

# **Physical inactivity and associated factors in Iranian children and adolescents: the Weight Disorders Survey of the CASPIAN-IV study**

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**Introduction:** This study aims to assess the associated factors of physical inactivity among Iranian children and adolescents at national level. The second objective is to assess the relationship of physical inactivity with anthropometric measures.

**Methods:** Along with a national surveillance program, this survey on weight disorders was conducted among a nationally-representative sample of Iranian children and adolescents, aged 6-18 years. Students were selected by multi-stage cluster sampling from rural and urban areas of 30 provinces of Iran. The Physical Activity Questionnaire for Adolescents (PAQ-A) was used to assess physical activity (PA). Using PAQ-A instrument, PA of past week categorized as; low PA level, that included those who scored between 1 to 1.9 on the PAQ-A instrument and high PA level that included participants with estimated scores between 2-5 PAQ-A.

**Results:** Participants were 23183 school students (50.8% boys) with a mean age of 12.55 +/- 3.3 years, without significant difference in terms of gender. Totally, 23.48% of participants (13.84% of boys and 33.42% of girls) were physically inactive. In multivariate logistic regression model, with increased age in children and adolescence, the odds of a physically inactivity increased (OR: 1.08; 95% CI: 1.07-1.10). The odds of prevalence of both obesity and underweight were high in children and adolescents with low PA. There was a decreasing trend in PA in higher school grades.

**Conclusion:** We found a considerably high prevalence of physical inactivity in Iranian children and adolescents, with higher rates among girls and older ages. However, we did not find correlation between PA and socioeconomic status (SES). Because of the positive relationship between PA and ST, future studies should consider the complex interaction of these two items. Multidisciplinary policies should be considered in increasing PA programs among children and adolescents.

**Keywords:** Physical inactivity, factor, Iranian children