



REPUBLIC OF SEYCHELLES

MINISTRY OF HEALTH
MINISTRY OF EDUCATION

SEYCHELLES

GLOBAL SCHOOL-BASED STUDENT HEALTH SURVEY

2025

27 FEBRUARY 2026



HEALTHY STUDENTS. STRONGER SCHOOLS. HEALTHIER SEYCHELLES.

Authors

Pascal Bovet — Consultant for noncommunicable diseases at the at the Unit for Prevention and Control of Cardiovascular Disease, Public Health Authority of the Ministry of Health, Seychelles, and senior consultant at Unisanté, Lausanne, Switzerland. He led data analysis and report writing.

Bharathi Viswanathan — Programme Manager at the Unit for Prevention and Control of Cardiovascular Disease, Public Health Authority, Ministry of Health, Seychelles. She led operational coordination of the Seychelles GSHS 2025, including liaison with WHO, coordination of questionnaire translation, and implementation of the survey in collaboration with the Ministry of Education.

Jean-Marc Athanase —Ministry of Education focal point for the Seychelles GSHS 2025. He coordinated implementation of the survey in secondary schools and professional centres under the Ministry of Education.

All authors contributed to the drafting of the report and approved the final version.

The authors acknowledge the technical support of the World Health Organization, particularly Laura Kann and Melanie Cowan, in preparing the sample design, providing the standard GSHS questionnaire framework, compiling the survey database, and providing the dataset used for the analyses presented in this report. The statistical analyses and interpretation presented in this report were conducted independently by the authors.

Suggested citation

Seychelles School-Based Student Health Survey 2025. Victoria: Ministry of Health; 2026. doi:10.16908/pub.2026.002. Available at: www.health.gov.sc

Persons and institutions involved in conducting the Seychelles GSHS in 2025

Last name	First name	Position	Work place
Steering Committee			
Athanase	Jean-Marc	Principal Planning Officer (Strategy)	Research, Planning and Policy Section, MOE
Bovet	Pascal	Consultant, NCD	UPCCD, PHA
Charlette	Stephanie	Programme Manager School Health	Family Health, HCA
Hotive	Doreen	HPR/SDH Officer	WHO Country Office, Seychelles
Mangroo	Gaynor	Senior Health Promotion officer	UPCCD, PHA
Prosper	Regina	Director	Health, Safety, Risk Management, MOE
Viswanathan	Bharathi	Program Manager (PI)	UPCCD, PHA
Administration Ministry of Health			
Barra	Jude	Financial Controller	PHA
Gedeon	Jude	Public Health Commissioner	PHA
Louange	Meggy	Director General	PHA
Administration Ministry of Education			
Eulentin	Merna	Principal Secretary	Education Services Department, MOE
Lesperance	John	Principal Secretary	Education Sector Development Department, MOE
Measurement of height and weight			
Albert	Juliette	Nurse	Beau Vallon Health Centre, HCA
Albert	Tara	Nurse	English River Health Centre, HCA
Antat	Tracy	Nurse	Port Glaud Health Centre, HCA
Belmont	Stephanie	Nurse	Anse Royale Health Centre, HCA
Beniot	Wilhemia	Nurse	Anse Boileau Health Centre, HCA
Bonne	Nanne	Nurse	Beoliere Health Centre, HCA
Bristol	Brenda	Nurse	Les Mamelles Health Centre, HCA
Changthiou	Selbianne	Nurse	Baie Ste Anne Health Centre, HCA
Desir	Serra	Nurse	English River Health Centre, HCA
Dogley	Natifa	Nurse	Independent School
Estico	Nathalie	Nurse	Ecole Francaise
Francois	Beryl	Nurse	Mont Fleuri Health Centre, HCA
Gabriel	Ruby	Nurse	Independent School
Jeanne	Micheline	Nurse	St. Marys Hospital, La Digue, HCA
Mathiot	Brigitte	Nurse	Anse Aux Pins Health Centre, HCA
Mwaura	Nathalie	Nurse	International School
Esparon	Lindy	Nutrition Technician	Nutrition Unit, HCA
Survey officers			
Albert	Annette	Teacher	Free Lance
Bastienne	Henry	Director	Phoenix Company
Cadeau	Anna-Belle	Nursing Officer	UPCCD, PHA
Charlette	Samantha	Lecturer	The Guy Morel Institute
Fremiot	Ken	Epidemiologist	Policy and Statistics Section, MOH
Lafortune	Vanessa	Office Assistant	UPCCD, PHA
Mangroo	Gaynor	Senior Health Promotion Officer	UPCCD, PHA
Mondon	Jolene	Research Officer	Policy and Statistics Section, MOH
Palmyre	Libranette	Teacher	Plaisance School, MOE
Rosalie	Terra	Counsellor	Plaisance School, MOE
Serret	Alize	Health Promotion Officer	Health, Safety, Risk Management, MOE
Vidot	Marthy	Personal assistant to the Minister	Minister's Office, MOH
Viswanathan	Bharathi	Programme Manager	UPCCD, PHA

Persons who facilitated the implementation of the survey in secondary schools			
Adrienne	May	Ag. Head Teacher	Anse Boileau Secondary
Choisy	Rodney	Deputy Head Teacher	Mont Fleuri Secondary
Collie	Ian	Head Teacher	Praslin Secondary
Crispin	Beguita	Deputy Head Teacher	Praslin Secondary
D'unienville	Sharon	Administrative officer	Vijay International School
Esparon	Andy	Principal	Independent School
Guitton	Christine	Head Teacher	Ecole Francaise Seychelles
Hoareau	Steve	Head Teacher	English River Secondary
Iman	Marie-May	Deputy Head Teacher	Pointe Larue Secondary
Kilindo	Jenny	Head Teacher	Plaisance Secondary
Labonte	Bergitta	Head Teacher	Anse Royale Secondary
Madeleine	Michel	Head Teacher	La Digue Secondary
Marcel	Nadia	Head Teacher	Mont Fleuri Secondary
Marie	Gritty	Deputy Head Teacher	Beau Vallon Secondary
Morel	Philip	Head Teacher	Beau Vallon Secondary
Morel	Andy	Deputy Head Teacher	Plaisance Secondary
Nancy	Medgee	Head Teacher	Belonie Secondary
Ntep	Marie-May	Head Teacher	Perseverance Secondary
Payet	Marie Anne	Deputy Head Teacher	English River Secondary
Rose	Erina	Deputy Head Teacher	Belonie Secondary
Soomery	Channel	Head Teacher	Pointe Larue Secondary
Thompson	Leslie	Head Teacher	Vijay International School
Vallantine	Elodie	Head Teacher	International School
Persons who facilitated the implementation of the survey in post-secondary schools			
Abeynake	Maheba	Director	Seychelles Maritime Academy
Adrienne	Savinia	Registrar	Seychelles Tourism Academy
Ali	Ebrahim M.	Director	National Institute of Health and Social Studies
Bristol	Josianne	Director	Seychelles Business Studies Academy
Denousse	Ferdinand	Director	Seychelles Institute of Technology
Issac	Beverly	Deputy Principal	School of Advanced Level Studies
Julienne	Alisha	Student Support Officer	Seychelles Institute of Technology
Larue	Elaine	Director	School of Advanced Level Studies
Mathiot	Richard	Director	Seychelles Tourism Academy
Reddy	Angelique	Registrar	Seychelles Maritime Academy
Renaud	Mercianne	Registrar	National Institute of Health and Social Studies
Solin	Maria	Deputy Director	Seychelles Business Studies Academy
Collaborators			
Ayodeji	Ibraheem	GSHS/G-SHPPS coordination focal point	UNESCO HQ, Paris
Bovet	Pascal	Consultant	UPCCD/PHA
Cowan	Melanie	Technical Officer	WHO, Dpt of NCDs/MH, Geneva
Hotive	Doreen	HPR/SDH Officer	WHO, Country Office, Seychelles
Kann	Laura	Consultant	WHO, Dpt of NCDs/MH, Geneva
Machawira	Patricia	Regional Advisor EHW	UNESCO Regional Office, Harare

HCA: Health Care Agency; PHA: Public Health Authority

Abbreviations

ENDS: Electronic nicotine delivery systems (e-cigarettes)

GSHS: Global School-based Student Health Survey (a standardized school survey conducted worldwide)

GYTS: Global Youth Tobacco Survey (a standardized survey on youth tobacco use conducted worldwide)

HBSC: Health Behaviour in School-aged Children study (an international school survey done in many countries)

WHO: World Health Organization

Use of generative AI

ChatGPT was used to support international comparisons and summarise recommendations from major health organisations. AI tools were not used to generate the survey analyses, findings, tables, or figures. All outputs were reviewed and adapted to reflect the local context, survey data, and the need to keep this report concise, informative, and action-oriented. The authors remain responsible for the final content.

Contents

Executive summary	7
Summary of key findings.....	9
What is the Global School-based Student Health Survey?.....	11
Previous reports on school-based behavioural surveys in Seychelles	12
Methods, procedures and participants.....	13
Main findings.....	16
1. Weight status.....	16
2. Nutrition	19
3. Tobacco and electronic cigarettes.....	22
4. Cannabis	24
5. Alcohol.....	25
6. Physical activity	27
7. Hygiene: tooth brushing.....	29
8. Sleep	30
9. Sexual behaviours related to prevention of HIV and STIs	31
10. Bullying and violence on school property or elsewhere	33
11. Mental health	35
12. Missing school and other social indicators	37
13. Use of social media	39
14. Parental support.....	40
15 Health education at school	42
16. Putting the pieces together: interconnected health risks in adolescence	44
Appendix 1 - Questionnaire	46
Appendix 2 - Previous reports on school-based behavioural surveys in Seychelles.....	54

Executive summary

This Global School-based Student Health Survey (GSHS) in Seychelles conducted in March-July 2025 provides nationally representative evidence on health behaviours, psychosocial wellbeing, and protective factors among students aged 11–17 years. The findings reveal a **high burden of interconnected health risks emerging early in adolescence**, with **marked age and gender gradients**, alongside clear evidence that **family support, school environments, and health education play a crucial protective role**.

Nutritional status and diet

- Both **undernutrition** and **overnutrition** are evident.
- While **6% of students were underweight**, **36% were overweight or obese**, including **17% obese**, with higher prevalence among girls.
- Only about half of overweight or obese adolescents **correctly perceived their weight status**, although 70% reported attempts to lose weight, suggesting awareness but possibly inadequate guidance or support.
- **Dietary patterns are suboptimal**: fewer than half of adolescents consumed vegetables or fruit daily, while consumption of sugar-sweetened beverages was common, with over one-third drinking soft drinks and more than 40% consuming commercial fruit juices daily.
- School **lunch practices also raise concerns**, as nearly 20% of students skipped lunch altogether, and a sizeable proportion relied on takeaway foods, pointing to opportunities for strengthening school nutrition policies.

Substance use: tobacco, alcohol, and cannabis

- The survey highlights **shifting patterns of substance use**.
- Comparing the 2025 data with previous school surveys, cigarette smoking on ≥ 1 day per month declined slightly from 2002 to 2015 **but halved from 2015 to 2025**.
- However, this improvement is partly offset by the **high prevalence of electronic nicotine device (END) use**, affecting one in five students monthly.
- Importantly, **most END users did not smoke cigarettes**, challenging simplistic assumptions that e-cigarettes primarily act as a gateway to smoking.
- While ENDs are less harmful than combustible cigarettes, they are addictive and pose significant health risks.
- **Alcohol use is widespread**, with nearly one-third of adolescents drinking monthly and a **significant minority reporting binge drinking, intoxication, and alcohol-related trouble or violence**.
- **Cannabis use**, while lower overall, shows a **steep age gradient** and **frequent use among half of users**, particularly among boys.
- These patterns underscore adolescence as a critical window for prevention.

Physical activity

- **Levels of physical activity are insufficient**. Only 27% met recommended activity levels on most days, with consistently lower participation among girls.
- **Participation in physical education and extracurricular activity declines sharply in older adolescents**, while **active transport to school is uncommon**.
- These patterns likely contribute to the high prevalence of overweight and obesity.

Mental health, violence, and bullying

- **Indicators of psychosocial distress are alarmingly common**. One in five adolescents reported persistent loneliness, nearly 20% experienced anxiety severe enough to disrupt sleep, and over one in five seriously considered suicide in the past year.
- These indicators **increase with age** and are **consistently higher among girls**.
- **Bullying**, including **cyberbullying**, affects a substantial minority, while **physical fighting** and **attacks** remain common, particularly among boys and younger students.
- These experiences are closely linked to substance use and mental health problems.

Sexual and reproductive health

- Sexual initiation increases sharply with age, with **nearly 50% of older adolescents reporting sexual intercourse**.

- However, **protective behaviours are inadequate**: condom use at last intercourse was reported by only 30%, and over one-third used no contraception.
- Reports of forced sexual intercourse by a family member are concerning, highlighting the need for strengthened safeguarding systems and support services.

Social environment, parental support, and school engagement

- Protective factors are unevenly distributed.
- Many adolescents report **limited parental monitoring, understanding, and communication**, especially at older ages.
- Over half found it difficult to talk to someone about worries.
- Positive school climate indicators decline with age, and school absenteeism remains notable among younger adolescents.

Social media use

- A large proportion of adolescents reported **very high social media use**, with nearly half spending five or more hours per day on weekends, and usage increasing sharply with age, particularly among older girls.

Health education in school

- While just over 50% of students reported being taught during this school year about physical activity and HIV prevention at school, far **fewer received education on tobacco, alcohol, and healthy eating**—highlighting key gaps in school health programmes.

Interconnected risks and protective factors

- **A central finding is the strong clustering of risk behaviours.**
- Tobacco, alcohol, cannabis use, risky sexual behaviour, school absenteeism, exposure to violence, and psychosocial distress are **closely interrelated**.
- Conversely, **parental involvement and social support consistently correlate with better outcomes**, including healthier sleep, lower substance use, fewer mental health problems, safer sexual behaviours, and reduced excessive social media use.

Policy implications

These findings call for integrated, multisectoral adolescent health strategies rather than isolated interventions. **Key priorities** include:

- **Strengthening school-based health promotion**, particularly nutrition, physical activity, substance use prevention, sexual health, and mental health support.
- **Addressing the rapid rise of electronic nicotine devices** with age-appropriate regulation and education.
- **Expanding mental health services and psychosocial support**, especially for older adolescents and girls.
- **Reinforcing parental engagement and communication**, which emerge as powerful protective factors.
- **Ensuring safe school environments and early prevention**, as many risk behaviours escalate with age.
- Strengthening the School Screening Programme to ensure that school nurses have sufficient time and resources to provide adequate counselling on healthy behaviours to all students, with targeted measures for those identified as high risk.

Overall, the **GSHS findings demonstrate that adolescence is a decisive period for shaping lifelong health trajectories**. Well-designed **policies that combine health education, supportive family and school environments, and targeted prevention** have a large potential to reduce **current risks and future burdens of noncommunicable diseases and mental health disorders**.

Summary of key findings

1. Weight status

- 6% of students were underweight.
- 36% of students aged 11-17 were overweight or obese (girls more than boys).
- 17% were obese.
- 55% of overweight/obese students correctly perceived that their weight as too high.
- 70% of overweight/obese students reported trying to lose weight.

2. Nutrition

- 39% of students aged 11-17 ate vegetables ≥ 1 time per day.
- 52% of students aged 11-17 ate fruit ≥ 1 time per day.
- 35% of students aged 11-17 drank ≥ 1 soft drink per day.
- 41% of students aged 11-17 drank ≥ 1 commercial fruit juice per day.
- 22% of students aged 11-17 did not eat for lunch, 16% brought it from home, 32% got it from the school canteen, 21% got it from a takeaway and 8% from another manner.

3. Tobacco and electronic cigarettes

- 9% of students aged 11-17 smoked cigarettes on ≥ 1 day/month, and 4% on ≥ 3 days/month.
- Comparing the 2025 data with previous school surveys, cigarette smoking on ≥ 1 day per month declined slightly from 2002 to 2015 but **halved from 2015 to 2025**.
- 21% of students aged 11-17 used an electronic nicotine device on ≥ 1 day/month and 9% on ≥ 3 days/month.
- 74% of END users did not smoke cigarettes (arguing against ENDS being a getaway to cigarette smoking).

4. Cannabis

- 6% of students aged 11-17 used cannabis (marijuana, hashish, 'lapay') ≥ 1 time per month.
- 50% of cannabis users used cannabis ≥ 6 times per month.
- The prevalence of cannabis increased sharply with age and is higher in boys than girls.

5. Alcohol

- 30% of adolescents aged 11-17 drank alcohol on ≥ 1 day/month.
- 12% of adolescents aged 11-17 had ≥ 3 drinks on drinking days.
- 29% of students aged 11-17 ever got into trouble or fights because of drinking alcohol.
- 24% of adolescents aged 11-17 reported to have ever been really drunk.
- Prevalence of these indicators increased sharply with age and tended to be larger in girls than boys.

6. Physical activity

- 27% of students aged 11-17 had physical activity for ≥ 60 min per day on ≥ 5 days/week, and 15% on ≥ 7 days/week.
- Prevalence was higher in boys than girls (33% vs 21%) with no marked differences by age.
- 36% of students aged 11-17 exercised to strengthen muscles on ≥ 3 days per week during the past 30 days.
- 57% of students aged 11-17 did not walk to go to school.
- Nearly 20% of students aged 11-15, but around 60% at age 16-17, did not attend physical education classes.
- 57% of students aged 11-17 took part in any extracurricular physical activity, but less at age 16-17.

7. Hygiene: toothbrushing

- 83% of adolescent brushed their teeth ≥ 2 times/day and 19% ≥ 3 times/day.

8. Sleep

- ~55% of students aged 11-12, ~45% aged 13-15 and ~25% aged 16-17 slept ≥ 8 hours.

9. Sexual behaviours related to prevention of HIV and STIs

- 9%/7% of boys/girls aged 11-12, 23%/27% aged 13-15, and 42%/45% aged 16-17 ever had sexual intercourse.
- 17% of boys and 15% of girls aged 16-17 had sexual intercourse with ≥ 3 people during their lifetime.
- 30% of students aged 11-17, or their partner, used a condom the last time they had sexual intercourse.
- 35% of students aged 11-17 did not use any method of contraception on their last sexual intercourse.
- 4% of boys and 5% of girls reported to have been forced to have sexual intercourse by a family member.

10. Bullying and violence on school property or elsewhere

- 11% of students aged 11-17 were bullied 'often' or 'most of the time' during the last 12 months
- 12% of students aged 11-17 were cyberbullied during the past 12 months.
- 15% of students aged 11-17 were involved in a physical fight ≥ 2 times during the past 12 months.
- 17% of students aged 11-17 were physically attacked ≥ 2 times during the past 12 months
- Prevalence decreased with age and was lower in girls than boys.

11 Mental health

- 20% of adolescents aged 11-17 felt lonely 'most of the times' or 'always' during the past 12 months.
- 83% of adolescents aged 11-17 had ≥ 2 close friends, with prevalence larger in girls than boys.
- 17% of adolescents aged 11-17 were 'most of the time' or 'always' so worried about something that they could not sleep at night.
- 22% of adolescents aged 11-17 'seriously considered attempting suicide' in the past 12 months.
- Prevalence of these indicators increased with age and was larger in girls than boys.

12. Missing school and other social indicators

- Around 10% of adolescents aged 11-15, but <4% aged 16-17 missed classes without permission for ≥ 3 days during the past 30 days.
- Around 40% of adolescents aged 11-15, but <30% aged 16-17 reported that most students in their school were kind and helpful during the past 30 days.
- 54% of adolescents aged 11-17 found that it was 'most of the time' or 'always' difficult to talk to someone about difficult problems and worries during the past 30 days.

13. Use of social media

- 25% of students aged 11-17 used social media during <1 hour/day on weekdays and 14% on weekends.
- 30% of students aged 11-17 used social media for ≥ 5 hours/day on weekdays, and 48% on weekends.
- Duration markedly increased with age (e.g. 37% of girls aged 16-17 spent ≥ 7 hours/day on weekends).

14. Parental support

- ~28% of adolescents aged 11-12, ~40% aged 13-15 and ~60% aged 16-17 reported that their parents 'never' or 'rarely' checked on to see if homework was done.
- 51% of students reported that their parents 'never' or 'sometimes' understood their problems or worries.
- 32% of adolescents said their parents 'never' or 'rarely' knew what they were doing with their free time.
- 16% of adolescents aged 11-17 reported that their parents went through their things without their approval, with lower prevalence at age 16-17 (10%).

15 Health education at school

- 46% of students aged 11-17 were taught on benefits of healthy eating during this school year.
- 21% were taught on dangers of tobacco use during this school year.
- 41% were taught on problems related to alcohol drinking during this school year.
- 53% were taught on how to avoid HIV infection or AIDS during this school year.
- 55% were taught about the benefits of physical activity during this school year.

15. Putting the pieces together: interconnected health risks in adolescence

- Risk behaviours strongly correlated, e.g. tobacco use, electronic cigarette, alcohol consumption, cannabis use, risky sexual behaviours, school absenteeism, exposure to bullying and violence, and indicators of psychosocial distress but were inversely associated with markers of social and familial support.
- Psychosocial vulnerability indicators such as loneliness, frequent worry, and suicidal ideation, were positively inter-related and associated with substance use behaviours.
- Parental involvement indicators—such as parents checking homework and understanding adolescents' problems—were consistently associated with more favourable outcomes, including better sleep, greater emotional communication, more positive perceptions of peer climate, and lower prevalence of substance use, suicidal ideation, multiple sexual partners, and excessive social media use.

What is the Global School-based Student Health Survey?

The Global School-based Student Health Survey (GSHS) is a **long-running international surveillance system targeting school going adolescents aged 11-17**, coordinated by the World Health Organization (WHO) in collaboration with UNICEF, UNESCO, UNAIDS, US Centers of Disease Control and Prevention and the World Bank.

The GSHS has been conducted since 2003 and implemented in over 120 countries so far, with many countries repeating the survey over time, ideally every 10 years or so to enable assessing trends over time.

The selection of the **eligible participating classes** is carried out by WHO, based on data on the total number of classes and children in each class including those aged 11-17 in the country. A two-stage cluster sampling design is used: schools are selected with probability proportional to enrolment size and classrooms are randomly selected within chosen schools. All students in the selected classrooms are eligible to participate. Participation is voluntary, with school approval, parental consent (according to national ethics rules), and student assent.

The main **GSHS instrument** is a standardized self-administered anonymous questionnaire targeting adolescents aged 11–17 years. The questionnaire consists of core modules (mandatory for international comparability) and optional modules tailored to national priorities. Students fill their responses to the 60-70 questions in a structured answer sheet.

Analysis. WHO performs standardized coding of the data from the students' answer sheets to ensure cross-country comparability. WHO also develop tables of frequency estimates weighted for probability of selection at each sampling stage, non-response (school and student level) and post-stratification (e.g. by sex or grade), allowing results to be extrapolated to the national student population. Most analyses are descriptive but analytic studies (e.g. associations between selected behaviours and outcomes) can also be conducted by local researchers, as relevant.

Limitations. Data excludes adolescents not attending school on the day of the survey and data are self-reported, which may result in self-recall bias, social desirability bias, and selection bias. Associations (if any is reported) rely on a cross-sectional design, i.e. no causal inference can be formally deducted.

Reporting. WHO provides summary tables of frequency estimates for all measured variables and a dataset (xls) of all variables, which countries can use to prepare a report of the main findings to relevant health and other authorities within a 2-year period.

Core GSHS questions modules

The rationale underlying the questions in the modules is to:

- Track early-life determinants of adult health
- Enable international comparisons
- Inform school-based and national prevention policies.

1. Demographic Information

Purpose: Age, sex, grade

Rationale: Essential for stratified analyses and international comparability.

2. Alcohol use

Measures: Ever use, current use, binge drinking

Rationale: Early alcohol use predicts injuries and violence, risky sexual behaviour, future alcohol dependence and risk of noncommunicable diseases (NCD).

3. Drug use

Measures: Cannabis, amphetamines, inhalants, other illicit drugs

Rationale: Substance use in adolescence is linked to mental health disorders, school dropout, long-term addiction risk.

4. Tobacco use

Measures: Cigarettes, smokeless tobacco, exposure to second-hand smoke

Rationale: Adolescence is the critical period for nicotine addiction initiation, a major NCD risk factor.

5. Dietary behaviours

Measures: Fruit/vegetable intake, soft drinks, fast food, hunger

Rationale: Poor diet in youth predicts obesity, diabetes, cardiometabolic diseases. Also captures food insecurity via hunger questions.

6. Physical activity

Measures: Frequency, duration, sedentary behaviour

Rationale: Low activity levels are a major driver of obesity, poor mental health, future cardiovascular risk

7. Mental health

Measures: Loneliness, anxiety, suicidal ideation and attempts

Rationale: Mental health disorders often begin in adolescence and strongly influence school performance, risk behaviours, suicide risk (a leading cause of death in youth)

8. Violence and injury

Measures: Physical fights, bullying, serious injuries

Rationale: Injuries and violence are major causes of adolescent morbidity and mortality

9. Sexual behaviours

Measures: Sexual initiation, condom use, multiple partners

Rationale: Assesses risk for HIV/STIs, teenage pregnancy, sexual coercion

10. Protective factors

Measures: Parental support, peer support, school connectedness

Rationale: Protective environments buffer against risk behaviours and improve mental health outcomes.

11. Hygiene

Measures: Handwashing, oral hygiene

Rationale: Basic hygiene practices reduce Infectious diseases, school absenteeism

12. Overweight and obesity

Measures: Self-reported height/weight

Rationale: Allows surveillance of adolescent overweight, a key predictor of adult obesity and NCDs.

While questions in the core modules cannot be altered by countries to ensure comparability between countries and over time, optional country-specific modules/questions can be added, which may include variables such as sleep, screen time, electronic cigarettes, etc. This flexibility allows policy-relevant tailoring while preserving comparability.

Why is the GSHS important?

- It captures shared NCD risk factors early in life
- It enables trend analysis over time
- It supports evidence-based school health policies
- It provides data where routine surveillance is weak
- A key conceptual strength is that the GSHS is grounded in a life-course approach: behaviours established in adolescence strongly shape adult health, productivity, morbidity and mortality.

Previous reports on school-based behavioural surveys in Seychelles

Several school-based behaviour surveys have been conducted in Seychelles, including the GSHS and GYTS. A full report was produced for each survey and submitted to the Ministry of Health. In addition, several papers analysing specific behaviours assessed in these surveys have been published in peer-reviewed medical journals.

Titles and references of these reports and papers are listed in **Appendix 2**. Links to these publications are provided, and the full reports can also be obtained from the authors of this report.

For concision, and given the wide range of topics covered by the GSHS, this report presents temporal trends only for cigarette smoking. This trend is particularly relevant for current health policy (as discussed in the section on tobacco), whereas policy considerations for the other behaviours assessed in the GSHS 2025 can be based on the 2025 data presented in this report.

Methods, procedures and participants

Preparatory work

- GSHS virtual training on sampling and other issues was organized by WHO (Laura Kann) in Geneva on 13 & 14 May 2024. It was attended by 4 persons from Seychelles (UPCCD: Bharathi and Gaynor and Ministry of Education: Mr. Jean Marc Athanase and Ms. Regina Prosper).

Protocol development, endorsement by MOH and ethics review

- The protocol developed locally along the well-established general GSHS methodology and approved by Public Health Authority in August 2024.
- Ministry of Education endorsed the survey in December 2024 and appointed Mr. Jean Marc Athanase as the focal person for MOE.
- The protocol was presented to Ministry of Health ethical committee on 12 December 2024 and approval was obtained in writing on 26 December 2024.

Steering committee, coordination and partners involved

- A steering committee was appointed and included members from UPCCD team (Bharathi Viswanathan, Gaynor Mangroo, Stephanie Charlette), MOE (Jean Marc Athanase, Regina Prosper) and WHO (Laura Kann, Geneva, Doreen Hotive, Seychelles).
- UPCCD, and its programme manager, were entrusted with the overall coordination of the survey
- UPCCD worked in close collaboration with the Ministry of Education (Jean Marc Athanase, Principal Planning Officer, Research, Planning and Policy Section; Regina Prosper, Director Health, Safety and Risk Management Section), the local 'Phoenix' private company (Henry Bastienne, Director), and the head-teachers at the participating schools who facilitated the organization of the survey at school level.

Selection of participants

- The survey targeted a randomly selected sample of S1-S5 classes (students aged 11-17years) from all secondary schools, including private schools of Mahe, Praslin and La Digue and professional centres (students aged 16-17 years).
- Ministry of Education provided UPCCD with the list of all S1-S5 classes and numbers of students in each class, and 1st and 2nd year professional centre classes in Seychelles.
- After receiving the lists of all schools and classes, UPCCD sent the lists to WHO in August 2024 which was responsible for random selection of participating schools and classes (Dr. Laura Kann, Geneva).
- The final sample of schools and classes included 2595 eligible students from 15 state and private schools from Mahe, Praslin and La Digue and 6 professional centres.

Obtaining students' parents consent forms and challenges along the process

- Several meetings took place between UPCCD and MOE (Mr. Jean Marc Athanase and Ms. Regina Prosper) between September 2024 to January 2025 to prepare the survey implementation in schools.
- UPCCD prepared the consent forms (~3000) to be sent by MOE to all eligible participants and their parents (January 2025).
- Upon sending the consent forms to the 2595 eligible participants, MOE received signed consent forms for only 76 eligible participants by February 2025.
- Given this low return, several meetings were organised with MOE in February-March 2025 to increase the number of received consent forms from parents through WhatsApp and other means by MOE. However, this resulted in only ~600 additional signed parents' consent forms received.
- Given the still low return response, 2 staffs from UPCCD met with all the head teachers at the enrolled secondary schools and professional centres during the 3rd week of February 2025 to discuss ways to further increase receipt of parent's consent forms. One new strategy consisted in obtaining phone contacts of parents of all eligible students.
- After having received lists of parents' phone numbers from MOE, 2 staffs (Gaynor and Bharathi) contacted around 400 parents over the phone (~600 phone calls) to get oral consent between April-July 2025.
- In addition, a few teachers also assisted by contacting the parents to obtain consent orally or in writing.
- These efforts increased the number of parental consent (orally) to 1985 out of which 401 parents did **not** consent for their children to participate. UPCCD filled up the consent forms with the names of the parents who had agreed and the date of contact.

- A substantial number of parents that UPCCD contacted by phone reported that they had not seen a consent form because their children did not bring the form home or they had forgotten to sign and return them to the school.
- **Overall**, considerable work and time was involved to obtain consent from parents, including the need to use strategies that were not anticipated as per the protocol.
- A **lesson** learnt from the very low response rate in receiving written consent forms from the parents (when left to students bringing the form to their parents and returning the signed form to MOE), is that in the future, it would be useful to obtain, from the start, phone numbers of the parents to enable direct phone contacts to obtain oral consent from the parents or facilitate receiving a written consent whenever possible/practical.

Survey conduct

- Phoenix Company (a trustable and reliable Seychelles private company that conducts surveys and which UPCCD had already worked with in past surveys) was mandated to conduct the survey in the schools.
- Eleven survey administrators were recruited by Phoenix (in collaboration with UPCCD), including health workers (staffs from UPCCD), ex schoolteachers, and CARE volunteers.
- A half-day training was organised on 21 March 2025 by UPCCD to brainstorm the roles and responsibilities.
- **The main round of data collection took place between March 24 and May 14, 2025**, in all the 94 randomly selected S1-S5 classes on Mahé, Praslin and La Digue and in 25 professional centre classes on Mahe.
- Data collection during the first round was conducted in one day in each school.
- Out of the 2595 eligible students, 1417 participated (**54.6% participation rate**).
- Since an additional 140 participants were needed to reach the minimum 60% participation rate required by WHO, UPCCD contacted MOE to locate students who were absent on the survey day.
- A **second round** targeting absent students in 8 secondary schools took place between June 16 to July 16, and 160 students participated.
- The final participation rate was >60% (**60.8 %, 1577 participants**).

GSHS survey questionnaire, measurement of weight and height and answer sheets

- GSHS involves an anonymous self-administered questionnaire to be completed by students over one 45-minute period. Participants compile their answers (along 1 to 7 pre-defined category responses, A, B, C, D, etc) on one-page response answer sheet.
- One survey supervisor (but no class teacher) was present in the class during the one-period class to supervise the survey conduct and could answer questions from the students about the survey process. They collected the answer sheets at the end of the 45-minute period.
- The GSHS questionnaire included a common set of obligatory core questions (used in all countries) as well as a few additional country-specific questions that were added by the survey organiser (UPCCD).
- Questions focused on risk behaviours such as tobacco, alcohol, drug, diet, physical activity, sexual behaviours, mental health and protective factors (the final questionnaire was finalized by February 2025).
- All eligible participants in secondary schools had their **height and weight measured** by school nurses 1-2 weeks prior to the survey and measurements were given by writing to the students. Height and weight for the professional centres were measured on the same day of the survey.
- Students had to report their measured weight and height into the anonymous questionnaire on the day the questionnaire was administered in schools.

Processing data

- All answer sheets were sent in August 2025 to WHO HQ for automated data entry.
- A data set was sent back to UPCCD by WHO in November 2025, together with weighted summary estimates generated by WHO.

Data analysis

- Most of the results shown in this report were computed locally (Dr P. Bovet) in January-February 2026 using Stata 18.0. Results were turned into figures for easy interpretation.
- Data were available for 1556 participants after data for 22 students aged ≥18 or with missing data for age was not available were dropped.
- Most results in this report are shown across 6 sex and age specific categories (i.e. boys aged 11-12, 13-15, and 16-17 and girls aged 11-12, 13-15, and 16-17), for all boys aged 11-17, for all girls aged 11-17, and for

all students aged 11-17.

- Prevalence estimates for all girls and for all boys are simple averages of the sex-and-age-specific estimates, respectively, in boys and girls in the 11-12, 13-15 and 16-17 age categories. Estimates in all students aged 11-17 are simple average of estimates in boys and girls aged 11-17.
- Pairwise correlation analyses were done for most of the variables using Stata 18.0 to identify associations (which are observational in nature and do not imply causality in the GSHS cross-sectional study design).
- Missing data for responses to any questions generally ranged between 20 and 80.
- In this report, 95% confidence intervals (or error margins) around prevalence point estimates are not reported to avoid overburdening figures.
- In general, **margin errors** range around 5-8% for sex and age stratified results, around 3-5% for all boys or all girls aged 11-17 and around 2-4% for estimates for all students aged 11-18.
- For example, estimates of 15% in boys aged 13-15 and 23% in girls aged 13-15 are not 'statistically' different since $15\% + 5\%$ (error margin) = 20% is not larger than $23\% - 5\%$ (error margin) = 18%.

Budget and support

- The main budget for the GSHS was supported by the **Public Health Authority** (MOH) and amounted to a total of **SCR 377'000** (~US\$26'000 in exchange rates in September 2025)
- SCR 98'000 were used for printing 4000 questionnaires and 4000 consent forms) and SCR 279'000 for allowances to the personnel involved in data collection, training to survey administrators, transport costs on Mahe, Praslin and La Digue, and local consultancy for data analysis and report writing.
- MOE provided stationaries (~4000 #2 pencils with erasers, 200 sharpeners).
- WHO funded (on its own budget) distance training, sampling of the enrolled classes and students, generating an individual-level electronic data file (xls) of answers, and providing automatically generated estimates summaries.
- UNESCO provided ~US\$10,000 for report printing and dissemination.

Table. Schools, classes, enrolled classes, enrolled participants, actual participants and participation rates

School ID	School	Classes	Students	Classes enrolled	Students enrolled	Participants	Participation (%)
1	Anse Boileau secondary	27	679	8	183	109	59.6
2	Anse Royale secondary	31	898	10	305	160	52.5
3	Belonie secondary	19	454	6	144	81	56.3
4	Beauvallon secondary	26	590	8	158	99	62.7
5	English River secondary	23	526	8	196	130	66.3
6	La Digue secondary	10	198	3	58	45	77.6
7	Mont Fleuri secondary	24	628	7	173	92	53.2
8	Perseverance secondary	24	622	7	175	101	57.7
9	PointeLarue secondary	29	794	9	247	175	70.9
10	Plaisance secondary	24	662	8	193	135	69.9
11	Grand Anse Praslin secondary	23	665	7	175	104	59.4
12	International School	15	361	5	129	43	33.3
13	Vijay International School Praslin	5	82	2	40	8	20.0
14	Ecole Francaise	5	105	2	34	26	76.5
15	Independent School (secondary)	15	395	4	105	45	42.9
16	Nat. Institute of Health & Social Studies	10	87	3	19	18	94.7
17	Seychelles Business Studies Academy	7	133	2	46	40	87.0
18	Seychelles Institute of Technology	29	291	9	60	55	91.7
19	Seychelles Tourism Academy	14	268	4	56	45	80.4
20	Seychelles Maritime Academy	7	104	2	21	18	85.7
21	School of Advanced Level Studies	15	114	5	78	48	61.5
Total		382	8656	119	2595	1577	60.8

The table shows that from all 21 eligible schools in Seychelles with 382 classes and 8656 students aged 12-18 years (949 in private schools), **119 classes with 2595 students were enrolled** for GSHS. Ultimately, **1577 students participated** in the survey (308 from private schools), an overall participation rate of 60.8%. Participation was much lower in private schools except for Ecole Francaise.

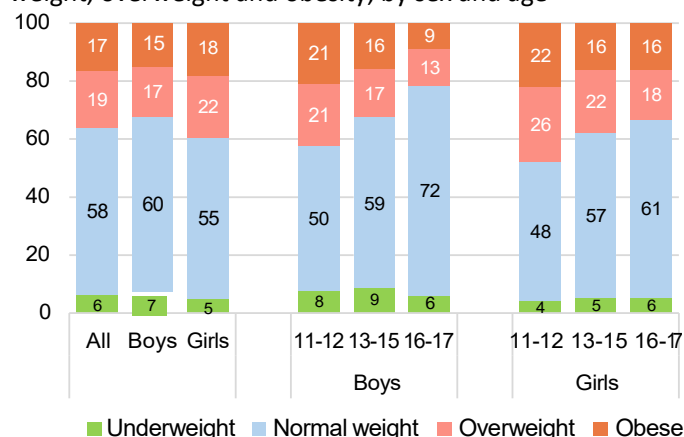
Main findings

1. Weight status

1.1 Weight status: underweight, overweight and obesity

Weight and height were measured by school nurses before the survey and values given to students. Students reported these values on the answer forms. Underweight was defined as <2SD for median for BMI by age and sex while overweight and obesity were defined respectively as >1SD and >2SD for median for BMI by age and sex and obesity.

Fig 1.1.1 Percentage of students with underweight, normal weight, overweight and obesity, by sex and age



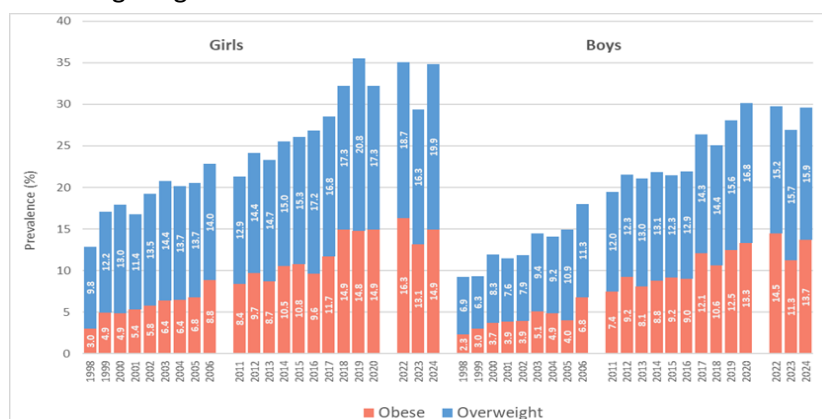
Box 1.1

- The prevalence of **stunting** (short height for age and sex) was ~4% of students.
- ~11% of students aged 11-17 reported that they **went hungry** 'most of the time' or 'always' because there was not enough food in their home during the past 30 days.

Comments

- The prevalence of underweight was low (<7%) and consistent with low prevalence of stunting and relatively low prevalence of students reporting to go hungry.
- In contrast, the prevalence of overweight or obesity combined reached ~36% with larger prevalence in girls than boys.
- The apparently decreasing prevalence of overweight/obesity between age 11-12 and age 16-17 may be partly related to the WHO criteria to assess overweight and obesity, which tends to underestimate adiposity in late adolescence.
- For comparison, Figure 1.1.2 below shows the prevalence of overweight and obesity between 1998 and 2024 in the ongoing school-based surveillance programme with yearly examination of ~3000-4000 students of P4, S1 and S4 and using the International Obesity Task Force criteria.

Fig 1.1.2 Prevalence of overweight and obesity in boys and girls (P4, S1 and S4) between 1998 and 2024, in the Seychelles School Screening Programme¹



Comments

- The prevalence of overweight or obesity combined increased to 34.8% in girls and 29.6% in boys in 2024.
- The prevalence of obesity increased to 19.9% in girls and 15.9% in boys in 2024.

¹ Mangroo G, Bovet P, Viswanathan B, Charlette S. School NCD screening programme: prevalence of overweight and obesity in children and adolescents aged 9 to 15 years in Seychelles from 1998 to 2024. Ministry of Health, 30.07.2024.

1.2 Perception of body weight by students

Fig 1.2.1 Body weight perception in students with normal vs overweight/obesity (percentage)

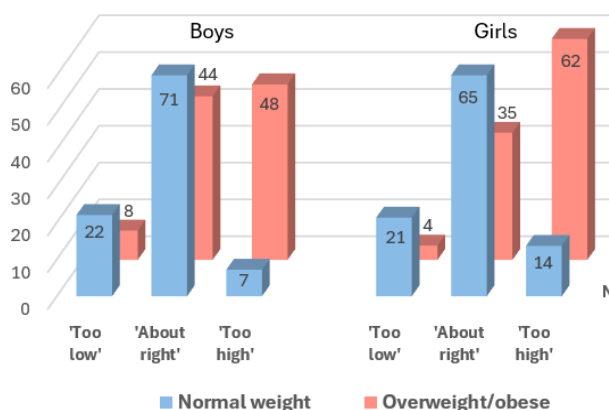
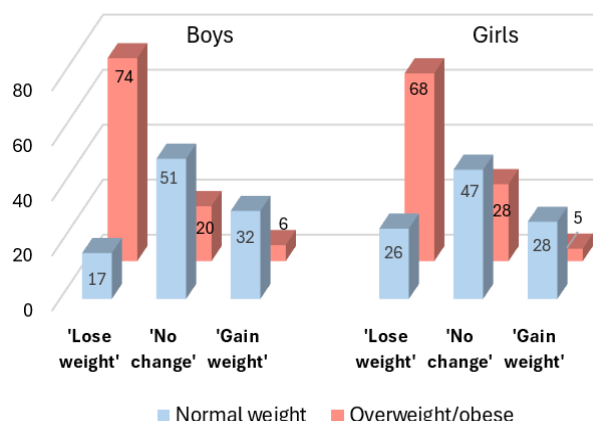


Fig 1.2.2 Intention to change body weight in students with normal vs overweight/obesity



Comments.

- When considering successful behaviour change for prevention and control of weight at the individual level, a prerequisite is that individuals can identify when their weight is too high, and those with excess weight should try to lose weight. Both figures contrast findings in students with normal weight (blue) vs findings in students with overweight or obesity (red).
- Fig 1.2.1 shows that 48% of boys and 62% of girls with overweight or obesity perceived -correctly- that their weight was 'too high' while the others (~40-50%) perceived -incorrectly- that their weight was 'about right' or 'too low' (the latter might not be willing to act about their overweight).
- Fig 1.2.2 shows that 74% of boys and 68% of girls with overweight or obesity reported that they tried to lose weight (while the ~30% others did not even try).

1.3 Summary of main findings

- ~4% of students aged 11-17 were stunted (too short for age and sex).
- ~12% of students reported to go hungry 'most of the time' or 'always' because of lack of food at home.
- ~6% of students were underweight.
- ~36% of students aged 11-17 were overweight or obese (girls more than boys).
- ~17% were obese.
- ~55% of overweight/obese students correctly perceived that their weight as too high.
- ~70% of overweight/obese students reported to try to lose weight.
- Findings on health education programmes in schools are provided in **Section 15**.

1.4 Significance

- The low prevalence of stunting, underweight and the fairly low percentage of adolescents going hungry indicate low chronic undernutrition in early life and little evidence of cumulative deprivation/infection burden earlier in childhood. However, low levels of undernutrition and food insecurity still remain.
- In contrast, the prevalence of overweight or obesity combined is very high (~38%) and compares with countries with highest prevalence of overweight/obesity worldwide such as several small island states, several middle- and high-income countries (e.g., Mexico, Gulf states, USA). Inversely, the prevalence of overweight/obesity in Seychelles is larger than in several high-income countries (e.g. France, Italy, Switzerland, Japan, Korea).
- Self-perception by students of their weight status was quite accurate and the percentage of overweight students trying to lose weight was quite high. However, substantial percentages of overweight students did not perceive themselves as overweight and/or did not report trying to lose weight. These indicators should be considered when designing individual-based behaviour change interventions for weight prevention and control.

1.5 General recommendations

Obesity is a multifactorial condition - a disease according to the WHO International Disease Classification - which results in numerous major biological diseases, including type 2 diabetes, hypertension, high blood cholesterol, cardiovascular disease, cancer, and musculoskeletal disorders.

- Obesity tracks over time, i.e. most adolescents with overweight carry it over adulthood. Indeed, the prevalence of combined overweight and obesity in adults aged 25-64 in the 2023 Seychelles National NCD Survey was very high: 78% in males and 60% in females aged 18-74 years (49% for obesity in women and 27% in men²).
- Excess calory intake (with calories contributed largely by high calorie density foods but also by other foods) is by far the main driver of overweight/obesity and interventions must primarily target healthy nutrition. Interventions to promote physical activity (i.e. energy expenditure) are also important.
- Prevention and control of overweight therefore requires interventions in multiple sectors targeting the entire population throughout the life course.
 - Key **measures** at the school level include:
 - regular health education programmes in schools
 - provision of healthy meals in school canteens and tuck shops (e.g. ban or restriction on sugary beverages)
 - **Multisectoral interventions** to tackle the obesogenic environment include:
 - user-friendly food labelling (e.g. 'traffic light' health warnings)
 - tax on unhealthy foods (an excise tax on sugary drinks is enforced in Seychelles but could be increased and extended to other unhealthy foods)
 - a ban or strict limitation on advertising, promotion and sponsoring of unhealthy foods (e.g. sugary drinks and junk food) in the mass media and in the public space.

² Bovet P, Viswanathan B, Louange M, Gedeon J. Seychelles National Survey of Noncommunicable Diseases 2023 (Seychelles Heart Study V): Procedures and Key Findings. Ministry of Health, Seychelles. 30 April 2024. <https://www.health.gov.sc/wp-content/uploads/Report-final30apr24.pdf>

2. Nutrition

2.1 Frequency of fruit and vegetables intake

Fig 2.1.1 Frequency (%) of vegetables intake per day (during the past 7 days)

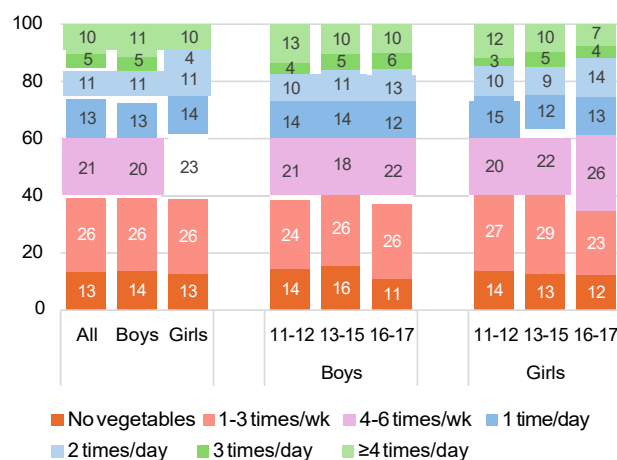
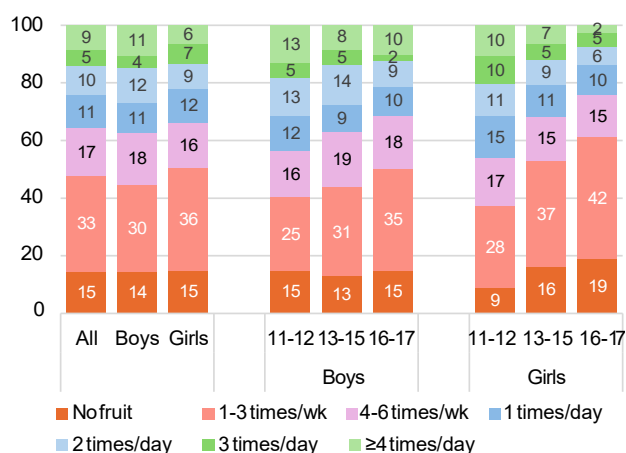


Fig 2.1.2 Frequency (%) of fruit intake per day (during the 7 past days)



Comments

- Fig 2.1.1 shows that the percentage of students eating vegetables ≥ 1 time per day was low (39% overall).
- The percentages did not differ markedly by sex and age.
- Fig 2.1.2 shows that the percentage of students eating fruit ≥ 1 time every day was low (overall 52%).
- Fruit consumption tended to decrease with age in both boys and girls.
- Challenges when using food frequency questionnaires include how fruit and vegetables are defined (several but not all fruit and vegetables were mentioned as examples in the questions and that recall on consumption in the past can be inaccurate (recall bias with under- or over estimation)).

2.2 Frequency of sugary beverages intake

Fig 2.2.1 Frequency (%) of drinking carbonated soft drinks (during the past 7 days)

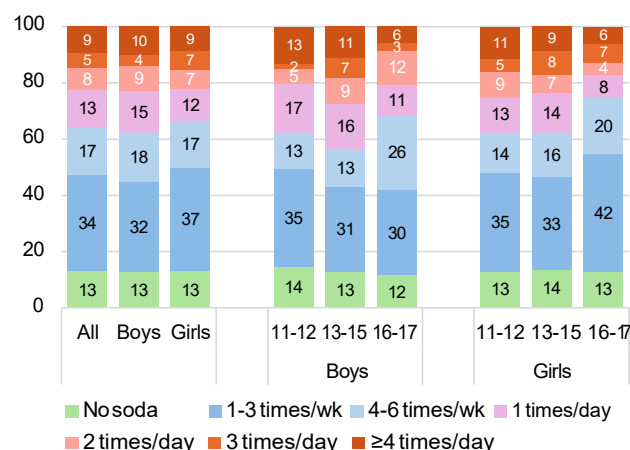
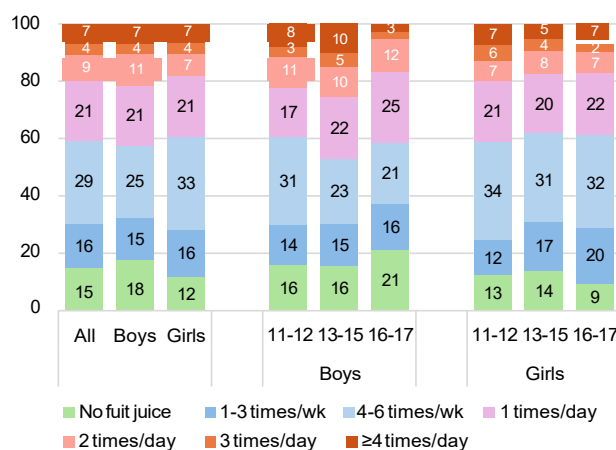


Fig 2.2.2 Frequency (%) of drinking commercial fruit juices (during the past 7 days)



Comments

- Fig 2.2.1 shows that 35% of students aged 11-17 drank as much as ≥ 1 soft drink/day.
- Fig 2.2.2 shows that 41% of students aged 11-17 drank ≥ 1 commercial fruit juice per day.
- The percentages did not differ markedly by sex or age.

2.3 Patterns related to lunch meals

Fig 2.3.1 Where students usually got their lunch from on days they are at school (%)

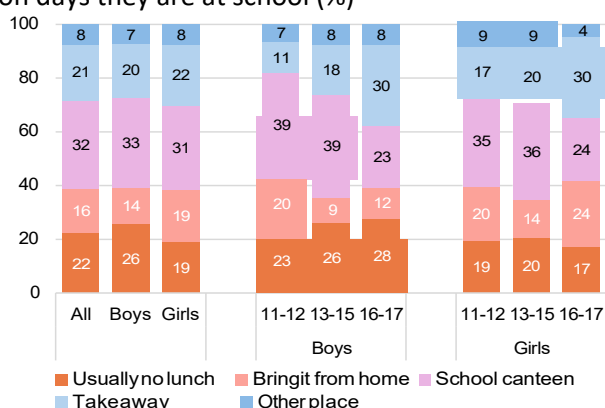
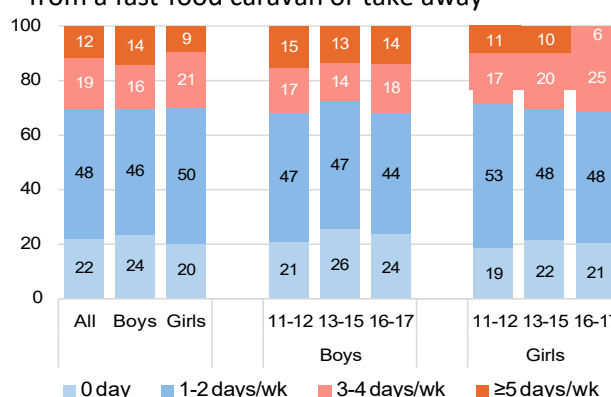


Fig 2.3.2 Frequency (%) of having a meal or snack from a fast-food caravan or take away



Comments

- Fig 2.3.1 shows that overall, and usually, as many as 22% of students aged 11-17 reported not having lunch at all (boys slightly more often than girls).
- Fig 2.3.1 also shows that 16% of students aged 11-17 brought lunch from home, 32% got it from the school canteen, 21% from a takeaway and 8% from another manner.
- Fig 2.3.2 shows that a high percentage of students aged 11-17 (overall 78%) got their meals or snacks from a fast-food caravan or take away outlet ≥ 1 time per week.
- Foods from food caravan or take away often include high fat items (samosa, 'gato piman', burgers, pizzas, etc.) with high caloric content.

2.5 Summary of main findings

- 39% of students aged 11-17 ate vegetables ≥ 1 time per day.
- 52% of students aged 11-17 ate fruit ≥ 1 time per day.
- 35% of students aged 11-17 drank ≥ 1 soft drink per day.
- 41% of students aged 11-17 drank ≥ 1 commercial fruit juice per day.
- 22% of students aged 11-17 did not eat for lunch, ~16% brought it from home, 32% got it from the school canteen, 21% got it from a takeaway and 8% from another manner.
- Findings on health education programmes in schools are provided in **Section 15**.

2.6 Significance

- Unhealthy nutrition is powerful risk factor for cardiometabolic diseases and cancer. Despite limitations in the accuracy of answers to food frequency questionnaires (recall bias, categorising food items), data strongly suggest that only a minority of adolescents eat the recommended amount of ≥ 5 fruit and vegetables portions per day.
- While a large variety of locally produced or imported fruit and vegetables is always available in the numerous small supermarkets and from street vendors throughout the country since more than a decade, cost of both locally produced and imported fruit and vegetables remains high and unaffordable for many. In addition, an increasing proportion of the population lives in apartments or small houses, which does not enable garden production of fruit and vegetables.
- Carbonated soft drinks and commercial fruit juices contain similar high sugar amounts (e.g. 30-40 grams of sugar or 8-10 teaspoons per 300 ml bottle, can, glass or packet) and sugar intake is an important driver of overweight. The percentages of students drinking ≥ 1 soft drink per day (35% overall) or ≥ 1 commercial fruit juice per day (41% overall) were high, indicating that a large proportion of students have a sugar intake from sugary drinks alone that exceeds the recommended daily sugar intake (<25 grams of added sugar per day).
- Lunch patterns indicate a variety of sources for their meals, including large percentages of students having their lunch from take-away outlets or food trucks, from which meals often have a high fat and calorie content.

2.7 Recommendations

Measures at the school level include:

- Health education in school and in the public mass media to promote vegetables and fruit intake
- Policies to promote the availability of healthy meals in schools (e.g. including ensuring that meals have sufficient content of fruits and vegetables)
- Policy to ban or limit the sales and consumption of sugary beverages within the school premises
- Availability of water fountains in all schools and other settings attended by students (e.g. sport premises)

Multisectoral interventions include:

- Voluntary or mandatory policies to prescribe user-friendly food content labelling for commercial foods (e.g. 'traffic light' system)
- Initiatives to develop regulation and standards to encourage take-away businesses to provide healthy meal options (e.g. with sufficient vegetable amounts, possibly along nutritional standards to be established)
- Tax and trade measures that promote the availability and affordability of selected fruit and vegetables
- Tax and trade measures to ensure that water bottles are largely less expensive than sugary beverages
- Ban or limitation on unhealthy food advertisement, promotion and sponsoring in public mass media and public space
- Measures in multiple sectors to boost the production of local fruits and vegetables.

3. Tobacco and electronic cigarettes

3.1 Frequency of cigarette smoking and use of electronic nicotine devices

Fig 3.1.1 Frequency of cigarette smoking during the past 30 days (the Y axis starts at 60%)

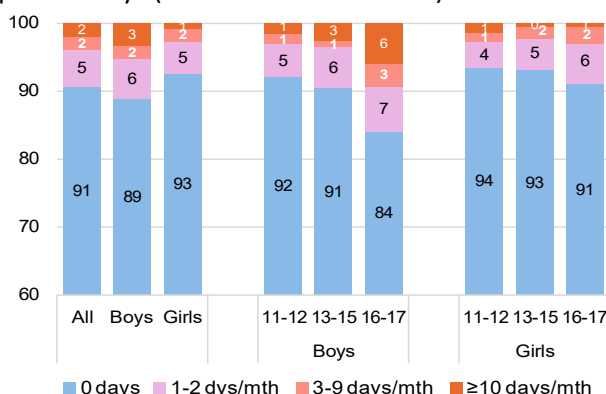
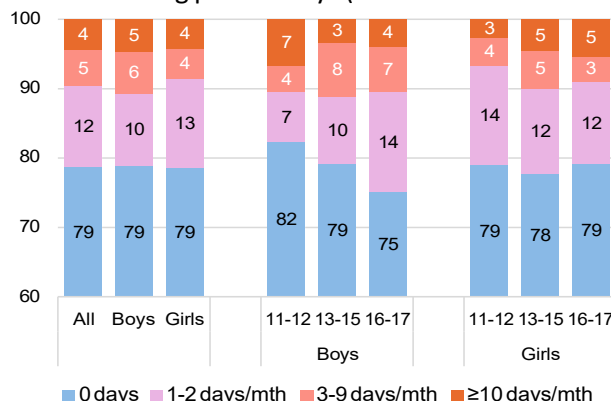


Fig 3.1.2 Frequency of using an electronic nicotine device during past 30 days (the Y axis starts at 60%)



Comments

- Fig 3.1.1 shows that 9% of students aged 11-17 smoked ≥ 1 cigarette on ≥ 1 day/month, and 4% smoked cigarettes on ≥ 3 days/month.
- Percentages were larger in boys than girls.
- Fig 3.1.2 shows that 21% of students aged 11-17 used an electronic nicotine device on ≥ 1 day/month during the past 30 days and 9% used an END on ≥ 3 days/month.
- The prevalence increased with age in boys but less so in girls.
- As discussed below, both cigarettes and electronic nicotine devices are addictive, but e-cigarettes are far less harmful for health than combustible cigarettes.

3.2 Dual use of combustible cigarettes and ENDS

Table 3.2 Combined use of combustible cigarettes and electronic nicotine devices (END)

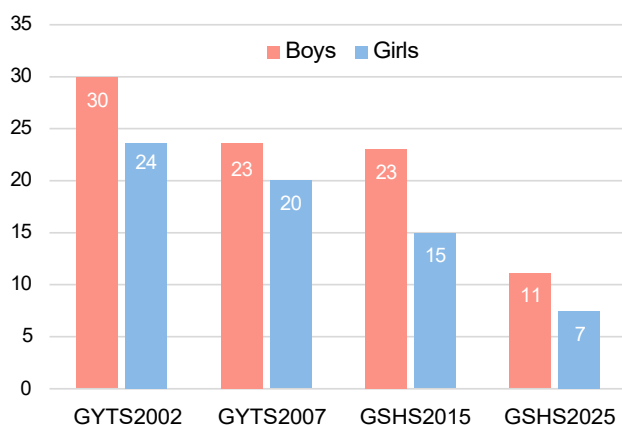
		Electronic nicotine device		
		No	Yes	Total
Cigarettes	No	1192	244	1436
	Yes	45	88	133
	Total	1237	332	1569

Comments

- 244 of 332 (74%) of END users did *not* smoke cigarettes, suggesting low dual use of both cigarette smoking and using ENDS.

3.3 Trends of cigarette smoking from 2002 to 2025

Fig 3.3 Percentage of students aged 13-17 who smoked ≥ 1 cigarette on ≥ 1 day in the past 30 days based on School-based surveys from 2002 to 2025



Comments

- GYTS: global youth tobacco survey.
- The prevalence of cigarette smoking decreased moderately from 2002 to 2015.
- The prevalence of cigarette smoking **halved** from 2015 to 2025.

3.4 Summary of main findings

- 9% of students aged 11-17 smoke cigarettes on ≥ 1 day/month, and 4% on ≥ 3 days/month.
- 21% of students aged 11-17 use an electronic nicotine device on ≥ 1 day/month and 9% on ≥ 3 days/month.
- 74% of END users do not smoke cigarettes (arguing against ENDs being a gateway to cigarette smoking).
- Based on previous student-based surveys, the prevalence of cigarette smoking at age 13-15 decreased by 2-3 times between 2015 and 2024.
- Findings on health education programmes in schools are provided in **Section 15**.

3.5 Significance

- Smoking prevalence among adolescents decreased markedly between 2015 and 2025 (after a rather small decrease between 2002 and 2015), which can likely be largely attributed to the emergent use of ENDs (ENDs were virtually not available in the market in Seychelles before 2015). It is reassuring that GSHS findings show that most END users did not smoke cigarettes (i.e. no dual use of cigarettes and ENDs), which may indicate trends toward de-normalizing cigarette smoking.
- Similar trends (downward for cigarette and upward for ENDs) have also been observed in both adolescents and in adults in other countries where END have been marketed since many years (e.g. Japan, Korea, Sweden, Canada, Australia, USA).
- When predicting the long-term public health impacts of these trends (downward for cigarette and upward for END use), it must be reminded that both products are highly addictive because of nicotine. However, END use is much less harmful than smoking cigarettes. Harm of cigarettes originate in tobacco combustion (temperatures range from 600° to 900°C) and production of carcinogenic substances in cigarette smoke (e.g. benzene). In contrast, ENDs do not involve combustion and do not emit smoke (but vapour). While cigarette smoking is the cause of 8 million deaths every year globally with a 3-times increased risk of cardiovascular disease and a 25-times increased risk of cancer, END use has not been associated with significantly increased risks of these diseases in cohort studies. A UK Health Commission considered e-cigarettes to be 95% less harmful than combustible cigarettes.^{3,4} and a 2025 report calculated that 100 million premature deaths could be prevented worldwide if smokers switch from cigarettes to nicotine alternatives over the next 35 years.⁵

3.6 Recommendations

- Health education programmes should be regularly conducted in schools and in the mass media to prevent the use of both combustible cigarettes and ENDs, inclusive harm reduction strategies.
- The 2009 Seychelles Tobacco Control Act, which is highly consistent with the requirements of the Framework Convention on Tobacco Control (which Seychelles has ratified first in Africa in 2005) addresses all main tobacco control issues: a ban on smoking in public places and transports; a total ban on tobacco advertising, promotion and sponsorship; requirements for large pictorial health warnings on tobacco packets; and a ban on sales to and by minors. A trade regulation imposes a high excise tax on tobacco products (~70% of tobacco product price).
- An amendment to the 2009 Seychelles Tobacco Control Act is being finalized to regulate the sale and use of ENDs in Seychelles. Briefly, the amendment will extend the provisions applicable to the sale and use of tobacco products to END products.

³ Royal College of Physicians (London). Nicotine without smoke: tobacco harm reduction, 28 Oct 2019. <https://www.rcp.ac.uk/improving-care/resources/nicotine-without-smoke-tobacco-harm-reduction/>

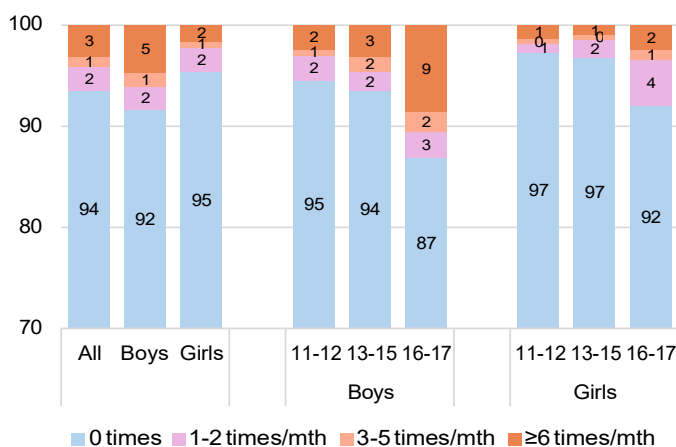
⁴ National Academies of Sciences, Engineering, and Medicine. Public Health Consequences of E-Cigarettes. Washington, DC: National Academies Press; 2018. <https://www.nap.edu/resource/24952/012318ecigaretteConclusionsbyEvidence.pdf>

⁵ 100 Million Lives by 2060 Report, October 2025. <https://tobaccoharmreduction.net/global-lives-saved/>

4. Cannabis

4.1 Frequency of cannabis use

Fig 4.1 Frequency of cannabis use in the past 30 days
(the Y axis starts at 60%)



Comments

- 6% of students aged 11-17 used cannabis (marijuana hashish, 'lapay') ≥ 1time during the past 30 days.
- 3% of students (~50% of cannabis users) used cannabis ≥6 time per month, suggesting that a substantial proportion of cannabis users use it frequently.
- The prevalence increased markedly with age and was higher in boys vs girls, particularly among frequent users.

4.2 Summary of main findings

- 6% of students aged 11-17 use cannabis (marijuana, hashish, 'lapay') ≥1 time per month.
- 50% of cannabis users use cannabis ≥6 times per month.
- The prevalence of cannabis increases sharply with age and is higher in boys than girls.

4.3 Significance

Based on GSHS and HBSC school-based surveys, a prevalence of 6% at age 11-17 can be considered as 'moderate-to-high' internationally, high in many low-and middle-income settings, around the European average, and far lower than in some older-teen measures (e.g. US high schools).

4.4 Recommendations

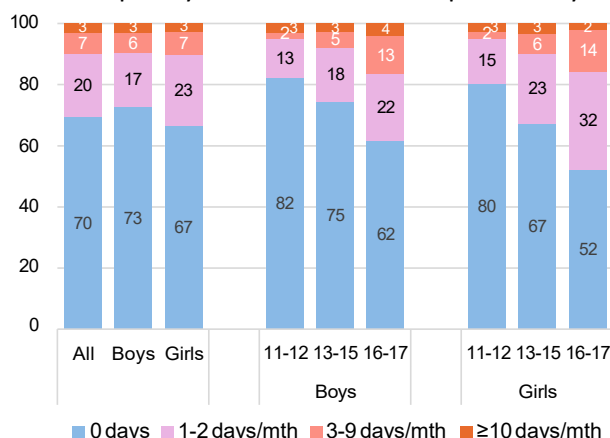
Guidance like the United Nations Office on Drugs and Crime (UNODC)/WHO International Standards on Drug Use Prevention advises a multi-layer approach (universal + targeted + environmental controls) including:

- Universal prevention (school-based life skills programmes, interactive life-skills training, integration into the curriculum over multiple sessions/years)
- Family-based programmes (parenting skills: monitoring, consistent rules, communication, bonding)
- School climate + engagement (reduce truancy, improve connectedness and supportive teacher–student relationships)
- Selective screening to identify higher-risk groups and capacity to provide brief motivational interventions and non-stigmatizing mental health support

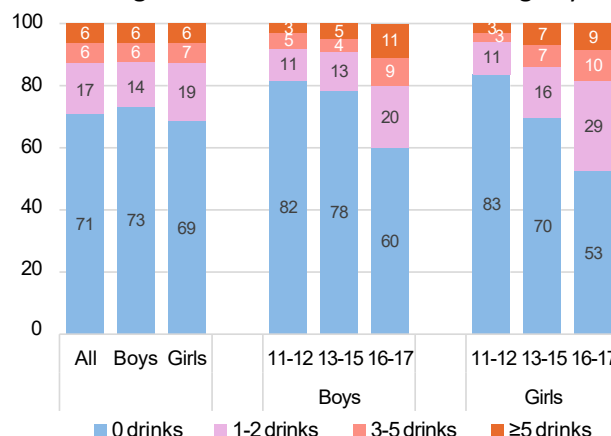
5. Alcohol

5.1 Frequency of alcohol use

5.1.1 Frequency of alcohol use in the past 30 days



5.1.2 Largest number of drinks on drinking days



Comments.

- Fig 5.1.1 shows that 30% of adolescents aged 11-17 drank alcohol on ≥ 1 day/month.
- Prevalence increased with age and was slightly larger in girls than boys (boys 38%, girls 48% at age 16-17).
- Fig 5.1.2 shows that 12% of adolescents aged 11-17 had a maximum of ≥ 3 drinks on drinking days.
- Maximum number of drinks increased with age (20% had ≥ 3 drinks on drinking days at age 16-17).

5.2 Where students got the alcohol they drank

Main usual source of alcohol (1 response possible)	%
I got it from my family	32
I bought it in a store, shop, or from a street vendor	25
I got it from my friends	17
I gave someone else money to buy it for me	8
I stole it or got it without permission	6
I got it some other way	12

Comments

- The 2 main sources for getting alcohol, among students who drank alcohol during the past 30 days, were students' family (32%) and buying it in a shop (25%).

5.3 Drinking problems

Fig 5.3.1 Lifetime frequency of getting into trouble, at home, work or school or getting into fights as a result of drinking alcohol

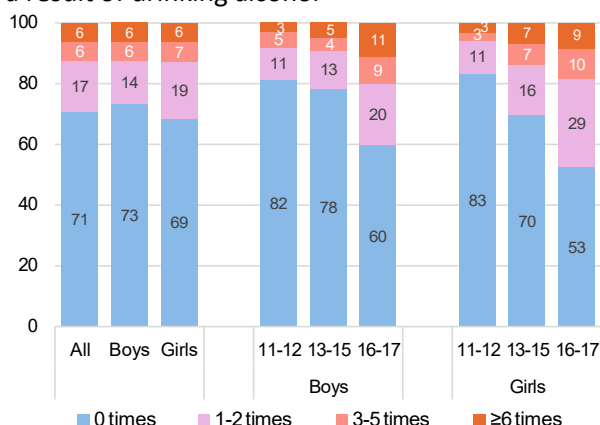
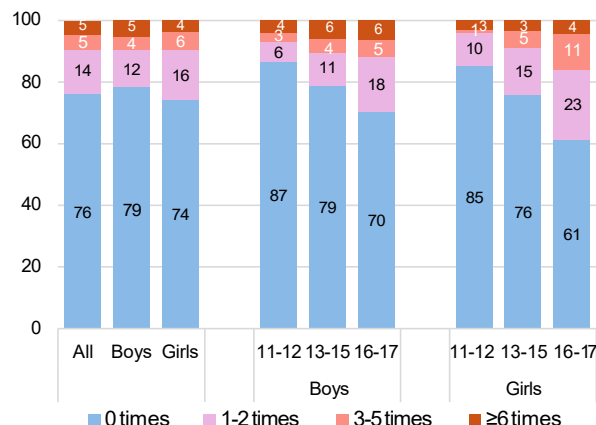


Fig 5.3.2 Lifetime frequency of drinking so much that you were really drunk



Comments

- Fig 5.3.1 shows that 29% of students aged 11-17 ever got into trouble at home, work or school, or got into fights as a result of drinking alcohol.

- The prevalence of getting into trouble because of alcohol was slightly larger in girls vs boys and increased sharply with age: 40% of boys and 47% of girls aged 16-17.
- Fig 5.3.2 shows that 24% of adolescents aged 11-17 reported to have ever been really drunk.
- The prevalence increased with age and was larger in girls vs boys (boys 27% vs girls 38% aged 16-17).

5.4 Summary of the main findings

- 30% of adolescents aged 11-17 drank alcohol on ≥ 1 day/month.
- Prevalence increased sharply with age and is larger in girls than boys.
- 12% of adolescents aged 11-17 had ≥ 3 drinks on drinking days.
- 29% of students aged 11-17 ever got into trouble or fights because of drinking alcohol.
- Prevalence of getting into trouble increased with age (40% of boys and 47% of girls aged 16-17).
- 24% of adolescents aged 11-17 reported to have ever been really drunk.
- Prevalence of drunkenness increased with age and was larger in girls (27% in boys and 38% in girls aged 16-17).
- Findings on health education at school on alcohol are presented in **Section 15**.

5.5 Significance

- Prevalence of 29% of adolescents aged 11-17 who drank during the past 30 days compares with figures in some higher-risk high income countries (e.g. HBSC surveys).
- The finding that approximately one quarter (24%) of adolescents aged 11–17 reported ‘having ever been really drunk’ is at the upper end of international benchmarks (e.g. HBSC surveys).
- Among older adolescents (16–17 years), prevalence of 27% in boys and 38% in girls place girls among the higher-risk groups observed internationally and indicates a narrowing or reversal of the traditional gender gap.
- International evidence consistently links early drunkenness with higher risk of heavy drinking later, injuries, violence, risky sexual behaviour, and poorer mental health and school outcomes.
- Because ‘ever been really drunk’ captures harmful drinking patterns, not just experimentation, policymakers usually treat drunkenness prevalence above ~20% in mid-adolescence as a red flag indicator.

5.6 Recommendations

In line with WHO ‘best buys’ and recommended interventions for alcohol harm reduction, measures to reduce alcohol consumption and harmful alcohol use among adolescents include:

- Sustained health education programmes in school
- Programmes for early identification and brief interventions for adolescents who report alcohol use or drunkenness, delivered through school health services and primary care
- Evidence-based prevention programmes that strengthen life skills and family protective factors
- Strict enforcement of minimum age-of-sale laws
- Comprehensive restrictions on alcohol marketing and promotion to young people (including a ban or limitation on advertisement of alcohol products in public places and in the mass media, and a ban or limitation of sponsoring by alcohol companies)
- Policies that reduce alcohol availability (e.g. shops allowed for sales of alcohol and opening hours) and affordability (e.g. high excise tax on alcohol products)
- Continuous surveillance is essential to monitor trends, address gender-specific risks, and evaluate policy impact

6. Physical activity

6.1 Frequency of physical activity

Fig 6.1.1 Days per week with physical activity for ≥ 60 min/day during the past 7 days

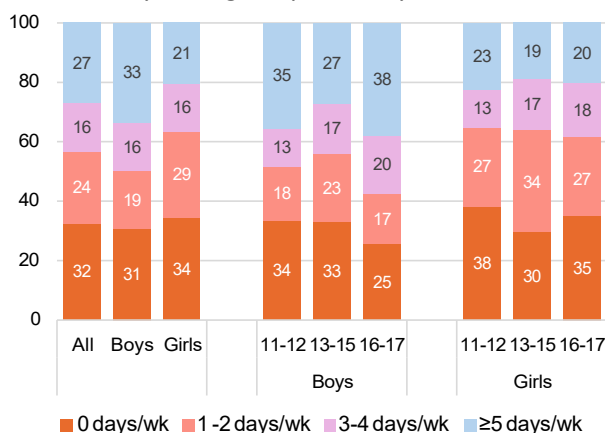
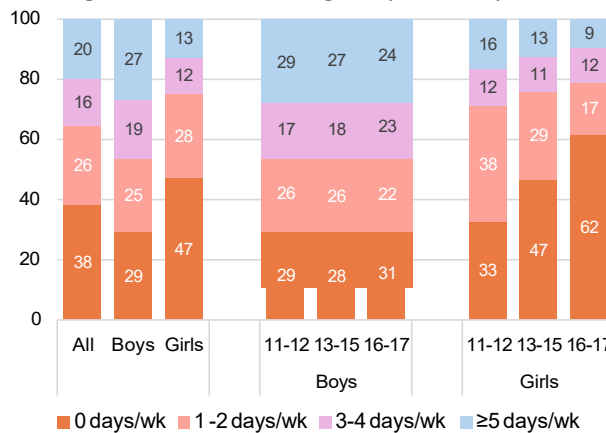


Fig 6.1.2 Days per week doing exercise to strengthen muscles during the past 7 days

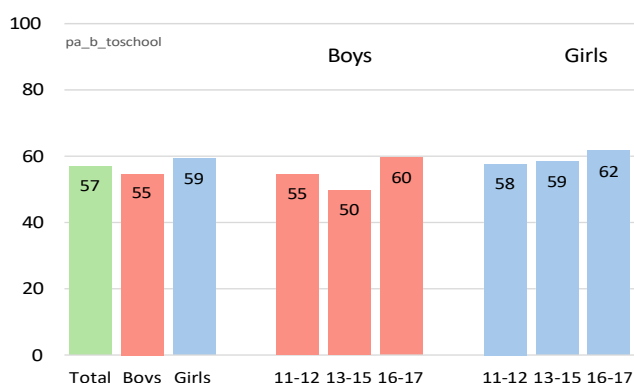


Comments

- Fig 6.1.1 shows that 27% of students had physical activity for ≥ 60 min/day on ≥ 5 days/week (and 15% on 7 days/week). Prevalence was higher in boys than girls (33% vs 21%) with no marked differences by age.
- Fig 6.1.2 shows that 36% of students exercised to strengthen muscles (push ups, sit-ups or weight-lifting) on ≥ 3 days/week during the past 30 days. Prevalence was larger in boys than girls (46% vs 25%).

6.2 Other patterns related to physical activity

Fig 6.2.1 Percentage of students who did not walk to or from school (during the past 7 days)



Comments

- 57% of students aged 11-17 did not walk or ride a bicycle to go to school.
- There was no marked difference by sex and age.

Fig 6.2.2 Percentage of students who did not go to physical education class (each week this school year)

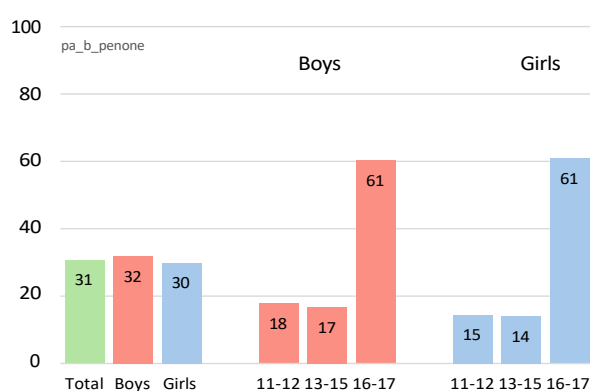
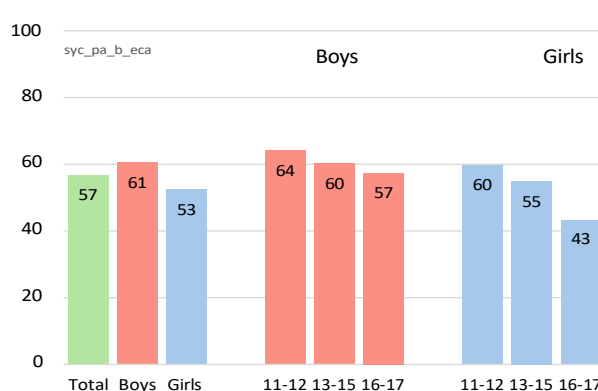


Fig 6.2.3 Percentage of students who took part in extracurricular activities related to physical activity



Comments

- Fig 6.2.2 shows that nearly 20% of students aged 11-15, but 60% at age 16-17, did not go to physical education classes during the past year, with no marked difference by sex.
- Fig 6.2.3 shows that 57% of students aged 11-17 took part in any extracurricular physical activity (basketball, football, swimming, dancing, etc) during the past 12 months.
- The proportion having extracurricular physical activity was lower at age 16-17 (43% in girls aged 16-17).

6.3 Summary of main findings

- 27% of students aged 11-17 have physical activity for ≥ 60 min per day on ≥ 5 days/week, and 15% on ≥ 7 days/week.
- Prevalence was higher in boys than girls (33% vs 21%) with no marked differences by age.
- 36% of students aged 11-17 exercised to strengthen muscles on ≥ 3 days per week during the past 30 days.
- Prevalence was larger in boys than girls (46% vs 25%).
- 57% of students aged 11-17 did not walk to go to school.
- Nearly 20% of students aged 11-15, but around 60% at age 16-17, did not attend physical education classes, with no marked difference by sex.
- 57% of students aged 11-17 took part in any extracurricular physical activity, but less at age 16-17.
- Findings about school health education programmes on physical activity are reported in **Section 15**.

6.4 Significance

- WHO recommends that children and adolescents aged 5–17 years get ≥ 60 min of moderate-to-vigorous physical activity every day for optimal health.
- The 15% proportion of students aged 11-17 meeting ≥ 60 min/day on ≥ 7 days in Seychelles is below the global average (~19–20%), but many countries have even lower daily activity levels among older adolescents.
- In practical terms, this means that most adolescents do not achieve the recommended daily activity, and your result is in line with that widespread pattern.

6.5 Recommendations (WHO Global Action Plan on Physical Activity, WHO NCD ‘best buys’)

1) Education sector policies aimed at making physical activity a routine part of school days and school culture

- Mandated, protected curriculum time for quality physical education (time + standards + assessment)
- Whole-of-school physical activity policy (not just PE): activity breaks, recess access, after-school sport
- Facilities and safe spaces: gyms, open play areas, equipment, joint-use agreements with communities

2) Transport & urban / built environment policies with goal of making default trips to school (and around neighbourhoods) active and safe (active commuting)

- Safe routes to school: sidewalks, protected cycle lanes, crossings, traffic calming, street lighting
- Public transport integration (active first/last mile)

3) Health system policies

- Physical activity counselling in primary care and exercise referral / social prescribing

4) Sport, recreation & youth development policies aimed at making PA activity appealing outside lesson time

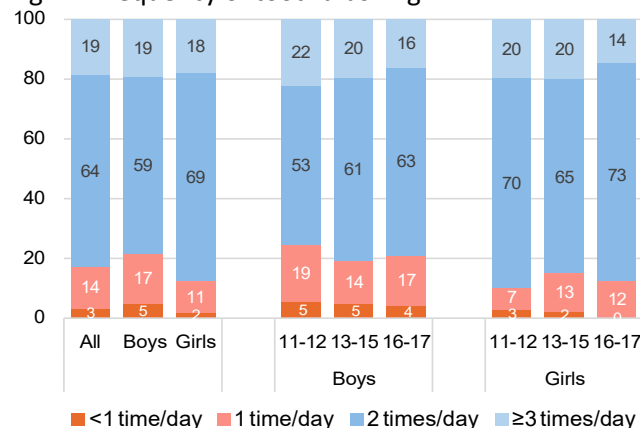
- Diversity of offers beyond competitive team sports (dance, martial arts, outdoor, “social sport” formats)

6) Information, marketing & digital environment policies, to shift norms and reduce barriers, especially for teens, including healthy digital approaches (e.g. active challenges, but avoiding ‘shame’ messaging)

7. Hygiene: tooth brushing

7.1. Frequency of tooth brushing

Fig 7.1 Frequency of toothbrushing



Comments

- 83% of adolescent brushed their teeth ≥ 2 times/day and 19% ≥ 3 times/day.
- Prevalence did not differ markedly by age and sex.

7.2 Summary of main findings

- 83% of adolescent brushed their teeth ≥ 2 times/day and 19% ≥ 3 times/day.
- Prevalence did not differ markedly by age and sex.

7.3 Significance

- The percentage of 83% tooth brushing ≥ 2 times/day among adolescents aged 11-17 is high internationally, e.g. $\sim 71\%$ of students brushed their teeth ≥ 2 times/day overall in analysis of GSHS in 72 countries and lower percentages are found in other surveys including in high-income countries (HBSC).
- High tooth brushing prevalence in Seychelles is consistent with long-time implementation of several components of oral health policy in Seychelles, including school-based screening and oral health education, free health care for oral health, and broad availability of fluoride containing toothpastes.

7.4 Recommendations

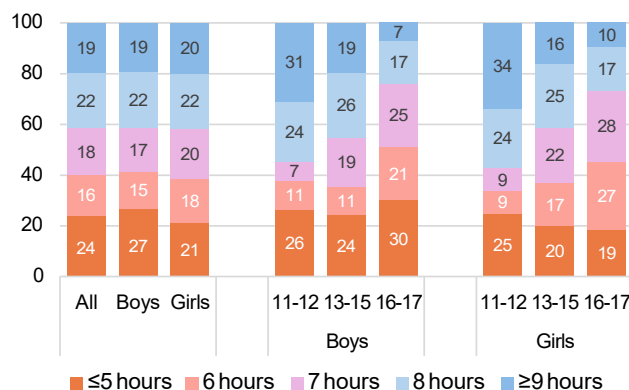
Main policies and programmes to promote tooth brushing and oral health, especially among children and adolescents, range from population 'best buy-style' measures to school-level delivery programmes:

- Fluoride policy (the backbone) aimed at making toothbrushing effective by default (toothpastes available in Seychelles are fluorinated and include fluoride concentration labelling)
- National oral health strategies aimed at institutionalizing brushing promotion across sectors, including twice daily tooth brushing recommendation and surveillance via school health programmes
- School-based programmes (most important delivery platform), including curriculum-embedded lessons on oral health, skills-based learning (how much toothpaste, how long to brush)
- Health-system-based programmes, including free dental check-ups and treatment
- Social policy approaches, including national campaigns promoting "brush twice a day"

8. Sleep

8.1 Duration of sleep

Fig 8.1 Distribution of average sleep duration



Comments

- ~55% of students aged 11-12, ~45% aged 13-15 and ~25% aged 16-17 slept ≥8 hours.
- The distribution of sleep duration categories was similar in boys and girls.

8.2 Significance

- Experts recommend 9–11 hours of sleep for 11–12 year-old teenagers and 8–10 hours of sleep per night for 13–17 years teenagers.
- Because anxiety, depression, and sleep problems reinforce each other, there is a need to integrate sleep into youth mental-health programmes and treat sleep as both a risk factor and outcome.
- Data in Seychelles follow a pattern that is consistent with international evidence (e.g. HBSC-type data) with sleep duration declining markedly with age, and by late adolescence only around one quarter meet the recommended ≥8 hours of sleep.

8.3 Recommendations

International evidence shows that the most effective strategies to promote adequate sleep among adolescents combine structural policies, particularly later school start times (many experts argue for start of secondary school classes at 8.30 or even at 8:45–9:00), with school-based sleep education, workload management and supportive digital-use and health-system interventions.

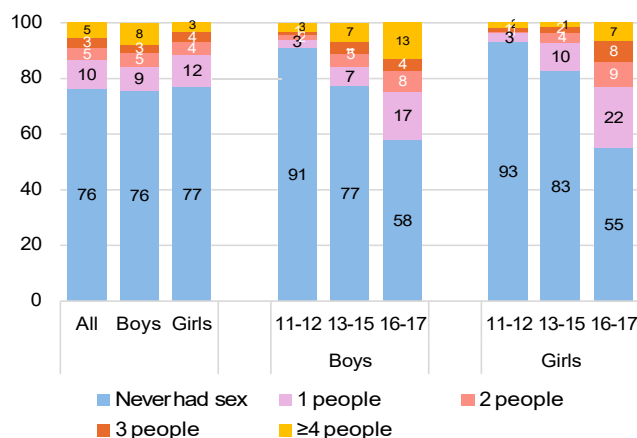
Given the high screen time found in adolescents in Seychelles (**Section 13**) and evidence that screens reduce sleep by delaying bedtime, **concrete family- and school-based measures** include:

- Promoting screen-free periods before bedtime (e.g. last 60 minutes)
- Setting limits on night-time push notifications
- School-level policies on late-evening messaging, assignments, or group chats
- Digital wellbeing modules in schools
- Parent–school agreements on night-time device use

9. Sexual behaviours related to prevention of HIV and STIs

9.1 Frequency of sexual intercourse and number of partners

Fig 9.1 Number of sexual partners



Comments

- 9%/7% boys/girls aged 11-12, 23%/27% aged 13-15, and 42%/45% aged 16-17 ever had sexual intercourse.
- 17% of boys and 15% of girls aged 16-17 had sexual intercourse with ≥3 people during their lifetime.

9.2 Contraception and protection against HIV and STIs

Table 9.2.1 Percentage of students, or their partner, who used a condom the last time they had sexual intercourse

Condom use	n	%
Yes	131	42
No	184	58
All	315	100

Comments

- 58% of students aged 11-17, or their partner, did not use a condom the last time they had sexual intercourse.

Table 9.2.2 Percent of students, or their partner, using different methods of contraception the last time they had sexual intercourse

Method of contraception	n	%
No method was used to prevent pregnancy	112	35
Condoms	97	30
Birth control pills	35	11
Withdrawal or some other method	32	10
An IUD or implant	5	2
A shot, patch, or birth control ring	5	2
I do not know	36	11
All	322	100

Comments

- 35% of students aged 11-17, did not use any method of contraception the last time they had sexual intercourse.
- 30% used a condom, 11% used a birth control pill, 10% practiced withdrawal, 4% used another method, and 11% did not know.

9.4 Frequency of having been touched or forced to have sexual intercourse by a family member

Table 9.4.1 Frequency (%) of having been touched or forced to have sexual intercourse by a family member

	Boys	Girls
Ever touched by a family member in a way that made them feel uncomfortable	9	10
Ever forced to have sexual intercourse by a family member	4	5

Comments

- 9% of boys and 10% of girls reported to have ever been touched by a family member in a way that made them feel uncomfortable.
- 4% of boys and 5% of girls reported to have been forced to have sexual intercourse by a family member.

9.5 Summary of main findings

- 9%/7% boys/girls aged 11-12, 23%/27% aged 13-15, and 42%/45% aged 16-17 ever had sexual intercourse.
- 17% of boys and 15% of girls aged 16-17 had sexual intercourse with ≥3 people during their lifetime.
- 30% of students aged 11-17, or their partner, used a condom the last time they had sexual intercourse.

- 35% of students aged 11-17 did not use any method of contraception the last time they had sexual intercourse.
- 4% of boys and 5% of girls reported to have been forced to have sexual intercourse by a family member.
- Findings on health education programmes at school are presented in **Section 15**.

9.6 Significance

- The low prevalence of **sexual intercourse** at age 11–12 is expected and broadly consistent with international evidence that early sexual debut is uncommon. The 13–15 prevalence is higher than global averages in low and middle income countries but matches well with higher-income country patterns. The 16–17 prevalence is comparable to the U.S. and many European countries by about age 17.
- The '**no method**' at last intercourse (35%) is relatively high compared with many adolescent sexual health surveys — especially multi-country HBSC data showing ~18% — but not out of line with more recent European/Canada trends of ~30% unprotected sex.
- **Condom use** (30%) is somewhat lower than commonly reported in U.S. and some multi-country data, where condoms are the most used contraceptive. Recent WHO reports highlight a decline in condom use among adolescents in some regions — raising public health concerns.
- **Birth control pill use** (11%) and **withdrawal** (10%) are well within international ranges among adolescents.
- The '**don't know**' percentage suggests that a notable portion of sexually active adolescents are uncertain about contraception — which is also observed in some international datasets.
- **In summary**, data in Seychelles suggest that sexual activity follows a typical international age gradient (not unusually early overall), risk protection is weak, especially low condom use (30%), high non-use of any method (35%), high uncertainty (11% "don't know"). The methods mix suggests limited dual protection (pregnancy + STIs) suggesting a service access + skills + norms problem, not just a knowledge problem. These findings are consistent with the well-known high rates of teenage pregnancy and STIs in Seychelles.
- The prevalence of **forced sexual intercourse by a family member** (4–5%) is consistent with estimates from international studies of intra-familial sexual abuse, though it lies at the higher end of reported ranges, particularly for boys. These findings underscore the need for strengthened child protection, early identification, and trauma-informed support services.

9.7 Recommendations

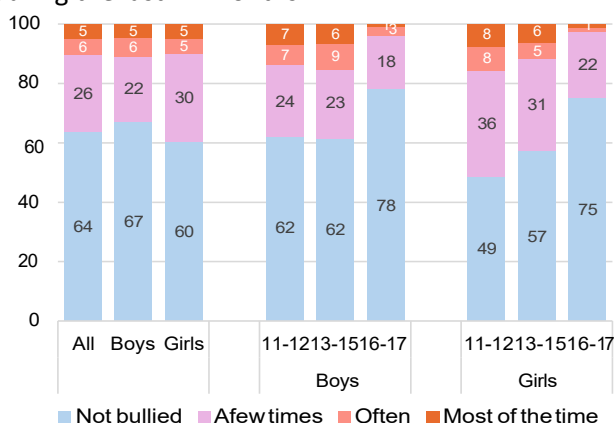
The high proportion of adolescents reporting no contraceptive use at last sexual intercourse and relatively low condom use point to the needs to:

- Strengthen **comprehensive sexuality education**, including teaching correct condom use (not just 'use a condom')
- Ensure **confidential youth-friendly sexual and reproductive health services**, and
- Expand **free access to condoms and modern contraception**, including remove or clarify parental consent barriers where they exist.
- Interventions should begin before sexual debut (starting before sexual debut at ages 11–12), emphasize correct and consistent use of protection, and address communication and shared decision-making skills in relation to contraceptive use, in line with WHO and United Nations International Children's Emergency Fund(UNICEF) recommendations.
- With regards to forced sexual intercourse, international guidance from World Health Organization and UNICEF treats any prevalence above 1–2% as warranting: mandatory reporting systems; school-based safeguarding education; accessible, confidential support services; and trauma-informed healthcare

10. Bullying and violence on school property or elsewhere

10.1 Frequency of being bullied on school property

Fig 10.1 Frequency of being bullied on school property during the last 12 months

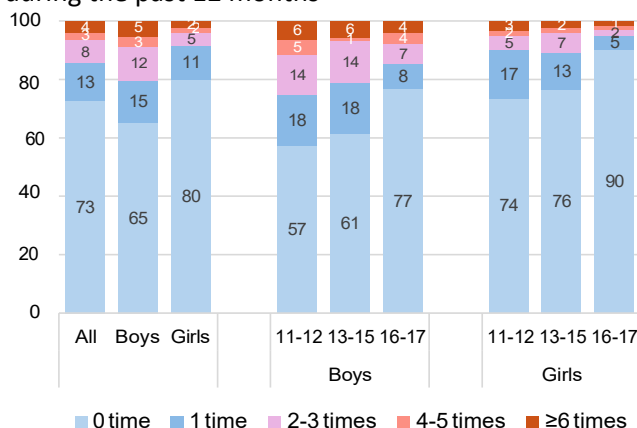


Comments

- 11% of students aged 11-17 were bullied 'often' or 'most of the time' during the last 12 months.
- Prevalence was similar in boys and girls and was lower at age 16-17.

10.2 Frequency of being involved in a physical fight during the past 12 months

Fig 10.2 Frequency of being involved in a physical fight during the past 12 months

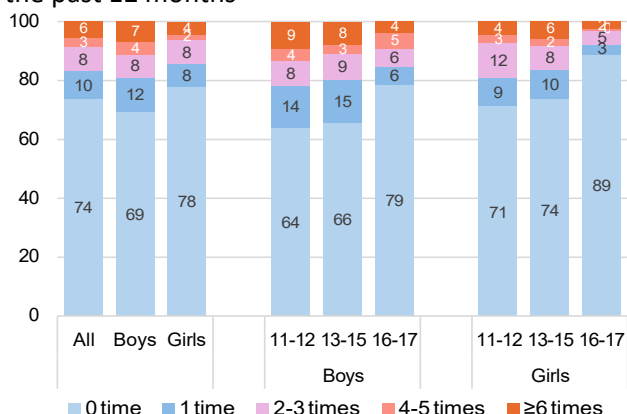


Comments

- 15% of students aged 11-17 were involved in a physical fight ≥ 2 times during the past 12 months.
- Prevalence was lower in girls than boys and decreased with age.

10.3 Frequency of being physically attacked

Fig 10.3 Frequency of being physically attacked during the past 12 months

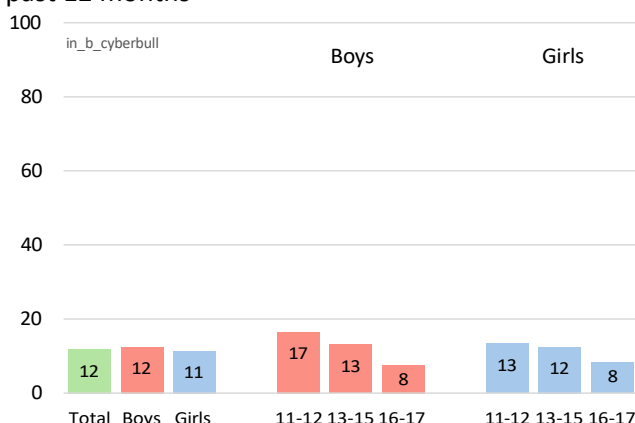


Comments

- 17% of students aged 11-17 were physically attacked ≥ 2 times during the past 12 months.
- Prevalence was lower in girls than boys and decreased with age.

10.4 Frequency of being cyber bullied

Fig 10.4 Frequency of being cyberbullied during the past 12 months



Comments

- 12% of students aged 11-17 were cyberbullied (yes/no) in the past 12 months.
- Prevalence decreased with age.

10.5 Summary of main findings

- 11% of students aged 11-17 were bullied 'often' or 'most of the time' during the last 12 months
- Prevalence is similar in boys and girls and is lower at age 16-17.
- 12% of students aged 11-17 were cyberbullied (yes/no) in the past 12 months.
- Prevalence decreases with age.
- 15% of students aged 11-17 were involved in a physical fight ≥ 2 times during the past 12 months.
- Prevalence is lower in girls than boys and decreased with age.
- 17% of students aged 11-17 were physically attacked ≥ 2 times during the past 12 months
- Prevalence is lower in girls than boys and decreases with age.

10.6 Significance

- **Bullying** victimization (frequent bullying): the finding of 11% of students aged 11–17 who were bullied "often" or "most of the time" in the past 12 months sits close to the mid-point of what is reported in many countries. (HBSC, GSHS). It does not suggest unusually high bullying, but it does indicate a substantial minority experiencing persistent victimization.
- The 12% **cyberbullying** victimization sits in the middle of the 10–15% range commonly reported in adolescents across Europe and Canada (HBSC).
- The 15% involved with ≥ 2 **fight**s lie within the 10-20% range in adolescents elsewhere (HBSC, GSHS). It reflects a moderate level of recurrent violence exposure/participation, comparable to many countries.
- The 17% proportion of students **physically attacked** ≥ 2 times in the past 12 months is in the upper range of the 12-20% range in other countries, suggesting exposure to violence for a sizeable group of students.
- Repetition matters: violence indicators based on repeated exposure (≥ 2 times, 'often') are more closely linked to mental health problems, school disengagement and risk behaviours. From a policy perspective, this is more important than one-time incidents.
- **In summary**, the prevalence of bullying, cyberbullying, and physical violence among students aged 11–17 is broadly consistent with international findings from WHO-supported surveys. While levels are not unusually high, a substantial minority experience frequent or repeated victimization, underscoring the need for sustained school- and community-based violence prevention and mental-health support.

10.7 Recommendations

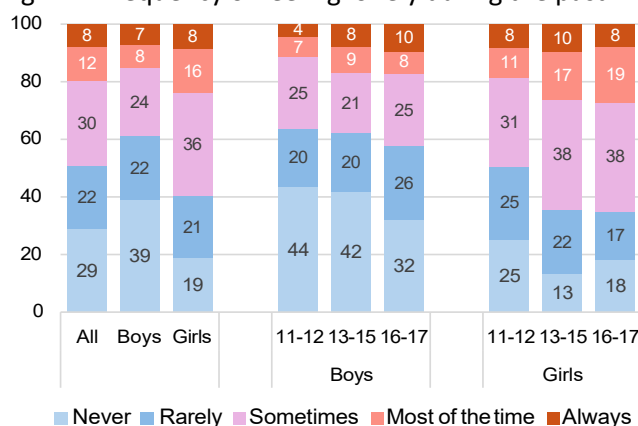
WHO and UNICEF guidance treats any repeated violence prevalence above ~10% (as is the case in Seychelles) as warranting:

- Whole-school anti-bullying programmes
- Safe reporting mechanisms
- Social–emotional learning
- Trauma-informed school health services

11. Mental health

11.1 Frequency of feeling lonely

Fig 11.1 Frequency of feeling lonely during the past 12 months

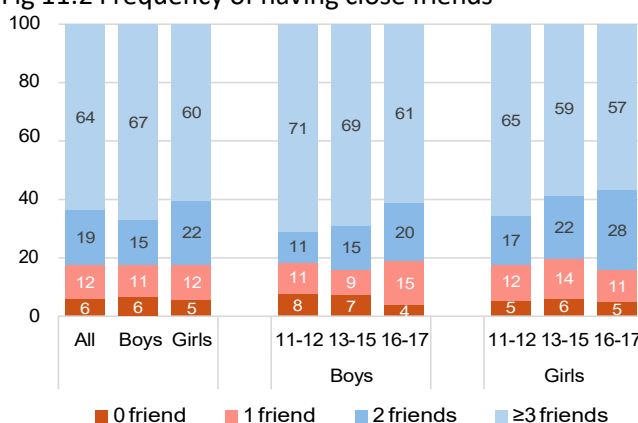


Comments

- 20% of adolescents aged 11-17 felt lonely 'most of the times' or 'always' during the past 12 months.
- Prevalence was larger among girls than boys and increased with age.

11.2 Frequency of having close friends

Fig 11.2 Frequency of having close friends

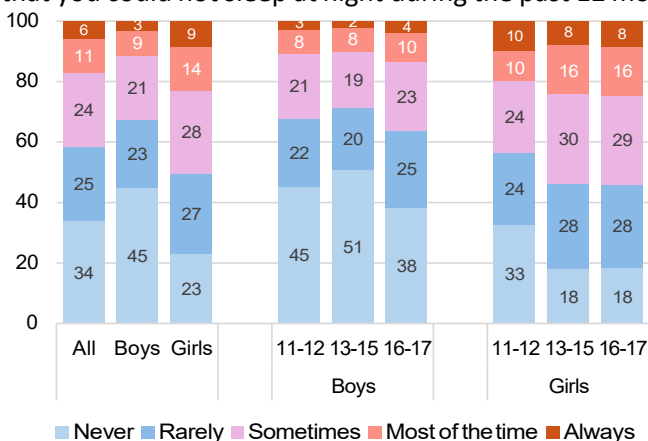


Comments

- 12% of adolescents aged 11-17 had only 1 close friend and 6% had no close friends.
- 83% of adolescents aged 11-17 had ≥2 close friends with prevalence slightly larger in girls than boys.

11.3 Frequency of being worried

Fig 11.3 Frequency of being so worried about something that you could not sleep at night during the past 12 months

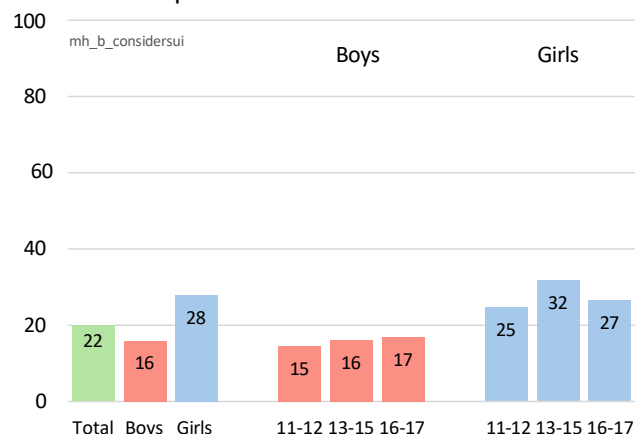


Comments

- 17% of adolescents aged 11-17 were 'most of the time' or 'always' so worried about something that they could not sleep at night.
- Prevalence was larger in girls than boys and increased with age.

11.4 Frequency of considering suicide

Fig 11.4 Frequency of seriously considering attempting suicide in the past 12 months



Comments

- 22% of adolescents aged 11-17 'seriously considered attempting suicide' in the past 12 months.
- Prevalence was larger in girls than boys and increased with age.

11.5 Summary of main findings

- 20% of adolescents aged 11-17 felt lonely 'most of the times' or 'always' during the past 12 months.
- Prevalence is larger among girls than boys and increased with age.
- 12% of adolescents aged 11-17 had only 1 close friend and 6% had no close friends.
- 83% of adolescents aged 11-17 had ≥ 2 close friends, with prevalence slightly larger in girls than boys.
- 17% of adolescents aged 11-17 were 'most of the time' or 'always' so worried about something that they could not sleep at night.
- Prevalence was larger in girls than boys and increases with age.
- 22% of adolescents aged 11-17 'seriously considered attempting suicide' in the past 12 months.
- Prevalence is larger in girls than boys and increases with age.

11.6 Significance

- The finding that 20% of adolescents (11–17) felt **lonely** "most of the time" or "always" in the past 12 months is in the upper range of typical international range, e.g. 10–20% in Europe/Canada (HBSC) with higher levels in girls and older adolescents or 15–25% range across many countries (GSHS).
- The finding that 6% had no close friends and 12% had only one **close friend** is in the range found in other countries, e.g. 3–7% among adolescents reporting no close friends and 10–15% reporting only one close friend (HBSC). This indicates that social-network indicators are very typical internationally.
- The **worry** indicator at 17% is well within the international range (e.g. 16–30% in GSHS) but still reflects chronic anxiety symptoms in nearly 1 in 6 adolescents, which is clinically and policy-relevant.
- The finding that 22% of adolescents seriously **considering suicide** in the past 12 months is in the high international range (e.g. 10-25% in GSHS or 15–22% in HBSC), with higher prevalence in girls.
- **Overall**, levels of loneliness, anxiety-related sleep disturbance, and suicidal ideation among adolescents are broadly consistent with international findings, though the prevalence of suicidal ideation lies at the upper end of reported global ranges. While most adolescents report adequate peer connectedness, a substantial minority experience persistent emotional distress, highlighting the need for strengthened mental-health promotion, early identification, and accessible support services.

11.7 Recommendations

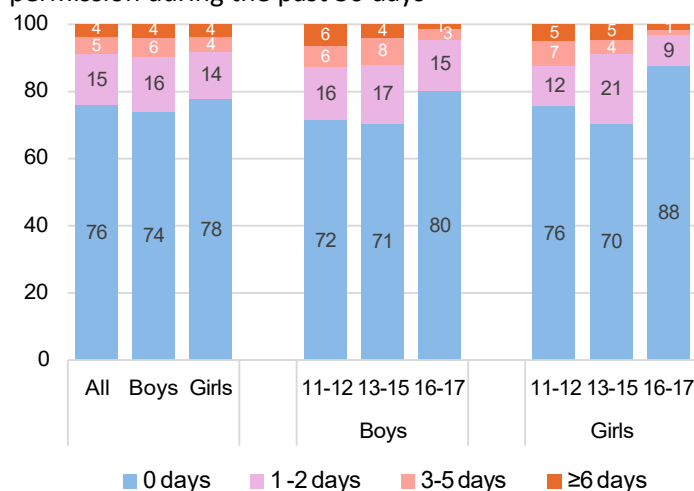
International guidance treats $\geq 20\%$ loneliness, $\geq 15\%$ chronic anxiety symptoms and $\geq 20\%$ suicidal ideation as indicators of high population mental-health need, warranting:

- Whole-school mental-health promotion
- Early detection and counselling
- Accessible, youth-friendly mental-health services
- Strong safeguarding and referral pathways

12. Missing school and other social indicators

12.1 Missing classes or school without permission

Fig 12.1 Frequency of missing classes or school without permission during the past 30 days

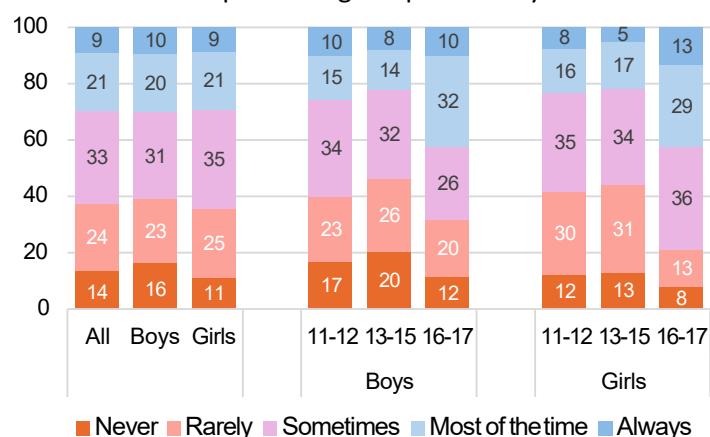


Comments

- Around 10% of adolescents aged 11-15, but only 4% in boys and 2% in girls aged 16-17 missed school or classes without permission for ≥3 days during the past 30 days.
- This may partly reflect that most students aged 16-17 chose to attend their professional centres and share common interests.

12.2 Feeling that most students are kind and helpful

12.2 Frequency reporting that most students in their school were kind and helpful during the past 30 days

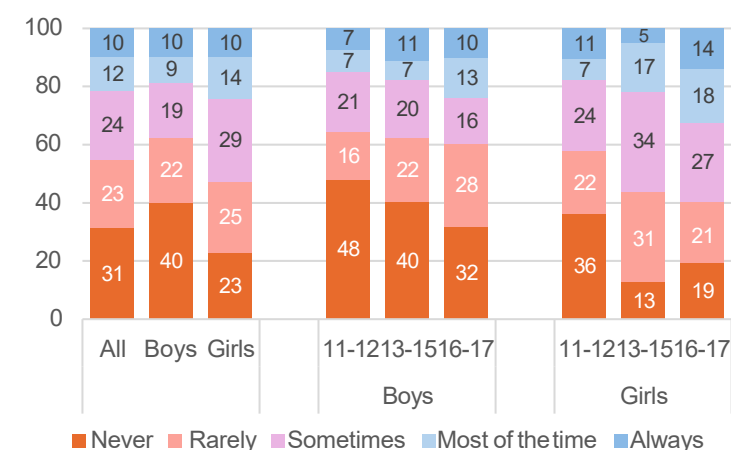


Comments

- Around 40% of adolescents aged 11-15, but 32% of boys and 21% of girls aged 16-17 reported that most students in their school were kind and helpful during the past 30 days.

12.3 Possibility to talk to someone about difficult problems and worries

Fig 12.3 Possibility to talk to someone about difficult problems and worries



Comments

- 54% of adolescents aged 11-17 found that it was 'most of the time' or 'always' difficult to talk to someone about difficult problems and worries during the past 30 days.
- Prevalence of inability to talk was larger in boys than girls and decreased over age.

12.4 Summary of main findings

- Around 10% of adolescents aged 11-15, but only 4% in boys and 2% in girls aged 16-17 missed classes or school without permission for ≥3 days during the past 30 days.
- This may partly reflect that most students aged 16-17 chose to attend their (mainly post-secondary) school and share common interests.
- Around 40% of adolescents aged 11-15, but 32% of boys and 21% of girls aged 16-17 reported that most students in their school were kind and helpful during the past 30 days.
- (54% of adolescents aged 11-17 found that it was ‘most of the time’ or ‘always’ difficult to talk to someone about difficult problems and worries during the past 30 days.
- Prevalence of inability to talk was larger in boys than girls and decreased over age.

12.5 Significance

- Overall, the findings align closely with international evidence and point to a clear age gradient in adolescents’ school engagement, social climate, and emotional communication.
- **Unauthorized school absence** (10% in adolescents in Seychelles) is relatively common among younger adolescents (11–15 years) and falls within internationally reported ranges (e.g. 5–15% in HBSC and Organisation for Economic Co-operation and Development-OECD countries). The markedly lower prevalence among 16–17-year-olds likely reflects, at least in part, voluntary participation in professional centres and greater alignment with students’ interests.
- **Perceptions of a kind and helpful school climate** (40% in adolescents in Seychelles) are moderate by international standards (e.g. 30–60%) and decline with age, particularly among girls. This suggests that a substantial proportion of adolescents do not experience their school peer environment as socially supportive.
- The proportion of adolescents reporting **difficulty talking about problems** and worries (54% in adolescents in Seychelles) lies at the upper end of levels reported in high-income countries (e.g. 40–60%) and points to a substantial public mental health concern. Higher prevalence among boys and the gradual decrease with age are consistent with established gender norms and developmental trends; however, persistence into late adolescence highlights an ongoing gap in emotional support.

12.6 Interventions

Strengthen emotional communication and help-seeking

- Implement universal, school-based mental health literacy programmes that normalize discussing worries and seeking support
- Develop gender-sensitive approaches, particularly for boys, that challenge norms around emotional suppression and promote acceptable alternative forms of expression (e.g. peer-led formats)

Improve school social climate

- Develop **whole-school approaches** that promote kindness, inclusion, and peer support rather than relying solely on individual-level interventions
- Use **structured peer programmes** (e.g. mentoring, cooperative learning) to strengthen social cohesion
- Promote supportive teacher–student relationships, which are consistently associated with lower absenteeism and better well-being

Strengthen psychosocial support

- Embed well-being services within educational institutions to address emotional and social needs, rather than treating them as external or optional resources

13. Use of social media

13.1 Duration of social media daily use

Fig 13.1.1 Duration per day using social media on week days

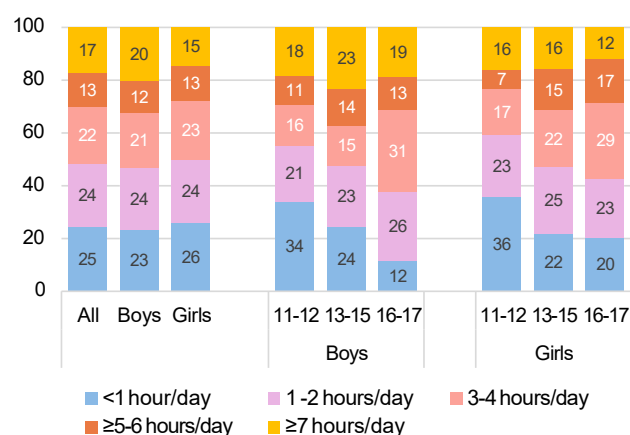
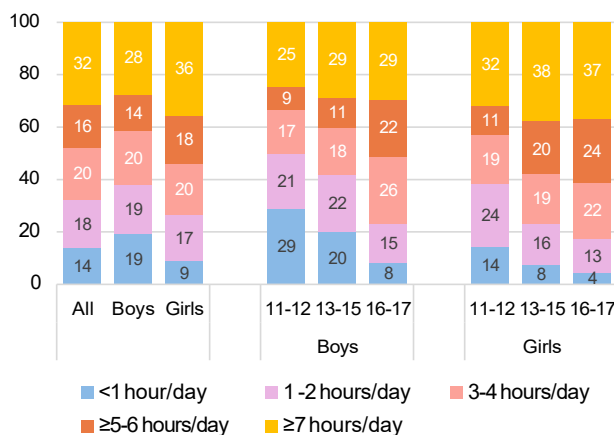


Fig 13.1.2 Duration per day using social media on weekend days



13.2 Summary of main findings

- 25% of students aged 11-17 used social media (e.g. TikTok, Instagram, YouTube, etc.) during <1 hour/day on weekdays, and 14% on weekends.
- 30% of students aged 11-17 used social media for ≥5 hours/day on weekdays, and 48% on weekends.
- Duration was smaller for girls than boys during weekdays but larger in girls than boys on weekends.
- Duration markedly increased with age (e.g. 37% of girls aged 16-17 spent ≥7 hours/day on weekends).
- These durations do not include time spent on calling friends, playing games on computers, or watching TV.

13.3 Significance

- International surveys show that daily social media use of 2–4 hours is common among adolescents, while very high use (≥5 hours/day) is less prevalent but increasing. In studies such as HBSC and OECD reports, around 15–30% of adolescents report ≥4–5 hours/day on weekdays, rising to 30–40% on weekends.
- Data suggest higher-than-average prevalence of very high use. As these estimates exclude other screen-based activities, total recreational screen exposure is likely underestimated.
- The findings indicate a marked polarization in use, with a minority engaging very little and a substantial proportion reporting extremely high use, consistent with international patterns.
- Gender differences are consistent with international evidence suggesting that girls' social media use is more strongly linked to social communication, while boys' screen time is more evenly distributed across gaming and sports.
- From a public health perspective, the high prevalence of ≥5–7 hours/day is concerning, given international evidence linking excessive social media use to sleep disruption, reduced physical activity, poorer mental well-being, and increased exposure to social comparison and online stressors.

13.4 Interventions to reduce excessive social media use

1. Promote balanced digital use

- Implement digital literacy and self-regulation programmes that promote awareness of use, personal limits, and prioritization of sleep and offline activities

2. Target weekends and older adolescents

- Encourage structured weekend activities (e.g. sports, arts, social clubs), with a particular focus on adolescents aged 15–17, including community- and school-linked programmes

3. Family-based strategies

- Support parents in establishing consistent, negotiated screen-time rules and device-free times (e.g. evenings, before bedtime)

4. Integrate with well-being promotion

- Embed guidance on social media use within broader sleep, physical activity, and mental health initiatives

14. Parental support

14.1 Frequency of parental support indicators

Fig 14.1.1 How often your **parents checked to see if homework was done**

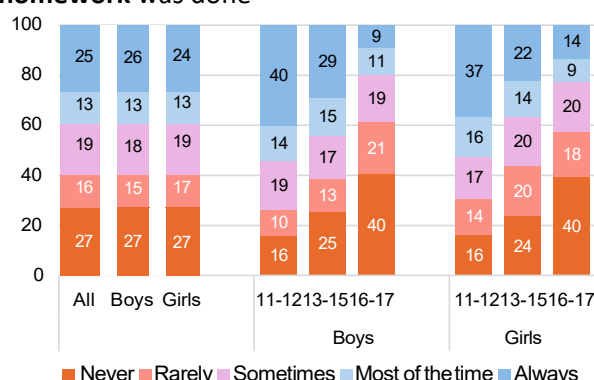


Fig 14.1.2 How often your **parents understand your problems and worries**

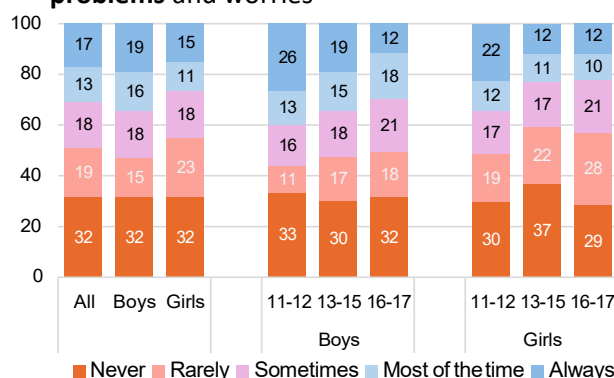


Fig 14.1.3 How often your parents **really know what you were doing** with your free time

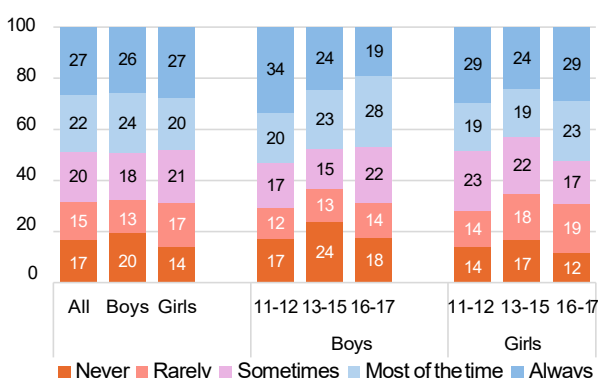
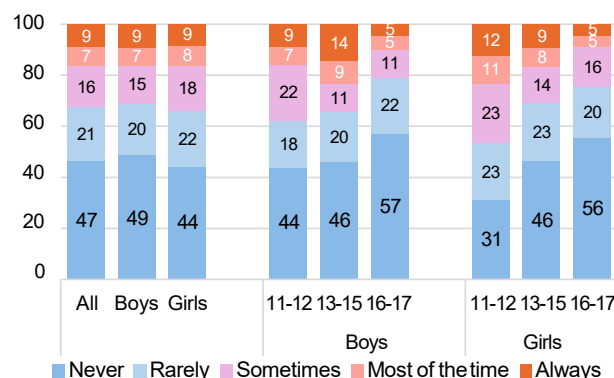


Fig 14.1.4 How often your parents **go through your things** without your approval



14.2 Summary of main findings

Fig 14.1.1 shows that ~28% (age 11-12), ~40% (age 13-15) and ~60% of adolescents reported that their parents 'never' or 'rarely' **checked on to see if homework was done**.

Fig 14.1.2 shows that 51% of students aged 11-17 reported that their parents 'never' or 'sometimes' **understood their problems** or worries, with slightly larger prevalence among girls than boys and at older vs younger age.

Fig 14.1.3 shows that 32% of adolescents aged 11-17 reported that their parents 'never' or 'rarely' **knew what they were doing with their free time**, with similar prevalence by sex and age.

Fig 14.1.4 shows that 16% of adolescents aged 11-17 reported that their parents went through their things without their approval, with lower prevalence at age 16-17 (~10%).

14.3 Significance

International evidence from studies such as HBSC and OECD indicates that most adolescents report moderate to high levels of parental monitoring and emotional support, with clear declines across adolescence. Against this backdrop, several of the reported figures appear unfavourable in international terms:

- The high and steeply increasing proportion of adolescents whose parents rarely or never check homework—reaching ~60% by ages 16–17—exceeds levels typically reported internationally, where parental academic monitoring remains more common even in mid-adolescence.
- Around half of adolescents reporting that parents never or only sometimes understand their problems or worries lies at the upper end of international ranges, particularly given the higher prevalence among girls and older adolescents, groups with greater emotional support needs.

- One-third of adolescents reporting limited parental awareness of their free-time activities is higher than expected, as international studies generally show continued, if reduced, parental knowledge through adolescence.
- By contrast, the relatively low prevalence of intrusive control (parents going through belongings without permission), especially among older adolescents, aligns with international norms and suggests respect for adolescents' privacy.

Taken together, the findings point to a pattern of low supportive monitoring rather than excessive control. This combination—limited parental involvement alongside low intrusiveness—has been internationally associated with poorer academic engagement, weaker emotional support, and increased vulnerability to risk behaviours.

14.4 Recommendations

Measures to address suboptimal parental monitoring and support include:

Promote balanced parental involvement

- Encourage parenting approaches that combine warmth, communication, and appropriate monitoring, rather than focusing solely on control or autonomy

Strengthen parent–adolescent communication

- Implement parenting programmes that enhance skills in listening, emotional validation, and age-appropriate discussion of adolescents' worries, with particular attention to girls and older adolescents

Support academic engagement without overcontrol

- Provide guidance to parents on maintaining interest in schooling (e.g. homework routines, encouragement) while respecting adolescents' growing autonomy

Clarify boundaries around privacy and trust

- Reinforce norms that discourage intrusive behaviours while promoting transparent, negotiated rules about free time and activities

Integrate parenting support into school and community settings

- Embed parenting resources within schools and community services to normalize support-seeking and reach families early in adolescence

15 Health education at school

15.1 Frequency of having health education on various health-related topics

Fig 15.1.1 Taught in any class about the benefits of **healthy eating** during this school year

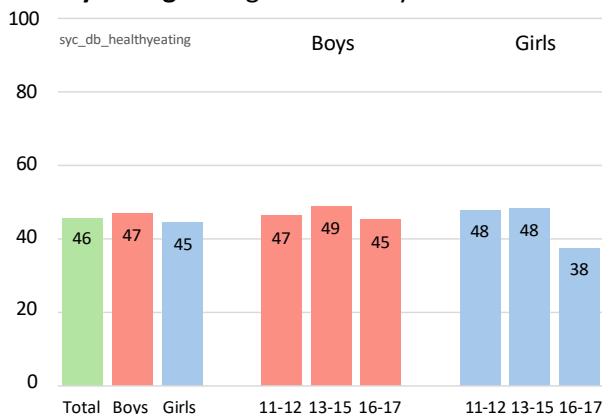


Fig 15.1.2 Taught in any class on the dangers of **tobacco use** during this school year

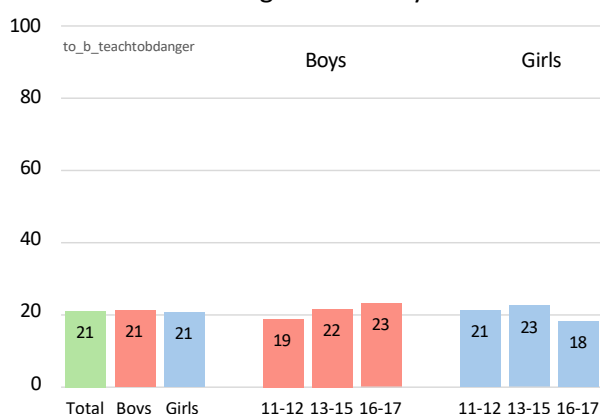


Fig 15.1.3 Taught in any class on the problems linked with **drinking alcohol** during this school year

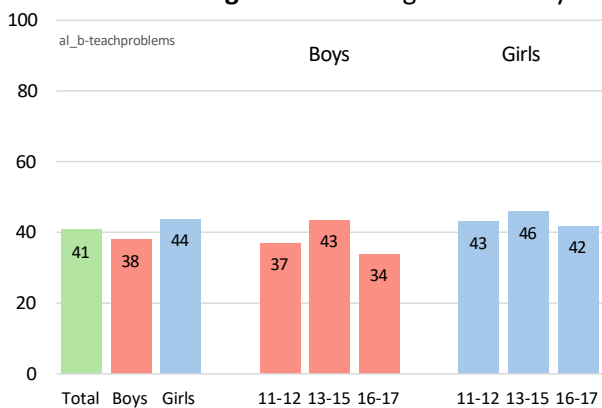


Fig 15.1.4 Taught in any class on how to avoid **HIV infection or AIDS** during this school year

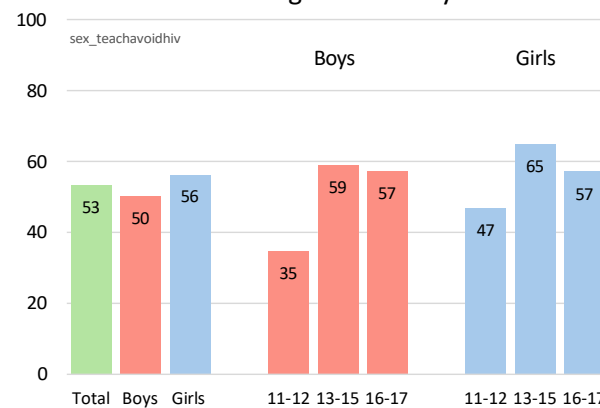
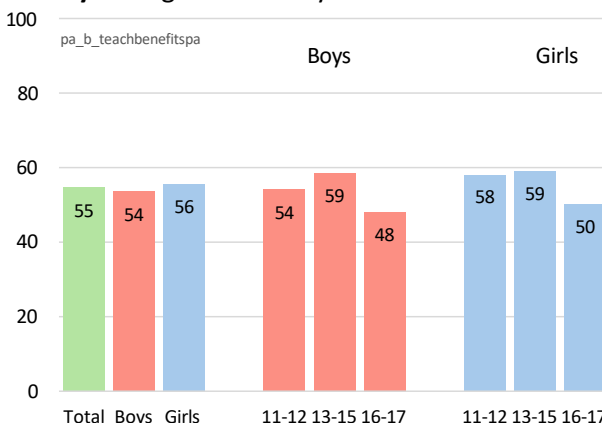


Fig 15.1.5 Taught in any class on the benefits of **physical activity** during this school year



15.2 Summary of main findings

- 46% of students aged 11-17 were taught on benefits of healthy eating during this school year.
- 21% were taught on dangers of tobacco use during this school year.
- 41% were taught on problems related to alcohol drinking during this school year.
- 53% were taught on how to avoid HIV infection or AIDS during this school year.
- 55% were taught about the benefits of physical activity during this school year.
- Except for HIV/AIDS, the percentages taught about any topic were similar in all age categories.

15.3 Significance

- Internationally, school health education coverage is generally higher and more systematic than observed in Seychelles, particularly for major noncommunicable disease (NCD) risk factors.
- For example, in WHO and OECD countries, 60–80% of adolescents typically report receiving education on healthy eating, physical activity, tobacco and alcohol risks.
- HIV/AIDS education is often prioritized internationally, especially in regions with higher prevalence, with reported coverage commonly above 50%, broadly consistent with the 53% observed here.
- Education on tobacco risks (21%) is markedly lower than expected given tobacco's status being the leading fully preventable cause of morbidity and mortality globally.
- **Overall**, the pattern points to fragmented rather than comprehensive health education, with stronger emphasis on infectious disease prevention than on NCD risk factors that account for the largest long-term health burden. These findings suggest substantial missed prevention opportunities within the school system. The low and uneven coverage of key health topics—particularly tobacco and alcohol—may undermine early risk awareness and contribute to the establishment of unhealthy behaviours during adolescence.

15.4 Recommendations

- Strengthen **comprehensive school health education**
- Establish a **minimum national curriculum covering nutrition, physical activity, tobacco, alcohol, and sexual health**, delivered consistently across schools
- Substantially **scale up education on tobacco and alcohol harms**, aligning with global best practice and burden of disease priorities
- Ensure health education **builds in depth and complexity with age** rather than being delivered as one-off exposures
- **Integrate with broader health promotion strategies**
- **Link school-based education to wider public health policies** (e.g. tobacco control, nutrition and physical activity strategies) to reinforce consistent messaging

This section examines pairwise associations between health behaviours, psychosocial indicators, and protective factors. Bivariate correlation analyses were conducted to assess the strength and direction of associations between variables. These analyses are descriptive and do not imply causality. To enhance interpretability, only statistically significant correlations ($p < 0.05$) are displayed, with non-significant associations omitted. Correlations > 0.10 are in red to facilitate identification of more substantive associations.

parents have a car

	is overweight	eats vegetables	eats fruit	drinks soda	drinks juice	smokes cigarette	uses e-cigarette	talks about problems	uses cannabis	drinks alcohol	troubles due to alcohol	drunkenness	physical activity	sleep hours	sex partners	bullied	cyberbullied	was attacked	got into fight	feels lonely	nb of friends	worries about problems	has suicide ideas	misses school	others are kind	talks about problems	social media time	parents understand	parents see homework	parents have a car
is overweight	1																													
eats vegetables	-	1																												
eats fruit	-	0.33	1																											
drinks soda	-	0.10	0.17	1																										
drinks juice	-0.05	0.11	0.11	0.24	1																									
smokes cigarette	-	-	-	0.08		1																								
uses e-cigarette	-	-	-	0.09	-	0.47	1																							
talks about problems	-	-	-	-	-	-	1																							
uses cannabis	-	-	-0.07	-	-	0.64	0.44	0.07	1																					
drinks alcohol	-	-0.07	-	0.16	0.08	0.36	0.45	0.06	0.31	1																				
troubles due to alcohol	-	-	-	0.06	0.06	0.24	0.27		0.29	0.28	1																			
drunkenness	-	-	-0.08	0.12		0.34	0.46	0.06	0.34	0.60	0.31	1																		
physical activity	-	0.07	-	-	-	0.06	0.11	0.09	0.06				1																	
sleep hours	-	0.05	-	-	-	-0.10	-0.11	0.09	-0.07	-0.09	-0.06	-0.13	0.07	1																
sex partners	-	-	0.11	0.06	0.38	0.37	0.06	0.42	0.40	0.24	0.49	0.08	-0.10	1																
bullied	0.08	0.08	0.11	0.09	0.16	-	0.07	0.11	0.15	0.13	-0.08	-0.09	0.06	1																
cyberbullied	-	-	-	0.07	0.11	0.11	-	0.06	0.12	0.09	-	-	0.09	0.37	1															
was attacked	-	-	-	0.06	0.17	0.16	-	0.14	0.11	0.15	0.11	0.06	-	0.12	0.25	0.19	1													
got into fight	-	-	-	0.13	0.09	0.29	0.30	-	0.22	0.26	0.22	0.27	-	-0.06	0.26	0.24	0.14	0.39	1											
feels lonely	-	-	-	-	-	0.14	0.14	-	0.09	0.12	0.07	0.10	-	-0.09	0.06	0.23	0.15	0.17	0.06	1										
nb of friends	-	-	-	-	-	-0.08	-0.11	-	-0.09	-0.06	-	0.08	-0.08	-0.17	-	-0.06	-	-0.14	1											
worries about problems	-	-	-	-	0.13	0.19	0.11	0.11	0.19	0.11	0.15	-	-0.09	0.11	0.20	0.15	0.16	0.11	0.45	-0.05	1									
has suicide ideas	0.07	-	-	-	0.12	0.17	-	0.08	0.13	0.14	0.11	-	-0.13	0.15	0.22	0.20	0.12	0.13	0.33	-0.10	0.34	1								
misses school	-	-	-	0.11	0.11	0.17	0.24	-	0.19	0.22	0.21	0.20	-	-0.07	0.14	0.13	0.06	0.10	0.22	-	-0.07	-	0.06	1						
others are kind	-	0.07	-0.10			-0.07	0.21	-	-	-	-	0.13	0.11	-	-0.17	-0.10	-0.08	-0.11	-	0.17	-	-0.09	-0.07	1						
talks about problems	-	-	-	-	-	-	-	0.07	0.06	-	0.06	0.11	0.09	0.06	-	-	-	-	-	-	0.11	-	-	0.21	1					
social media time	-	-	-0.10	0.06	-	-	-	0.08	-	0.08	-	0.09	0.07	0.06	-0.05	0.05	-	0.17	0.05	0.11	0.07	0.05	-	0.08	1					
parents understand	-	-	0.05	-	-	-0.06	-0.09	0.24	-	-0.08	-0.06	-0.08	0.08	0.14	-0.08	-0.10	-	-0.07	-	-0.22	0.09	-0.15	-0.24	-	0.23	0.24	-0.08	1		
parents see homework	0.08	-	0.07	-	0.06	-0.13	-0.11	0.06	-0.09	-0.14	-	-0.15	-	0.25	-0.16	-	-0.05	-0.06	-0.09	-0.15	0.08	-0.12	-0.13	-	0.11	0.06	-0.09	0.30	1	
parents have a car	-	-	-	-	-	-	-	-	-	-	-	-	0.06	0.04	-	-	-	-	-	-	-	-	-	-	-	-	0.06	-	-	

16.1 Results and significance

- Statistically significant pairwise correlations ($p < 0.05$) indicate that adolescent health behaviours and psychosocial indicators cluster into a limited number of **coherent patterns** rather than occurring independently.
- As expected, the strongest and most consistent associations are observed within behavioural domains, particularly among substance use behaviours, while cross-domain associations are generally weaker but conceptually meaningful.
- A broad **cluster of risk behaviours** is evident, linking tobacco use, electronic cigarette use, alcohol consumption, cannabis use, risky sexual behaviours, school absenteeism, exposure to bullying and violence, and indicators of psychosocial distress. These behaviours **tend to co-occur** and show **inverse associations with markers of social and familial support**, including parental monitoring of homework and number of friends.
- **Indicators of psychosocial vulnerability**, including loneliness, frequent worry, and suicidal ideation, are positively inter-related and associated with substance use behaviours, while showing inverse associations with sleep duration.
- Conversely, **parental involvement indicators**—such as parents checking homework and understanding adolescents' problems—are consistently associated with more favourable outcomes, including better sleep, greater emotional communication, more positive perceptions of peer climate, and lower prevalence of substance use, suicidal ideation, multiple sexual partners, and excessive social media use.
- Time spent on **social media** shows generally weak associations with most behavioural indicators but demonstrates stronger links with loneliness and frequent worry, suggesting closer alignment with emotional well-being than with health-risk behaviours per se.
- **Overall**, the correlation structure supports the presence of interrelated but distinct behavioural and psychosocial patterns in adolescence. These findings are **consistent with international evidence** and reinforce the importance of integrated approaches to adolescent health promotion that address multiple behaviours and underlying social and emotional determinants simultaneously.

16.2 Significance and recommendations

Adolescent risk behaviours (e.g. substance use, school absenteeism, risky sexual behaviours), psychosocial distress (e.g. loneliness, worry, suicidal ideation), and exposure to bullying and violence tend to co-occur, indicating that single-issue interventions are unlikely to achieve sustained impact. Policy-relevant key messages include:

Psychosocial well-being and sleep are central cross-cutting determinants

- Loneliness, frequent worry, and suicidal ideation are closely inter-related and linked to multiple risk behaviours, while adequate sleep is consistently associated with more favourable outcomes, highlighting sleep and emotional well-being as high-leverage intervention targets

Parental involvement functions as a strong protective factor across outcomes

- Parental monitoring and understanding are associated with better sleep, improved emotional communication, positive peer climate, and lower prevalence of substance use, risky behaviours, excessive social media use, and suicidal ideation

Effective adolescent health policy requires integrated, multisectoral action

- The observed behavioural patterns support coordinated approaches that combine mental health promotion, family support, school engagement, and health-risk prevention, rather than programmes focused on single behaviours or sectors

In short, improving adolescent health requires addressing **shared underlying determinants**, not isolated behaviours.

Appendix 1 - Questionnaire

2025 SEYCHELLES GLOBAL SCHOOL-BASED STUDENT HEALTH SURVEY

This survey is about your health and the things you do that may affect your health. Students like you all over your country are doing this survey. Students in many other countries around the world also are doing this survey. The information you give will be used to develop better health programs for young people like yourself.

DO NOT write your name on this survey or the answer sheet. The answers you give will be kept private. No one will know how you answer. Answer the questions based on what you really know or do. There are no right or wrong answers.

Completing the survey is voluntary. Your grade or mark in this class will not be affected whether or not you answer the questions. If you do not want to answer a question, just leave it blank.

Make sure to read every question. Fill in the circles on your answer sheet that match your answer. Use only the pencil you are given. When you are done, do what the person who is giving you the survey says to do.

Here is an example of how to fill in the circles:

Fill in the circles like this  Not like this  or 

Survey

1. Do fish live in water?
 - A. Yes
 - B. No

Answer sheet

1.        

Thank you very much for your help.

1. How old are you?

- A. 11 years old or younger
- B. 12 years old
- C. 13 years old
- D. 14 years old
- E. 15 years old
- F. 16 years old
- G. 17 years old
- H. 18 years old or older

2. What is your sex?

- A. Male
- B. Female

3. In what standard or year are you?

- A. S1
- B. S2
- C. S3
- D. S4
- E. S5
- F. Year 1
- G. Year 2

4. Do your parents or guardians (father, stepfather, mother, or stepmother), or the people you live with own a car or pick-up truck?

- A. Yes
- B. No

The next 3 questions ask about your height, weight, and going hungry.

5. How tall are you without your shoes on? ON THE ANSWER SHEET, WRITE YOUR HEIGHT IN THE SHADED BOXES AT THE TOP OF THE GRID. THEN FILL IN THE CIRCLE BELOW EACH NUMBER.

Example

Height (cm)		
1	5	3
0	0	0
●	1	1
2	2	2
	3	●
	4	4
	●	5
	6	6
	7	7
	8	8
	9	9
I do not know		9

6. How much do you weigh without your shoes on? ON THE ANSWER SHEET, WRITE YOUR WEIGHT IN THE SHADED BOXES AT THE TOP OF THE GRID.

THEN FILL IN THE CIRCLE BELOW EACH NUMBER.

Example

Weight (kg)		
0	5	2
●	0	0
1	1	1
2	2	●
	3	3
	4	4
	●	5
	6	6
	7	7
	8	8
	9	9
I do not know		9

7. During the past 30 days, how often did you go hungry because there was not enough food in your home?

- A. Never
- B. Rarely
- C. Sometimes
- D. Most of the time
- E. Always

The next 4 questions ask about what you might eat and drink.

8. During the past 7 days, how many times did you eat fruit, such as apples, oranges, bananas, avocados, mangoes, papayas, java apple, golden apple, starfruit, or any other local or imported fruits?

- A. I did not eat fruit during the past 7 days
- B. 1 to 3 times during the past 7 days
- C. 4 to 6 times during the past 7 days
- D. 1 time per day
- E. 2 times per day
- F. 3 times per day
- G. 4 or more times per day

9. During the past 7 days, how many times did you eat vegetables, such as carrots, lettuce, tomato, cabbage, cucumber, watercress, Chinese cabbage, beans, or any other local or imported vegetables?

- A. I did not eat vegetables during the past 7 days
- B. 1 to 3 times during the past 7 days
- C. 4 to 6 times during the past 7 days
- D. 1 time per day
- E. 2 times per day
- F. 3 times per day
- G. 4 or more times per day

10. During the past 7 days, how many times did you drink a can, bottle, or glass of a carbonated soft drink, such as Cola, Fanta, Sprite, Bitter Lemon, Cocktail, Pepsi, or Miranda? (Do **not** count diet soft drinks.)

- A. I did not drink carbonated soft drinks during the past 7 days
- B. 1 to 3 times during the past 7 days
- C. 4 to 6 times during the past 7 days
- D. 1 time per day
- E. 2 times per day
- F. 3 times per day
- G. 4 or more times per day

For this question, sugar-sweetened drinks include sports drinks (Lucozade Sport), energy drinks (Red Bull, Double Seven, Lucozade), 100% fruit juices (Lacnor, Liquifruit, Ceres, Vitrac), fruit drinks that are not 100% juice (Sun Cool, Paradise), sugar-sweetened flavoured milks (Perette, Lacnor, Cavins), and sugar-sweetened teas, coffees, or flavoured waters.

For this question, DO NOT COUNT carbonated soft drinks measured in the previous question or diet or no calorie drinks.

11. During the past 7 days, how many times did you drink a can, bottle, or glass of a sugar-sweetened drink?
 - A. I did not drink sugar-sweetened drinks during the past 7 days
 - B. 1 to 3 times during the past 7 days
 - C. 4 to 6 times during the past 7 days
 - D. 1 time per day
 - E. 2 times per day
 - F. 3 times per day
 - G. 4 or more times per day
12. During the past 7 days, how many glasses or small packets of fruit juice did you usually drink per day? (Do not include soft drinks or milk.)
 - A. I did not drink a glass or small packet of fruit juice during the past 7 days
 - B. Less than one glass or small packet per day
 - C. 1 glass or small packet per day
 - D. 2 glasses or small packets per day
 - E. 3 glasses or small packets per day
 - F. 4 glasses or small packets per day
 - G. 5 or more glasses or small packets per day
13. During the past 7 days, how many glasses or small bottles of water did you usually drink per day?
 - A. I did not drink a glass or small bottle of water during the past 7 days
 - B. Less than one glass or small bottle per day
 - C. 1 glass or small bottle per day
 - D. 2 glasses or small bottles per day
 - E. 3 glasses or small bottles per day
 - F. 4 glasses or small bottles per day
 - G. 5 or more glasses or small bottles per day
14. During the past 7 days, on how many days did you eat at least one meal or snack from a fast food restaurant, such as Butcher's Grill, a pizzeria, or fast food caravan?
 - A. 0 days
 - B. 1 day
 - C. 2 days
 - D. 3 days
 - E. 4 days
 - F. 5 days

- G. 6 days
- H. 7 days

15. Where do you usually get your lunch on the days you are at school?

- A. I usually do not eat lunch on the days I am at school
- B. I bring it from home
- C. I get it from the school canteen or school cafeteria
- D. I bring it from a takeaway outside of school
- E. Some other place

The next 2 questions ask about your weight.

16. How do you describe your weight?

- A. My weight is too low
- B. My weight is too high
- C. My weight is about right

17. Which of the following are you trying to do about your weight?

- A. I am not trying to do anything about my weight
- B. Lose weight
- C. Gain weight
- D. Stay the same weight

The next question asks about what you were taught in school.

18. During this school year, were you taught in any of your classes of the benefits of healthy eating?

- A. Yes
- B. No
- C. I do not know

The next 3 questions ask about your oral health.

19. During the past 30 days, how many times per day did you **usually** clean or brush your teeth?

- A. I did not clean or brush my teeth during the past 30 days
- B. Less than 1 time per day
- C. 1 time per day
- D. 2 times per day
- E. 3 or more times per day

20. During the past 30 days, did you **usually** use a toothpaste that contains fluoride when you cleaned or brushed your teeth?

- A. I did not clean or brush my teeth during the past 30 days
- B. Yes, I usually used a toothpaste that contains fluoride
- C. No, I did not usually use a toothpaste that contains fluoride
- D. I do not know if the toothpaste I usually used contains fluoride

21. During the past 30 days, did a problem with your mouth, teeth, or gums cause you to miss classes or school?

- A. Yes
- B. No

The next question asks about physical attacks. A physical attack occurs when one or more people hit or strike someone, or when one or more people hurt another person with a weapon (such as a stick, knife, or gun). It is not a physical attack when two students of about the same strength or power choose to fight each other.

22. During the past 12 months, how many times were you physically attacked?
- A. 0 times
 - B. 1 time
 - C. 2 or 3 times
 - D. 4 or 5 times
 - E. 6 or 7 times
 - F. 8 or 9 times
 - G. 10 or 11 times
 - H. 12 or more times

The next 2 questions ask about sexual violence.

23. Have any of your family members touched you in a way that made you feel uncomfortable?
- A. Yes
 - B. No
24. If you have ever been forced to have sexual intercourse when you did not want to, was the person a family member?
- A. Yes
 - B. No

The next question asks about physical fights. A physical fight occurs when two students of about the same strength or power choose to fight each other.

25. During the past 12 months, how many times were you in a physical fight?
- A. 0 times
 - B. 1 time
 - C. 2 or 3 times
 - D. 4 or 5 times
 - E. 6 or 7 times
 - F. 8 or 9 times
 - G. 10 or 11 times
 - H. 12 or more times

The next 4 questions ask about bullying. Bullying occurs when one or more students or other people about your age say or do hurtful or mean things. Bullying can occur when someone teases, threatens, ignores, spreads rumors about, calls someone a bad name, makes sexual remarks, or hits, shoves, or hurts another person over and over again. It is not bullying when two people of about the same strength or power argue or fight or tease each other in a friendly way.

26. During the past 12 months, were you bullied on school property?
- A. Yes

- B. No

27. During the past 12 months, were you bullied when you were **not on school property**?

- A. Yes
- B. No

Cyber bullying is a form of bullying using social media and other forms of online communication. Cyber bullying may happen on Instagram, Twitter, Snapchat, Facebook, and other social media platforms or through texting and email.

28. During the past 12 months, were you **cyber** bullied?
- A. Yes
 - B. No
29. During the past 12 months, how often were you bullied?
- A. I was not bullied during the past 12 months
 - B. A few times
 - C. Often
 - D. Most of the time or always

The next 3 questions ask about your friendships and feelings.

30. How many close friends do you have?
- A. 0 friends
 - B. 1 friend
 - C. 2 friends
 - D. 3 or more friends
31. During the past 12 months, how often did you feel lonely?
- A. Never
 - B. Rarely
 - C. Sometimes
 - D. Most of the time
 - E. Always
32. During the past 12 months, how often were you so worried about something that you could not sleep at night?
- A. Never
 - B. Rarely
 - C. Sometimes
 - D. Most of the time
 - E. Always

Sometimes people feel so depressed about the future that they may consider attempting suicide, that is, taking some action to end their own life. The next 3 questions ask about attempted suicide.

33. During the past 12 months, did you **seriously** consider attempting suicide?
- A. Yes
 - B. No
34. During the past 12 months, did you make a plan about how you would attempt suicide?

- A. Yes
- B. No

35. During the past 12 months, how many times did you attempt suicide?
- A. 0 times
 - B. 1 time
 - C. 2 or 3 times
 - D. 4 or 5 times
 - E. 6 or more times

The next 4 questions ask about cigarette use. Cigarettes include manufactured cigarettes, roll-your-own cigarettes, and kretek cigarettes.

36. Have you ever tried or experimented with cigarette smoking, even one or two puffs?
- A. Yes
 - B. No
37. How old were you when you first tried smoking a cigarette?
- A. I have never tried smoking a cigarette
 - B. 7 years old or younger
 - C. 8 or 9 years old
 - D. 10 or 11 years old
 - E. 12 or 13 years old
 - F. 14 or 15 years old
 - G. 16 or 17 years old
 - H. 18 years old or older
38. During the past 30 days, on how many days did you smoke cigarettes?
- A. 0 days
 - B. 1 or 2 days
 - C. 3 to 5 days
 - D. 6 to 9 days
 - E. 10 to 19 days
 - F. 20 to 29 days
 - G. All 30 days
39. Does your mother, stepmother, father, stepfather, or guardian smoke cigarettes?
- A. Yes
 - B. No
 - C. I do not know

The next question asks about other forms of smoked tobacco products other than cigarettes. This includes pipes, cigars, mini cigars, cigarillos, waterpipes, hookah, shisha, narghile, hubble-bubble, bidis, and heated tobacco products (HTPs).

40. During the past 30 days, on how many days did you use any form of smoked tobacco products other than cigarettes?
- A. 0 days
 - B. 1 or 2 days
 - C. 3 to 5 days
 - D. 6 to 9 days
 - E. 10 to 19 days
 - F. 20 to 29 days
 - G. All 30 days

The next question asks about smokeless tobacco products. This includes snuff, chewing tobacco, dip, betel quid with tobacco, and gutka.

41. During the past 30 days, on how many days did you use any form of smokeless tobacco products?
- A. 0 days
 - B. 1 or 2 days
 - C. 3 to 5 days
 - D. 6 to 9 days
 - E. 10 to 19 days
 - F. 20 to 29 days
 - G. All 30 days

The next question asks about what you were taught in school.

42. During this school year, were you taught in any of your classes about the dangers of tobacco use?
- A. Yes
 - B. No
 - C. I do not know

The next question asks about electronic cigarettes. Electronic cigarettes, or e-cigarettes, are electronic devices that usually contain a nicotine-based liquid that is vaporized and inhaled. You may also know them as vape-pens, hookah-pens, electronic hookahs (e-hookahs), electronic cigars (e-cigars), electronic pipes (e-pipes), or e-vaporizers. Some look like cigarettes and others look like pens or small pipes. They are battery-powered devices that produce vapor instead of smoke. They do not contain tobacco.

43. During the past 30 days, on how many days did you use electronic cigarettes?
- A. 0 days
 - B. 1 or 2 days
 - C. 3 to 5 days
 - D. 6 to 9 days
 - E. 10 to 19 days
 - F. 20 to 29 days
 - G. All 30 days

The next 7 questions ask about drinking alcohol. This includes drinking beer, Guinness, wine, whiskey, rum, vodka, takamaka, tropical, vermouth, portom, Vodka Breezer, Bacardi Breezer, Red Ice, Black Ice, liquors, baka, kalu, or lapire. Drinking alcohol does not include drinking a few sips of wine for religious purposes. A "drink" is a glass of wine, a bottle of beer, a small glass of liquor or home brew, or a mixed drink.

44. How old were you when you had your first drink of alcohol other than a few sips?
- A. I have never had a drink of alcohol other than a few sips
 - B. 7 years old or younger
 - C. 8 or 9 years old
 - D. 10 or 11 years old
 - E. 12 or 13 years old
 - F. 14 or 15 years old
 - G. 16 or 17 years old
 - H. 18 years old or older

45. During the past 30 days, on how many days did you have at least one drink containing alcohol?

- A. 0 days
- B. 1 or 2 days
- C. 3 to 5 days
- D. 6 to 9 days
- E. 10 to 19 days
- F. 20 to 29 days
- G. All 30 days

46. During the past 30 days, on the days you drank alcohol, how many drinks did you **usually** drink per day?

- A. I did not drink alcohol during the past 30 days
- B. Less than one drink
- C. 1 drink
- D. 2 drinks
- E. 3 drinks
- F. 4 drinks
- G. 5 or more drinks

47. During the past 30 days, what is the largest number of alcoholic drinks you had in a row, that is, within a couple of hours?

- A. I did not drink alcohol during the past 30 days
- B. 1 or 2 drinks
- C. 3 drinks
- D. 4 drinks
- E. 5 drinks
- F. 6 or 7 drinks
- G. 8 or 9 drinks
- H. 10 or more drinks

48. During the past 30 days, how did you **usually** get the alcohol you drank? SELECT ONLY ONE RESPONSE.

- A. I did not drink alcohol during the past 30 days
- B. I bought it in a store, shop, or from a street vendor
- C. I gave someone else money to buy it for me
- D. I got it from my friends
- E. I got it from my family
- F. I stole it or got it without permission
- G. I got it some other way

49. During your life, how many times have you got into trouble at home, work, or school or got into fights, as a result of drinking alcohol?

- A. 0 times
- B. 1 or 2 times
- C. 3 to 5 times
- D. 6 to 9 times
- E. 10 to 19 times
- F. 20 or more times

Staggering when walking, not being able to speak right, throwing up, and passing out are some signs of being really drunk.

50. During your life, how many times have you drank so much alcohol that you were really drunk?

- A. 0 times

- B. 1 or 2 times
- C. 3 to 5 times
- D. 6 to 9 times
- E. 10 to 19 times
- F. 20 or more times

The next question asks about what you were taught in school.

51. During this school year, were you taught in any of your classes the problems associated with drinking alcohol?

- A. Yes
- B. No
- C. I do not know

The next 4 questions ask about drug use. This includes using cannabis (also called marijuana), amphetamines, cocaine, inhalants, heroin, steam, stuff, and ecstasy. Do not count tobacco and alcohol use.

52. How old were you when you first used drugs?

- A. I have never used drugs
- B. 7 years old or younger
- C. 8 or 9 years old
- D. 10 or 11 years old
- E. 12 or 13 years old
- F. 14 or 15 years old
- G. 16 or 17 years old
- H. 18 years old or older

53. During your life, how many times have you used cannabis (also called marijuana, hashish, staff, lapay, skunk, sensi, awia, or staff durban)?

- A. 0 times
- B. 1 or 2 times
- C. 3 to 5 times
- D. 6 to 9 times
- E. 10 to 19 times
- F. 20 or more times

54. During the past 30 days, how many times did you use cannabis (also called marijuana, hashish, staff, lapay, skunk, sensi, awia, or staff durban)?

- A. 0 times
- B. 1 or 2 times
- C. 3 to 5 times
- D. 6 to 9 times
- E. 10 to 19 times
- F. 20 or more times

55. During your life, how many times have you used amphetamines or methamphetamines (also called speed or poppers) for non-medical purposes?

- A. 0 times
- B. 1 or 2 times
- C. 3 to 5 times
- D. 6 to 9 times
- E. 10 to 19 times
- F. 20 or more times

The next 5 questions ask about sexual intercourse.

56. Have you ever had sexual intercourse?

- A. Yes
- B. No

57. How old were you when you had sexual intercourse for the first time?

- A. I have never had sexual intercourse
- B. 11 years old or younger
- C. 12 years old
- D. 13 years old
- E. 14 years old
- F. 15 years old
- G. 16 or 17 years old
- H. 18 years old or older

58. During your life, with how many people have you had sexual intercourse?

- A. I have never had sexual intercourse
- B. 1 person
- C. 2 people
- D. 3 people
- E. 4 people
- F. 5 people
- G. 6 or more people

59. The **last time** you had sexual intercourse, did you or your partner use a condom or kapot?

- A. I have never had sexual intercourse
- B. Yes
- C. No

60. The **last time** you had sexual intercourse, what **one** method did you or your partner use to **prevent pregnancy**? SELECT ONLY ONE RESPONSE.

- A. I have never had sexual intercourse
- B. No method was used to prevent pregnancy
- C. Birth control pills
- D. Condoms
- E. An IUD or implant
- F. A shot, patch, or birth control ring
- G. Withdrawal or some other method
- H. I do not know

The next question asks about what you were taught in school.

61. During this school year, were you taught in any of your classes how to avoid HIV infection or AIDS?

- A. Yes
- B. No
- C. I do not know

The next 5 questions ask about physical activity. Physical activity is any activity that increases your heart rate and makes you breathe hard. Physical activity can be done in sports, playing with friends, walking to school, or in physical education class. Some examples of physical activity are running, fast walking, biking, dancing, football, basketball, and swimming.

62. During the past 7 days, on how many days were you physically active for a total of at least 60 minutes per

day? ADD UP ALL THE TIME YOU SPENT IN ANY KIND OF PHYSICAL ACTIVITY EACH DAY.

- A. 0 days
- B. 1 day
- C. 2 days
- D. 3 days
- E. 4 days
- F. 5 days
- G. 6 days
- H. 7 days

63. During the past 7 days, on how many days did you do exercises to strengthen or tone your muscles, such as push-ups, sit-ups, or weightlifting?

- A. 0 days
- B. 1 day
- C. 2 days
- D. 3 days
- E. 4 days
- F. 5 days
- G. 6 days
- H. 7 days

64. During the past 7 days, on how many days did you walk or ride a bicycle to or from school?

- A. 0 days
- B. 1 day
- C. 2 days
- D. 3 days
- E. 4 days
- F. 5 days
- G. 6 days
- H. 7 days

65. During this school year, on how many days did you go to physical education (PE) class each week?

- A. 0 days
- B. 1 day
- C. 2 days
- D. 3 days
- E. 4 days
- F. 5 or more days

66. During the past 12 months, did you take part in any extracurricular (ECA) activities that were related to physical activity such as basketball, football, hiking, swimming, or dancing?

- A. Yes
- B. No

The next question asks about what you were taught in school.

67. During this school year, were you taught in any of your classes the benefits of physical activity?

- A. Yes
- B. No
- C. I do not know

The next question asks about the time you spend mostly sitting or lying down when you are not in school or doing homework.

68. How much time do you spend during a **typical or usual** day sitting or lying down doing such things as watching television, playing computer games, talking with friends, using your mobile phone, traveling in a motor vehicle, napping, or doing other activities sitting or lying down, such as watching DVD videos? (Do **not** count time spent sleeping at night.)

- A. Less than 1 hour per day
- B. 1 to 2 hours per day
- C. 3 to 4 hours per day
- D. 5 to 6 hours per day
- E. 7 to 8 hours per day
- F. More than 8 hours per day

69. During school holidays or weekends how many hours per day do you watch TikTok, YouTube, Instagram, and other social media activities or the internet?

- A. Less than 1 hour per day
- B. 1 to 2 hours per day
- C. 3 to 4 hours per day
- D. 5 to 6 hours per day
- E. 7 to 8 hours per day
- F. More than 8 hours per day

70. During school days how many hours per day do you watch TikTok, YouTube, Instagram, and other social media activities or the internet?

- A. Less than 1 hour per day
- B. 1 to 2 hours per day
- C. 3 to 4 hours per day
- D. 5 to 6 hours per day
- E. 7 to 8 hours per day
- F. More than 8 hours per day

The next question asks about how much sleep you get.

71. On an average school night, how many hours of sleep do you get?

- A. 4 or less hours
- B. 5 hours
- C. 6 hours
- D. 7 hours
- E. 8 hours
- F. 9 hours
- G. 10 hours
- H. 11 or more hours

The next 7 questions ask about your experiences at school and at home.

72. During the past 30 days, on how many days did you miss classes or school without permission?

- A. 0 days
- B. 1 or 2 days

- C. 3 to 5 days
- D. 6 to 9 days
- E. 10 or more days

73. During the past 30 days, how often were most of the students in your school kind and helpful?

- A. Never
- B. Rarely
- C. Sometimes
- D. Most of the time
- E. Always

74. During the past 30 days, how often were you able to talk to someone about difficult problems and worries?

- A. Never
- B. Rarely
- C. Sometimes
- D. Most of the time
- E. Always

75. During the past 30 days, how often did your parents or guardians understand your problems and worries?

- A. Never
- B. Rarely
- C. Sometimes
- D. Most of the time
- E. Always

76. During the past 30 days, how often did your parents or guardians check to see if your homework was done?

- A. Never
- B. Rarely
- C. Sometimes
- D. Most of the time
- E. Always

77. During the past 30 days, how often did your parents or guardians **really** know what you were doing with your free time?

- A. Never
- B. Rarely
- C. Sometimes
- D. Most of the time
- E. Always

78. During the past 30 days, how often did your parents or guardians go through your things without your approval?

- A. Never
- B. Rarely
- C. Sometimes
- D. Most of the time
- E. Always

Appendix 2- Previous reports on school-based behavioural surveys in Seychelles

This appendix focuses on behavioural surveys and does not include publications on high blood pressure or other metabolic measurements.

A) Seychelles adolescent behaviour survey reports (GSHS / GYTS)

Global Youth Tobacco Survey (GYTS) – Seychelles

- **GYTS Seychelles 2015 – [Report](#)**
Mayen Chacon AL, Viswanathan B, Bovet P.
- **GYTS Seychelles 2007 – [Report](#)**
Viswanathan B, William J, Madeleine G, Warren W, Bovet P.
- **GYTS Seychelles 2002 – [Report](#)**
Bovet P, Viswanathan B, Warren W.

Global School-based Student Health Survey (GSHS) – Seychelles

- **GSHS Seychelles 2015 – [Report](#)**
Mayen Chacon AL, Viswanathan B, Bovet P.
- **GSHS Seychelles 2007 – [Report](#)**
Lasserre AM, Viswanathan B, Bovet P.

B) Peer-reviewed papers based on behaviour surveys in adolescents in Seychelles

Tobacco / substance use (survey-based)

- **Association between substance use and psychosocial characteristics among adolescents of the Seychelles. [PubMed](#)**
Alwan H, Viswanathan B, Rousson V, Paccaud F, Bovet P. (BMC Pediatr, 2011)
- **Linking Global Youth Tobacco Survey (GYTS) data to the WHO Framework Convention on Tobacco Control (FCTC): the case for the Seychelles. [PubMed](#)**
Viswanathan B, Warren CW, Jones NR, Asma S, Bovet P. (Prev Med, 2008)
- **Clustering of smoking, alcohol drinking and cannabis use in adolescents in a rapidly developing country. [PubMed](#)**
Faeh D, Viswanathan B, Chiolerio A, Warren W, Bovet P. (BMC Public Health, 2006)
- **Comparison of smoking, drinking, and marijuana use between students present or absent on the day of a school-based survey. [PubMed](#)**
Bovet P, Viswanathan B, Faeh D, Warren W. (J Sch Health, 2006)

Mental health / violence / bullying (GSHS-based)

- **Weight status, body image and bullying among adolescents in the Seychelles. [PubMed](#)**
Wilson ML, Viswanathan B, Rousson V, Bovet P. (Int J Environ Res Public Health, 2013)
- **Bullying among adolescents in a sub-Saharan middle-income setting. [PubMed](#)**
Wilson ML, Bovet P, Viswanathan B, Suris JC. (J Adolesc Health, 2012)
- **Suicidal expression among school-attending adolescents in the Seychelles. [PubMed](#)**
Wilson ML, Dunlavy AC, Viswanathan B, Bovet P. (Int J Environ Res Public Health, 2012)

Nutrition / body image

- **Is accurate perception of body image associated with appropriate weight-control behavior among adolescents of the Seychelles. [PubMed](#)**
Alwan H, Viswanathan B, Paccaud F, Bovet P. (J Obes, 2011)

Anthropometry / obesity trends in children & adolescents (school measurement series)

- **Trends in obesity, overweight, and thinness in children in the Seychelles between 1998 and 2016. [PubMed](#)**
Aly R, Viswanathan B, Mangroo G, Gedeon J, Bovet P. (Obesity, 2018)
- **Marked increase in prevalence of obesity in children of the Seychelles between 1998 and 2004. [PubMed](#)**
Bovet P, Chiolerio A, Madeleine G, Gabriel A, Stettler N. (Int J Pediatr Obes, 2006).

