THE TREND OF DAILY PHYSICAL ACTIVITIES PREVALENCE AMONG ELEMENTARY SCHOOL CHILDREN

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Abstract

Time spent outdoors in the early years is positively correlated with physical activity levels among children (Sallis et al., 1993). This article presents the prevalence of daily physical activities of children in the city of Tirana for the physical activities carried out. A total of 452 children (224 boys and 228 girls) are surveyed by the questionnaire (PAQ-C) for assessing the prevalence of physical activities (during the last week). Children who have completed the questionnaire are of age of 10.4 years old. Children are engaged in daily walking at 83.5% , while 52.7 % of them do bicycling, 74.8% running and 83.8% do daily games during their free time on the last of week of activities. Fourth grade children have lower participation in all daily activities compare to fifth grade children as follows, daily walking (82.8%), bicycling (52.2 %), running (73.4 %) and games (82.7%).

Keywords: children, physical activities, walking

Introduction

Strong et al. (2005) and World Health Organization recommend that children should accumulate 60 min of moderate to vigorous (MVPA) every day but also emphasizes that these minutes should be on top of everyday physical activities. Everyday physical activities total around 30 min of MVPA in the quintile of the least active children, means that the new recommendations constitute more activity in total compared with earlier recommendations (Andersen et al., 2011). The amounts of physical activity greater than 60 minutes can provide additional health benefits and most of the daily physical activity should be aerobic. Vigorous-intensity activities should be incorporated, including those that strengthen muscle and bone, at least 3 times per week in order to improve cardiorespiratory and muscular fitness, bone health, and cardiovascular and metabolic health biomarkers (WHO, 2010). There is a trend of decline of physical activities among Albanian children. This paper presents the prevalence of daily physical activities of children in the city of Tirana for the physical activities carried out.

Methods

A total of 452 children (224 boys and 228 girls) were surveyed by the questionnaire for assessing the prevalence of physical activities in Tirana. Children who have completed the questionnaire were of age of 10.4 years old (elementary school-grade 4 and 5). The sample within two schools was randomly selected from a pool of 28 elementary school in Tirana.
PAQ-C (Crocker et al., 1997) were used to assess physical activities during the last week (within 7 day recall) to the children. The questionnaire were validated in Albanian language.

Statistical analysis

The questionnaires were putted in an excel database and then converted to SPSS software 19.0. Mean values and percentage were calculated as a total sample and than split by gender and grade.

Results

Results from the table 1 show the prevalence of daily physical activities. Children are engaged in daily walking at 83.5% , while 52.7 % of them do bicycling, 74.8% running and 83.8% do daily games during their free time on the last of week of activities.

Table 1 Prevalence of daily physical activities in children living in Tirana

Daily physical activities (percentage)			
Daily walking	Bicycling	Running	Games
83.5	52.7	74.8	83.8

Data from the table 2 show the prevalence of daily physical activities by gender. 84.3% of girls do daily walking, while 47.8 % of them do bicycling, 73.1% running and 88.1% do daily games during their free time.

While boys except daily walking and games (lower participation then girls), have higher percentage of participation with regard to bicycling (84.7%) and running (76.2 %) compare to girls.

Table 2 Prevalence of daily physical activities in children living in Tirana by gender

	Daily physical activities (percentage)			
	Daily walking	Bicycling	Running	Games
Boys (N=224)	82.7	58.7	76.2	79.7
Girls (N= 228)	84.3	47.8	73.1	88.1

Data from the table 3 show the prevalence of daily physical activities by grade. 83.9% of fifth grade children do daily walking, while 53.4% % of them do bicycling (fifth grade), 75.3 % running and 84.4 % do daily games during their free time.

Fourth grade children have lower participation in all daily activities compare to fifth grade children as follows, daily walking (82.8%), bicycling (52.2 %), running (73.4 %) and games (82.7%).

Table 3 Prevalence of daily physical activities in children living in Tirana by grade

	Daily physical activities (percentage)			
Grade	Daily walking	Bicycling	Running	Games
Fourth	82.8	52.2	73.4	82.7
Fifth	83.9	53.4	75.3	84.4

Discussion

The results show that girls in Tirana (84.3%) perform more daily walking than boys (82.7%) while boys make more use of bicycles, running and different games compared to girls.
The results show that 84.3% of girls do daily walking, while 47.8 % of them do bicycling, 73.1% running and 88.1% do daily games during their free time. While boys except daily walking and games

(lower participation then girls), have higher percentage of participation with regard to bicycling (84.7%) and running (76.2 %) compare to girls.
The data show a high level of participation of children who perform daily physical activities. Time spent outdoors in the early years is positively correlated with physical activity levels among children Sallis et al. (1993). Gidding et al. (2006) demonstrated over a 3-year interval in 663 children that long-term participation in intense physical activity may reduce BMI in children and those with elevated cholesterol levels who lead a more physically active lifestyle had lower systolic blood pressure and a trend toward lower low-density lipoprotein. Elevated body mass index (BMI) places children and adolescents at greater risk for cardiovascular disease as adults, and that diet and physical activity are important factors in maintaining a healthy BMI range (Walther 2009).

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