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Spotlight on adolescent health and well-being

FINDINGS FROM THE 2017/2018

HEALTH BEHAVIOUR IN SCHOOL-AGED CHILDREN

(HBSC) SURVEY IN EUROPE AND CANADA

INTERNATIONAL REPORT

SUMMARY

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Findings from the 2017/2018 Health Behaviour in School-aged Children (HBSC) survey in Europe and Canada

International report

SUMMARY

Abstract
Health Behaviour in School-aged Children (HBSC), a WHO collaborative cross-national study, has provided information about the health, well-being, social environment and health behaviour of 11-, 13- and 15-year-old boys and girls for over 30 years. The 2017/2018 survey report presents data from over 220 000 young people in 45 countries and regions in Europe and Canada. The data focus on social context (relations with family, peers, school and online communication), health outcomes (subjective health, mental health, overweight and obesity, and injuries), health behaviours (patterns of eating, physical activity and toothbrushing) and risk behaviours (use of tobacco, alcohol and cannabis, sexual behaviour, fighting and bullying) relevant to young people's health and well-being. New items on electronic media communication and cyberbullying and a revised measure on family meals were introduced to the HBSC survey in 2017/2018 and measures of individual health complaints and underweight are also included for the first time in the international report. Volume 1 of the international report presents key findings from the 2017/2018 survey, and Volume 2 provides key data disaggregated by country/region, age, gender and family affluence.This summary collects the main findings and scientific and policy implications of the survey.

Keywords
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Cover illustration by **Ketlin**, aged 15 (Estonia)

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MAIN FINDINGS

OVERVIEW

This report presents key findings from 227 441 young people aged 11, 13 and 15 years in 45 countries/regions who participated in the 2017/2018 Health Behaviour in School-aged Children (HBSC) survey. The findings highlight some positive trends in relation to adolescents' health and well-being. Most adolescents experience positive and supportive social relationships, relatively few health problems, and good overall health and well-being. Substance use continues to decline and eating habits are improving. Challenges nevertheless remain.

There is some evidence of increasing pressure at school, especially among older adolescents, at a time when perceived support from family and teachers decreases. The proliferation of digital media has led to problematic use among some adolescents whose social media behaviours affect their relationships with family and friends and disrupt other activities. Physical activity levels remain extremely low and increasing numbers of young people are reporting issues that affect their mental health, such as feeling low and sleep difficulties. Persistent social and gender inequalities remain, and many aspects of health and well-being worsen with age.

By helping to make young people's lives more visible, HBSC continues to underpin effective actions to promote the health of adolescents across the WHO European Region, Canada and beyond.

KEY FINDINGS

EATING BEHAVIOURS AND ORAL HEALTH

Most adolescents are failing to meet current nutritional recommendations, undermining their capacity for healthy development. The proportion of adolescents eating breakfast has declined since 2014 in around half the countries/regions. More than four out of 10 adolescents do not eat breakfast every school day. Girls across all ages tend to skip breakfast and eat fewer meals with their family than boys. Almost two in three adolescents do not eat enough nutrient-rich foods such as fruits and vegetables, and consumption of highly processed foods is high: one in four adolescents eat sweets and one in six consume sugary drinks at least once a day. This is despite declines in sweets and soft-drinks consumption and an increase in fruit and vegetable intake since 2014. As adolescents grow older and gain more autonomy over their eating behaviour, they are more likely to make unhealthy food choices and skip meals. Levels of good oral hygiene, as indicated by regular toothbrushing, remain low in some countries/regions, especially among boys. Social inequalities in eating behaviours and oral health persist in most countries/regions, with adolescents from richer families having healthier eating habits and better oral hygiene.

PHYSICAL ACTIVITY

Fewer than one in five adolescents meet the WHO global physical activity recommendations of 60 minutes or more of moderate-to-vigorous physical activity (MVPA) each day. Levels have declined in around a third of countries/regions since 2014, mostly among boys, and participation remains particularly low among girls and older adolescents. More adolescents (half of boys and a third of girls) participate in vigorous physical activity (VPA) four or more times a week. Social inequalities in physical activity persist, with adolescents from poorer families reporting lower levels of MVPA and VPA in most countries/regions.

OVERWEIGHT, UNDERWEIGHT AND BODY IMAGE

Overweight and obesity affect one in five adolescents, with higher levels among boys and younger adolescents. Compared with 2014, levels have largely remained stable, but increases were observed in up to a third of countries/regions, particularly among older adolescents. Only a few countries/regions have shown decreases in overweight and obesity. On the other hand, one in 20 adolescents are underweight, and this number has been stable since 2014. Older adolescents are more likely to have a healthy body weight, but less likely to have a positive body image. One in four adolescents, and even more girls, consider themselves as too fat. This is despite some encouraging declines in negative body perceptions since 2014, notably among girls. Overweight and body image are highly patterned by family affluence, with young people from poorer families more likely to be overweight or obese or have poorer body image.

ONLINE COMMUNICATION

While use of digital technology is now ubiquitous among young people, girls are more likely than boys to communicate frequently with friends and others online and are more at risk of problematic social media use. Around a third of adolescents communicate online with friends and others almost all the time throughout the day, and intensive use increases with age. Overall, one in seven adolescents prefer to use online communication to discuss personal issues with their friends, and this is more common among boys. Problematic social media use affects 7% of adolescents overall but is highest among older girls.

MENTAL WELL-BEING

Boys and adolescents from richer families report higher life satisfaction and better mental well-being. A decline in mental well-being is observed with increasing age, such that older adolescents have lower levels of life satisfaction, are less likely to report excellent health and experience more frequent health complaints. At age 15, girls report poorer mental well-being than boys across almost all countries/regions. Prevalence of multiple health complaints have increased since 2014. The most common health complaints are nervousness, irritability and sleep difficulties.

SEXUAL HEALTH

Risky sexual behaviour remains worrying, with a quarter of sexually active 15-year-olds using neither condom nor pill at last sexual intercourse. At age 15, one in four boys and one in seven girls report having had sexual intercourse. While most countries/regions showed no change, prevalence of sexual intercourse among 15-year-olds declined in almost a quarter. Since 2014, there has been a small decline in condom use. Pill use is less common but has remained relatively stable.

ALCOHOL, TOBACCO AND CANNABIS USE

Drinking and smoking have continued to decline, but the number of current users remains high among 15-year-olds. Alcohol is the most commonly used substance by 15-year-olds: 59% have ever drunk alcohol compared with 28% for cigarette-smoking and 13% for cannabis use. In relation to current use, 37% of 15-year-olds had drunk alcohol in the last 30 days, 15% had smoked cigarettes and 7% had used cannabis. The sharpest increases in both alcohol use and smoking are seen between ages 13 and 15. Substance use is more common in boys, with the gender gap narrowing at age 15. Social inequalities in substance use are only evident for alcohol use, mainly among boys.

BULLYING AND VIOLENCE

Boys are more likely to be perpetrators of both physical and online violence, while girls are more likely to be victims of cyberbullying. Boys report higher involvement in physical fights, bullying and cyberbullying perpetration. Unlike face-to-face bullying, where the rates are similar among genders, girls are more likely to be cyberbullied, especially at age 13. Despite declines in bullying perpetration since 2014, the proportion of adolescents being bullied has remained the same. Younger adolescents are particularly vulnerable and more likely to be the victims of bullying. There is no clear link between social inequalities and violent behaviours.

INJURIES

Boys and younger adolescents are more likely to report medically attended injuries. Social inequalities are observed, with higher frequency of medically attended injuries among adolescents from richer families.

SOCIAL WELL-BEING

Most adolescents report high family and peer support, but social inequalities exist in more than half of countries/regions. Over two in three adolescents perceive their parents as being highly supportive and easy to talk to, but both these positive aspects of family life decline with increasing age. Boys report higher levels of parental support and communication, while girls perceive higher levels of support from their friends. While ease of communication with parents has improved since 2014, levels of peer support have declined. Social well-being is socially patterned, with adolescents from richer families reporting better communication with their parents and higher levels of family and peer support.

SCHOOL EXPERIENCE

Compared with 2014, adolescents in around a third of countries/regions are more likely to feel pressured by schoolwork and less likely to like school. More than half of adolescents report high levels of support from their fellow

students and their teachers, but only around a quarter like school a lot. In most countries/regions, school experience worsens with age: school satisfaction and support from teachers and classmates decline, and schoolwork pressure increases. Gender differences in schoolwork pressure increase with age, with 15-year-old girls reporting higher levels than boys in most countries/regions. Adolescents from richer families report more schoolwork pressure but also higher student support in some.

FAMILY CONTEXT

The life circumstances in which adolescents grow up vary greatly and large differences are observed at both individual and country/region level. Most adolescents live with both their mother and father, while one in six live in a single-parent family, mostly headed by a mother. Parental unemployment and immigrant status each affect one in 20 adolescents, although large cross-national variation is observed. Both are known risk factors for poorer adolescent health and well-being outcomes.

Anna, aged 10 (Estonia)

THE HBSC STUDY

An HBSC survey is undertaken every four years to provide an overview of adolescent health and well-being in Europe and North America. HBSC data are used at national/regional and international levels to gain new insights into adolescent health and well-being, understand the social determinants of health and inform policy and practice to improve young people's lives.

The 2017/2018 HBSC international report is published in three parts:

- Volume 1: key findings
- Volume 2: key data
- methods annex and online resources.

Further information about the HBSC study is available online (HBSC, 2020). HBSC data can be accessed at the WHO Regional Office for Europe's health information gateway (WHO Regional Office for Europe, 2020) and via the HBSC data portal at the University of Bergen (University of Bergen, 2020).

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SCIENTIFIC AND POLICY IMPLICATIONS

SCIENTIFIC IMPLICATIONS

Despite the social, economic and political pressures facing many European countries/regions during the past decade, the 2017/2018 HBSC survey finds that most adolescents experience positive and supportive social relationships, relatively few health problems, and good overall health and well-being. The results also reflect the salient role of social relationships in shaping inequalities in adolescent health. Positive and supportive social connections in family, school and community settings each contribute to better mental and physical health and fewer risk behaviours.

Several disconcerting trends nevertheless emerge. Since the previous HBSC survey in 2013/2014, fewer adolescents today like school and more experience intense pressure to do well academically. The proliferation of electronic media communication across all aspects of adolescent life has resulted in a subgroup of adolescents (one in 14) who report problematic use of social media. Compared to four years ago, the prevalence of multiple health complaints has increased and overweight and obesity continue to rise in some countries/regions, now affecting one in five adolescents. Levels of physical activity in most countries/regions show little or no improvement, with fewer than one in five adolescents meeting the global physical activity recommendation of at least 60 minutes of MVPA each day. Daily fruit and vegetable consumption improved slightly but is still too low. Further research is needed, but these results point to numerous opportunities for policy intervention.

Adolescence is a formative stage of the life-course in which gender differences in social relationships and several aspects of mental and physical health begin to emerge. These differences become more rigid with age and define health inequalities throughout adult life. The HBSC survey shows a developmental divergence in social and emotional well-being from ages 11–15, with older girls at greatest risk. During the transition from early to mid-adolescence, girls show steeper declines in perceived family support, ease of communication with parents, teacher support and school satisfaction. Girls also show higher levels of intense electronic media communication and problematic social media use. Boys and younger adolescents are more active, less likely to skip breakfast and family meals, and report higher life satisfaction and fewer health complaints than girls and older adolescents, respectively. Boys nevertheless face different risks as they get older. They are more likely to be perpetrators of physical and online violence and to be treated for injuries, while girls are more likely to be victims of cyberbullying.

> Social and emotional well-being decreases as adolescents get older, especially among girls.

Despite sustained policy attention over the past few decades and recent improvements in many countries/regions, a significant minority of adolescents still engage in behaviours such as cigarette-smoking and alcohol misuse that compromise their health. The prevalence of these behaviours increases with age, and they are more common among boys than girls. One in three 15-year-olds have drunk alcohol in the past month – far more than have smoked cigarettes or used cannabis.

These results also show socioeconomic differences in health and in the quality of social networks that support health. The HBSC survey estimates socioeconomic position using a list of material assets in the home and scores these relative to other adolescents in the country/region. Differences in this socioeconomic index are positively related to most health indicators in both genders and in most countries/regions. Adolescents from more affluent families, for instance, benefit from more supportive social relationships at school and home, are more physically active, have better diets and report greater life satisfaction and better health. More affluent adolescents are also more likely to have breakfast and family meals and eat fruit and vegetables each day, and are less likely to be overweight or obese. Exceptions to this socioeconomic pattern are found in reports of school pressure and medically attended injuries, which are higher in more affluent adolescents.

The findings presented in this report show that health inequalities in adolescence are universal and pose concerns in every country/region in the HBSC network. The good

news is that the differences in the distribution of health, both between and within countries/regions, offer clues to how policy can be used to improve and equalize health in adolescence. As research on health inequalities shifts toward more explanatory and experimental methods, robust information about adolescents is needed. It is vital that such information includes adolescents' perspectives on the social conditions that shape and constrain their health and well-being. The HBSC survey remains a unique and invaluable resource in such efforts.

POLICY IMPLICATIONS

Recognition is growing that investing in adolescence yields triple benefits, bringing health, social and economic gains to today's adolescents, tomorrow's adults and future generations. The HBSC study provides important evidence on the state of adolescent health and well-being for informing policy and programming, and highlights priority areas for investment and action. As it is carried out every four years, it allows analyses of trends in and between countries/regions. These trends are of major interest to the public and to policy-makers, as are comparisons with neighbouring countries/regions.

Risk factors for noncommunicable diseases, such as unhealthy eating behaviours, tobacco use, alcohol use and physical inactivity, can be addressed effectively during adolescence. In this way, HBSC drives improvements in making children's and adolescents' lives visible and supports progress towards achieving the United Nations Sustainable Development Goals and recommendations of the WHO Accelerated Action for the Health of Adolescents (AA-HA!) guidance.

Adolescents from less well-off families experience poorer health and well-being.

The report shows positive changes in adolescent health behaviours since the last survey cycle, which reflect international and national/regional efforts to promote healthy lifestyles. Adolescents are more satisfied with their lives, have healthier food intake, more positive body image, experiment less with alcohol and tobacco and are less involved in bullying others. These positive changes nevertheless are overshadowed by the persistence of gender and social inequalities across many aspects of young people's lives, and overall declines in mental and social well-being and daily physical activity. Adolescents from poorer families shoulder the greatest burden of negative health and well-being outcomes. It is important to mobilize actions to maximize the positive changes while reducing the impact of negative stressors and risk factors. Health improvement programmes need to be implemented with a gendered lens, where possible, particularly for issues such as violence, sexual well-being, mental well-being, eating behaviours, oral hygiene and school experience.

Investing in adolescence yields triple benefits, bringing health, social and economic gains to today's adolescents, tomorrow's adults and future generations.

Stark differences in health and well-being are revealed when disaggregating data by age, pointing to the importance of early prevention and intervention as well as developmentally informed policy and legal frameworks. Increasing age brings a decline in mental and social well-being, physical activity, healthy eating habits and positive school experience, and an increase in substance use. More support is needed to balance increasing adolescent autonomy, identity formation and social experimentation with protection, capacity, risk and responsibility as individuals transition from early to late adolescence.

Poor eating behaviours, physical inactivity and the rise in adolescent overweight and obesity indicate that insufficient progress has been made in the implementation of policies and actions. Programmes that target both the environment (such as provision of healthy and nutritious food, safe neighbourhoods, and opportunities for physical activity and sports participation) and critical periods during the life-course are required. Introducing policies that increase the availability, affordability and consumption of healthy foods

and which enable the fortification of staple foods could mitigate some of the observed social inequalities.

Poverty can make it hard to create supportive relationships – adolescents from poorer backgrounds experience less social support from family, friends and classmates.

The marketing of unhealthy foods and sugar-sweetened beverages to children, which is directly linked to overweight and obesity, needs to be regulated. Over half of the countries/regions do so, but most marketing regulations only apply to children up to the age of 12 or 13. The current HBSC data suggest that the age limit should be increased, especially in relation to soft-drinks consumption.

Schools remain an ideal setting in which to modify unhealthy eating habits and promote physical activity. This can be done through provision of school meals that meet healthy nutrition standards, safe drinking-water free of charge, and nutrition and physical education, especially targeting at-risk groups (girls, older adolescents and those from low-affluence families). The decline in daily MVPA since 2014 is deeply worrying. Stronger efforts should therefore be made to support habitual daily physical activity such as active transportation and active play in line with the Toronto Charter and the WHO European physical activity strategy.

School and home are two of the main social environments in which adolescents grow and learn. Many school-aged children report that they lack supportive environments, especially as they get older. The HBSC data show that economic hardship can hinder the creation of supportive relationships, with adolescents from poorer backgrounds experiencing lower levels of social support from family, friends and classmates. Policies should be developed to promote supportive social relationships by teaching positive parenting skills and increasing opportunities for social interactions in schools and local communities, targeting older adolescents and those from lower social strata. A significant decline in school satisfaction and an increase in school pressure since 2014 require attention. School policies should aim to facilitate student and family engagement and staff empowerment, improve academic, social and emotional skills, and adopt collaborative teaching methods to foster a positive learning environment and create trusting and caring relationships.

Digitalization presents an unparalleled opportunity to engage adolescents, who increasingly use digital technology to connect and communicate. As well as encouraging positive health behaviours, however, technology can amplify vulnerabilities and introduce new threats such as problematic social media use and cyberbullying, which disproportionately affect girls. Investment is needed in programmes that contribute to adolescents being informed, responsible and critical users of media, and in those that improve parental involvement and oversight.

Violent behaviours continue to be an important public health concern, especially among boys. Anti-violence programmes should involve adolescents at an early age (when they are most vulnerable to bullying and fighting), strengthen family and parenting skills and reduce risk factors, such as poor academic performance, high absenteeism, school drop-out and unstructured free time. Schools should provide safe, secure and nurturing environments that support children's development and guide them towards values of tolerance and respect, underpinned by strong antibullying and antidiscrimination policies. Targeted actions should be developed with a gendered lens to address the increased likelihood of boys being the perpetrators of violent behaviours and girls being cyberbullied. Injury prevention should be addressed at structural, environmental and community levels to ensure safer play areas, homes, vehicles and roads.

International and national/regional prevention strategies have brought encouraging declines in smoking and drinking

Technology can have positive benefits but can also amplify vulnerabilities and introduce new threats such as cyberbullying, which disproportionately affect girls.

among adolescents, but current alcohol and tobacco use remain high among older adolescents. HBSC data suggest that alongside population-level prevention measures, innovative interventions are needed for those adolescents who already exhibit substance-use behaviours. Information campaigns and programmes that teach skills to resist peer and other social pressures to smoke or drink demonstrate promising results, especially peer-led and school-based programmes combined with community-wide efforts. The most effective prevention measures remain more stringent policies on affordability and availability of products, including comprehensive bans on advertising, price increases through taxation, and creation of alcohol- and smoke-free public places that can drive changes in social norms.

Many health problems, such as poor mental well-being, begin to manifest during adolescence. It is imperative that countries/regions provide adequate policy frameworks and financial investment to support adolescent mental health, ensuring that good-quality assessment mechanisms, guidance for facilitating transition from child to adult mental health services and community services for providing early interventions are in place.

Improving the health of adolescents requires action across all sectors and at all levels of society.

It is important that all countries/regions have adolescent-responsive health systems, with services that are accessible, equitable, acceptable and appropriate, particularly for mental and sexual health. A package of universal initiatives and targeted approaches aimed at supporting the mental well-being of girls, older adolescents and those from lower social strata who are in the higher-risk group should be developed and maintained. Too many countries/regions report that their national school policy does not include adolescent mental health. School health services could encourage positive mental health through programmes on the management of cognitive, socioemotional, behavioural and relationship skills. Access to modern contraceptives should be increased, and confidential reproductive and sexual health services provided by trained professionals.

There should be more focus on oral hygiene, especially among boys, with provision of accessible and affordable preventive and intervention services. Different determinants of health need to be addressed through an integrated approach among relevant sectors and enhanced coordination between key actors at national/regional and local levels.

Schools play an important role in the health and well-being of adolescents. Every school should be a health-promoting school, using a whole-school systems approach to improve physical and social environments, management and organization, teaching, school health services, health promotion and extracurricular activities. Schools should consider the potential of digital technologies for health promotion, combined with peer strategies that are shown to be effective in school settings. Under-resourcing and overburdening with duties and expectations nevertheless should be acknowledged when considering policy actions at school level. Improving the health of adolescents requires action across all sectors and at all levels of society.

In conclusion, countries/regions should ensure that adolescent needs are visible, their engagement in policy and programming reinforced, and investment in their health and well-being maintained. Evidence of substantial cross-national variation in adolescent health suggests that each country/region should develop its own policy package, taking into account their economic, epidemiological and social constraints and cultural sensitivities. The diversity of adolescents should be recognized in terms of age, gender and socioeconomic status, and different strategies applied to reach different subgroups. Comprehensive programmes should be designed to address multiple adolescent needs and contextual constraints using a sustainable, rights-based and evidence-informed approach.

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