation of a state active PE policy would increase school-based MVPA by 16% (approximately 1 minute per day) among 17.6 million children aged 6–11 years and cost an estimated $401 per BMI unit reduction after 2 years." In terms of MET-hours, this intervention would be considered cost-effective for a child-based intervention at 34 cents per MET-hour gained. It is also much cheaper than bariatric surgery or primary care interventions with regards to BMI unit change. However, the intervention is not projected to result in large BMI changes.

Reference: Barrett JL, Gortmaker SL, Long MW, Ward ZJ, Resch SC, Moodie ML, Carter R, Sacks G, Swinburn BA, Wang YC, Cradock AL. Cost Effectiveness of an Elementary School Active Physical Education Policy. Am J Prev Med. 2015 Jul;49(1):148-59. doi: 10.1016/j.amepre.2015.02.005.

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