

Prevalence of and Factors Associated with Insufficient Physical Activity Among Adolescents: Evidence from the National Nutrition Surveillance Study

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Objectives: The World Health Organization (WHO) set a target of 15% relative reduction of the prevalence of insufficient physical activity (IPA) by 2025 among adolescents and adults globally. In Bangladesh, there is no national estimates of the prevalence of IPA among adolescents. In the recently completed round of the national nutrition surveillance (NNS 2018–2019), we aimed to estimate the prevalence and risk factors associated with IPA among adolescent girls and boys.

Methods: NNS was conducted in 57 rural, 15 urban and 10 slum clusters selected using multistage cluster sampling. In these clusters, we collected data from 4732 adolescent girls and 4761 adolescent boys. We used Global Physical Activity Questionnaire to collect physical activity

(PA) data. The WHO recommended cut off points for IPA (5–17 years: <300 minutes of moderate to vigorous-intensity PA weekly; 18–19 years: <150 minutes of moderate intensity PA weekly or <75 minutes of vigorous-intensity PA weekly) were used to estimate the prevalence of IPA. Bivariate and multivariable logistic regression were performed to identify factors associated with IPA.

Results: Prevalence of IPA among girls and boys were 50.6% and 29.4%, respectively and the prevalence was significantly higher among early adolescents (10–14 years) than late adolescents in both boys and girls. The IPA prevalence was the highest among the adolescents living in non-slum urban areas (girls: 77.9% and boys: 64.6%). The IPA prevalence in slum areas was 36.6% for girls and 34.0% for boys; and in rural areas was 50.0% for girls and 28.2% for boys. For both girls and boys, age group, occupation and >6 hours of sitting per day were associated with IPA. Place of residence, consumption of fruits and vegetables, education and paternal occupation were associated with IPA only among the boys. On the other hand, maternal and paternal education and overweight/obesity were associated with IPA only among the girls.

Conclusions: One in every two adolescent girls and one in every three adolescent boys do not meet the WHO recommended level of PA in Bangladesh. This study identified several modifiable factors associated with IPA among adolescent boys and girls and these factors should be addressed through comprehensive public health interventions in order to improve adolescent health in Bangladesh.

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