DISCUSSION
AGE

The three age groups included in the HBSC study – 11-, 13- and 15-year-olds – represent the entry point to, and early years of, adolescence and adolescent development. Young people experience rapid changes to their physical, emotional and psychological state and health throughout adolescence. Changes relate to important developmental trajectories across this age span in relation to formation of identity and values, transformations in relationships with parents and peers, and establishment of health and risk behaviours (1). It is therefore vital to understand age differences in relation to perceived social context, health behaviour and risk behaviours to facilitate a developmental trajectory that promotes young people’s health and well-being during adolescence.

SOCIAL CONTEXT
Findings from the HBSC 2013/2014 survey show that young people’s perceptions of their social context tend to have a negative developmental trajectory from age 11 through 13 to 15 in families and at school, while the role of peers has a more stable or even positive developmental trajectory. The quality of communication with mother and father (how easy it is to talk to them) reduces from 11 to 13 and declines further at age 15. The same pattern is observed for liking school and perceived school performance, with perceived school pressure increasing throughout the age span and adding to the observed negative development.

A somewhat less negative age trajectory from 11 to 15 is reflected in a stable level of perceived support from classmates in half of the countries and regions, although a reduction is reported for the other half. Stability in perceived peer support outside of school from 11 through 15 is observed in most countries and regions. The same applies to spending time with friends in the afternoon and early evening (in about half) which increases from age 11 to 15 in a quarter. An increase with age is seen for communication via social media.

HEALTH OUTCOMES
Negative development across age is also seen for health outcomes, with increasing reports of poor health from 11 to 15 in three quarters of countries and regions and a substantial drop in life satisfaction over the same age period. Added to this is an extensive increase in reported multiple health complaints for girls from 11 to 15, although the situation is stable for boys.

In relation to overweight and obesity, a change across age groups is seen for boys and girls, with 15-year-olds reporting lower BMIs than those of 11. A girls-only age-related change is seen for body image, with 15-year-olds reporting poorer body image than those who are 11 and 13. The change across age for weight-reduction behaviours goes in opposite directions for girls and boys: there is an increase in weight-reduction behaviours for girls in most countries and regions, but a reduction for boys from 11 to 15 in a quarter and stability in the rest.

HEALTH BEHAVIOURS
Overall, a negative drop in healthy behaviours is seen with increasing age. This pattern is observed for boys and girls in relation to breakfast and fruit consumption, although the decrease in fruit consumption is lower for girls. Soft-drink consumption increases from age 11 to 15 in half of the countries and regions, adding to the pattern of negative developmental trajectory for health-promoting behaviours. There is nevertheless a positive age-related drop in the prevalence of medically attended injuries between ages 11 and 15.

A positive age trend is also seen for girls’ oral health, with an increase in toothbrushing behaviours from age 11 to 15, but a drop with increasing age is observed for boys.

Eleven-year-olds are more likely to meet physical activity guidelines of at least 60 minutes of MVPA daily than 15-year-olds in almost all countries and regions, which represents a negative developmental age trajectory. The same negative trend is seen for watching television, with an increase from age 11 to 15.
**RISK BEHAVIOURS**

Some of the risk behaviours measured in the survey (tobacco initiation, cannabis use and sexual behaviours) are only reported for 15-year-olds, so it is not possible to comment on age trends in relation to these behaviours. Weekly smoking, alcohol use and drunkenness increase with age. The same applies to bullying others, but being bullied and (for boys) cyberbullying and fighting decrease. Cyberbullying and fighting are more stable during the adolescent years for girls, but with a peak at age 13 for cyberbullying.

**DISCUSSION**

Overall, a negative developmental trajectory with an increasing burden of negative health perceptions and health-compromising behaviours with advancing age is evident. A relevant question to raise is how much of this negative development is related to individual-level pubertal trajectories and the change process of increasing autonomy and responsibility from childhood to adolescence, and how much to influences from the settings in which young people live and participate, such as home, school and leisure facilities?

The age span from 11 to 15 years represents for most young people the prepubertal or pubertal periods. These are characterized by biological changes, conscious establishment of self-identity and exploration of risk behaviours such as tobacco and alcohol use, and sexual behaviour. Early entrance to puberty is associated with increased levels of health-compromising behaviours (2), possibly through seeking older friends who have already started exploring risk behaviours. A healthy developmental trajectory involves increasing possibilities for autonomous decision-making to stimulate the establishment of self-identity and self-management.

Findings show that despite the overall pattern of a negative developmental trajectory for health and health behaviours with increasing age, variation across countries and regions is substantial. This might be related to variation in cultural norms in relation to what is considered appropriate exploration of behaviours and levels of autonomy. It could also be explained by differences in policy in areas such as regulation of smoking in schools and the legal age for purchasing cigarettes and alcohol. The behaviour effect of policy regulations might influence role-modelling of parents and peers’ smoking behaviours and provide another explanation for observed country/region differences.

Few children at age 11 have entered puberty, which may explain why there is less variation in health perceptions and health behaviours across countries and regions for this group. The number of adolescents exploring new behaviours and experiences is likely to rise as young people enter the pubertal phase. The exploration of risk behaviours can be explained by young people’s inclination to sensation-seek, which may be related to a biological drive to achieve rewards (3). The drive for sensation-seeking and its acceptance in cultural norms is likely to represent a prominent effect of cultural norms on variations seen within and across countries and regions.

The influence of social relations and determinants may also help to explain variations in young people's health behaviours and perceptions (4,5). It is likely that parents have a stronger effect than peers on the health-related behaviours of the youngest age group (6). The parents of 11-year-olds have a strong structural influence on behaviours by being providers of daily meals and encouraging and facilitating participation in leisure activities. They are also more likely to set norms and regulations on where and with whom the children can spend their time and when they go to bed. Similarity across countries and regions in parental structuring of the youngest age group’s day in relation to meals and regulation of behaviour is expected, but some variation in children’s autonomy and influence is likely to develop because of cultural norms.

Increasing age typically involves increased maturation; with this, parents tend to give children room to influence or even make their own decisions on how to fill their time and with whom it is spent. Cultural variation is still to be expected, particularly in norms set for girls, but also in relation to a country or region’s wealth and the priority it gives to health interventions (5).
Parental norms and role-modelling continue to be influential in preventing health-compromising behaviours in 13- and 15-year-olds (7), but the influence of peers’ norms and behaviours becomes increasingly important (6,8). A major mechanism in this change of influence from parents to peers is the increasing time spent with friends. The influence of peer norms and role-modelling is communicated through in-group behaviour – that is, behaviour considered relevant and important to the group of friends, which may include smoking or experimenting with alcohol, or abstaining from using any substances. Friends may also take over the role of confidant, particularly in relation to situations of stress, frustration and insecurity that may include family-related conflicts (6).

Entry into adolescence therefore marks an increase in autonomy at home, with peers and in school. Escalation of autonomy in relation to the home and with peers is reflected in decisions around which activities and behaviours to pursue and with whom to spend time. At school, adolescents are allowed greater influence with increasing age on tasks and effort around tasks. With increased autonomy comes higher levels of responsibility and greater expectations of having the capacity to take care of self in relation to, for example, eating adequately, doing homework and getting enough sleep. Increased responsibility in the school setting is reflected in more and more of the learning process being left to the students, with them assuming responsibility for ensuring they make progress and use the resources available to them. Although most adolescents are likely to enjoy their increased autonomy and freedom, increased responsibility, in which more depends on the individual’s choices and efforts, can create perceptions of greater stress (9).

The age-related developmental trajectory identified in the HBSC survey may be explained through the interplay between young people going through the developmental pubertal process and their experiences in different social contexts, such as family, leisure and school (10). Better understanding of this interplay and how it evolves during adolescence is important in identifying unique and shared individual and social correlates of different health behaviours and perceived health (4).

Age trajectories in adolescent health behaviours not only affect health during the adolescent years, but may also track into adulthood (5,11). Young people who are physically active during the adolescent years, for example, are more likely to continue to be physically active in adulthood (12,13). This activity pattern, particularly if combined with healthy eating, may prevent the development of cardiovascular disease and cancer. Stimulation of healthy behaviours from an early age is therefore an important health-promotion initiative.

The same principle holds for preventing the development of risk behaviours such as smoking and excessive alcohol use to avoid their tracking into adulthood. Psychosomatic complaints established in adolescence are also likely to persist into adulthood, so preventing stress experiences in school, at home and with peers by providing young people with opportunities for autonomy and perceived control is vital in promoting healthy development.

CONCLUSION
A notable finding from the survey is that health-compromising behaviours are less frequent and relatively stable across countries and regions for the youngest age group (11-year-olds). The situation is somewhat different for 13- and 15-year-olds, in that health-compromising behaviours increase with age and more variation in the pattern of increase is seen.

The age-related increase may be explained by the escalation of peer influence during adolescence, with possibly greater experimentation with risk behaviours and less prioritization of healthy behaviours such as physical activity and healthy eating. The variation across countries and regions is likely to relate to differences in cultural and economic contexts, and individual developmental growth trajectories are likely to interact with contextual influences. Better understanding of the interplay between individual and contextual contexts and how they change with age is needed.

Specifically, the findings underscore the need to develop age-differentiated interventions that address the interplay between the individual and the context in which he or she lives to promote young people’s health and well-being. The school setting has
been identified as a particularly powerful arena for such interventions, providing an opportunity to combine the knowledge and skills of teachers and health support staff (14–16).

REFERENCES

GENDER
GENDER

Young women and men take on adult gender roles (social expectations of what is regarded as male or female) in all spheres – personal, family and work – during adolescence. These gender roles are shaped by society, so are likely to differ across countries and regions (1).

National political and economic opportunities for women and cultural and religious gender norms affect young people’s conceptions of gender roles and may influence their exposure to health risks and protective factors (2). Cross-national differences in adolescent health may therefore be understood as a reflection of cross-national variation in gender roles. Awareness of gender differences and similarities and understanding of their origins are prerequisites for designing successful and targeted interventions.

SOCIAL CONTEXT
The HBSC study gathers information on key social contexts for adolescent health, such as family, peers and school environment. These contexts have been found to strongly affect adolescent health (2–5), so it is relevant to identify and explain gender differences within them.

Some clear gender differences emerge in relation to family life, with boys generally reporting more positive relationships. When asked about ease of communication with parents, for example, boys are more likely to report finding it easy to talk to their fathers about things that really bother them. No clear gender differences exist for communication with mothers, but they arise in older age groups in relation to perceived family support, with boys reporting higher levels.

Girls tend to report higher levels of perceived peer support, with gender differences becoming more pronounced in the older age group. Meeting friends every day is more common among boys, while girls tend to have more contact with friends via social media, although this is not the case in all countries and regions.

Girls (especially in the younger age group) are more likely to report high satisfaction with school and high perceived academic achievement, indicating that they have more positive school experiences. Eleven-year-old girls also perceive less school-related pressure, but this changes with age: at 15, girls report more school-related pressure than boys. Classmate support shows no clear patterning by gender.

HEALTH OUTCOMES
Some of the most persistent gender differences relate to adolescent health outcomes. Specifically, girls are more likely to report fair or poor health and multiple health complaints, and also to describe lower life satisfaction. Each of these gender differences increases with age.

Boys have a higher prevalence of medically attended injuries, which may be due to greater participation in physical activities. While boys are more likely to be overweight or obese, girls report perceiving their body to be too fat and being engaged in weight-reduction behaviour more commonly. The size of these gender differences tends to increase with age.

HEALTH BEHAVIOURS
Clear gender differences in young people’s health behaviours are evident. Girls are less likely to have breakfast every weekday, but also report eating fruit more frequently. Boys generally report higher consumption of soft drinks. Regular toothbrushing (more than once a day) is more common among girls. Boys take part in MVPA more often, but are also more likely to report screen-time behaviour (watching television, videos, DVDs and other entertainment on a screen on weekdays).
RISK BEHAVIOURS

Risk behaviours in the HBSC study include substance use, sexual behaviour, fighting and bullying. Overall, boys tend to engage more in these behaviours.

Boys in general report early and weekly smoking more often. Weekly drinking and (early) drunkenness also tend to be more common among boys, as is use of cannabis. Although not significant, a pattern in which girls appear to be catching up with boys in relation to substance use seems to be developing in some countries and regions with, for instance, different forms of alcohol use becoming more common among girls.

In most countries and regions, boys are more likely to report having had sexual intercourse, although the opposite pattern is found in some. Boys are also more likely to report condom use, but no clear gender pattern emerges regarding contraceptive pill use.

Boys are involved in fighting more often at all ages and are significantly more likely to be perpetrators of bullying, but gender differences are less strong for bullying victimization. No clear gender pattern has yet emerged for cyberbullying.

DISCUSSION

The current HBSC data reflect gender-specific social relationships shaped by gender socialization, the process by which boys and girls learn feminine and masculine identities. They also appear to be influenced by societal expectations, which may differ across countries and regions (6). Boys’ social networks are typically based on activities, with higher levels of physical activity and sports, while girls’ networks and friendships are based more on personal communication. This gendered pattern is also reflected in boys and girls’ use of screen devices, with girls tending to use them primarily for homework and social purposes and boys for gaming and watching television (7).

Girls in many countries and regions perform better at school. Boys are lagging behind: they dislike school more and rate their achievements lower. School-based factors, such as teaching practices and examination systems, and conceptions of masculinity in peer cultures at school may make schools less appealing to boys (8,9).

Persistent gendered patterns in self-rated health are identified, with girls reporting lower subjective health. These may reflect girls’ higher expectations for daily life or a gender bias in measuring self-rated health. HBSC questions may focus on female-specific reactions to stress (internalizing – headache, stomach ache and feeling nervous) rather than anger-based reactions (externalizing) seen more frequently among boys (10).

While boys are more likely to be overweight or obese, girls more commonly report that they perceive their body to be too fat and that they are engaged in weight-reduction behaviour. This gender difference in body dissatisfaction can be attributed to physical changes in puberty, combined with societal standards for ideal appearances. Boys’ bodies change in the desired direction, becoming more muscular and strong, while girls lose their so-called ideal appearance through gaining body fat.

A notable process of gender equalization in some risk behaviours has been observed over the past decade (11–13). The findings confirm this tendency. Specifically, equalizing of traditional gender differences in tobacco use through increased prevalence of smoking among girls has been seen in some countries and regions. Alcohol use still tends to be more common among boys, but a pattern of gender convergence is emerging (12,13): there is even evidence of girls reporting more excessive alcohol use than boys in some countries, particularly in the United Kingdom. These equalizing trends may reflect men and women’s changing social positions and gender identities. Heavy drinking, for example, may now be considered to be less in accordance with dominant norms of masculinity, consequently becoming more acceptable among girls and challenging traditional codes of femininity (14).

Boys are more likely to report sexual intercourse in most countries and regions, with the differences being largest in those in eastern Europe. Specific features of national contexts may withhold girls (especially) from engaging in sexual intercourse at an
early age: country/region-level age norms appear to affect the timing of sexual initiation in girls to a greater extent than in boys (15). Physical and psychological symptoms are associated with early sexual initiation in girls – but not boys – in countries with more traditional gender norms (16). National features that might generate these differences should be explored further.

Fighting, bullying and getting injured remain more common for boys. These health-compromising behaviours can be considered gendered, with young boys being pushed to perform more risky behaviours to fulfil notions of masculinity (17,18). The higher prevalence of injuries among boys may also reflect the fact that they engage more in injury-producing sports (19,20).

Overall, the extent to which structural factors reinforce the gendered nature of health during adolescence needs greater exploration. The United Nations Sex Inequality Index provides an opportunity to assess associations between gender inequality and health outcomes across countries and regions. It shows that those with greater gender inequality have poorer health outcomes for both sexes, after adjustment for national wealth. This suggests that gender inequality is detrimental to both young men and young women, and supports the need for policies to actively address gender inequalities (2).

CONCLUSION

HBSC findings highlight systematic and international gender differences in adolescent health. The magnitude of the differences tends to vary across countries and regions, which suggests that more research into the potential influence on adolescent health of (national) social structures and cultural factors (such as gender norms and roles) is needed. The observed differences also suggest that strategies for health promotion and disease prevention may need to be tailored differently for boys and girls.

Special attention may need to be paid to boys’ well-being at school, as they score systematically lower than girls in relation to school experiences. Many risk behaviours are still more common among boys, so health-promotion activities that specifically target boys may be needed. Potential increases in girls’ risk behaviours, resulting in gender equalization of health-compromising behaviours, should be monitored carefully.

Persistent gendered patterns in self-rated health and well-being, with girls reporting lower subjective health, require attention. Boys and girls may react differently to mental health interventions (21), so they may need to be tailored. Girls’ relatively low self-perceptions call for mental health promotion to give stronger emphasis to strengthening their self-esteem and preventing them from developing negative ideas about their bodies.

REFERENCES


FAMILY AFFLUENCE
FAMILY AFFLUENCE

Socioeconomic differences are found in many areas of health and health behaviours and the social relationships that support them. In general, young people with higher affluence tend to get along better with their families and peers, do better in school and report better health outcomes. The pattern is less clear in relation to some risk behaviours and in spending time with peers.

SOCIAL CONTEXT
Young people with higher affluence have better communication with parents, although the association is stronger for communication with fathers and among girls. Family affluence positively relates to perceived family support in over half the countries and regions and to peer support in about two thirds. It is also related to school performance, despite having no consistent association with liking school or school pressure.

HEALTH OUTCOMES
Inequalities related to family affluence exist across a range of health outcomes. Higher family affluence relates to better self-rated health and higher life satisfaction. It is also associated with frequency of multiple health complaints in around a third of countries and regions for boys and about half for girls. Low affluence relates to excess body mass and perceptions of being too fat, although this is not observed across all countries and regions. Medically attended injuries increase with higher family affluence, which might reflect differences in accessing health services or participation in sports in some countries and regions.

HEALTH BEHAVIOURS
Higher affluence relates to more frequent physical activity, more regular toothbrushing, higher fruit intake and more frequent breakfast consumption in most countries and regions. Inequalities in soft-drink consumption vary, with higher affluence relating to higher consumption in some countries and regions but lower in others. Higher television-watching is associated with lower affluence, largely in western Europe, but the opposite relationship is observed in some eastern European countries.

RISK BEHAVIOURS
No clear pattern of inequalities is found in risk behaviours. Low affluence relates to weekly smoking in most countries and regions, but not to age of smoking onset, drinking initiation or cannabis use. Young people from low-affluence families are more likely to have been bullied, but there is no consistent relationship for fighting, bullying others and cyberbullying.

DISCUSSION
Adolescent health and health behaviours share a complex association with family affluence. Longitudinal research in this area has found that the effects are bidirectional in nature. Obesity in adolescence, for example, predicts less education and lower incomes in adulthood (1); conversely, low adolescent SES increases the risk for adult obesity after differences in adult SES are taken into account (2,3). Research has also found that international differences in income inequality determine the size of health inequalities in adolescents (4). Health, SES and social mobility are intricately linked from an early age, which helps explain why health inequalities endure throughout the life-course.

The mechanisms that underlie these inequalities involve multiple causal pathways (5). First, family affluence affects adolescent health by limiting access to material resources that support health, such as good-quality schools, healthy food options and access to parks and playgrounds that facilitate physical activity (6).

Second, low family affluence levies the psychosocial effects of low socioeconomic rank and the stress and anxieties of living in relative poverty (7). This psychosocial path explains why the socioeconomic gradient in health extends through the full range of family affluence and why socioeconomic differences are observed in all HBSC countries and regions regardless of their...
national wealth. Material and psychosocial pathways work in tandem: inequalities in food choices, for example, are determined by affordability of healthy food options and the stressors of relative deprivation, which disinhibit dietary restraint and drive preferences for high-fat, high-caloric foods (8–10).

Third, family affluence indirectly affects adolescent health though social stratification. Lower-affluence adolescents have less structured mealtimes and poorer communication with parents, perceive less social support from their families and peers, and do less well in school. Research has found that antisocial behaviour, school dropout and exposure to crime-ridden neighbourhoods are more common experiences for lower-affluence adolescents (11). Health inequalities are created and then reinforced by multiple social contexts.

Fourth, observed differences in health outcomes are also a consequence of socially patterned differences in early life experiences and the cumulative effects of psychological stress on the development of neuroregulatory centres of the brain that govern emotion, attention and social functioning (12).

CONCLUSION

The likelihood that adolescents are healthy, happy and doing well in school becomes significantly and progressively stronger as family affluence rises (11). Early socioeconomic exposures have lasting effects on lifelong health and well-being (13, 14). The HBSC study provides valuable information about the magnitude of these differences across multiple health behaviours and health outcomes.

REFERENCES

CONCLUSION
CONCLUSION

SCIENTIFIC CONCLUSIONS
Young people are regarded as being healthy relative to other population groups, but adolescence is now recognized as a critical stage of the life-course during which many behavioural patterns that help determine current health status and future health outcomes are established. Emerging evidence suggests that adolescents are particularly sensitive to environmental influences, which emphasizes the importance of adopting a social determinants approach to understanding adolescent health and well-being.

The HBSC study provides a unique insight into the lives of young people across Europe and North America. This latest report presents key findings from the 2013/2014 survey in relation to health behaviours, risk behaviours and health outcomes, and the social context in which young people live.

The data show that family relationships change during the adolescent years, especially for girls, and that the role of family as a protective factor may diminish during this time. In contrast, perceived support from friends remains relatively stable, potentially providing an important resource at a time when many changes are taking place. The quotes from young people featured throughout the report demonstrate the essential role that friendships play in supporting young people through the challenges they face.

The way young people interact and communicate has changed in recent years, with the growth of social and other forms of electronic media. Technological developments over past decades present benefits and risks for young people. Most of the adolescents surveyed engage in daily EMC with their peers, with an increasing trend compared to previous years (1).

Increased use of mobile devices and media technology has the potential to facilitate the development of online/electronic aggression, so questions on cyberbullying were included for the first time in the 2013/2014 survey. Interest in this new phenomenon is growing, as exposure to cyberbullying has been associated with a wide range of negative outcomes for those victimized. Overall, young people reported being victims of cyberbullying less often than traditional bullying, but this balance may shift in the future.

Evidence that electronic media use can have positive and negative effects on young people’s health highlights the importance of continuing to monitor the changing nature of peer relations to better understand their impact. Large variation in prevalence of face-to-face contact time and use of social media exists between countries and regions, highlighting the role of wider cultural factors in determining social norms and practices.

School has an important influence on young people’s lives, and health and learning are closely linked. There is considerable cross-national variation in young people’s experiences at school, particularly in relation to how much they like school and feel pressured by schoolwork. This is not surprising, given the diversity of school systems across countries and regions and differences in the way the school day is organized. Younger children tend to have more positive experiences, although younger boys are more likely than girls to experience school-related stress. The opposite relationship is seen for older students, where stress is higher among girls. This may be a contributing factor to the lower levels of mental well-being experienced by girls of this age.

The findings show a marked decline in subjective well-being among girls during the adolescent years. On average, one in five girls report fair or poor health by age 15 and half experience multiple health complaints more than once a week. Body dissatisfaction also increases significantly during this period for girls, particularly in western and central European countries, despite actual levels of overweight and obesity remaining stable. Indeed, the data indicate that older female adolescents have a different trajectory in relation to the main health and well-being indicators. In addition to poorer mental health, 15-year-old girls also report the lowest levels of life satisfaction, daily breakfast consumption and physical activity.

Many positive behaviours appear to be influenced by gender. Girls are more likely to include fruit and vegetables in their diet and brush their teeth, while boys are more likely to be physically active. Negative health outcomes and risk behaviours are also
strongly gendered. Boys, for example, are more likely to experience injury and be involved in physical fights. They drink alcohol and smoke tobacco more often, although the gender gap has been closing in some countries in recent years as girls adopt behaviours typically regarded as masculine. Despite this, encouraging trends in risk behaviour are seen compared with previous surveys, with substantial reductions in substance use, fighting (2) and bullying victimization (3) among boys and girls in many countries and regions (4,5).

Differences in family affluence continue to have a strong effect on young people’s health and well-being. The findings show that adolescents from low-affluence families tend to have poorer health, lower life satisfaction, higher levels of obesity and sedentary behaviours, poorer communication with their parents, less social interaction via social media and lower levels of support from friends and family. In contrast, those from high-affluence families tend to report better outcomes. Many of these inequalities are persistent and evidence suggests they may be increasing, with widening gaps in several key domains of adolescent health (6). Socioeconomic patterning of behaviours is less evident for risk behaviours and school experience, which suggests that schools can provide a supportive environment for young people’s health and development regardless of family circumstances.

Health-related behaviours in adolescence are affected by structural determinants of health (such as national wealth and income inequality, and employment opportunities) and proximal or intermediate determinants (including the connectedness of adolescents to family and school) (7). The large variation in prevalence between countries and regions observed for many indicators reinforces the importance of country-level factors and cultural norms in determining young people’s health and well-being. As Sawyer et al. (7) note:

*The complex interaction of social determinants of health and risk and protective factors with the biological and social-role transitions of adolescence explains the growing disparities between the health of adolescents in different regions and countries. These same factors also affect the experience of growing up within the same country, where adolescents can have highly heterogeneous life experiences and diverse health outcomes.*

HBSC is in a unique position to be able to describe and explain patterning of health among this age group within and between countries and regions, and to identify the main influences on young people’s engagement in health-related behaviours within a risk- and protective-factors framework. The findings in this report should be addressed through a positive youth-development approach (8) in which the focus is adolescents’ assets and developmental strengths, whether internal to the young person (resilience, for example) or external (such as peers and school).

**POLICY CONCLUSIONS**

This report reflects on international efforts towards meeting the overall priority of the WHO European child and adolescent health strategy to make children’s lives more visible (9). The HBSC study raises the profile of adolescence as a critical period in the life-course, shedding light on adolescents’ health behaviours and social and developmental context over time. It is a unique instrument for understanding new challenges to adolescent health (10) and provides a common voice that speaks to the national and international realities of young people’s lives. The report highlights priority areas for action and identifies modifiable risk and protective factors that can be used to inform the development and implementation of intervention and prevention programmes.

Findings show that young people increasingly use digital social media to interact and become informed. Innovative interventions should be designed to make use of new communication technologies to disseminate health-promoting messages. Frequent use of electronic media highlights the need to address young people’s health literacy to ensure they know how to assess the quality of information and validity of sources. Measurement and evaluation of interventions that make use of new communication technologies are critical to building a knowledge base that can enhance the ability to improve opportunities and outcomes in this age group.
The breadth of the HBSC study can support a range of policy actions to improve young people’s health and well-being. It cannot directly identify the causes of observed trends in adolescents' health, but can reflect on changes in policies that coincide with alterations in reported behaviours. For example, some of the positive changes in young people’s lives reflected in the report could be attributable to international and national efforts to promote healthy eating, increase physical activity, encourage positive oral health and reduce risk behaviours. Room for improvement remains, however.

Prevention programmes should begin early and be developed with a gendered lens for issues such as fighting, sexual behaviour, subjective health, toothbrushing and school perception. The burden of deterioration in adolescent subjective health is a major health problem that calls for structural changes through a HiAP approach (11). Oral health promotion should be integrated with general health promotion: further investment in oral health promotion to help prevent oral disease could generate sizeable savings in treatment costs later in life (12).

Access to modern contraceptives and confidential sexual and reproductive health services is critical, especially for boys from low-affluence backgrounds, but lack of skilled practitioners may hinder policies to improve sexual health in this age group.

Greater insight into the harmful effects of alcohol on the brains of adolescents has supported the introduction of more stringent policies to curb teenage drinking and changes in social norms. Interventions that focus on preventing experimentation among young people and preventing those who have experimented from adopting a regular habit, and policies to restrict their access to tobacco products through commercial sources (13), should be scaled-up to delay onset as much as possible.

A systemic approach to addressing obesity and overweight rates that includes the provision of healthy and nutritious food, safe neighbourhoods and opportunities for physical activity and sports participation should be adopted. School fruit schemes and food-based guidelines and labelling have proven effective in improving eating habits, but data suggest that the school food environment is also of importance in shaping children’s diet.

Injury prevention is an important public health area in which small investments could realize big gains. Common macro approaches, such as the use of legislation, product and environmental modifications to promote children’s safety, supportive home visits, promoting the use of safety devices (such as helmets, seat belts and smoke alarms) and educational programmes, are supported (14).

Relationships are critical during adolescence, with peers and parents having a key role as protective assets in young people’s lives. Policies should support the establishment and maintenance of supportive social relationships among adolescents through, for example, opportunities to interact with peers in safe and structured settings. It is also important to change misleading discourses which imply that time spent alone with peers leads to risk-taking and offending; this very much depends on the conditions under which the interactions take place (15). Increased attention to, and more investment in, programmes that promote positive parenting during adolescence are necessary.

The overall health and behaviours described in this report are quite positive, but the need to address existing social, age and gender inequities persists. Members of the HBSC network have been working closely with WHO in monitoring the European child and adolescent health strategy, which aims to address the social determinants of health and bridge the equality gap for young people (9). HBSC data will play an important role in ensuring that the strategy’s commitments are realized.

The adoption of supportive environments for the whole community, rather than just for at-risk populations, is necessary. Supportive environments include schools and communities, but also cyberspace. Investment is needed for programmes that contribute to young people being informed online users, foster healthy and responsible online interactions with peers and include educational messages about the potentially negative consequences of online activities.

Comprehensive, integrated, flexible and sustainable policies to achieve positive health outcomes in this age group are only possible with the necessary political will to ensure sufficient resources are allocated for implementation and evaluation. The
knowledge generated from these activities can provide valuable insights into what works in promoting young people’s health. The HBSC study has now been active for over 30 years. It is well positioned to provide solid evidence on children and young people’s needs and strengths and relevant data to enhance understanding of health inequalities. The study’s efforts to increase young people’s participation in the production of science and policy results in data that better reflects their lifestyles and priorities (16), while also being of significant value to programme and policy design.

The report underscores the importance of giving young people a stronger voice and offering them more opportunities for engagement in activities related to their health and well-being. Young people should play an active role in identifying their social and health problems and challenges and contribute to the development of solutions and interventions that target them as a group.

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