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PO0435

Family and home correlates of television viewing in 12–13 year old adolescents: the Nepean study

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Purpose: To determine the association between factors in the family and home environment and viewing television, including video and DVD use, in early adolescence.

Methods: Cross-sectional survey of 343 adolescents aged 12–13 years (173 girls), and their parents (338 mothers, 293 fathers). Data were collected via self-report and checked for completeness at interview. The main measures were familial and home environmental factors that predicted adolescents viewing 22 hours of television/day. Factors examined included family structure, opportunities to watch television/video/DVDs, perceptions of rules and regulations on television viewing, and television viewing practices, including eating habits in front of the television.

Results: Two-thirds of adolescents watched 22-hour television per day. Factors in the family and home environment associated with adolescents watching television 22 hours per day include adolescents who have siblings (Adjusted Odds Ratio [95%CI] AOR = 3.0 [1.2, 7.8]); access to pay television (AOR = 2.0 [1.1, 3.7]); ate snacks while watching television (AOR = 3.1 [1.8, 5.4]); co-viewed television with parents (AOR = 2.3 [1.3, 4.2]); and had mothers who watched 22 hours television per day (AOR = 2.4 [1.3, 4.6]).

Conclusions: There are factors in the family and home environment that influence the volume of television viewed by 12–13 year olds. Television plays a central role in family eating practices and as a medium for recreation. Intervention strategies targeting families to reduce adolescents’ snacking while watching television may indirectly influence the incidence of overweight and obesity.

PO0436

Changes in sedentary behaviour among adolescent girls: a 2.5 year prospective cohort study

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Objective: To describe longitudinal changes in sedentary behaviour among girls, during early to mid adolescence.

Methods: 2.5 year prospective cohort study, comprising 9 data collections, 6 months apart, between 2000 and 2002. Participants were 200 girls aged 12–15 years from 8 high schools located in Sydney, Australia. The main outcome was self-report measures of the usual time spent each week in a comprehensive range of sedentary behaviours.

Results: Retention rate for the study was 82%. Girls aged 12.9 years old spent approximately 45% of their discretionary time in sedentary behaviour, which increased to 63% at age 14.9 years (P < 0.001). Small screen recreation was the most popular sedentary pastime, accounting for 33% of time spent in sedentary behaviours, followed by homework, studying and reading (25%). However, the time spent in these behaviours remained relatively stable during the study period. Change in sedentary behaviour was primarily related to increased time spent on hobbies and crafts (47% increase), computer use (33% increase), and sitting around talking with friends (24% increase).

Discussion: Girls spend a large proportion of their discretionary time in sedentary behaviour, which increases during the transition between early and mid-adolescence. Small screen recreation is the most popular sedentary behaviour, but viewing times are relatively stable, indicating that pre-adolescence may be the most appropriate age to implement intervention strategies targeting this behaviour. Interventions among adolescent girls that focus on exchanging at least one hour of sedentary behaviour a week with physical activity could have significant health benefits.

PO0437

ACE-Obesity: the cost-effectiveness of two multi-faceted school-based interventions to reduce the prevalence of unhealthy weight in children in Australia

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Aim: We performed a comparative cost-effectiveness analysis from a societal perspective of two multi-faceted school-based interventions aimed at reducing the prevalence of unhealthy weight in Australian children.

Methods: Both interventions were based on the ‘Know Your Body’ (KYB) program available commercially (www.kendallhunt.com). The program was integrated into the school curriculum and delivered by the regular teachers to educate children on health, physical activity and nutrition. The program was adapted and trialled in Greece (Manios et al., 1999) and Israel (Tamir et al., 1990). The Greek intervention also included an additional active physical exercise (PE) component. Benefits were modelled from changes in mean BMI to future savings in Disability Adjusted Life Years (DALY). The reference year was 2001, the target population was all children in grade 1, and costs and benefits were discounted at 3%. We calculated incremental cost-effectiveness ratios (ICERs) and also took into consideration second stage filters of strength of the evidence, equity, acceptability, feasibility, sustainability, and potential side effects.

Results: Both interventions were cost-effective (less than SAUD50,000 per DALY saved), but the Greek intervention was almost three times more cost-effective. Although the Greek intervention was more expensive, the costs were offset by savings in future health care costs due to a reduction in obesity-related conditions. Its superiority is due to its greater efficacy, which was attributed to the active PE component by the authors.

Conclusions: A multi-faceted school-based intervention that incorporates an active PE component alongside health education is more cost-effective than a purely health education approach.

PO0439

Fast food consumption, high-energy intake, and television viewing are associated with obesity in Indonesian adolescents.

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Background: Obesity among adolescents is increasing in Indonesia, however there is no information about risk factors needed to design interventions. To examine whether fast food consumption, high-energy intake, and television viewing are factors associated with obesity.

Methods: A cross-sectional study in Yogyakarta, in late 2003 recruited junior high school students from urban (n = 4747) and rural (n = 4602) areas. 7.8% of urban and 2.0% of rural students.