Walking a Thin Line: Addressing the Safety of Overweight and Obese Children and Youth in Canada

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Introduction

This case study grew out of an interest in understanding the relationship between the determinants of health and the root causes of crime, victimization and safety. As we looked for an issue that would be familiar to many audiences and that would help planners, policy makers and researchers to understand the links between health and safety, we came upon the subject of overweight and obesity in children and youth. It was a great topic to use as an example because almost everyone would know and accept that body weight affects health, but they might not consider the safety implications associated with obesity. Moreover, limited attention has been paid to the sex and gender dimensions of overweight and obesity in children and youth, particularly with respect to policies and programs that address healthy weights. This case study consequently examines the ways in which our understanding of overweight and obesity as a health issue has effectively obscured the threat these conditions pose to the safety of girls and boys, male and female youth. The case study also analyzes the emphasis on “healthy living” – physical activity and healthy eating – in policy and program responses to overweight and obesity, arguing that our best efforts to reduce the incidence of obesity and overweight in children and youth may be increasing behaviours that threaten their social, emotional, and physical safety.

How Do Girls and Boys Measure Up?

The prevalence of overweight and obesity in children and youth has been increasing substantially during the past two decades. For example, in the United States (US) and Brazil, the number of overweight children and youth is escalating at a rate of 0.5 percent annually and at 1 percent annually in countries such as the United Kingdom (UK), Australia and Canada. As a result, as many as one in 10 children in the world are now considered to be overweight. The International Obesity Task Force (IOTF) estimates that nearly 155 million school-aged children and youth (5 to 17 years old) are overweight and 30 to 40 million of those individuals are obese.

Sex-disaggregated data from Canada suggest that girls and boys face similar risks of becoming overweight or obese and these kinds of data have tended to produce a rather generic approach to dealing with overweight and obesity, one that focuses on healthy eating and active living with scant regard for gender or the other determinants of health (see Figure 1). Policies and programs that address overweight and obesity are also grounded in a relatively narrow definition of health. If we hope to address the epidemic of overweight and obesity in children and youth, we need to adopt a more holistic understanding of overweight and obesity and incorporate a sex- and gender-based analysis into the design and delivery of policies, programs and public health messages.
What’s Safety Got to Do With It?

While the health risks associated with overweight and obesity are well-known, little attention has been paid to safety. Yet something as fundamental as a child car seat demonstrates the serious safety issues associated with childhood overweight and obesity. One US study found that nearly 300,000 American children, aged 1 to 6 years, would not easily fit into a standard car seat because of their size. Moreover, there are only four car seats on the US market that will accommodate a 3-year-old weighing more than 40 pounds and these range in price from $240 to $270 each.[3]

But there are other, more subtle, ways that overweight and obesity can pose safety hazards for young people, such as predisposing them to victimization, criminal activity, and engaging in risky behaviours. A heightened appreciation of these issues provides new perspective for designing interventions. For the purposes of this case study, we will be looking at two issues: bullying and school engagement.

Bullying

Over the past decade, bullying has attracted an increasing amount of attention from researchers, parents, kids, educators, media and policy makers. The pervasiveness of bullying among children and youth, especially in schools, is alarming. In Canada, reported rates of bullying among school-aged children and youth vary from 15 percent to 25 percent.[4,5] However, in various parts of the country rates may be higher. For example, a study examining the prevalence of bullying among junior high school students in six schools located in Western Canada found that 86 percent of the 440 participants surveyed reported that they had been bullied.[6] A substantial body of research has shown that individuals who are bullied are more likely to experience long-term difficulties than children...
and youth who escape peer victimization. For instance, victims of bullying experience a range of problems including depression, anxiety and suicide.\footnote{[7]} Furthermore, individuals who are victimized in their early years are more likely to be victimized in the future.

Like children and youth who are victims of bullying, individuals who bully also experience challenges in their lives. Bullies are at increased risk of engaging in aggressive behaviours, sexual harassment and dating violence as adolescents.\footnote{[7]} Furthermore, young people who engage in bullying are more likely to be involved in illegal activities, such as substance abuse and delinquency.\footnote{[7]}

A growing body of research is drawing attention to the relationship between bullying (both victims and perpetrators) and overweight and obesity. Studies have shown that both overweight and obese girls and boys are at a greater risk of being targets of bullying.\footnote{[8]} Furthermore, in comparison to their healthy-weight peers, overweight and obese children and youth are also more likely to be perpetrators of bullying.\footnote{[7]} One reason why those who are bullied may grow to be bullies themselves is because they often become so angry by the continuous abuse they experience at the hands of their peers that they in turn become aggressive towards others.\footnote{[7]}

Gender differences in patterns of bullying and victimization among overweight and obese girls and boys have been found, but the findings are somewhat mixed. A study in the UK found that preadolescent obese boys were more likely to be both overt bullies and victims than their healthy-weight peers, while obese girls were more likely only to be victims of bullying and not perpetrators.\footnote{[9]} Another study highlighting gender differences in bullying behaviours in unhealthy-weight youth found that overweight and obese girls were much more likely to engage in and be victims of bullying than both their healthy-weight peers as well as boys who were overweight and obese (see Figure 2). Similarly, Fitzgerald found that the tendency to bully increased with body weight among teenage girls.\footnote{[10]}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure2.png}
\caption{Prevalence of Bully-Victims and Bully-Perpetrators among Boys and Girls, Ages 11-16, by Weight}
\end{figure}
Given the fact that overweight and obese children and youth are more likely to be both victims and perpetrators of bullying, the argument can be made that they are perhaps at a greater risk of having safety issues than their healthy-weight peers.

**School Engagement**

Another dimension of childhood and adolescence experience that demonstrates safety issues for overweight and obese youth is school engagement. School engagement means, simply, the degree to which a child or youth is oriented towards school. For example, children are engaged if they want to do well in school, look forward to making friends there and show up for class on time as well as participate in the classroom and extracurricular activities. Poor school engagement has been linked to bullying. For example, Kochenderfer and Ladd found that feelings of loneliness and school avoidance were more pronounced among young children who had been victimized by their peers.

Unfortunately, there is no specific data available on school engagement among overweight and obese children and youth. However, given that school provides ample opportunities for bullying and that overweight and obese youth are frequently the targets of bullying behaviours, it is reasonable to suggest that they may have a weaker connection and even a greater aversion to school.

Poor school engagement has been linked to unsafe behaviours. Research has shown that adolescents who are less connected to school are more likely to participate in delinquent and/or criminal behaviour. For example, children and youth who are less engaged in school commit a higher number of property-related offences (see Figure 3). According to Canadian statistics, girls who are not as engaged at school are more likely than boys to commit such property crimes as stealing, breaking and entering, selling stolen goods, vandalism, auto theft and arson.

**Figure 3. Relationship Between Sex and School Commitment for Property-related Delinquency, Canada, 1998/99**

In addition to property offences, youth who express a low commitment to school are more likely to be associated with serious forms of delinquency than their counterparts who enjoy school, including gang involvement and violent crimes. While overweight and obesity does
not necessarily lead to delinquency, the victimization and bullying that this group of children and youth experience may predispose them to behaviours that are neither healthy nor safe (see Figure 4).

**Figure 4. Relationship between Sex, Self-reported Victimization and Violent Delinquency, Canada, 1998/99**

![Graph showing the relationship between sex, self-reported victimization, and violent delinquency.]

What is Being Done to Address Overweight and Obesity among Children and Youth?

In order to address the rise in overweight and obesity rates among young people, healthy living programs and strategies have been designed to encourage nutritious eating and physical activity. For example, the federal government has established tax credits for children enrolled in eligible physical activities and invested $5 million dollars to resurrect the ParticipACTION program developed in the 1970s. Similarly, provincial governments have started to invest in various initiatives, including tax incentives, to encourage sports participation.

Encouraging children and youth to make healthier food choices and engage in physical activities seems sensible to counteract negative health consequences associated with overweight and obesity. However, while youth participation in physical activities often leads to advantageous health outcomes such as healthier body weights and enhanced fitness levels, it does not necessarily result in improved safety. In fact, in some cases, increased or intensified sports participation may deepen health and safety risks for children and youth.

Sports and Safety

While some children and youth experience multiple benefits associated with physical activity, others may find that some activities, such as sports participation, contribute to unhealthy and unsafe behaviours. Furthermore, the effects of physical activity and/or sports participation among overweight and obese children and
youth may not necessarily be the same for girls and boys. Sports participation must be understood in the context of powerful and pervasive gender roles in society.

Even in the sports arena, girls are expected to be “sugar and spice and everything nice,” while boys are encouraged to be more aggressive and resilient, both physically and emotionally. For adolescent boys, participation in sports and athletic prowess provide a direct and acceptable avenue to praise and popularity. In contrast, for girls, the relationship between gender roles and sport is more complex. Adolescent girls may struggle to reconcile their athletic abilities with standards of feminine beauty and behaviour. For example, young girls who engage in elite and competitive sports may become more prone to disordered eating and unhealthy approaches to weight management. Problems more frequently arise in sports where girls are expected to be lean or thin for reasons associated with performance or appearance, such as diving, figure skating or gymnastics. In such contexts, adult authority figures often encourage young girls to engage in unhealthy weight loss behaviours “for the sport.” As one research study uncovered, 75 percent of female gymnasts participated in unhealthy weight loss strategies (e.g., crash or fad diets) because their coaches told them they were too heavy.[13,14]

Sports participation produces many benefits for girls, including reducing their likelihood of taking up smoking[15] or engaging in risky sexual encounters.[16] Despite such positive behavioural outcomes, we need to be alert to the limitations of sports participation, as well as the possibility of negative repercussions. For example, while studies have shown that fewer girls involved in sports smoke, little or no effect has been found in relation to sports and reduced alcohol consumption.[15] Furthermore when gender is examined, positive outcomes and the protective influences of sports participation for adolescent girls do not appear to extend to boys. For example, male athletes appear more likely than girls and at least as likely as non-athlete boys to abuse alcohol and other illegal substances, engage in risky sexual behaviours, carry a weapon and get into fights.[15-18] Evidence also suggests that boys involved in athletic programs show elevated levels of aggression outside of sports settings.[16] Furthermore, research has found that boys who view themselves as “jocks,” as opposed to simply “athletes,” are far more likely to engage in acts of violence against peers and family as well as strangers.[16] Therefore, in some cases, sports participation may have limited benefits for male adolescents while deepening their health and safety risks.

Conclusions

A sex- and gender-based analysis of overweight and obesity in children and youth not only enables us to compare and contrast the realities of girls’ and boys’ lives – and the lives of different groups of boys and girls – it also leads us to take a new view of our policy and program responses. While we undoubtedly need to address the increasing prevalence of overweight and obesity among children and youth today, our solutions can not be simple because the issue is not simple. Policies and programmes that focus only on “healthy living,” especially sports participation and physical activity, may contribute to healthier body weights among children and youth, but they also have the potential to exacerbate risky behaviours, such as disordered eating and unsafe sex. Moreover, interventions designed around the principle of healthy living may not be equally beneficial for
girls and boys, female and male youth. In other words, policies and programs must walk a thin line between health and safety. Without a sex- and gender-based analysis of the issue and our solutions, we may not only fail to stem the rising tide of obesity and overweight, we may actively contribute to behaviours among children and youth that are at least as dangerous and debilitating as unhealthy weight.

References


