

Title

Peer Support for Physical Activity Promotion in children and adolescents. Systematic Review of the Literature

Authors

Ricardo Gonçalves ^{1,2}, Rui Batalau ^{1,2}, João Carmo ^{1,2}, Maria Joana Cruz ², João Leal ², & António Palmeira ^{1,3}

¹ Universidade Lusófona de Humanidades e Tecnologias (ULHT)

² Centro de Investigação em Desporto e Educação Física do Instituto Superior Manuel Teixeira Gomes (ISMAT)

³ CIPER – Faculdade de Motricidade Humana, Universidade Técnica de Lisboa

Presentation

Oral communication

Abstract

Background: Physical inactivity is the fourth leading risk factor for global mortality, notwithstanding the wide spread knowledge about the multiple health benefits associated with regular physical activity. Therefore, it seems necessary to promote behavior changes, especially at earlier ages. In this field, recent research seems to show that physical activity trials using peer support are effective in behavior modification. Nevertheless, previous reviews on this issue have been essentially narratives. Thus, our purpose was to analyze, through a systematic review of the literature, if interventions using peer support can increase physical activity and decrease sedentary behavior among children and adolescents (5-17 years).

Methods: In this systematic review, a PICO (Population, Intervention, Control and Outcomes) model strategy was used. Literature published between 1st January 2008 and 21st January 2012 was obtained through searching PubMed electronic database, according to previously defined inclusion criteria. All analogous keywords were placed, to avoid selection bias. The search was limited to English language papers in peer-reviewed journals. Data were extracted for a standard table and study quality was evaluated through PEDro Scale (Physiotherapy Evidence Database), by a not blinded reviewer.

Results: We identified 951 papers that related the four groups of keywords. 472 were excluded based on publication date and 471 were excluded, because titles and abstracts consulted did not fulfilled eligibility criteria. Eight randomized controlled trials, which had the purpose of increasing the levels of physical activity or decreasing sedentary behavior, in children and adolescents, based on peers support, were selected. Data, covering a total of 11,014 participants, shows that peers support appears to promote a decrease in sedentary activities and an increase in moderate and moderate-to-vigorous physical activity in children and adolescents, since the presence of a friend can increase motivation for performing physical activity.

Conclusions: Based on this systematic review, peer support in children and adolescents seems to be an effective mediator for physical activity promotion and sedentary behavior reduction. Thus, the implementation of programs to encourage physical activity should consider including peer support. The information gathered, not only will provide clues to further investigations, but also will help pediatric health promotion through an evidence-based practice.

Keywords: child, adolescent, behavior, peers, physical activity, sedentary.

This work is being supported by the Portuguese Science Foundation (Fundação para a Ciência e a Tecnologia) through individual research grant (SFRH/BD/90236/2012) co-financed by the European Social Fund and Portuguese National Funds from MCTES.