

Patterns of health and disease
are largely a consequence of
how we learn, live and work

Vulnerable Teens: A Study of Obesity, Poor Mental Health and Risky Behaviours Among Adolescents in Canada

Summary of Results

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C a n a d i a n P o p u l a t i o n H e a l t h I n i t i a t i v e



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Cette publication est aussi disponible en français sous le titre *Jeunesse vulnérable : une étude de l'obésité, de la mauvaise santé mentale et des comportements à risque chez les adolescents au Canada*.

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Research Context

The research program on vulnerable teens focused on four health issues among Canadian children and adolescents:

- Smoking;
- Overweight and obesity;
- Behavioural and developmental outcomes of children born to adolescent mothers; and
- Mental health (self-esteem).

The objective of this research program was to examine the prevalence and incidence of these issues, their relationships with socio-economic status and gender, and their geographic distribution. Sources included data from the first four cycles of the National Longitudinal Survey of Children and Youth (NLSCY)ⁱ and other relevant survey data collected at the federal and provincial levels (Canada Fitness Survey, Labour Force Survey, etc.).

The authors used two methodological approaches to analyze the data. The first approach recognized the existence of a socio-economic gradient, or the relationship between socio-economic status (SES) and social outcomes.ⁱⁱ The second methodological approach was based on growth trajectories, which involves measuring variables of interest for the same individual over at least three time points.ⁱⁱⁱ

Research Results

The research results are presented below by the four health issues listed above.

Smoking

The study revealed some differences in smoking prevalence among different age groups and between sexes. The prevalence of smoking increased between age 15 and 22 for both males and females. After age 22, rates decreased for females and continued to increase for males through to age 35. Rates were higher for males than for females, except for the 15-to-18-year-old age group.

i. The first four cycles of the NLSCY were conducted in 1994, 1996, 1998 and 2000.

ii. For the purposes of this research, children's SES was composed of family income, parents' level of education and the prestige of the parents' occupations.

iii. The analysis of data focused on the average growth trajectory, whether the growth was linear or curvilinear, the overall pattern of growth and the extent of variation among children of different ages.

The odds of smoking as a young adult were 30% lower for women. Being married appeared to be protective for young adults, decreasing the odds of smoking by 40% compared to single young adults. Also, young Anglophones were 20% less likely to smoke compared to young Francophones. However, unlike Francophones, Anglophones tended to start smoking as they got older.

Overweight and Obesity

The authors investigated the trends in overweight and obesity among Canadian children and adolescents. Certain factors associated with becoming overweight were also examined (for example, SES, geography and demographic characteristics). Research findings confirmed that there was an increase in overweight and obesity among children and adolescents from 1981 to 1996. The authors estimated that the prevalence of childhood overweight nearly tripled and the prevalence of childhood obesity increased fivefold over this period.

Boys appeared to experience more weight issues than girls. In 1996, 33% of boys were classified as overweight versus 26% of girls; 10% of boys were obese compared with 9% of girls.

The authors found that children in the Atlantic provinces seemed to be at a greater risk of being overweight than those in the Prairies. Rates of overweight among children ranged from 36% in Newfoundland and Labrador to 24.4% in the Prairies. The higher rates in the Atlantic provinces persisted even after controlling for SES indicators.

Both SES variables and family structure were somewhat related to the odds of children being overweight. The authors found that for each \$10,000 increase in family income, the odds of being overweight decreased by about 3%. Each additional year of the father's education reduced the odds of a child being overweight by 4%. The presence of siblings seemed to be particularly beneficial: each brother or sister reduced the odds of a child being overweight by 11%.

Behavioural and Developmental Outcomes of Children Born to Adolescent Mothers

The children of adolescent mothers, compared to those born to older mothers, performed more poorly on measures of behavioural outcomes, cognitive development and academic performance, even after controlling for SES indicators. Also, children of older adolescent mothers appeared to be more at risk for behaviour problems than children of younger adolescent mothers.

Mental Health (Self-Esteem)

The growth trajectories for Canadian youth with regard to self-esteem appeared to differ according to age, sex and SES. The study suggested that self-esteem exhibited a tendency to decline between the ages of 10 and 17; the decline was steeper for females than for males. Nevertheless, this steep decline seemed to level out and was reversed around the age of 16. In this age range, SES was unrelated to changes in self-esteem for males. However, the decline in self-esteem from ages 10 to 17 was much steeper for females from low-SES families than for females from high-SES families.

Author-Identified Policy Implications

A population health approach to the health of Canadian children and adolescents may advance the state of evidence demanded by policy-makers. Evidence about the relative importance of various determinants of health might help in making various policy choices, such as targeted versus universal interventions and prevention programming for adolescents versus more general interventions for children.

The research results presented in this report suggest that a number of options might be considered to address smoking, obesity and teenage mothers. For example, policies that are targeted at Canadians of lower SES may be important in decreasing the prevalence of smoking. Governments and public health officials may want to monitor a larger variety of behaviours and track changes in the prevalence of overweight and obesity among demographic, geographic and ethnic subsets of the Canadian population.

This publication is part of CPHI's ongoing inquiry into the patterns of health across this country. Consistent with our broader findings, it reflects the extent to which the health of Canadians is socially determined, interconnected, complex and changing. CPHI is committed to deepening our understanding of these patterns.