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Impact of community-based participatory initiative on children's pedometer-determined physical activity

Rahma Ajja
*University of South Carolina*

Rohan Shah
*University of South Carolina*

Falon Tilley
*University of South Carolina*

R Glenn Weaver
*University of South Carolina*

Daria Winnicka
*University of South Carolina*

See next page for additional authors

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Abstract

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Authors
Rahma Ajja, Rohan Shah, Falon Tilley, R Glenn Weaver, Daria Winnicka, Morgan Hughey, Collin A. Webster, Aaron Beighle, Russell R. Pate, Ruth Saunders, and Michael W. Beets

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**Impact of Community-Based Participatory Initiative on Children’s Pedometer-Determined Physical Activity**

**Wednesday, April 24, 2013**  
**Exhibit Hall Poster Area 2 (Convention Center)**

Rahma Ajja, Rohan Shah, Falon Tilley, R. Glenn Weaver, Daria Winnicka, Morgan Hughey, Collin A. Webster, Aaron Beighle, Russell R. Pate, Ruth Saunders and Michael W. Beets, (1)University of South Carolina, Columbia, SC, (2)University of Wollongong, Australia, (3)University of Kentucky, Lexington, KY

**Background/Purpose:** State and national physical activity (PA) guidelines recommend all children attending afterschool programs (ASPs) accumulate 4600 steps per day while attending an ASP. Research indicates less than 20% of children meet this guideline in ASPs. The purpose of this study was to evaluate the impact of comprehensive and coordinated approach on pedometer-determined PA levels of children attending four-large scale ASPs programs.

**Method:** Five hundred and fifty children (255 girls) attending four ASPs participated in a quasi-experimental pre-post study. Children wore Walk4Life MVPa pedometers on 4 nonconsecutive, unannounced days (Mon-Thru) during baseline (Fall 2011) and post-intervention (Spring 2012). The intervention (January-April 2012) consisted of: policy implementation, professional development training, on-site booster sessions and ongoing technical assistance. Random-effects linear and logit models evaluated the impact of the intervention on steps/day and the percentage meeting the 4600 steps/day guideline.

**Analysis/Results:** An increase from 2,558 to 3,264 steps/day and 3375 to 4258 steps/day from Fall to Spring was observed, representing a 4.41 (95CI 2.49-7.83) and 2.24 (95CI 1.57-3.21) increase in the odds of meeting the 4600 steps/day guideline for girls and boys, respectively. The proportion meeting 4600 steps/day increased from 8.3% to 21.1% and 25.1% to 39.1% for girls and boys, respectively.

**Conclusions:** The comprehensive and coordinated approach implemented over 4 months is effective in increasing the number of children attending ASPs meeting the 4600 steps/day guideline. Additional efforts are required to ensure all children meet the activity guideline.

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