Maternal alcohol and tobacco consumption and the association with their 9-14 year old children’s body mass index

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Aim: Little is known about impact of maternal alcohol and tobacco consumption on adolescents’ body size. The purpose of this study was to evaluate whether maternal alcohol or tobacco consumption is associated with their children's body size in adolescence, assessed by Body Mass Index (BMI).

Methods: This study was conducted in subjects recruited into the Finnish Health in Teens cohort (Fin-HIT) between 2011 and 2014. A total of 4,525 subjects aged between 9 and 14 years and their mothers or female adults responsible for the children were analyzed. Relative risks (RR) and 95% confidence intervals (CI) were estimated using multinomial logistic regression.

Results: Most children were normal weight (74.5%), 10.6% were underweight and 14.9% were overweight or obese. Among mothers, 50.6% were never smokers, 35.7% were former smokers, and 13.7% were current smokers. Alcohol consumption was classified by Alcohol Use Disorders Identification Test (AUDIT), 12.7% were abstainers (score=0), 65.0% were low-moderate drinkers (scores 1-4) and 22.3% were harmful drinkers (scores≥5). There were statistically significant associations between currently smoking mothers and children's overweight (RR=1.36; 95% CI: 1.05-1.75). There was an inverse association between maternal former smoking and children's underweight (RR=0.70; CI: 0.56-0.87) compared to never smoker mothers. Among children in puberty, abstainer mothers were more likely to have underweight children compared to low-moderate mothers (RR=1.57; 95% CI: 1.03-2.41).

Conclusion: Current smoker mothers were associated with children's overweight and former-smoker mothers were inversely associated with the children's underweight. Being an abstainer mother was associated with the children's underweight in puberty stage. If other studies confirm these results, public health interventions aiming at healthy weight of adolescents should target the whole family, not only the adolescents themselves.

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The prevalence of overweight and obesity among adolescents in public and private school in two senatorial districts of Osun State, Nigeria

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Obesity is the most serious long term health problem; currently, adolescents are facing and its prevalence is increasing worldwide including developing countries. Cross sectional study was carried out among adolescents of 11-19 year old in both public and private school in urban area of the state. The data was collected using pretest self-administered questionnaire; anthropometric measurement was also used to examine their nutritional status. Obesity status were determined using BMI cut off point, the overweight was found to be 3.06% among female and 0.6% among male whereas prevalence of obesity was 0.46% in female and not among male. 62.6% had snack daily, fruit consumption pattern was low 0.6% and 43.7% spent 4-5 hours watching television daily after school. Positive association exists between the lifestyle and nutritional status of the respondents. Education effort to improve nutrition knowledge can be incorporated into course curriculum and focus on various components within the system when implementing preventive measure on obesity.

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