







Adolescent Health Survey

Findings from School-based Survey in Himachal Pradesh







ISBN: 978-81-978653-6-7

Suggested Citation

Mohanty S, Das SS, Bahl D, Mehra D, Sethi G, Garg R, Patel N, Mehta R, Beri G, Gupta A, Chauhan A, Mehra S. (2024). Adolescent Health Survey Findings from School-based Survey in Himachal Pradesh. New Delhi: Mamta Health Institute for Mother and Child. ISBN 978-93-5773-998-6

Disclaimer

Information contained in the publication may be freely reproduced, published, or otherwise used for non-profit purposes without permission but with due acknowledgement to Mamta Health Institute for Mother and Child.

Research Team

Saroj Mohanty, Subha Sankar Das, Deepika Bahl, Devika Mehra, Gaurav Sethi, Rishi Garg, Nikita Patel, Rajesh Mehta, Gopal Beri, Anmol Gupta, Anjali Chauhan, and Sunil Mehra

Copyright

@Mamta Health institute for Mother and Child - 2024



ELLERSLIE SHIMLA-171 002



FOREWORD

Good health is a prerequisite for future generations and development of a country. Adolescents transitioning from childhood to adulthood gives us a unique opportunity to invest in their development and well-being determining the trajectory of our future human capital. Investing in adolescent health is the basic duty of governments to address adolescent wellbeing within the demographic and epidemiological transition to endure for the rest of their lives, improving potential for future development, for ending extreme poverty and creating more inclusive societies.

Quality education and better health remains the task for all of us. Both the Rashtriya Kishor Swasthya Karyakram and Ayushman Bharat School Health Programme at schools create a unique opportunity to improve both the health status and health education of learners. As an integrated approach of better health promotion, strengthened prevention, reducing health barriers and appropriate curative measures would bring about improvement in the overall situation of health and wellbeing of the students.

Government of Himachal Pradesh commissioned and approved Mamta Health Institute for Mother and Child for the adolescent health and programme implementation survey in the State to understand status of adolescent students enrolled in government schools across districts. The insights gathered from this survey will undoubtedly provide rationales for informed decision-making and targeted interventions within the existing frameworks.

Noteworthy to mention the contributions of the dedicated team of Mamta, the National and State Technical Resource Group members, students, and Principals for this survey. This endeavour will be a catalyst for optimistic change in youth health policies, programmes, implementation toward a healthier and lively future for the youth of Himachal Pradesh.

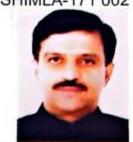
(M. Sudha Devi)

Whodrade

RAKESH KANWAR, IAS SECRETARY (Education) to the Government of Himachal Pradesh.



ELLERSLIE SHIMLA-171 002



Foreword

Healthy children shape future health status. Behavioural patterns that develop during childhood and adolescence are retained for life.

Every day thousands of children in the state go to school and spend a considerable time interacting with and learning from their peers and teachers, developing knowledge, building attitudes, skills and developing behaviours. Other than the family, no social institution has greater influence on the lives of children than schools where children develop behaviour skills for physical, emotional, and social well-being.

Acknowledging the vulnerability and significance of safeguarding and promoting the health and well-being of adolescents, Government of India, in January 2014 under the Ministry of Health and Family Welfare, launched Rashtriya Kishore Swasthya Karyakram (National Adolescent Health Programme).

The Indian government introduced the Ayushman Bharat (blessed with a long life, India)-School Health and Wellness Programme in 2018, a joint collaboration between the Ministry of Health and Family Welfare and Ministry of Human Resource and Development to strengthen the preventive and promotive health through health promotion activities for adolescents.

An institutionalised evaluation of documenting achievement would strengthen these governments' led implementations befitting adolescent students. Towards this National Health Mission, Government of Himachal Pradesh guided and mentored Mamta to conduct a State wide district level survey to assess the areas of improvement. Conducting a follow-up survey would provide an opportunity to gain an objective understanding of the progress achieved through the renewed implementation focus.

Rakesh Kanwar

Priyanka Verma

(IAS)

Mission Director National Health Mission

Ref No.....



Directorate of Health Services

Swasthya Sadan, Kasumpti, Shimla-171009 (H.P.)

Phone: 0177-2624505 e-mail: md-hp-nrhm@nic.in

Dated. 25 | 0.7. | 2.0.24.



FOREWORD

Health of children is the foundation for the future. A child in good health excels in education. With the world's largest youth population, India has an inspiring demographic dividend that can have lasting impact on the social and economic development of the country. Investing in the health and wellbeing of children is a critical priority in the State.

Children are simultaneously vulnerable to wide spectrum of communicable and chronic disease conditions including nutritional deficiencies, substance abuse, mental health concerns, violence, injury, and reproductive and sexual health problems. Many of these issues can be worked on by promoting informed healthy choices. A focused and comprehensive intervention that targets risk factors and social determinants of health conditions as well as empowers children and adolescents to adopt healthy behaviours can play a crucial role in reducing the burden of current and future diseases.

More children than ever are attending school, and for longer periods of their lives, therefore, schools can do more than perhaps any other single institution to inculcate the wellbeing and build competence of children and adolescents. Establishing healthy behaviours during childhood is easier and more effective than trying to change unhealthy behaviour in adulthood. Rashtriya Kishor Swasthya Karyakram and Ayushman Bharat School Health Programme at Schools create a unique opportunity.

The successful implementation of State Adolescent Health Survey by Mamta Health Institute for Mother and Child in collaboration with and approval of the National Health Mission and Directorate of Health, Himachal Pradesh gives us an opportunity to look for areas of improvement within existing adolescent health programme implementations in the State.

This piece of evidence would not have been possible without the support and guidance of prominent individuals who contributed, participated, and facilitated activities at various levels. I express my heartfelt gratitude to all those who played a significant role in making this survey a reality.

(PRIVANKA VERMA)

Dr. Gopal Beri

Director Health Services

Ref. :....



(O): 0177-2621424 Fax: 0177-2620661

(R): 2622159

Mobile : 94180-13888 Health and Family Welfare Deptt.

> Swasthaya Bhawan, Kasumpti, H.P. Shimla-171009

> > Dated: 21-01-2021



FOREWORD

The health and well-being of adolescents are crucial to the future of our society. The Government of Himachal Pradesh has implemented various initiatives, including the Rashtriya Kishor Swasthya Karyakram (RKSK) and the Ayushman Bharat School Health Programme, to address the diverse health needs of our young population. These programs focus on promoting holistic health through education, prevention, and curative services.

The Adolescent Health Survey, conducted by Mamta Health Institute for Mother and Child in collaboration with the National Health Mission and the Directorate of Health, Himachal Pradesh, provides an in-depth understanding of the health status and needs of adolescent students in government schools across the state. The findings of the survey will provide insights into the types and prevalence of adolescent health-related issues in Himachal Pradesh. It aimed to assess how adolescents access and utilize services and commodities under the Ayushman Bharat School Health Programme and RKSK. This will help to design and implement targeted interventions that directly address these issues.

Importantly, the survey highlights the need for empowering adolescents to make informed health choices. Schools play a critical role in shaping adolescents' health behaviors, providing a foundation for lifelong well-being. Providing school going adolescents with the right information and support will enable them to adopt healthy behaviors that will benefit them throughout their lives. This empowerment is essential for the overall social and economic development of our state, as a healthy adolescent population is better equipped to contribute to society's progress.

I extend my deepest gratitude to the National Health Mission, the Directorate of Health, Himachal Pradesh, the dedicated team at Mamta Health Institute for Mother and Child, the National and State Technical Resource Group members, and the principals and students of the participating schools. Their unwavering commitment and hard work have been pivotal to the success of this survey.

(Dr. Gópal Beri)







Dr. Anjali Chauhan State Programme Officer, Adolescent Health National Health Mission, Himachal Pradesh



FOREWORD

Adolescence is a critical period where the foundation for a healthy and productive adulthood is laid. As such, investing in the health of our young people is not just a necessity, but a strategic imperative for the sustainable growth and prosperity of our society.

The Government of Himachal Pradesh has always been at the forefront of initiatives aimed at improving health outcomes. The collaboration with the Mamta Health Institute for Mother and Child for the adolescent health and program implementation survey is a testament to our commitment to this cause. The comprehensive survey 'School Based Adolescent Health Survey' has provided us with invaluable insights into the health status of adolescent students across government schools in various districts, shedding light on areas that require targeted interventions.

The findings from this survey reveal both strengths and areas for improvement. While there have been commendable strides in health promotion and disease prevention among adolescents, gaps remain in areas such as mental health support, nutritional education, and accessibility to reproductive health services. These insights will guide our efforts in making informed decisions and implementing strategic interventions that address the unique health challenges faced by adolescents. Our goal is to ensure that every adolescent in Himachal Pradesh has access to the necessary health services and support, enabling them to lead healthy, productive lives.

Ayushman Bharat- School Health and Wellness Programme is being implemented for adolescents of government schools throughout the state, the findings from survey will guide us on focus areas and will help in addressing the highlighted issues. Additionally, the state is also running Nayi Disha Kendras to provide clinical, counselling, referral services exclusively to adolescents along with de-addiction services, adolescents can avail these services.

I congratulate the entire team and hope the findings will help the government to reform the policies and address the highlighted issue that will help the adolescents to become healthy and responsible adults.

(Dr. Anjali Chauhan)

Dr. Sunil MehraExecutive Director **Mamta Health Institute for Mother and Child**



I am delighted to present the State-level School-based Adolescent Health Survey Report, prepared under the auspices of the Government of Himachal Pradesh.

Adolescents today encounter new and diverse challenges in an ever-changing society. These challenges may lead to mental health issues, substance use, violence, early pregnancy, education barriers and environmental hazards; significantly increasing morbidity and mortality. In 2014, the Government of India launched the Rashtriya Kishor Swasthya Karyakram (RKSK), prioritising areas such as nutrition, injuries, violence (including gender-based violence), non-communicable diseases, mental health, sexual and reproductive health, and substance misuse. Schools present the ideal ecosystem for students to learn from role models, such as teachers and head of schools. Subsequently, Ayushman Bharat-School Health and Wellness Programme (AB-SHP) was launched in 2020 as a collaborative effort between the Ministries of Health and Family Welfare and Human Resource Development (now Ministry of Education) to strengthen preventive and promotive health communications through health promotion activities in schools. Both programmes are designed to improve health and well-being of adolescents. empowering them to thrive in today's environment.

Despite an enabling health promoting environment, adolescents (15-19 years) in Himachal Pradesh remain vulnerable. According to the National Family Health Survey-V (2020-21), as high as 53.2 % girls and 22.1 % boys were anemic, 4.9 % adolescent girls and 6.4% boys were overweight/obese, and 3.4% girls were either already mothers or pregnant. The survey further showed that 33.2 % girls and 28.4% boys use modern methods of contraception. Substance use, particularly tobacco use, is also significant with 14% tobacco users (aged 20-34 years) having initiated tobacco use at the age of 15-17 years (Global Adult Tobacco Survey-2, 2016-17). These statistics underscore the necessity of evaluating the current programmes to provide evidence for strengthening these in the State.

Although precise estimation of adolescent health issues is critical for planning and prioritisation, regularly and systematically measuring adolescent health and well-being over time remains a gap in India. Adolescent representation in the national representative surveys such as the National Family Health Survey, the Global Adult Tobacco Survey, and the National Mental Health Survey are conducted but vary in frequency and often provide limited coverage of specific age groups and health issues. Consequently, there is insufficient data on younger adolescents (10-14 years), as well as on diverse ethnicities. Moreover, there is a lack of comprehensive coverage of domains such as mental health, bullying, substance use, injury, sexual and reproductive health, and the positive aspects of adolescent health and well-being.

With the given context, Mamta Health Institute for Mother and Child, under the aegis of the Government of Himachal Pradesh, undertook this first of its kind school-based adolescent health survey in in all the districts of Himachal Pradesh. This pioneering initiative aimed to generate evidences on 12 themes: food preferences and choices, physical activity, hygiene, digital device use, connection to parents and/or guardians, health-seeking behaviour, access to government schemes, violence and

road safety, substance use, reproductive and sexual health, menstrual hygiene, and mental health. The insight gained from this survey will furnish evidence crucial for strengthening the existing adolescent health programme (RKSK and AB-SHP) implementation in the State. Himachal Pradesh offers an operational environment conducive to the seamless implementation of surveys. The State boasts 928 government high schools and 1,869 government senior secondary schools. It has set a precedent in India by ensuring universal access to elementary education and maintaining gender equality in educational access, with Gender Parity Index values of 1.01 at the secondary level and 1.03 at the higher secondary level. These factors uniquely position the State to effectively reach its adolescent population. To ensure the validity, reliability, generalisability, and scalability, two advisory committees-one at the national level comprising of domain experts in adolescent health and research methodology and another one at the State level including government officials from health, education, economics, statistics department along with academia were established.

Three research instruments were developed i.e. for students, principals, and a checklist for observing the school environment. The variables in the survey tools were aligned with themes of AB-SHP, RKSK, Global School-based Health Survey, Global School Health Policies and Practices, and the Global Action for Measurement of Adolescent Health indicators for a broader comparability. Before commencing the data collection, tools were pilot-tested for content validity, face validity and group concurrent validity. Data collectors were trained and given practical orientation before initiation of data collection. Measures were undertaken to maintain data quality as per global standard. Descriptive statistics was used for data analysis.

Some of the key findings of the survey may hold significant relevance for State specific programming as it is evident how States differ in their adolescent health challenges that 4 out 10 students currently are not engaging in physical activity, access to deworming tablets distributed in schools to a tune of 79%, 7 out of 10 students reported health related topics discussed in their class, consumption of cough syrup without prescription was reported to be more than 23%, and half of the students used modern contraception during sexual intercourse.

I acknowledge the partnership between State government, Mamta, academia, and domain experts for this project. Special and due mention of the commitment and guidance of Ms. M. Sudha Devi, IAS, Secretary – Health and Family Welfare, Mr. Rakesh Kanwar, IAS, Secretary- Education, Ms. Priyanka Verma, IAS, Mission Director – National Health Mission, Dr. Gopal Beri, Deputy Mission Director, and Director Health Services, National Health Mission and Dr. Anjali Chauhan, State Programme Officer, National Health Mission.

I recognise the efforts of the State Advisory Group members Prof. (Dr.) Anmol Gupta, Mrs. Shanta Chauhan, Mrs. Puneet Sharma, Mr. Ghanshyam Sharma, Dr. Savita Thakur Joshi, and Prof. (Dr.) Mamta Mokta who mentored the process.

The exceptional endeavour of the National Advisory Group Members: Late Prof (Dr.) Arvind Pandey, Dr. Nomita Chandhiok, Dr. Rajesh Mehta, Prof. (Dr.) Harish K Pemde, Prof. (Dr.) Laxmi Kant Dwivedi in providing overall guidance is highly recognised.

This report evokes a profound sense of fulfilment. Upholding rigorous global standards, Mamta has made a steadfast commitment to repeat the survey after three years with due approval from the State government.

Let us reaffirm our dedication to advancing adolescents health and well-being.

Dr. Sunil Mehra

Acknowledgments

Mamta Health Institute for Mother and Child conceived a school based adolescent health survey in Himachal Pradesh as a step forward in strengthening adolescent health programming at the State and district level under the approval and guidance from the Government of Himachal Pradesh and institutions and experts across the country and State.

Our heartiest gratitude is due to Smt. M. Sudha Devi, IAS, Secretary – Health and Family Welfare, Shri. Rakesh Kanwar, IAS, Secretary- Education, Smt. Priyanka Verma, IAS, Mission Director – National Health Mission for invaluable direction and encouragement. Also, our sincere thanks to Dr. Gopal Beri, Deputy Mission Director, Director Health Services, National Health Mission for his constant support and guidance.

Dr. Anjali Chauhan, State Programme Officer, National Health Mission as driving force for the study, deserves special mention; without whom we would have never accomplished this task.

Prof (Dr.) Anmol Gupta, Professor and Head, Department of Community Medicine, Indira Gandhi Medical College and Hospital, Shimla acted as a coach for the survey and we are thankful to him.

Eminent experts as members of the National Advisory Group guided the survey at every step. We are also grateful from deep core of our heart to late Prof. (Dr.) Arvind Pandey, ex-Director, Indian Council of Medical Research — National Institute of Medical Statistics, New Delhi; Dr. Nomita Chandhiok, Senior Deputy Director General/Scientist 'G' (Retd.), Indian Council of Medical Research, New Delhi; Dr. Rajesh Mehta, former Regional Advisor, World Health Organization — South-East Asia Region, New Delhi; Prof. (Dr.) Harish K Pemde, Professor of Paediatrics, Kalawati Saran Children's Hospital, New Delhi and Prof. (Dr.) Laxmi Kant Dwivedi, Professor, Department of Survey Research and Data Analytics, International Institute for Population Sciences, Mumbai for their invaluable guidance in designing the survey.

The State Advisory Group steered this study for which we are thankful to Prof. (Dr.) Mamta Mokta, Professor and Dean Faculty, Himachal Pradesh University; Mrs. Shanta Chauhan, Assistant Director, Elementary Education; Mrs. Puneet Sharma, Director of Higher Education; Dr. Savita Thakur Joshi, Research Investigator, Population Research Centre, and Mr. Ghanshyam Sharma, Research Officer, Economics and Statistics Department.

Our special thanks are also due to the district level functionaries of the Departments of Health and Education, especially the principal of the schools who supported and guided this work in the schools. The students who participated in the survey needs special mention.

Last but not the least, we are beholden for the contribution of data collectors who worked tirelessly not for just data collection but also coordination at different levels in the district.

Our biggest thanks are for the State team of Mamta Health Institute for Mother and Child and its team lead Dr. Gaurav Sethi who navigated the survey throughout at different levels.

Table of Contents

Ackno	wledgments	16
Table o	of Contents	17
Execut	tive summary	23
Chapte	er 1: Introduction	29
1.1	Background	29
1.2	Adolescent Health Status: World Health Organization Regions	29
1.3	Adolescent Health in India: Policy and Programme Environment	20
1.4	Measuring Adolescent Health and Wellbeing	31
1.5	Rationale	32
Chapte	er 2: Methodology	35
2.1	Study Setting	35
2.2	Objectives	36
2.3	Study Design	36
Chapte	er 3: Result	41
3.1	District-wise School Covered for Data Collection	41
3.2	Background Details	41
Chapte	er 4: Findings	45
4.1	Food Preferences and Choices	45
4.2	Physical Activity	48
4.3	Personal Hygiene	49
4.4	Digital Use and Cyber Bullying	51
4.5	Violence and Road Safety	52
4.6	Substance Use	54
4.7	Reproductive and Sexual Health	56
4.8	Menstrual Hygiene	57
4.9	Mental Health	58
4.10	Access to Government Schemes	59
Chapte	er 5: Recommendations	63
5.1	Food Preferences and Choices	63
5.2	Physical Activity Physical Activity	64
5.3	Personal Hygiene	65
5.4	Digital Device Use and Cyber Bullying	65
5.5	Violence and Road Safety	66

Adolescent Health Survey

5.6	Substance Use	67
5.7	Reproductive and Sexual Health	68
5.8	Menstrual Hygiene	68
5.9	Mental Health	69
5.10	Government Schemes	69
5.11	Overarching	70
Chapter 6: Conclusion		73
Annexure: 1		74
Annexure: 2		144
Refere	nces	145

List of tables and figures

Table 1: Major survey employed in India for measuring adolescent health and well-being	31
Table 3.1 Distribution of sampled schools across districts	41
Table 3.2 School characteristics	41
Table 3.3 Student respondent characteristics	41
Figure 3.1 Occupation of the main bread winner in respondent family	42
Figure 3.2 Family size of the adolescents	42
Table 4.1: Percentage of Students Self-Reported, Food Preference	46
Table 4.2: Percentage of Students Self-Reported Physical Activities	48
Table 4.3: Percentage of Students Self-Reported Personal Hygiene Practices	49
Table 4.4: Percentage of Students Self-reported Digital Device Use and Bullying	51
Table 4.5: Percentage of Students Self-reported Violence and Road Safety Violations	53
Table 4.6: Percentage of Students Self-reported Substance Use	55
Table 4.7: Percentage of Students Self-reported Sexual Health	57
Table 4.8: Percentage of Students Self-reported Menstrual Hygiene	58
Table 4.9: Percentage of Students Self-reported Mental Health Issues	59
Table 4.10: Percentage of Students Self-reported Access to Government Schemes	60
Table 1.1: Students ate fruits daily	74
Table 1.2: Students drink milk or eat milk products daily	75
Table 1.3: Students eat fried food daily	76
Table 1.4: Students consume soda beverages daily	77
Table 1.5: Students consumed food with high sugar daily	78
Table 1.6: Students consume foods with high salt and fats daily	79
Table 1.6: Students reading information on nutritional levels on packaged food	80
Table 1.7: Students reported eating breakfast	81
Table 2.1: Students undertaking mild exercise	82
Table 2.2: Students undertaking moderate exercise	83
Table 2.3: Students undertaking strenuous exercise	82
Table 3.1: Students washing hands with soap and water or using sanitizer after visiting restroom	83
Table 3.2: Students washing hands with soap and water or use sanitizer before eating food	84
Table 3.3: Students washing hands with soap and water or using sanitizer before handling/	
cooking food	85
Table 3.4: Students using toilets or latrines in school	86
Table 3.5: Separate latrines and toilets for boys and girls	87
Table 3.6: Cleanliness of latrines and toilets	88

Table 3.7	7: Availability of running water in latrines and toilets	89
Table 3.8	3: Availability of washing area inside latrines and toilets	90
Table 3.9	2: Cleaning of dustbin inside the classroom everyday	91
Table 4.1	: Time spent by students on digital device per day in past 7 days	92
Table 4.2	2: Students having a mobile phone for use on a regular basis	93
Table 4.3	3: Non-usage of digital device by students in past 7 days	94
Table 4.4	E: Students reporting bullying someone online in past 12 months	95
Table 4.5	S: Students report being bullied online in past 12 months	96
Table 5.1	: Parents/guardians spending time with students in past 30 days	97
Table 5.2	2: Students reporting how often their parents/guardians try to know what they do in their free time in past 30 days	98
Table 6.1	: Students describing their health in general	99
Table 6.2	2: Actions by students when they experience any health condition	100
Table 7.1	: Students reported having undergone health screening since April 2023	101
Table 7.2	2: Students reported to have been informed about any disease or complication during health screening	102
Table 7.3	3: Students provided with a referral slip for government health facility	103
Table 7.4	: Students reported receiving weekly iron folic acid tablets in school	104
Table 7.5	: Students having consumed weekly iron folic acid tablets	105
Table 7.6	s: Students received deworming tablets from school	106
Table 7.7	7: Students consumed deworming tablets	107
Table 7.8	3: Students reported discussion on health-related topics in school assembly sessions	108
Table 7.9	2: Students reported discussion on health conducted in respective classes in the past 1 week	109
Table 7.1	0: Students reported 'Health Mela' organized inside school premises in the last 3 months	110
Table 7.1	1 : Students knew their Health Ambassador	Ш
Table 7.1	2: Students knew their Health and Wellness Messenger	112
Table 8.1	: Students engaged in physical fight	113
Table 8.2	2: Students reported bullied someone in past 12 months	114
Table 8.3	3: Students reported bullied by someone in past 12 months	115
Table 8.4	: Students wore helmet when pillion riding or driving motorcycle in the past 30 days	116
Table 8.5	: Students wore seat belt when driving car or other motor vehicle in the past 30 days	117
Table 8.6	s: Students skipped school because they felt unsafe at school or while going and coming back from school in the past 30 days	118
Table 9.1	: Students reported their classmates using substance in last 12 months prior to survey	119
Table 9.2	2: Students smoked or chewed tobacco during the past 30 days	120
Table 9.3	3: Students used e – cigarette during the past 30 days	121

Table 9.4: Students consumed alcohol in past 30 days	122
Table 9.5: Students used hashish during the past 30 days	123
Table 9.6: Students used cocaine/heroin/opium during the 12 months	124
Table 9.7: Students used hallucinogens during the past 30 days	125
Table 9.8: Students used an injectable drug during their life	126
Table 9.9: Students used inhalants during the past 12 months	127
Table 9.10: Students consumed cough syrup without prescription during the past 12 months	128
Table 9.11: Students consumed sleeping pills during the past 12 months	129
Table 10.1: Students ever had sexual intercourse	130
Table 10.2: Students reported reasons for not having sexual intercourse	131
Table 10.3: Age at first sexual intercourse	132
Table 10.4: Students reported on whom to reach out to for information about sexual encounter and sexual - behaviour	133
Table 11.1: Student reported on menarche	134
Table 11.2: Students reported menstrual hygiene practices during menstrual cycle	135
Table 11.3: Students experienced any menstrual problem during the past 30 days	136
Table 11.4: Students reported their preferred source of treatment for menstrual problem	137
Table 12.1: Students felt disappointed, depressed, hopeless or have little interest in doing things	138
Table 12.2: Students reported losing appetite or over-eating when worried	139
Table 12.3: Students felt nervous or anxious or not able to control worrying	140
Table 12.4: Students reported having a difficult time staying focused	141



Executive summary

Mamta, since many years, is actively supporting the Government of Himachal Pradesh in implementing various health programmes across the State. As part of furthering support to adolescent health in Himachal Pradesh, a State level School-based Adolescent Health Survey was undertaken in the year 2023 with the approval and guidance of the Government of Himachal Pradesh in general and Secretary, Health and Family Welfare, in particular.

A cross-sectional survey of 7,563 adolescents, aged between 13-17 years, enrolled across 204 government schools in all 12 districts, was undertaken. The School-based Adolescent Health Survey aimed to understand the health behaviours and protective factors among adolescents of this specified age group and identify the areas of improvement in environment and practices towards promoting health and well-being of school-going adolescents.

Mamta Health Institute for Mother and Child Institutional Review Board approved the study. Two research instruments were adapted from the Global School-based Student Health Survey for students (self-administered), and the Global School Health Policies and Practices Survey for principals (self-administered) and an observation checklist for data collectors for achieving the study objectives. Research instruments were titrated after pilot testing in schools other than the sampled schools. Standard quality assurance modalities were used for data quality. For statistical treatment, descriptive statistics and Pearson's Chi-square test was done in Stata 18 software. Given below are the key findings derived from the survey:

Study findings

Most of the surveyed schools were co-educational, offering education up to higher secondary classes (89.2%). Of the 7,563 participants, 50.7% were boys, 67.1% were aged between 13 to 15 years and 86.8% were from the rural areas.

a. Food Preferences and Choices:

The survey revealed low consumption of healthy food, along with high consumption of unhealthy food (fast food), among the student respondents. A quarter of the respondents self-reported skipping their breakfast and lunch. Adolescent girls in the older age group (16 and 17 years) residing in rural areas are vulnerable due to their unhealthy dietary behaviours.

b. Physical Activity:

More than half of the adolescents self-reported engaging in strenuous, and mild physical activities between three to seven days in the past week. Boys, in the younger age group (13 to 15 years) from urban areas, are found vulnerable due to their inadequate physical activity in their daily schedule.

c. Personal Hygiene:

More than four percent adolescent had self-reported unhealthy hand washing practices. Similar percentage of adolescents self-reported not having separate toilet facilities for boys and girls in coeducational institutions surveyed. A significant concern related to the vulnerability of younger age group (13 to 15 years) girls from rural areas reported inconsistent hygiene practices which may increase their susceptibility to infection.

d. Digital Device Use and Cyber Bullying:

About two percent adolescents self-reported spending more than 8 hours per day on digital device. Almost ten percent adolescents self-reported that they bullied online, at the same time, nine percent self-reported having been bullied online. Analysis highlights older age group (16 and 17 years) boys in urban areas are more addicted to this practice.

e. Violence and Road Safety:

Nearly a quarter of the adolescents self-reported to engaging in a physical fight. About fourteen percent and eleven percent of adolescents self-reported that they had physically bullied someone and physically bullied by someone respectively. Almost one-fourth of the respondents self-reported feeling unsafe while going or coming back from school or inside school. The analysis highlights a concern about the vulnerability of young adolescent (13 to 15 years) boys in rural areas attributed to their indulgence in violence and following unsafe road use behaviours.

f. Substance Use:

Self-reported substance uses among adolescents ranged from three percent to five percent. Almost one-fourth self-reported consumption of cough syrup and one-tenth use of injectable drugs. Young (13 to 15 years) adolescent boys in rural areas, are more vulnerable to various substance misuse.

g. Reproductive and Sexual Health:

About six percent of adolescents self-reported of ever having sexual intercourse. Among these more than sixty-two percent had sexual intercourse before age of 14 years. Less than half of adolescent students who self-reported sexual intercourse, used protections during their last sexual intercourse. Young (13 to 15 years) adolescent boys in rural areas, are particularly vulnerable especially for early initiation of sexual activities which mostly are unprotected.

h. Menstrual Hygiene:

Nearly all respondents were reportedly using hygienic menstrual practices. Additionally, more than thirty percent of adolescent girls reported experiencing menstrual cycle problems, more than half of them have, however, opted not to act or relied on home remedies. It is evident that rural adolescent girls are particularly vulnerable because of poor hygienic practices, suboptimal health seeking related to menstruation.

i. Mental Health:

More than eight percent of adolescents self-reported having mental health issues. The findings underscore the vulnerability of urban older adolescent (16 and 17 years), particularly girls, to mental health.

j. Access to Government Schemes:

More than seventy-one percent of adolescents self-reported that a team visited their school to conduct health check-up/screening in the school premise. Nearly eighty and eighty-eight percent of adolescents self-reported having received deworming tablets and weekly iron folic acid tablets from school. Almost eighty-nine, sixty-eight, and forty-six percent of adolescents self-reported that health related topics were being discussed in assembly sessions, discussion and/or lecture on health conducted in

class and *Health Melas* organized in school respectively. Six of every ten students self-reported knowing Ayushman Bharat School Health and Wellness Programme Ambassador of the respective school and Health and Wellness Messenger of their class. The analysis suggests that older (16 and 17 years) adolescents, boys from urban areas do not utilise the government schemes.

Recommendations

a. Food Preferences and Choices

The findings highlight the need for encouraging personal healthy food choices while discouraging the consumption of junk foods. Additional activities as part of the Module 6 and 8 of the existing School Health and Wellness Programme, can be included. Adolescents can be engaged through dance, reels, and skits to encourage healthy eating.

b. Physical Activity

Integrating physical activity across the 11 themes of the School Health and Wellness Programme can contribute in fostering positive physical activity behaviors and discourage sedentary lifestyle among students. Additionally, strategies are needed to make parents aware about the importance of adhering to regular physical activities as healthier life style practices as role model for their children.

c. Personal Hygiene

Activities can to be added in the existing Module 6, where students need to be taught about the World Health Organization suggested five steps of handwashing. Aligning with Swachch Bharat Vidhalaya, each school can maintain a school maintenance schedule and the School Management Committee and designated teachers can periodically check the upkeep.

d. Digital Devise use and Cyber Bullying

Schools and families must promote safe and limited use of mobile phones and overall screen time. Comprehensive education within Module 3 on the various forms of bullying, its impact on individuals and communities, and strategies for prevention and intervention can contribute to develop a holistic understanding of the issue. Students need to be sensitised with available services such as the National Cyber Crime Reporting Portal, Helpline Numbers (1800-180-5522) to seek help.

e. Violence and Road Safety

Adolescents to be provided life skills and education on conflict resolution and negotiation so that they do not indulge in violence and abstain from bullying. Incorporating contextual content and activities into Module 10, to promote adherence to safe road use measures among adolescents, including wearing seat belts, recognising, and following different signs and road marking, understanding safety signals and legal age for driving, would be imperative.

f. Substance Use

To prevent and manage substance misuse, the existing information in Module 7 should be elaborated by adding content on e-cigarette, marijuana, hallucinogens due to their reported widespread consumption in the State. Additionally, it is imperative to share details about the National Tobacco Quit Line Services (1800 112 356), m-cessation (011-22901701), nearest Adolescent Friendly Health Clinic, Health and Wellness Centers, and De-addiction Center (Deaddiction and Rehabilitation Centre, Bhuntar, Kullu). The misuse of cough syrups can be prevented by involving parents and strict implementation of prescription-based sales and stopping over the counter sales to children by pharmacy stores.

g. Reproductive and Sexual Health

Key contextual concepts such as contraception and abortion can be included in Module 9 such as how condoms holistically prevent sexually transmitted infections and reproductive tract infections and pregnancy. Question box and health messenger (peer) led group discussions should be promoted more often and expertise from doctors trained in Rashtriya Kishor Swasthya Karyakram could be sought.

h. Menstrual Hygiene

Module I could incorporate further details about the safety of using menstrual hygiene products, along with debunking prevalent myths about their usage. In order to promote the use of menstrual hygiene products, it is essential to create an enabling environment that includes the availability of disposal and appropriate handwashing facilities. An overall supportive environment could be ensured for menstrual hygiene in collaboration with girls, boys, parents, and other stakeholders.

i. Mental Health

Within the Module 2, Flag Signs introduced by the Ministry of Education in 2022, can be included with an aim for early screening and identification of thirteen Adolescent Mental Health concerns. Adolescents need to be made aware of the existing health services of Adolescent Friendly Health Clinics, Health and Wellness Centres and helplines such as Tele Manas (14416).

j. Overarching

Assessment of Ayushman Bharat-School Health and Wellness Programme recommends that communication for school children needs to be included within the school inspection mandate at the level of school inspectors. A physical space can be dedicated in every school as 'Health and Wellbeing Corner', where monthly articles by students, and Information Education Communication materials can be displayed for promoting health and well-being aligned with the topics discussed in the Ayushman Bharat-School Health and wellness Programme schedule. The existing platforms in schools such as school assemblies, parent-teacher meetings, annual functions, and School Management Committees may be used to sensitise school students, parents and management about themes, available services and commodities under Ayushman Bharat-School Health and Wellness Programme and Rashtriya Kishor Swasthya Karyakram.





Chapter 1:

Introduction

1.1 Background

Globally, 1.25 billion adolescents play a crucial role in shaping a sustainable and equitable future. As of 2019, close to 90% adolescents reside in Low- and Middle-Income Countries¹. Nearly half of these adolescents live in Asia, and almost one in four (282 million) live in South Asia. Within this region, Bangladesh and Pakistan have the highest proportion and India has the greatest absolute number of adolescents².

Adolescence is widely recognised as a unique stage of life-transition, characterised by significant physical, cognitive, psychosocial, and emotional development³ and also lays the foundation for adult health status. Unmet health needs during adolescence can impact immediate growth and development, throughout the life course and potentially result in lasting effects on the health of the next generation. Emphasising investment in this life-stage will yield triple dividend⁴.

1.2 Adolescent Health Status: World Health Organization Regions

Morbidity and mortality among adolescents is a matter of concern as globally more than 1.2 million adolescents aged 10–19 years died in 2015⁵. The region with the highest adolescent mortality was African Low- and Middle-Income Countries, recording 243 deaths per 100,000 adolescents⁶. Following closely, Eastern Mediterranean Low- and Middle-Income Countries reported a rate of 115 deaths per 100,000 adolescents. Several factors contribute to adolescent mortality, and the leading causes vary between genders and age groups. There were an estimated 1.7 million deaths among adolescents in 2015 in the South – East Asia Region⁷; the leading causes of mortality included self-harm (suicide), road injury, and maternal mortality (among girls). In addition, significant morbidity is reported among adolescents in the Region – a loss of 21 783 disability adjusted life years per 100 000 adolescents owing to self-harm, iron deficiency anaemia, depressive disorders, road traffic injuries and diarrhoeal diseases.

By using the Global Burden of Diseases, Injuries, and Risk Factors Study 2019, it is estimated that in India⁸ females in the 10–14 and 15–19 years age groups suffered 6.75 million and 9.25 million disability-adjusted life years, respectively, 39.1% and 44.2% respectively of which were years of life lost. The corresponding disability-adjusted life years for males were 6.71 million and 9.65 million, respectively. Injuries accounted for 65.9% and 45.3% of years of life lost in males and females aged 15–19 years respectively, and 40.8% in males aged 10–14 years respectively. Specifically, road injuries (15.3%) and self-harm (11.3%) accounted for most of the injury deaths in 15–19 years whereas drowning (7.7%) and road injuries (6.9%) accounted for the most injury deaths in 10–14 years males.

1.3 Adolescent Health in India: Policy and Programme Environment

India is home to over 250 million adolescents, constituting 20 percent of the total population ⁹. National Family Health Survey rounds ^{10–12}, reported that adolescents of age 15–19 years are vulnerable due to high prevalence of any anaemia, overweight/ obesity, fewer use of modern method of contraception, less use of hygienic practices during menstruation.

Acknowledging the vulnerability and significance of safeguarding and promoting the health and wellbeing of adolescents and simultaneously addressing a range of health issues, the Government of India, under the Ministry of Health and Family Welfare, in January 2014 launched Rashtriya Kishor Swasthya Karyakram 13. The initiative aimed to engage with adolescents, encompassing both genders, rural and urban residents, married and unmarried, including those attending school and those who are out-ofschool. It particularly targets marginalised and underserved communities. The programme has broadened its focus beyond Sexual Reproductive Health to include priority areas such as nutrition, injuries, violence (including gender-based violence), non-communicable diseases, mental health, and substance misuse. This expansion aimed to provide comprehensive support and services, acting as a single resource for adolescent health and well-being. It is observed that the Rashtriya Kishor Swasthya Karyakram serves as a valuable linkage between health systems and schools where adolescents are easily accessible, particularly in rural areas. However, evidence indicates that challenges, such as the lack of human resources or counsellors, lack of signage in Adolescent Friendly Health Clinics, commodities and the geographical remoteness of certain areas, hinder the effectiveness of outreach within the programme implementation 14,15. A significant challenge in the implementation of the programme warrants the need for strengthening the outreach strategy.

In pursuit of Sustainable Development Goal 2030, which emphasises health and education integration, the Government of India in 2020 launched the Ayushman Bharat-School Health and Wellness Programme ¹⁶ for children and adolescents (6 to 18 years). This collaborative effort between the Ministry of Health and Family Welfare and the Ministry of Human Resource Development aims to strengthen preventive and promotive health communications through health promotion activities in schools with the objectives of providing age-appropriate information about health and nutrition, promoting healthy behaviour, detecting and treating diseases including identification of malnourished and anaemic children, promotion of the use of safe drinking water in schools, promotion of safe menstrual hygiene practice among girls, promotion of yoga and meditation, encouraging research on health wellness and nutrition.

With significant government investment in improving adolescent health, standard institutionalised evaluation mechanisms for impact of these programmes are critical. Current adolescent health data often lack inter-sectoral coordination beyond health e.g., with education, water and sanitation, and social protection system to name a few. Unmarried adolescents are often overlooked in National Family Health Survey rounds, limiting chronological and evolving understanding of adolescent contextual health needs.

It is crucial to measure health behaviours, determinants, outcomes, as well as policy and programme implementation to effectively monitor progress in enhancing adolescent health and promoting well-being.

1.4 Measuring Adolescent Health and Well-being

Systematic and longitudinal measurement of adolescent health and well-being remains uncommon, particularly in Low- and Middle-Income Countries. Recently, the Global Action for Measurement of Adolescent Health initiated to promote harmonised guidance for adolescent health measurement, supporting countries and technical organisations in collecting useful data to track progress in the improvement of adolescent health ¹⁷.

Globally adolescent health indicators are predominantly derived from repeated cross-sectional surveys ¹⁸ including the Global Early Adolescent Study ¹⁹, Health Behavior in School-aged Children ²⁰, Global Youth Tobacco Survey ²¹, Global School-based Health Survey ²². Several shortcomings to adolescent health and well-being measurement in Low- and Middle -Income Countries ²³ are evidenced:

- i. Lack of coverage of 10-14 years' adolescents and, diverse ethnicities.
- ii. Age disaggregated data are often lacking—limiting their use for programme planning.
- iii. Several aspects of adolescent health are inadequately covered including mental health, substance use, injury, sexual and reproductive health, bullying among unmarried adolescents, and positive aspects of adolescent health and well-being.
- iv. Current adolescent health data systems often lack intersectoral coordination beyond health e.g. with education, water and sanitation, and social protection systems.

In the Indian context, several major surveys are utilised to assess adolescent health and well-being as mentioned below:

Table I:Major survey employed in India for measuring adolescent health and well-being 10-12,22,24-33

Survey	Frequency	Focus on adolescent health and well being
National Family Health Survey	Every five years (NFHS-I to 5)	Fertility, family planning practices, infant and child mortality, maternal and child health, nutrition, reproductive health, anaemia, etc. Age group: 15 to 19 years in the context of only married
Global Adult Tobacco Survey	Every five years (GATS I and 2)	Monitor adult tobacco use and track key tobacco control indicators Age group: I 5 and above
Global Youth Tobacco Survey	Varied (2003, 2006, 2009, 2016, 2019)	Systematically monitoring youth tobacco use (smoking and smokeless) and tracking key tobacco control indicators. The fourth round has been designed to provide estimates at the state/union territory level by sex and location of school (rural/urban) among 13-15 years. Age group: 13 to 15 years
Global School Health Survey	Piloted in Rajasthan in 2007	Healthy eating, hygiene, substance use, physical activity, connectedness etc. Age group: 13 to 17 years
National Mental Health Survey	2015-16 and repeat planned in 2023	Assess mental morbidity in India Age group: above 18 years
Comprehensive National Nutrition Survey	2019	First survey measuring malnutrition, micronutrient deficiencies, non- communicable diseases Age group: 10 to 19 years

The Global School Health Survey stands out as promising, encompassing all essential adolescent priority areas. However, its utilisation in India has been limited to the pilot in Rajasthan in 2007. There is substantial potential for adapting this survey in the Indian context, providing a nuanced understanding of adolescent health needs within the framework of Rashtriya Kishor Swasthya Karyakram and Ayushman Bharat-School Health amd Wellness Programme. This survey can provide reliable evidence for informing planning, implementation, and monitoring of health programmes and system strengthening.

1.5 Rationale

Mamta is actively supporting the Himachal Pradesh Government in implementing various health programmes to achieve the Sustainable Development Goals. These programs aim to address various aspects of healthcare, from adolescent health to maternal and child health, through comprehensive and community-centered approaches:

Adolescent health initiatives:

- a. Rashtriya Kishor Swasthya Karyakram: Mamta is actively involved in the establishment, operationalisation, and mentoring of Adolescent Friendly Health Clinics across the State. Additionally, the institution is facilitating trainings for various elements within the Rashtriya Kishor Swasthya Karyakram and Ayushman Bharat-School Health and Wellness Programme.
- b. E-learning platform: Under the Rashtriya Kishor Swasthya Karyakram, Mamta is supporting the development of digitising the modules for designated Medical Officers positioned at Adolescent Friendly Health Clinics.

Other initiatives:

- a. State Midwifery Technical Unit: A Midwifery-led Care Unit, for nurse practitioners and a skill lab has been established in the Shri Lal Bahadur Shastri Medical College and Hospital in Mandi, for establishing State Midwifery Training Institute under the National Midwifery Initiative.
- b. Care companion programme: Caregivers of pregnant and lactating women are being capacitated with basic skills for identification of early danger signs, infant care and improve outcomes and strengthen health service utilisation in 31 high load delivery points including Medical College (6), Zonal Hospital (4), Regional Hospital (4), Civil Hospital(16), and Community Health Centre (1).
- c. Strengthening Integrated Child Development Scheme: Complementing the ongoing implementation in Hamirpur district by strengthening ownership and accountability of the local functionaries for improved health and well-being of newborns, children, adolescents, and women while addressing water, sanitation, hygiene, and skill development.
- d. Comprehensive primary health care: Strengthening ten Health and Wellness Centres in Sirmour district by capacitating human resources on various components of primary health care, along with infrastructure support to ensure provision of services as per the programme mandate. Through community meetings, wellness camps, special day celebrations, communities are being empowered to access services from these Health and Wellness Centres.

e. Improving maternal, child, and adolescent health: A system strengthening and improving the quality of delivery of public health services initiative has been launched in Mandi and Chamba districts. This emphasises increasing the demand for healthcare services and strengthening community ownership on health, nutrition, and hygiene along with non-communicable disease management.

Mamta, as part of furthering support to adolescent health implementation in the State, undertook this comprehensive State-level School-based Adolescent (13-17 years) Health Survey in the year 2023 with the approval and under the guidance of the Government of Himachal Pradesh.



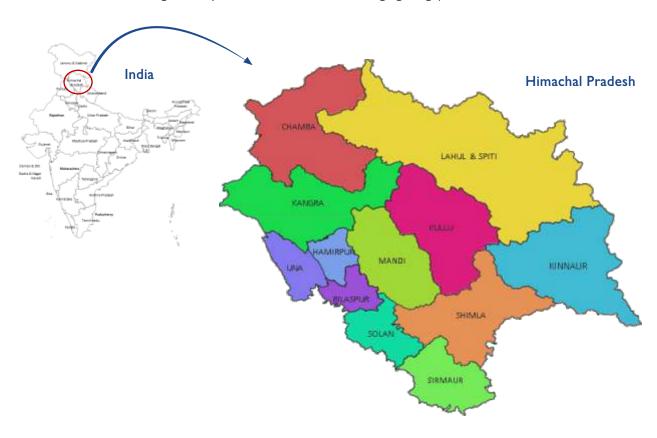
Chapter 2:

Methodology

2.1 Study Setting

Himachal Pradesh is administratively divided into 12 districts, 73 sub-divisions, 78 blocks and 172 tehsils. As in Census 2011, the total population of the State was 68,64,602, percentage of rural population was 89.97, sex ratio of 909 and the literacy rate was 83.78%, well above the national average³⁴.

The school infrastructure in the State comprises 928 government high schools, 1,869 government senior secondary schools, and 130 governments colleges. Total number of students enrolled from class 8 to class 12 was 7,82,941 35. There is almost universal enrolment, with the Net Enrolment Ratio at 99.7 in primary level³⁵ and the retention rate was 96.42 in class 11. Himachal Pradesh became the first State in India to make elementary education accessible to every child³⁶, and is an exception in upholding gender access in education³⁷. School enrolment and participation rates for girls are almost universal at the primary level. Higher levels of education, however, do reflect a gender-disparity. But Himachal is still significantly ahead of other states at bridging the gap³⁸.



Map not to scale

2.2 Objectives

The objectives of the study were:

- a. To understand the types and prevalence of adolescent health-related issues, including health behaviours in Himachal Pradesh.
- b. To understand, access to and utilisation of services and commodities by adolescents according to Ayushman Bharat School Health Programme and Rashtriya Kishor Swasthya Karyakram in Himachal Pradesh.
- c. To understand the status of school policy environment and practices towards promoting health and wellbeing of adolescents in schools.
- d. To provide recommendations to strengthen the ongoing adolescent health programme in state of Himachal Pradesh

2.3 Study Design

- i. Advisory committee: Two advisory committees were formed for the study one at a national level and another at the state level. These committees consisted of government officials, eminent experts, and senior members of Mamta Health Institute for Mother and Child. Both Advisory committees played a crucial role in advising the study design, development of survey tools, sampling methodology, implementation plan, data quality assurance, data analysis and report writing. Throughout the study period, five national level and three state level consultative meetings were held.
- ii. Study design and participants: A cross-sectional design was used to reach to adolescent (13 to 17 years) boys and girls, currently attending government schools for the one-point of time survey.
- iii. Sampling: Sample size was determined using the Cochran's Sampling for finite population³⁹:

$$n' \! = \! (((M)^*(N^*(z^2)^*p^*(1\!-\!p)) / ((d^2)^*(N\!-\!1) + (z^2)^*p(1\!-\!p)))$$

Where

n' = Sample size

M = Number of sampling stages

N = Universe/total population

z = Confidence level (1.96) for 95%

p = Prevalence (0.05)

d = Margin of error (0.5)

iii. Sampling: Sample size was determined using the Cochran's Sampling for finite population³⁹:

In addition to this estimate, another 15% of the sample were additionally added for adjusting non-response/incomplete response, and parental consent refusal. Total sample arrived was 7,563.

Sample was distributed among all 12 districts by using the probability- proportional-to-size with consideration for factors such as location of schools (rural and urban), adolescent gender (boy and girl) and age of adolescents (13-15 years and 16-17 years). Further, exclusive boy's or girl's schools

- were also considered for sample distribution at the first instance. It was ensured that one school from a school cluster was included in the final sample frame.
- iv. Research instruments: Three research instruments were developed for students, principals, and observing school environment (in and around). The inclusion of both adolescent respondents and school principals provided a comprehensive understanding of adolescent health issues and school-level factors impacting health outcomes and aided in data triangulation
 - a. Students survey (self-administered): 'Global School-based Student Health Survey' questions were adopted and adapted for the survey. The questionnaire covered the domains of dietary behaviour, physical activity, hygiene, digital devise use, connect to parents/guardians, health seeking behaviour, health screening, violence, substance use, reproductive and sexual health, menstrual hygiene, and mental health to assess the prevalence of adolescent health and related issues. The questions were aligned with Global Action for Measurement of Adolescent Health 17 to maintain comparability. The aim was to understand the types and prevalence of adolescent health-related issues, including health behaviours. Additionally, to understand, access to, and utilisation of government services and commodities by adolescents.
 - b. Principal survey (self-administered): 'Global School Health Policies and Practices Survey'⁴¹ tool was adapted covering the domains of school health coordination, healthy and safe school environment, violence and bullying, substance use prevention, implementation of government schemes, and physical education and activity. The aim was to understand the implementation of school health policies aimed promoting health and wellbeing of adolescents.
 - c. Observation (school environment checklist): The tool was developed with the aim to triangulate the self-reported data of adolescents and principals (as mentioned above) with the observation of the school environment (in and around) on cleanliness, substance use, availability of vendors selling junk foods, , adherence to Tobacco Free Education Institution guidelines and school attendance.

All these survey tools were made in KoBo collect⁴² online data collection interface.

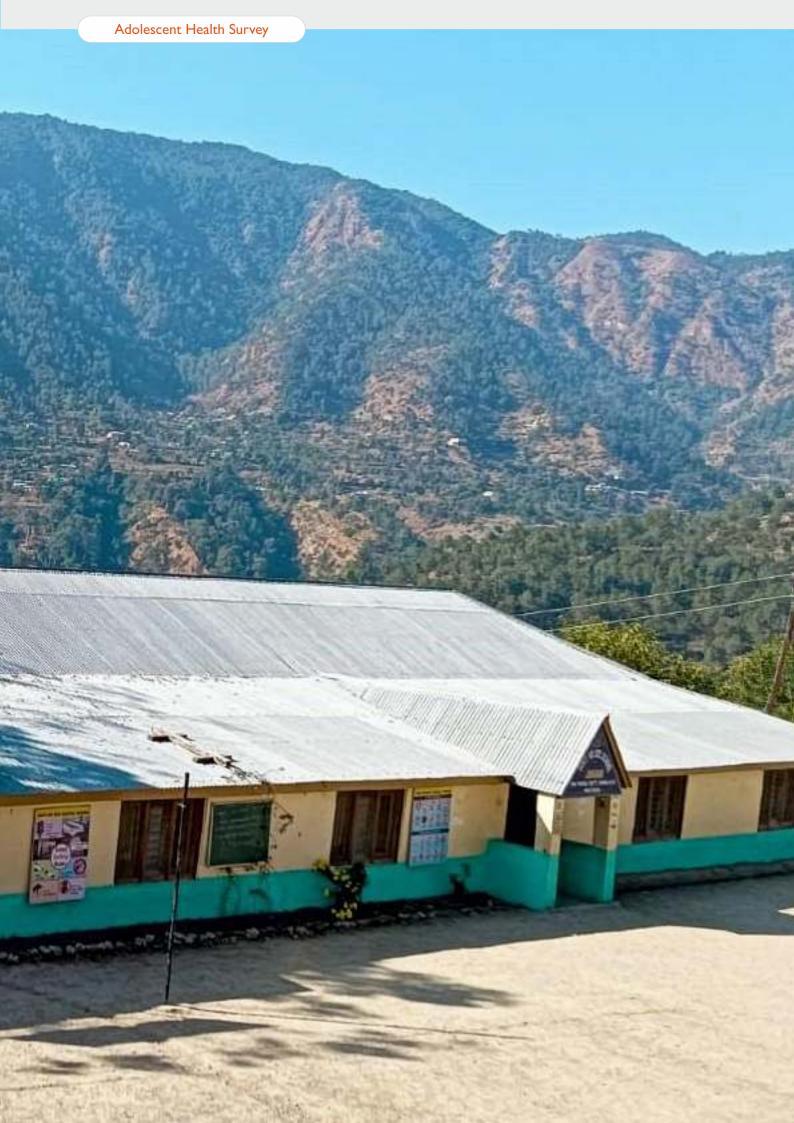
- v. Pilot testing of survey instruments: Tools were pilot tested to establish the content validity and face validity. Content validity was established by seeking the inputs of thematic experts (n= 14). For face validity, pilot testing was conducted in two districts, with representation from both rural and urban schools, and included both boys and girls enrolled in class 7th to 12th (n=90). For group concurrent validity of the survey tools, face-to-face interview was conducted among 20% (n=18) of the adolescents along with self-administration mode. Feedback received from experts and adolescents related to language of the questions, sequencing, topic sensitivity, addition or deletion of response options were incorporated and integrated into the survey instruments to enhance contextual appropriateness before commencing the data collection.
- vi. Ethical approval: Institutional Review Board of Mamta Health Institute for Mother and Child, New Delhi granted ethical approval to the study (MIRB/September 2023/009).

- vii. Training of data collectors: A two-day interactive residential training was organised in Shimla, in which 24 data collectors were trained on the tools, field operational plan, data quality assurance, and anticipated challenges and probable solutions. On the following day, they practiced using the research instruments in non-sampled schools (n=12). Based on these experiences and feedback, the field operational plan was finalised.
- viii. Data quality assurance: Logical sequencing, question skip pattern, default global position system locations, and the date and time of data gathering were all included in the online data collection interface. For identification of student respondents in each school, an automated calculating mechanism was also integrated into the interface. In order to double-check and validate the data collection in the individual schools, principals of the sampled schools were telephonically contacted. For 25% of the sampled schools, the district data quality management teams with experience in data quality parameters accompanied the data collectors during the data gathering process. Back checks and spot checks were undertaken by these teams. Collected data were analysed on a daily basis to identify outliers, unusual patterns, refusal rate, responses of key questions and deviation. Throughout the data collection process, every evening at a scheduled time, data collectors and the study management team got connected online to discuss the challenges, findings of the quality management team to decide the future course of action.
- ix. Student participants consent: Consent was taken from the sampled school authorities for surveying students. Following this, the parents or legal guardians of the adolescents gave passive consent and their child participation. Subsequently electronic assent was taken from students and those who did not give the assent were excluded from the data collection process.
- x. Inclusion criteria: Following determined student participation in the survey within respective schools
 - Students of 13-17 years, present on the day of data collection
 - Parents of students (13 17 years) who gave passive consent for their children to participate
 - Students (13 17 years) who assented to participate in the study
- xi. Data collection: As many as 7,563 students along with 204 principals from 204 schools participated in the survey in the month of November, 2023. The collected data were uploaded on real time. Additionally, data collection team undertook the observation of the school environment (in and around) as per the prescribed format.
- xii. Data analysis: The collected data was cleaned for inconsistencies. Descriptive statistics across all modules and variables was computed. Univariate analysis was performed to describe the general characteristics of the study population. Pearson's Chi-square test was used to measure statistical relationship / association between two categorical variables at a statistical significance level of p<0.05. Stata, 18 software was used for analysis.

^aparents/guardians to sign and return the circulated consent form if they refuse to allow their child to participate in the study).

xiii. Limitations:

- a. Susceptibility to societal bios as data was collected through self-administration process.
- b. Observation checklist, was restricted to a few selected thematic areas thus scope of data triangulation was limited.



Chapter 3:

Results

3.1 District-wise Schools Covered for Data Collection

Data for the school-based health survey was collected from 204 schools across all the 12 districts of Himachal Pradesh (Table 3.1). A total of 7,563 students in the adolescent age and 204 principals participated in the survey and the non-response rate was < 1.0%.

Table 3.1 Distribution of sampled schools across districts

District	Number of schools	District	Number of schools
Bilaspur	17	Lahul & Spiti	16
Chamba	16	Mandi	17
Hamirpur	17	Shimla	21
Kangra	17	Sirmour	19
Kinnaur	15	Solan	14
Kullu	17	Una	18
Total			204

3.2 Background Details

Table 3.2 School characteristics

Variable	Number	Percentage
	Type of school	
Only boy's school	13	6.4
Only girl's school	16	7.8
Co-educational school	175	85.8
	Grades taught in school	
Upper Primary School	4	2.0
High School	18	8.8
Higher Secondary School	182	89.2
	Location of School	
Rural	177	86.8
Urban	27	13.2

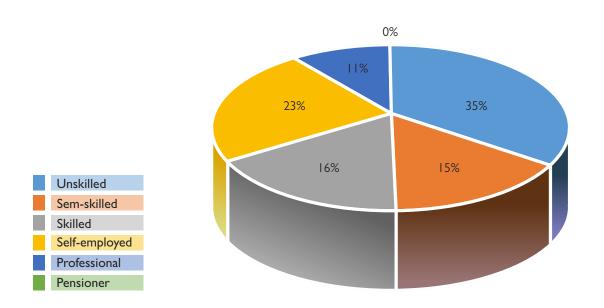
The majority of surveyed schools (85.8%) were co-educational, with 89.2% higher secondary schools, and 86.8% were situated in rural areas (Table 3.2).

Table 3.3 Student respondent characteristics

Variable	Number	Percentage
	Age	
13 to 15 years	5073	67.1
16 and 17 years	2490	32.9
	Residence	
Rural	6687	88.4
Urban	876	11.6
	Sex	
Воу	3833	50.7
Girl	3730	49.3

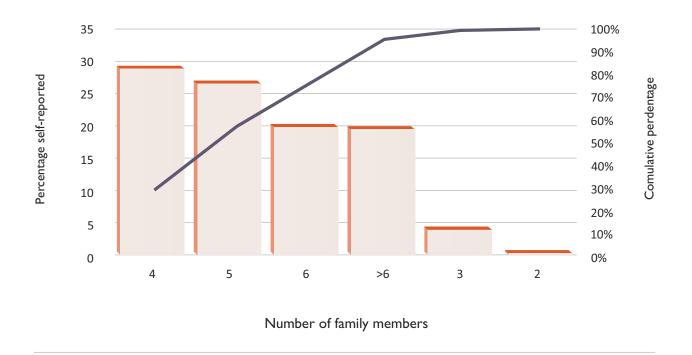
The survey included almost equal proportion of boys (50.7%) and girls (49.3%) and a higher percentage of younger adolescents (67.1%) residing in rural areas (88.4%) (Table 3.3).

Figure 3.1 Occupation of the main bread winner in respondent family



Adolescent respondents have self-reported that more than one-third of the bread-winners of the family engaged as unskilled worker, 23% were self-employed, 17% skilled worker, 15% semi-skilled worker, and 11% were professionals (Figure 3.1).

Figure 3.2 Family size of the adolescents



Although a majority of the adolescents reside in rural area, still most of the respondents have self-reported that they belong to nuclear family as almost one-third have a family size of four or five, followed by six or more than six family members in every two respondents out of ten (Figure 3.2).



Chapter 4:

Findings

This survey presents the findings of a comprehensive assessment of adolescent health as per the modules mentioned below:

I. Module – B: Food Preferences and Choices 2. Module – Physical Activity Personal Hygiene Module-D: 4. Module – E: Digital Device Use and Cyber-Bullying 5. Module– F: Connect to Parents and/or Guardian 6. Module – G: Health Seeking Behaviour Module – H: Access to Government Schemes 8. Module - I: Violence and Road Safety 9. Module - I: Substance Use Reproductive and Sexual Health 10. Module – K: 11. Module – L: Menstrual Hygiene 12. Module – M: Mental Health

The analysis of the findings in each module is complemented by suggestions aimed at enhancing adolescent health through ongoing initiatives under the Ayushman Bharat-School Health and Wellness Programme and other supporting government schemes. These recommendations focus on interventions tailored to address the specific health needs and challenges identified among adolescents in the State. By aligning within the existing government programmes, these recommendations also aim to leverage existing resources and infrastructure for contextual interventions that can positively impact adolescent health and well-being and enable them to thrive.

Corresponding tables in Annexure — I for details on identification of vulnerable subpopulation within the surveyed adolescent sample may be referred.

4.1 Food Preferences and Choices

In India, there is a dual burden of over nutrition and undernutrition⁴⁴. The World Obesity Atlas 2023

predicts a 9.1% annual increase in childhood obesity from 2020 to 2035⁴⁵ in India. Processed foods are known to contain more calories than fresh fruit and vegetables to the average Indian diet, driven by economic growth and aggressive marketing of high sugar, salt, and fat foods from the food industry⁴⁶. Evidence has spotlighted that 70% of the premature deaths in adults due to

Estimates show that 56.4% of total disease burden in India is due to unhealthy diets (ICMR, NIN, 2024)

non-communicable diseases are associated with risky behaviours that began in childhood such as unhealthy dietary choices and sedentary lifestyles³. At the same time, subclinical manifestation of undernutrition and anaemia persist in the country⁴⁷. Daily calorie consumption is generally below the recommended level of 2,503 kcal/capita/day, except for the wealthiest $5\%^{46}$.

Generally, adolescents possess knowledge about what constitutes a healthy diet, yet this awareness often fails to translate into actual improvements in their dietary habits ⁴⁸. Therefore, to strengthen the existing policy and programmes, it is crucial to understand current dietary behaviours of adolescents and to identify drivers that can encourage shifts towards the healthy eating behaviours.

The Indian Council of Medical Research's, 'My Plate for the Day'⁴⁷ recommends sourcing of micro and macro nutrients from a minimum of eight food groups with vegetable, fruits, green leafy vegetables, roots and tubers forming essentially half of the recommended plate of foods per day. The other major portion is from cereals, and millets followed by pulses, flesh foods, eggs, pulses, nuts, oil/seeds, curd/milk. According to the recent guidelines released by Indian Council of Medical Research in 2024 healthy eating habits refer to ⁴⁷:

- 1. Inclusion of starchy fresh vegetables and green leafy vegetables and at least 30 gram of fruits in every meal (Approximately 100 grams should be fruits and 400 grams vegetables in a day)
- 2. Consuming at least 50% cereals and other grains as whole grains
- 3. Adequate consumption of milk or curd or yoghurt for children and adolescents
- 4. Consuming adequate nuts, oil seeds, fatty fish,
- 5. Restricting cooking oil to 25 to 30 grams per day
- 6. Discourage overeating as well indiscriminate dieting
- 7. Restricting meal frequency to two to three times a day
- 8. Restricting consumption of foods high in fat, salt and sugar and ultra-processed foods

Table – 4.1: Percentage of Students Self-Reported, Food Preference

In Books	Sex		А	Age		nce	Total
Indicator	Boy	Girl	13-15	16-17	Urban	Rural	Total
			Healthy f	ood habit			
Fruit>= 4-6 times ^a	52.5*	56.4	54.0	55.3	55.6	54.3	54.4
Milk/Milk product >= 4-6 times ^a	71.6	68.4*	70.0	70.0	70.2	68.5	70.0
Egg>= 4-6 times ^a	27.2	23.4*	26.6	22.7*	18.4*	26.2	25.3
		ı	Unhealthy	food habit			
Junk food >= 2 days ^{a,c}	97.9	97.6	97.7	98.0	97.4	97.8	97.8
Skipped breakfast⁵	22.3	24.1	22.3	25.1*	23.1	23.7	23.2
Skipped lunch ^b	31.1	30.1	27.5	36.9*	26.1	31.2*	30.6

^{a.} During past 7 days

^{b.} During past 30 days

^c Consumption of fried food, and/or soda beverage, and/or high salt food, and/or high sugar food during past 7 days

^{*} Differences across groups are statistically significant at 95% confidence level

The self-reported dietary habits of adolescents showed an erratic pattern (Table 4.1). More than half of the adolescents (54.4%) reported eating fruits 4-6 times or more during last 7 days, with a statistically higher consumption reported among girls (56.4%) compared to boys (52.5%). However, no statistically significant difference by age and place of residence was found. On the contrary, the Comprehensive National Nutrition Survey, conducted pan-India in the year 2016–18 ³³, reported consumption of fruits (once in a week) to a tune of 36.3% among 10 to 19 years adolescents which was much lower in comparison to this survey findings.

Majority of the adolescents (70.0%) reported consuming milk/ milk products 4-6 times or more in the past 7 days which was statistically higher among boys (71.6%) compared to girls (68.4%). However, no statistically significant difference by age and place of residence was reported. In comparison, 76% respondents in the Comprehensive National Nutrition Survey ³³ reported consumption of milk or curd (once in a week), higher than the current survey.

Out of 3,124 respondents who ate egg, more than 25% of the adolescents reported consuming eggs 4-6 times or more during last 7 days prior to the survey. The frequency of consuming eggs was significantly higher in boys (27.2%) than in girls (23.4%). The proportion of adolescents who ate eggs in rural areas (26.2%) was higher than adolescents in urban areas (18.4%). A statistically significant difference between younger (26.6%) and older (22.7%) adolescents in consumption of eggs was observed. Consumption of eggs (once in a week) was reported to be 3.2% by the Comprehensive National Nutrition Survey ³³ whereas, in this survey, adolescents have self-reported much higher consumption.

More than 23% adolescents reported skipping breakfast and 31% of the adolescents reported having skipped lunch in past 30 days. There was no statistically significant difference between boys and girls in skipping breakfast or lunch. When comparing age, the proportion of adolescents who skipped breakfast and lunch was higher among those aged 16-17 than aged 13-15 years (25.1% and 22.3%) and (36.9% and 27.5%) respectively. No statistically significant difference was observed between adolescents from rural and urban areas in skipping breakfast, although the proportion of adolescents who skipped lunch in rural area (31.2%) was higher than adolescents in urban areas (26.1%).

Almost all adolescents (98%) reported eating junk food in the past 7 days and there were no statistically significant differences by sex, age, and place of residence in preference for junk food. The Comprehensive National Nutrition Survey³³ reported fried food consumption (once in a week) among 13.4% respondents while 3.4% adolescents reported consuming aerated drinks (once in a week) whereas, the school-going adolescents in this survey have reported much higher consumption.

In an effort to discourage the consumption of junk food, the Food Safety and Standards Authority of India issued the Safe Food and Healthy Diets for School Children Regulations in 2020 ⁴⁹. Under this legislation, vendors selling foods high in fat, salt, or sugar (*chowmein*, *pakoda*, *samosa*, *mathri* etc.) are prohibited within a 50-meter radius of schools. As per the observation 39.7% schools did not have hawkers within 50 meters.

Adolescent girls in the older age (16 and 17 years) group residing in rural areas are adopting unhealthy dietary behaviours.

4.2 Physical Activity

Physical inactivity is a global concern associated with emerging non-communicable diseases which bring significant economic burden. This issue is particularly challenging in a rapidly growing country like India, which has the world's largest population ⁵⁰. Sedentary behaviours established in childhood often persist into adulthood ⁵¹ and the potential disease burden is substantial. Studies documented that physical inactivity costs healthcare systems approximately \$33.8 billion worldwide, with Low- and Middle-Income Countries bearing majority of this burden ⁵². Thus, promoting active lifestyles among adolescents in Low- and Middle-Income Countries including India, is crucial.

The World Health Organization, recommends individuals to engage in an average of 60 minutes per day of moderate-to-vigorous intensity, mostly aerobic, physical activity throughout the week ⁵³. In training and resource material of Ayushman Bharat-School Health and Wellness Programme, 30 minutes a day physical activity has been recommended ¹⁶.

Table – 4.2: Percentage of Students Self-Reported Physical Activities

La di casa di	Sex		А	Age		nce	Total
Indicator	Воу	Girl	13-15	16-17	Urban	Rural	iotai
			Physical	activities			
Mild exercise 3-7 days ^a	58.8	59.2	56.5*	64.I	59.1	59.0	59.0
Moderate exercise 3-7 days ^a	60.3	57.9*	59.0	59.3	58.7	61.9	59.1
Strenuous exercise 3-7 days ^a	62.7	50.9*	57.5	55.7	57.1	56.9	56.9
			Sedentary	y activities			
Spent time on reading and doing academic work, including tuitions >= 3hr ^a	41.5	51.2*	45.1	48.7*	49.4	45.9	46.3

^{a.} During past 7 days

Around 57% to 59% of the adolescents in the survey reported that they had engaged in strenuous, and both mild and moderate physical activities, three to seven days respectively in the past seven days (Table 4.2). No statistical difference was observed for mild physical activity by sex, and residence of adolescents. However, it was observed that older (16 and 17 years) adolescents (64.1%) engaged more in mild physical activity compared to younger (13 to 15 years) adolescents (56.5%).

The frequency of adolescents who reported to have engaged in moderate and strenuous physical activities in past seven days was higher among boys, as compared to girls (60.3% vs 57.9%) and (62.7% vs 50.9%) respectively. No statistically significant difference was observed for age, and place of residence of adolescents in self-reporting of engagement in moderate and strenuous physical activity. The levels of physical activity were found to be low, despite the availability of playgrounds (95.1%), inposition physical education teacher (89.7%) and daily physical education period (94.6%) as self-reported by principals in the surveyed schools.

^{*} Differences across groups are statistically significant at 95% confidence level.

Concerning the sedentary lifestyle, 46% participants self-reported that they spent time in reading, and doing academic work, including tuitions on an average for more than 3 hours in the past seven days. The frequency differed by sex, boys (41.5%) vs girls (51.2%). There was statistically significant difference between younger (45.1%) and older adolescents (48.7%), but there was no statistically significant difference by place of residence.

Adolescent boys in the younger age group (13 to 15 years) who reside in urban areas are seldom engaging in physical activity in their daily schedule.

4.3 Personal Hygiene

In Low- and Middle-Income Countries, importance of hygiene practices such as handwashing and tooth brushing have been relatively overlooked. These practices are crucial, as inadequate sanitation and poor personal hygiene significantly contributes particularly to gastrointestinal and respiratory illnesses⁵⁴⁻⁵⁷.

A meta-analysis showed that improvements in hand hygiene resulted in reductions in gastrointestinal illness by 31% and reductions in respiratory illness by 21%⁵⁷. The World Health Organization recommends washing hands with soap and water when visibly dirty or visibly soiled with body fluids or after using the toilet ⁵⁸.

Table – 4.3: Percentage of Students Self-Reported Personal Hygiene Practices

Indicator	Sex		Age		Residence		Total
indicator	Boy	Girl	13-15	16-17	Urban	Rural	iotai
Not washing hand after using rest room ^a	4.5*	2.6	3.8	3.1	3.0	3.6	3.6
Not washing hand before eating food ^a	4.4*	2.2	3.5	3.1	3.0	3.4	3.3
Not washing hand before handing food ^a	7.6*	4.1	5.8	6.0	4.2	6.1*	5.9
			Hygiene	in school			
Not having separate toilets or latrines for boys and girls ^b	-	-	-	-	16.8*	2.3	3.9
Toilets or latrines were not clean	15.6*	10.5	10.8	17.7*	26.4*	11.4	13.1
Unavailability of running water in school toilets	-	-	-	-	17.3	17.9	17.8
Not having handwashing area inside school toilets	-	-	-	-	6.1	6.5	6.4
Dustbin not cleaned every day in the classroom	-	-	-	-	16.6*	9.1	10.0

Almost 3% to 6% adolescents self-reported never or rarely or sometimes washing their hands after using toilet, before eating and before handling food, during the past 30 days (Table 4.3). No statistically significant difference was observed for age of the respondents with handwashing practices.

There was, however, statistically significant difference among adolescents from rural areas compared to those from urban areas in washing hand before handling food (4.2% vs 6.1%). In addition, statistically significant differences were observed between boys and girls (4.5% of boys and 2.6% of girls), (4.4% of boys and 2.2% of girls) and (7.6% of boys and 4.1% of girls) self-reporting that they never or rarely or sometimes washing their hands after using toilets, before eating food, and before handling food respectively.

Promoting hygiene among school students, Government of India had launched Swachh Bharat Swachh Vidyalaya Initiative to ensure separate toilets for girls and boys in all Government schools ⁵⁹. Additionally, the standard operating procedure of Swachh Schools, mandates schools to clean dustbin on a daily basis ⁶⁰. The present survey findings revealed that 3.9% of adolescents self-reported not having separate toilets for boys and girls in co-educational institutions, with a statistically significant difference between rural (2.3%) and urban areas (16.8%). However, 93.6% of schools reported having separate facilities for boys and girls, respectively as self-reported by principals.

Among the student respondents, 13% reported that toilets were not clean at school with statistically significant difference for gender (15.6% among boys' vs 10.5% among girls), age (10.8% among 13-15 aged vs 17.7% among 16-17 aged) and location (26.4% in urban areas vs 11.4% in rural areas). Principals however self-reported that toilets were cleaned daily in 98% of schools. Observation by the survey team documented that 80% toilets were clean.

About 18% of the adolescents reported unavailability of running water in school toilets and, 4.9% principals also self-reported lack of regular water supply in school. Around 6.4% adolescents self-reported not having handwashing area inside the school toilets. The survey team observed that in 16.7% schools, there was no handwashing facility.

Almost 10% students self-reported dustbins were not cleaned every day in the classroom with statistically significant difference between 16.6% in urban areas and 9.1% in rural areas. On the other hand, school principals (96.1%) self-reported, cleaning of dustbin on a daily basis.

While 98.5% of principals reported having soaps in toilets, the survey team observed 65.2% had soap for washing hands.

By juxtaposing discussions above, indicates overall compliance with the guidelines for maintaining a hygienic environment in schools. However, it is worth noting that there are still a few schools where attention is needed to ensure consistent implementation.

Younger age group (13 to 15 years) girls from rural areas are susceptible to infection for their inconsistent personal hygiene practices.

^a The response to the question was either never, or rarely, or sometimes during past 30 days

^{b.} Analysis excluding exclusive boys' and exclusive girls' school

^{*} Differences across groups are statistically significant at 95% confidence level.

4.4 Digital Device Use and Cyber Bullying

The Annual Status of Education Report, 2023 ⁶¹ reflects that while there is a wider access, with 95% males and 90% females reported knowing how to use a smartphone, however, the technical nuance of "know-how to use a smartphone" looks different for boys and girls. For instance, boys between the 14 to 18-years were more than twice as likely to own their own smartphone than girls, and, therefore, were likely to spend far more time using these devices. With this earlier age of mobile maturity, children in India also reported experiencing online risks at a higher rate.

Cyber bullying is defined as "any behaviour performed through digital or electronic media that repeatedly communicates aggressive or hostile messages intended to inflict discomfort or harm" ⁶². Risks such as cyber bullying, attempted thefts of online accounts, leaking financial information, and unauthorized use of personal data are often reported higher in India than in other countries ⁶³. Cyber bullying encompasses various forms of online harassment, including but not limited to, hurtful messages, spreading rumours, posting embarrassing content, and sharing personal information without consent.

Teens, TWeens and TEchnology Study, 2015 reported that 22% of Indian respondents between eight and sixteen years have reported being bullied online and as many as 52% of Indian children have indicated that they had bullied people over the social media⁶⁴. Bullying can have profound psychological effects, evidenced from researches primarily from Western countries indicating that victimised students are more likely to consider suicide, carry weapons to school, engage in physical altercations, and suffer injuries⁶⁵. Additionally, they are prone to experiencing anxiety, low self-esteem, and dropping out of school^{66,67}.

Studies of school-age cyber victims indicate heightened risk of depression, of psychosomatic symptoms such as headaches, abdominal pain, and sleeplessness and of behavioural difficulties including alcohol consumption. As found in studies of face-to-face bullying, cyber victims report feeling unsafe and isolated, both at school and at home. Bullying has serious psychological effects that can last into adulthood⁶⁸.

Table – 4.4: Percentage of Students Self-reported Digital Device Use and Cyber Bullying

Indicator	Sex		Age		Residence		Total
	Воу	Girl	13-15	16-17	Urban	Rural	Ισται
Digital device use more for than 8 hours/day ^a	2.4*	1.6	1.6	2.7*	1.8	2.0	2.0
Bullied someone online	12.5*	6.7	8.7	11.7*	12.4*	9.3	9.6
Bullied by someone online	9.9*	5.8	7.2	9.3*	11.0*	7.5	7.9

^{a.} In past 7 days

b. In past 12 months

^{*} Differences across groups are statistically significant at 95% confidence level.

Two percent adolescents self-reported spending more than 8 hours per day on digital device. The frequency of adolescents who self-reported spending time on digital device was lower among girls compared to boys (1.6% vs 2.3%). Older (16 and 17 years) adolescents (2.7%) engaged in using digital device more compared to younger (13 to 15 years) adolescents (1.6%). No statistically significant difference was observed by residence. Adolescents in the survey self-reported exceeding the recommended screen time limit of 2 hours per day by watching television/ mobile phone/ computer/ tablet etc., a deviation from the recommendation in Ayushman Bharat-School Health and Wellness Programme curriculum ⁶⁹.

In the past 12 months, 10% of adolescents self-reported bullying someone online, while 8% self-reported being bullied by someone online. Boys reported higher proportion of both bullying others (9.9%) and being bullied by others (12.5%) compared to girls (5.8% bullying, 6.7% being bullied by someone.

There were significant differences in the prevalence of bullying someone online by age (8.7% in adolescents aged 13-15 year and 11.7% in 16-17-year-old) and residence (12.4% in urban and 9.3% in rural areas). Similarly, in the prevalence of being bullied by someone by age (7.2% aged 13-15 year and 9.3% in 16-17-year-old) and residence (11.0% in urban and 7.5% in rural areas) (Table 4.4).

Significant vulnerability of older age group (16 and 17 years) boys who reside in urban areas For their regular usage of digital device.

4.5 Violence and Road Safety

The World Health Organization defines violence as "the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, which either results in or has a high likelihood of resulting in injury, death, psychological harm, abnormal development or deprivation" ⁷⁰. Adolescents are more prone to be involved in violence and physical attacks and fights and are more prone to injury, intentional or unintentional, than other age groups ⁷¹.

Recognising childhood injuries, particularly road traffic injuries, as a substantial global public health challenge, the World Health Organization underscores the urgency for comprehensive interventions^{72,73}.

India bears the highest burden of child road traffic fatalities globally, with an estimated 1.5 million cases reported annually 73 . A noticeable dearth of focused research persists, particularly within the South Asia region, including India, especially concerning vulnerable population segments such as children and adolescents 72 . Injuries accounted for 65.9% and 45.3% of Year of Life Lost in males and females aged 15–19 years, and 40.8% in males aged 10–14 years. Specifically, road injuries (15.3%) and self-harm (11.3%) accounted for most of the injury deaths in 15–19 years whereas drowning (7.7%) and road injuries (6.9%) accounted for the most injury deaths in 10–14 years males 8 .

Bullying is the 'systematic abuse of power' and is defined as 'aggressive behaviour or intentional harm-doing by peers that is carried out repeatedly and involves an imbalance of power' ⁷⁴. Children who were victims of bullying have been consistently found to be at a higher risk for common somatic problems such as colds, or psychosomatic problems such as headaches, stomach aches or sleeping problems, and are more likely to take up smoking ^{75,76}. Bullying victims have also been reported to develop internalising problems and anxiety disorder or depression disorder more often ⁷⁷.

Table – 4.5: Percentage of Students Self-reported Violence and Road Safety Violations

Indicator	Se	×	А	Age		ice	Total
Indicator	Boy	Girl	13-15	16-17	Urban	Rural	Iotai
			Vi	olence			
Engaged in physical fight ^a	28.6*	17.5	23.6		27.6*	22.6	23.1
Bullied someone physically ^a	17.8*	10.1	13.6	14.6	17.9*	13.4	14.0
Bullied by someone physically ^a	15.3*	7.4	11.4	11.4	16.0*	10.8	11.4
Feeling unsafe while going, coming, and inside school>= I days ^b	26.5*	18.6	22.7	22.4	25.6*	22.2	22.6
			Roa	d Safety			
Do not wear a helmet when pillion riding or driving a motorcycle/scooty	48.3	46.1	47.8		46.3	47.5	47.3
Do not wear a seat belt when driving a car or other motor vehicle $^{\rm b}$ $^{\lor}$	42.2	40.2	41.3	41.3	40.1	41.4	41
Do not wear a seat belt when riding a car or other motor vehicle $^{\rm b}{}^{\rm }$	42.9	40.4	41.3	42.6	40.1	41.9	41.7

^a During past 12 months

Nearly a quarter of adolescent respondents (23%) admitted to engaging in physical fights within the last year (Table 4.5), This behavior was reported more among boys, with 28.6% of boys admitting to it, compared to 17.5% of girls. Additionally, adolescents living in urban areas were significantly more likely to report involvement in physical fights compared to those from rural areas (27.6% vs. 22.6%). No statistically significant difference however observed based on age.

Within the past year, 14% adolescents self-reported physically bullying someone. Boys were more likely to admit to physically bullying others with 17.8% of boys reporting this behavior compared to 10.1% of girls. The incidence of engaging in physical fights in the last 12 months was higher in urban areas compared to rural (17.9% vs. 13.4%). However, there were no statistically significant differences observed based on age.

In the past 12 months, 11% adolescents self-reported having been bullied by someone physically. Higher proportion of boys self-reported being bullied by someone compared to girls (15.3% vs 7.4%). There were statistically significant differences in the experience of being bullied by someone physically by residence (16% in urban and 10.8% in rural areas). However, no statistically significant difference was observed by age.

^b During past 30 days

[√] Excluding those respondents who neither drive or pillion ride

^{*} Differences across groups are statistically significant at 95% confidence level

In the past 12 months, 23% respondents self-reported feeling unsafe while going or coming back from school or inside school. More boys self-reported feeling unsafe as compared to girls (26.5% vs 18.6%). There were significant differences in the prevalence of feeling unsafe by residence (25.6% in urban and 22.2% in rural areas). No statistically significant difference was observed by age.

In line with the implementation of policies aimed at discouraging fighting and violence among adolescents, survey responses from principals indicated that 96.1% of schools have adopted such measures, and 98.5% had policies prohibiting physical abuse. Nevertheless, the evidence indicates that a significant number of adolescents are still engaging in physical altercations or encounter bullying, either as targets or instigators.

Almost 47%, 41%, and 42% of the adolescents self-reported not wearing a helmet when pillion riding or driving a motorcycle or scooty, not wearing a seat belt when driving a car or other motor vehicle, and not wearing a seat belt when riding a car or other motor vehicle respectively. No statistically significant difference was observed by age, sex, and place of residence.

Young adolescent (13 to 15 years) boys in rural areas are more vulnerable because of their indulgence in violence and unsafe road use behaviours.

4.6 Substance Use

World Health Organization⁷⁸, defined substance abuse as "persistent or sporadic drug use inconsistent with or unrelated to acceptable medical practice". Adolescents are most prone to substance addiction ⁷⁹. The critical age of initiation of substance use is the adolescent period⁸⁰ Adolescents are vulnerable to the effects of substance use and are at an increased risk of developing long-term consequences, such as mental health disorders, underachievement in school, a substance use disorder, and higher rates of addiction^{81,82}. The World Health Organization identified that while long-term health risks were not currently well-understood but vapes (e-cigarettes) generate substances known to cause cancer, posed risks to heart and lung health and could affect brain development in young people⁸³.

Heroin, opium, alcohol, cannabis, and propoxyphene are the five most common drugs being abused by children in India ⁸⁴. The use of certain drugs such as whitener, alcohol, tobacco, hard and soft drugs is especially widespread among street children, working children and trafficked children⁸⁵. Most current users of tobacco, alcohol, and drugs, develops the habit in early adolescence due to curiosity, experimentation and sometimes, due to peer pressure, and are often continued to become regular users⁸⁶.

According to Childline India, a nodal agency of the Union Ministry of Women and Child Development, the incidence of drug abuse among adolescents is higher than the general population ⁸⁴.

Table – 4.6: Percentage of Students Self-reported Substance Use

Indicator	Se	ex	A	Age		ce	Total
indicator	Boy	Girl	13-15	16-17	Urban	Rural	iotai
			Subs	stance Used	Ь		
Smoked or chewed tobacco ^a	5.2*	2.3	3.5	4.5*	3.1	3.9	3.8
Used E -cigarette ^a	4.7*	2.3	3.4	3.7	2.6	3.7	3.5
Alcohol ^a	4.4*	2.1	3.0	3.9*	3.1		3.9
Marijuana ^b	4.9*	2.7	3.9	3.6	2.7	4.0	3.8
Cocaine/heroin/ opium ^b	4.0*	2.3	3.3	2.9	2.1	3.3	3.2
Hallucinogens ^a	4.8*	3.4	4 . I	3.9	2.7	4.2*	4.1
Needle to inject any illegal drug c	9.2	8.8	10.2*	6.6	7.0	9.3*	9.0
Inhalants ^b	5.2*	3.7	4.5	4.4	4.0	4.5	4.5
Cough syrup without prescription ^b	22.2	23.5	23.7*	21.0	20.8	23.1	22.8
Sleeping pills ^b	5.2*	3.5	4.7	3.8	3.8	4.4	4.4

^{a.} In past 30 days

The findings (Table 4.6) indicated that self-reported substance use among the surveyed adolescent population ranged from 3% to 5%. However, certain substances showed higher rates of consumption, notably non-prescribed cough syrup at 23% and injectable drugs at 9%.

In comparison to girls, significantly higher proportion of boys indulged in use of, tobacco (5.2% in boys vs 2.3% in girls), e – cigarette (4.7% in boys vs 2.3% in girls), alcohol (4.4% in boys vs 2.1% in girls), marijuana (4.9% in boys vs 2.7% in girls), cocaine/heroin/opium (4.0% in boys vs 2.3% in girls), hallucinogens (4.8% in boys vs 3.4% in girls), inhalants (5.2% in boys vs 3.7% in girls), sleeping pills (5.1% in boys vs 3.5% in girls). However, no statistically significant difference was observed by sex with consumption of cough syrup without prescription and injectable drug use. In the Global Adult Tobacco Survey – 2^{27} the use of tobacco among adolescents aged 15 to 17 years was reported nil and the Global Youth Tobacco Survey – 4^{31} reported 1.1% tobacco use among 13 to 15 years adolescents but, in this survey, the self-reported prevalence of tobacco use was much higher to a tune of almost 4%.

There were variations in substance use observed across different age groups. Adolescents aged between 16- to 17-year-old have self-reported higher proportion of smoking or chewing tobacco (3.5% among 13–15-year vs 4.5% among 16–17-year adolescents), and consuming alcohol (3.0% among 13–15-year vs 3.9% among 16–17-year adolescents). Conversely, adolescents aged between

b. In past 12 months

^{c.} During life time

^{*}Differences across groups are statistically significant at 95% confidence level

13- to 15-year-old disturbingly reported higher proportion of injecting drug (10.2% among 13–15-year vs 6.6% among 16–17-year), and cough syrup without prescription (23.7% among 13–15-year vs 21.0% among 16–17-year).

Similarly, variation was detected by residence. The statistically significant difference was observed in hallucinogens (4.2% in urban areas and 2.7% in rural areas) and injectable drug (9.3% in urban areas and 7.0% in rural areas).

Despite strict laws and policies against drug use in India, use of substances is reported rampant. The Cigarette and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act, stipulates the minimum legal age for tobacco consumption at 18 years. And, in accordance with the Prohibition of Electronic Cigarettes Act (2019) ⁸⁷, production, manufacture, import, export, transport, sale, distribution, storage, and advertisement of e-cigarettes is banned. The use and possession of cocaine are explicitly prohibited, as in the Comprehensive Dangerous Drugs Act of 2002⁸⁸, Narcotic Drugs and Psychotropic Substances Act, 1985 and amendment of 1989⁸⁹ and Juvenile Justice Act, 2015⁹⁰.

Ninety eight percent of school principals have self-reported implementing measures to prohibit substance use among faculty, staff members, and visitors. Adhering to the Tobacco-Free Education Institution Guidelines 2020⁹¹, all school principals confirmed the existence of policies preventing tobacco use by students. Seventy percent of schools displayed "Tobacco Free Education Institution" signage at entrance/ boundary wall of school, display board, specifying 'Tobacco Free Area' signage inside the school. The surveyors, however, observed that 83.3% of schools had *pan shop or ghumti* within 100 yards from the school premises selling tobacco products in violation of section 6b of Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act, 2003⁹².

Young adolescent (13 to 15 years) boys in rural areas, are particularly vulnerable to various substance use.

4.7 Reproductive and Sexual Health

Adolescence is a time of personal experience and choice, when personal and sexual identities are being formed ⁹³. Becoming a sexually healthy adult is one of the key developments during adolescence. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as a pleasurable and safe sexual experience, free of coercion, discrimination, and violence ⁹⁴. Risktaking and emotion-seeking together with the misconception of invulnerability in adolescence period can lead to increased assertiveness in engaging with risky behaviours ⁹⁵.

Adolescents do not have - in many cases - an adequate sex education, hence, they are a risk group for contracting sexually transmitted diseases and can also reach early motherhood or fatherhood for which they are neither objectively nor subjectively prepared ⁹⁶.

Adolescents in India are vulnerable to reproductive and sexual health risks due to their developing age, ignorance and isolation in matters related to sexuality and sexual and reproductive health, and their inability or unwillingness to use modern contraceptive methods and health services ⁹⁷.

Table – 4.7: Percentage of Students Self-reported Sexual Health

Indicator	Sex		A	\ge	Residence		Total
Indicator	Boy	Girl	13-15	16-17	Urban	Rural	Iotal
			Sexual	Behaviour			
Ever had sexual intercourse	7.7*	4.1	6.0	5.9	6.6	5.9	6.0
Age at first sexual intercourse <14 years	56.4	74.0*	-	-	55.2	63.5	62.4
Contraceptive use at last sexual intercourse	49.3*	59.7	57.0	44.6*	44.8	54.1	47.1

^{*} Differences across groups are statistically significant at 95% confidence level.

Almost 6% of the adolescents self-reported to have ever had sexual intercourse (Table 4.7). More boys self-reported having ever had sexual intercourse compared to girls (7.7% vs 4.1%). However, no statistical significant differences were observed by age and residence.

Among the adolescents who have ever had sex, 62% self-reported having sexual intercourse before reaching the age of 14 years. This frequency was higher among girls, compared to boys (74.0% vs 56.4%). No statistically significant difference was observed by residence.

Nearly half of the respondents (47%) who ever had sex, reported using modern contraception for protection in their recent sexual encounter. The proportion of girls to have had unprotected sex was higher as compared to boys (59.7% vs 49.3%). Similarly, the percentage of respondents who had unprotected sex was higher among adolescents aged between 13 to 15 years as compared to adolescents aged between 16 to 17 years (57.0% vs 44.6%). No statistically significant difference was observed by residence.

Young adolescent (13 to 15 years), boys, and students in rural areas, being particularly vulnerable especially for early initiation of sexual activity which mostly are unprotected.

4.8 Menstrual Hygiene

Menstrual hygiene management to ensure healthy and dignified management of menstruation has received particular attention from the World Health Organization and United Nations Children's Fund. Inability to manage adequate menstrual hygiene can have serious consequences for adolescent girl's physical, mental, and emotional health, as well as their social development and educational attainment ¹⁰¹. Managing menstrual health and hygiene among adolescent girls is a major public health concern for policymakers in Low- and Middle-Income countries, including India ^{102,103}. In India, the majority of adolescent girls remains unaware of menstruation, reproduction, and sexuality. Menstruation is still considered a taboo topic, and contributes to the perpetuation of numerous misconceptions and limitations across culture ¹⁰⁴. Millions of adolescent girls in India drop out of school every year due to restrictions on mobility, a lack of gender specific restrooms, disposal facilities in schools, fear or shame of the odour and stains ¹⁰⁵. Under the Ayushman Bharat-School Health and Wellness Programme package, school students are provided with sanitary napkins ¹⁶.

Table – 4.8: Percentage of Students Self-reported Menstrual Hygiene

I. B. A	Sex	Sex		Age		idence	Total
Indicator	Воу	Girl	13-15	16-17	Urban	Rural	iotai
			Menstrua	ıl Hygiene			
Menstrual cycle started	-	-	-	-	-	-	73.9
Menstrual hygiene practice	-	-	98.9	99.2	99.3	90.0	99.0
Experienced menstrual problem ^a	-	-	30.9	29.7	32.0	30.2	30.4

^{a.} during the past 30 days.

As per Table 4.8, around three-fourth adolescent girls (74%) had self-reported that their menstruation had already commenced by the time of data collection. Almost universal (99.0%) self-reported hygienic menstrual practice such as the use of sanitary pads, tampons, or menstrual cups. The National Family Health Survey – V^{12} has reported 92% women (15-24 years) use hygienic method of menstrual protection in Himachal Pradesh. The high reporting of hygienic menstrual product use among adolescents could also be attributed to the provision of sanitary products in schools as self-reported by principals (66.5%). Schools are actively involved in creating an enabling environment by promoting the use of hygienic products, as indicated by the principals (86.4%), and are facilitating this initiative by providing a secure place for disposal of sanitary napkins. However, observation in schools captured that 58.3% schools had dustbins in toilet.

Nearly one third (30%) adolescent girls self-reported having problems during menstrual cycle in the past 30 days. There were no statistically significant differences observed by age, and residence.

Diverse strategies are adopted by adolescents in dealing with their menstrual challenges. While, majority 56.0%, opted not to act or relied on home remedies, 32.6% girls reportedly sought support from formal health care services such as government health facilities, private hospitals, private doctors, Auxiliary Nurse Midwife Sub-Centers, and Adolescent Friendly Health Clinics. Additionally, 9.0% students obtained medication from a chemist, while 2.5% sought treatment from the health room at school or from teachers.

Rural adolescent girls are particularly vulnerable because of poor hygienic practices and suboptimal health seeking for menstruation concerns.

4.9 Mental Health

During adolescence, many mental health issues emerge of which persist into adulthood of Research shows that developing adolescents are particularly susceptible to anxiety, depression, mood disorders, and cognitive and behavioral issues. These mental health issues contribute significantly to the mental health burden experienced by adolescents. If left unaddressed, these problems can become more complex while adolescents' transition into adulthood, with suicide being a concerning consequence of Robert R

^{*} Differences across groups are statistically significant at 95% confidence level

risk behaviors, such as substance use, school dropout and incurring expulsion^{112,113}. Additionally, bullying others and being bullied are common among adolescents with mental health problems. In light of the substantial burden of mental health conditions in adolescents, the World Health Organization has developed the Mental Health Action Plan, 2013–2020¹¹⁴ and recommended actions for improving the mental health of adolescents.

Table – 4.9: Percentage of Students Self-reported Mental Health Issues

Indicator	Sex		Age		Residence		Total	
	Boy	Girl	13-15	16-17	Urban	Rural	iotai	
			Menta	l health				
Depressed ^a	7.7	10.3*	8.1	10.8*	10.6	8.8	9.0	
Worried ^a	5.3	7.5*	5.8	7.8*	6.3	6.4	6.4	
Anxious ^a	5.1	7.2*	5.4	7.6*	7.9*	5.9	6.1	
Difficult to stay focused ^a	12.3*	9.9	9.9	13.5*	15.0*	10.6	11.1	

^a During past 12 months

Adolescent students who self-reported being depressed, worried, anxious, and had difficulty to stay focused always or most of the time in the past 12 months, was 9%, 6%, 6% and 11% respectively (Table 4.9).

In comparison to boys, more girls often felt depressed (7.7% in boys vs 10.3% in girls), worried (5.3% in boys vs 7.5% in girls) and anxious (5.1% in boys vs 7.2% in girls). A higher proportion of boys reported difficulty in staying focused in last 12 months compared to girls (12.3% vs 9.9%).

Older adolescents aged between 16- to 17 years, compared to 13-15 year-old, self-reported feeling depressed (8.1% among 13–15-year vs 10.8% among 16–17-year), worried (5.8% among 13–15-year vs 7.7% among 16–17-year), anxious (5.4% among 13–15-year vs 7.6% among 16–17-year), and difficulty in staying focused (9.9% among 13–15-year vs 13.5% among 16–17-year), always or most of the time in the past 12 months .

There was no statistically significant difference by residence in self-reporting of being depressed and worried. Predominantly more urban adolescents self-reported feeling anxious (7.9% in urban and 5.89% in rural areas) and had difficulty in staying focused (15.0% in urban and 10.6% in rural areas) (Table 4.9).

Urban, older adolescent (16 and 17 years) and girls are vulnerable due to poor mental health.

4.10 Access to Government Schemes

Government of India, through the Ayushman Bharat - School Health and Wellness Programme, has introduced a package of services¹⁶ of school health and promotion activities (age-appropriate incremental learning delivered through Health and Wellness Ambassadors and Health and Wellness

^{*}Differences across groups are statistically significant at 95% confidence level.

Messengers), health screening (through Rashtriya Bal Swasthya Karyakram, mobile health teams), service provisions (supply of weekly iron folic acid and deworming tablets, and sanitary napkins at schools) for promoting adolescent health and well-being. These services except the health screening, are to be provided by the Ayushman Bharat-School Health and Wellness Programme Health and Wellness Ambassadors (each school appoints two teachers, preferably one male and one female)).

Moreover, Health and Wellness Ambassadors are to deliver weekly health promotion and disease prevention information through engaging activities. In addition, two students from each class assist the Health and Wellness Ambassadors in facilitating initiatives and activities. As part of the Health Promotion Activities within the Ayushman Bharat-School Health and Wellness Programme implementation, it is suggested to make use of existing school spaces and platforms such as assemblies, Parents Teacher Association meetings, and Adolescent Health Days to reinforce participation and to arrange quarterly "Health Melas" within the school premises ¹⁶.

Table – 4.10: Percentage of Students Self-reported Access to Government Schemes

Indicator	Sex		Age		Residence		T . I
	Воу	Girl	13-15	16-17	Urban	Rural	Total
Government Schemes							
Any team visited school to conduct health check-up	-	ū	-	-	68.4	71.6	71.2
Received one deworming tablet from the school ^a	76.9*	80.2	80.0	75.6*	66.2*	80.2	78.6
Received any weekly iron folic acid tablets from the school ^b	85.8*	89.7	89.3	84.5*	82.9*	88.3	87.7
Health related topics discussion in assembly sessions	-	-	-	-	87.2*	89.5	89.2
Discussion/lecture on health conducted in class ^c	-	-	-	-	59.8*	69.0	67.9
<i>Health Mela</i> organized in school ^d	-	-	-	-	35.7*	46.9	45.6
Knows Health Ambassador	57.9	59.8	58.3	59.8	57.9	59.0	58.8
Knows Health and Wellness Messenger	57.9	59.8	58.3	59.8	51.1*	59.3	58.4

^{a.} In last 6 months

More than 71% of adolescent respondents self-reported that a team visited their school to assess/screen their health status or conduct health check-up within the school premise in the last six months prior to the survey. No statistically significant difference was observed by residence.

b. In last I month

In last week

d. In last 3 months

^{*}Differences across groups are statistically significant at 95% confidence level

78.6% and 87.7% of adolescent respondents self-reported receiving deworming tablet and weekly iron folic acid tablets from school respectively. The proportion of reporting receiving deworming tablet (76.9% in boys vs 80.2% in girls) and weekly iron folic acid tablets (85.8% in boys vs 89.7% in girls) was higher among girls compared to boys. Statistically significant lower proportion was observed in adolescents aged 16-17 years and from urban areas in reporting of receiving deworming tablet (80.0% in 13-15 vs 75.6% in 16-17), (66.2% from urban vs 80.2% from rural), and weekly iron folic acid tablets (89.3% in 13-15 vs 84.5% in 16-17), (82.9% from urban vs 88.3% from rural). It has been reported that the prevalence of anaemia among 15 to 19-year-old men is 22.1% and 53.3% in the case of women in the National Family Health Survey $-V^{12}$.

Adolescents self-reported health related topics being discussed in assembly sessions (89%), discussion and/or lecture on health was conducted in the classrooms (68%) and organisation of Health Mela in school (46%). The percentage was however statistically lower in urban areas as compared to rural areas. Adolescents self-reported knowing Health Ambassador of the school (58.8%) and Health and Wellness Messenger of their class (58.4%) (Table 4.10).

The self-reported data from the respondents significantly differed from the self-reporting by school principals. As many as 95% of the principals self-reported that students undergo yearly health screening, indicating the scope of improvement in the screening process to ensure inclusivity.

Older adolescents (16 and 17 years), boys and from urban areas are vulnerable because of their limited utilisation of existing government programmes and schemes.



Chapter 5:

Recommendations

In the previous section the findings of the school based adolescent survey is presented by age, sex, and place of residence of the respondents across modules. Vulnerability among school going adolescents in Himachal Pradesh is also presented. In this section we consolidate the recommendations under three themes for consideration and relevant actions. The first part is around strengthening the existing Ayushman Bharat—School Health and Wellness Programme curriculum to enhance and prioritise communication within school environment for the identified contextual issues. The second part includes recommendations on reinforcing implementation of existing policy and programme components, and the third is focused on interdepartmental coordination.

5.1 Food Preferences and Choices

The Indian Academy of Pediatrics (2019) guidelines, recommend only one serving of 'junk food' per week. The survey findings, however, revealed that 98% of adolescents consumed junk food twice or more in the past week. Additionally, 23% reported skipping breakfast, and 30% skipped lunch. These highlight the need to initiate dialogue to foster healthier eating habits and options.

a) Ayushman Bharat – School Health and Wellness Programme - curriculum

Healthy dietary choice is included in Module 6: "Nutrition, Health, and Sanitation" and in Module 8 "Promotion of Healthy Lifestyle". Based on the findings, further emphasis on healthy food options and discouraging the consumption of junk foods is needed. Healthy behaviour and choices can be achieved through constant reinforcement by adding a few more activities.

- 1. To promote and engage children, initiatives such as the "Ghar Ka Khana" (home food) competition can be arranged. Involving the parents this event may showcase innovative cooking techniques and ingredients, such as consumption of millets, to transform unhealthy meals/food into nutritious and attractive alternatives.
- 2. Students may co-create a food label that is easy to understand and can be used to decide which food options are healthy vis-a-vis unhealthy.
- b) Fostering Policy reinforcement
 - 1. Ensuring school canteens (where ever available) do not serve food high in fat, salt, and sugar.
 - 2. To promote consumption of healthy option, foods can be kept in coloured shelves such as red (to avoid consumption), green (can consume frequently) and yellow (to have in moderation) as recommended by the Food Safety and Standards Authority of India and Working Group of Women and Child Development 113,114.
- c) Strengthening Inter-departmental coordination

District and block authorities, school management committees and local governance representatives must ensure coordination between Education Department, Health and Family Welfare Department, and law enforcing agencies to enforce Food Safety and Standard Authority of India's safe food and healthy diets for School Children Regulations, 2020 which stipulates that no hawkers sell food high in fat, salt, or sugar within 50 meters around schools.

5.2 Physical Activity

Considering that many health habits start early, the World Health Organization (2020), recommend that adolescents should limit their sedentary time, particularly recreational screen time. However, the present data documented that half of the adolescents (46%) were engaged in sedentary activities during the past week, highlighting a concerning trend toward inactivity among this age group. To promote present and future well-being, the following are recommended to encourage physical activity.

a. Ayushman Bharat – School Health and Wellness Programme curriculum

In Module 8 "Promotion of Healthy Lifestyle", physical activity among school going adolescents may further be promoted.

- I. Integrating physical activity across the II themes of the School Health and Wellness Programme can contribute to foster increased physical activity and discourage sedentary lifestyle among students.
- 2. Creative activities should be incorporated to involve parents and community members through activities such as "Parivar ki Bhagidari" (Family Partnership) race. The child's goal would be to recruit more team members and participate in the race.
- 3. Holding regular competitions and summer camps (such as cycling, and treasure hunt to name a few) to reinforce physical activity.
- 4. In each physical education class, regular water breaks for students need to be encouraged for adequate fluid intake to prevent dehydration in the present changing climatic condition.
- 5. Schools to have bi-annual "Khelo India" fitness assessment 115 to assess the fitness of the students. Results may also be shared with parents.
- 6. Encouraging students in diverse activities such as yoga, and dance that are non-competitive. Yoga instructors from the local Health and Wellness Centres can be invited to popularise regular yoga among students. Regular yoga, dance competitions can be encouraged at school, cluster, and district level competitions.

- b) Fostering Policy reinforcement
 - 1. To ensure that every school has mandatory physical education teachers, playground, and daily physical education Classes.
- c) Strengthening Inter-departmental coordination
 - I. Block authorities, school management committees and local governance representatives can earmark funds to develop and maintain physical activity infrastructures in school.

5.3 Hygiene

The World Health Oraganization recommends washing hands with soap and water when visibly dirty, visibly soiled with blood or other body fluids, or after using the toilet. However, the survey findings revealed a concerning gap in hygiene practices among adolescents. Approximately 3% to 6% of adolescents were not washing their hands after using the toilet, before eating, or before handling food, and thus pose a potential risk for infectious diseases. Swachh Bharat Swachh Vidyalaya, part of the larger Swachh Bharat Mission, by the Government of India aimed at promoting cleanliness, hygiene, and sanitation in schools across the country. As observed, unclean toilets (13%), lack of running water (18%), and uncleaned dustbins (10%) can further exacerbate the problem. Addressing aforementioned hygiene and sanitation issues is crucial for improving hygiene practices among adolescents.

- a. Ayushman Bharat School Health and Wellness Programme curriculum
 - 1. As part of Module 6 "Nutrition, Health and Sanitation", the students should be taught "How to Handwash" as suggested by the World Health Organization 116.
 - 2. It is essential to incorporate activities that reinforce the message of continuing good hygiene practices. Global Handwashing Day (October 15th) should be celebrated with students, school administration, and by involving the parents and community members.
 - 3. In the month of October,
 - school can organize educational games and interactive workshops on hand hygiene to reinforce the benefits of adequate handwashing and personal hygiene.
 - 4. Schools may consider setting hand hygiene booth in schools to promote hand hygiene among students.
- ii. Fostering Policy reinforcement
 - I. Aligning with the Swachch Bharat Vidhyalaya, a school maintenance schedule should be maintained and periodically checked by the School Management Committee and the designated teachers ⁵⁹.

5.4 Digital Device Use and Cyber Bullying

Nearly 2% of adolescents were spending more than 8 hours a day on digital devices. Additionally, the findings documented that 10% of adolescents were engaged in online bullying, while 8% have been

victims of online bullying in the past 12 months. This current emerging trend highlights the growing concern of cyberbullying, which has been documented to lead to serious emotional and psychological consequences. These insights, even minuscule at present, underscore the need for interventions focused on promoting healthier digital habits and addressing cyberbullying.

- a. Ayushman Bharat School Health and Wellness Programme curriculum
 - I. Comprehensive education can be introduced and emphasised within Module 3 "Interpersonal Relationship" while discussing the types and various forms of bullying, its impact on individuals and communities, and strategies for prevention and intervention can contribute to a holistic understanding of the issue.
 - 2. There is an opportunity to enhance Module II "Promotion of Safe Use of Internet, Gadgets, and Media" by documenting the adverse effects of cyberbullying on the physical, psychological, and academic performance.
 - 3. As part of Module II, additional information can be introduced where students can be sensitized about 'National Cyber Crime Reporting Portal'¹¹⁷, Helpline Number (1800-180-5522)¹¹⁸, Emergency Response Support System ¹¹⁹. All these numbers and website can be permanently displayed in the designated 'Health and Wellbeing Corner' at schools.

5.5 Violence and Road Safety

The Motor Vehicle Act (1988) mandates using seat belts and helmets and prohibits underage driving. The National Crime Records Bureau report and Global Burden of Disease data highlight road injury as one of the principal causes of adolescent morbidity and mortality in the country. The survey results indicate that many adolescents frequently engage in unsafe road use behaviours. Specifically, 47.3% reported not wearing helmets while riding motorcycles, while 41.1% did not wear seat belts while driving cars. These findings underscore the need to promote, nurture, and reinforce safe road use practices among adolescents.

- a. Ayushman Bharat School Health and Wellness Programme curriculum
 - Relevant content may be included in Module 10, "Safety and Security against Violence and Injuries," to promote adherence to safe road use measures among adolescents, including wearing seat belts, understanding markings on roads, understanding safety signals and legal age for driving to promote safer road use practices ¹²⁰ for self and other road users.
 - Activities can be included where school students can draw a map to locate the type of traffic signs and markings such as the centre line, double white/yellow lines, various traffic signs, small broken white lines, parking prohibited lines, stop lines, and zebra crossing lines and non-violation of traffic rules.
 - 3. Information, Education, and Communication materials for safety signals and road markings should be permanently displayed in the designated corner inside the school to reinforce the messages [21,122].

- b. Strengthening Inter-departmental coordination
 - Regular virtual awareness campaigns emphasizing on road safety can be initiated in schools in collaboration with the Transport Department, through various mediums to promote safe road use.

5.6 Substance Use

A small yet notable percentage of adolescents (3% to 5%) used substances. The diverse nature of substance use by adolescents, includes – tobacco, e-cigarettes, alcohol, marijuana, cocaine, hallucinogens, injectable drugs, inhalants, cough syrups, and sleeping pills. These findings emphasise the critical need to reduce substance access and promote the health and well-being of adolescents within the existing robust policy framework aimed at preventing substance use. Enforcement of laws like the Comprehensive Dangerous Act (2002); the Narcotic Drugs and Psychotropic Substances Acts (1985, 1989); the Juvenile Justice Act (2015); the Cigarettes and Other Tobacco Products Act (2003); and the Prohibition of Electronic Cigarettes Act (2019) would address the access. The Ayushman Bharat – School Health and Wellness Programme curriculum needs to emphasise the rationale and benefits of avoiding substances in the first place including addressing peer pressure.

- a. Ayushman Bharat School Health and Wellness Programme _curriculum
 - 1. To enhance the prevention and management of substance misuse, the existing information in Module 7 "Prevention and management of substance misuse" should be contextualised by incorporating additional content on e-cigarette, Marijuana, and hallucinogens.
 - 2. Activities for discouraging substance misuse can be conducted including taking pledge against substance use in assemblies, organising competitions (poster, slogan, essay, quiz, debates, community walks, signature campaigns and street plays) depicting ill effect of substance addiction. Additionally, how to avoid peer pressure and lure to addiction can be co-created by students themselves under the mentorship of Ayushman Bharat Health and Wellness Ambassadors.
 - 3. Visit by the Adolescent Friendly Health Clinic counsellor/ Medical Officer can be a valuable initiative to raise awareness among adolescents about the consequences of substance misuse. During such visits, adolescents can be sensitized of the long-term risks associated with substance use and provided with information on available resources for support and assistance. This can include sharing details about the tobacco quit line number (1800 112 356)¹²³, m-cessation (011-22901701)¹²⁴, services for tobacco cessation (1800 112 356)¹²⁴, nearest Adolescent Friendly Health Clinic, Health and Wellness Centers, and de-addiction center (Deaddiction and Rehabilitation Centre, Bhuntar, Kullu).
- b. Strengthening Inter-departmental coordination
 - I. The school authorities can organise virtual interactions with local law enforcement and health authorities to deliver substance use messages. This will facilitate in advocating the policy makers regarding substance use related issues.

c. Fostering Policy reinforcement

- 1. School authorities should follow Tobacco Free Educational Guidelines to prevent tobacco use among school students, teachers, and staff.
- a. Following the Tobacco Free Educational Guidelines, schools will attain tobacco-free status if they score 90% and above according to the specifications laid down in the Guidelines. However, attaining a score of 50 is mandatory for all schools⁸⁹.

5.7 Reproductive and Sexual Health

Nearly 6% of adolescents were engaged in sexual intercourse. Among those who have been sexually active, almost half used contraception during their last sexual encounter. A critical need is to help adolescents make informed and healthy decisions about their sexual health through the early beginning of culturally sensitive, age-appropriate, and contextual sexual and reproductive health education, improved access to resources, and supportive environments.

- a. Ayushman Bharat School Health and Wellness Programme curriculum
 - In line with global guidance from the United Nations, Comprehensive Sexuality Education should begin at the age of 5 years and continue till 18 years to help children passing through the maturation process to adulthood. Core concepts suggested by International Technical Guidance on Sexual Education can be integrated in Module 9 "Reproductive Health and HIV Prevention".
 - 2. Key concepts such as condom use and abortion can be contextualised as topics under Module 9 "Reproductive Health and HIV Prevention".
 - 3. Role of contraception in the prevention from sexually transmitted infections and reproductive tract infection can also be included in aforementioned Module.
 - 4. Visit of Adolescent Friendly Health Clinic Counsellor or Medical Officer can be a valuable initiative for education on adolescent reproductive anatomy and processes. Information about adolescent reproductive anatomy and processes and available helplines 7827-170-170¹²⁶ for violence against women or CHILDLINE on 1098¹²⁷ or women in distress on 1091¹²⁸ can be displayed in the 'Health and Wellness Corner'.
- b. Strengthening Inter-departmental coordination
 - 1. The school authorities can invite the local law enforcement and health authorities to be the part of school assembly and deliver session on laws and policies such as the Protection of Children from Sexual Offences Act and Medical Termination of Pregnancy Amendment Rules, 2021¹²⁹. Modalities of conducting such sessions can be mutually agreed.

5.8 Menstrual Hygiene

Around 30% of adolescent girls reported experiencing menstruation-related challenges. Among them, more than half (56%), however, resorted to home remedies or opted not to act on menstrual challenges. The relatively low percentage of adolescent girls seeking medical help for menstrual issues indicates a need also to be addressed as the demand side approach, access to healthcare, and supportive environments may better address menstrual health challenges.

- a. Ayushman Bharat School Health and Wellness Programme curriculum
 - I. Within Module I "Growing up Healthy" there is an opportunity to emphasise menstrual health issues aiming to increase awareness. This would ensure that adolescent girls are equipped with knowledge on normal menstrual experiences and when they should seek guidance from healthcare professionals.
 - 2. To ensure the successful implementation of the Ayushman Bharat-School Health and Wellness Programme, it is crucial to enhance the supply-side and expand reach covering all beneficiaries.
 - 3. Adolescent Friendly Health Clinic Counsellor/ Medical Officer visit to the school on annual days can sensitise parents, students, teachers, and school management regarding menstrual hygienic products and challenges that girls might face.
 - 4. In order to promote the use of menstrual hygiene products, it is essential to create an enabling environment that includes the availability of safe disposal and facilities for handwashing.

5.9 Mental Health

Adolescent mental health is indeed a critical issue that needs attention. The prevalence of mental health issues among adolescents, ranged from 6% to 11%, highlighted the importance of addressing these challenges early on. Effective support and intervention are crucial in improving the quality of life for adolescents.

- a. Ayushman Bharat School Health and Wellness Programme curriculum
 - I. Health and Wellness Ambassadors can be sensitised on 'Red Flag Signs' introduced by Ministry of Education in 2022 with an aim for early identification of signs of thirteen Adolescent Mental Health Issues and concerns¹³⁰.
 - 2. In Module 2 "Emotional Well-Being and Mental Health", activities such as "khoj," (discover) can be incorporated where students can be tasked with researching available services and helplines for adolescent mental health issues and concerns.
 - 3. During the annual school events, inviting Adolescent Friendly Health Clinic Counsellors, or Medical Officers can help raise awareness about adolescent mental health issues. They can sensitize parents, students, teachers, and school management about the importance of connectedness between parents and children, as well as between students and teachers, in preventing mental health issues. These sessions can also educate attendees about available mental health services such as those offered in Adolescent Friendly Health Clinic, Health and Wellness Centres, and helplines including Tele Manas (14416)¹³¹.

5.10 Government Schemes

Implementation of various health-related activities within schools is crucial for promoting adolescent wellbeing, especially under the Ayushman Bharat – School Health and Wellness Programme. With 46% of schools organized health melas, the awareness of health ambassadors and health and wellness messengers was relatively modest, at 59% and 58%, respectively.

- a. Ayushman Bharat School Health and Wellness Programme curriculum
 - I. Students and parents need to be made aware of the importance of annual health screening, one of the packages for services under the Ayushman Bharat School Health and Wellness Programme implementation. The Rashtriya Bal Swasthya Karyakram mobile health team's visit to the school needs to be informed well in advance so that students and their parents can be encouraged for availing the early identification and early management facilities.
 - 2. A robust digital mechanism for tracking the estimation, supply, distribution, and consumption of Iron Folic Acid and deworming tablets by respective schools and teachers can ensure timely and uninterrupted supply and stock of commodities and consumption reporting. Since schools are to dispense, this can be integrated within Education Department regular reporting system with lateral linkages with the Health Department.
 - 3. Health and Wellness Ambassadors need to be sensitised and capacitated to regularly utilise the school assembly to reach a student audience through a single instance.
 - 4. Following the model of Rashtriya Kishor Swasthya Karyakram, these Health and Wellness Messengers can be distinguished by wearing a badge, as implemented in Madhya Pradesh which would help in improving participation and utilisation of services.
 - 5. A digital recording platform comprising all the reporting and compliance may enhance implementation of different programmatic activities including those by the Health and Wellness Ambassadors as per the guidelines.

b. Strengthening Inter-departmental coordination

I. Coordination between school authorities with the Health Department may be strengthened for uninterrupted supply of iron folic acid tablets, deworming tablets, and sanitary napkins as well as for health screening and organising the Health Mela.

c. Fostering Policy reinforcement

I. School authorities, Health and Wellness Ambassadors, and other authorities concerned to follow the coordination and supportive supervision mandates of Rashtriya Kishor Swasthya Karyakram and Rashtriya Bal Swasthya Karyakram for holistic health of adolescents.

5.11 Overarching

- I. The school inspectors are mandated to inspect schools on a regular basis to ensure academic achievements of students. Communication to school children on various themes of Ayushman Bharat-School Health and Wellness Programme may be embedded into the inspection process.
- 2. Decentralizing the process for ongoing support, identified Cluster Resource Centre and Block Resource Centre coordinators may also handhold implementation concurrently.
- 3. 'Health and Wellbeing Corner' a physical space can be dedicated in every school, where monthly articles by students relevant to the on-going topics of the Ayushman Bharat-School Health Programme schedule and Information Education Communication materials can be used to promote participation and increase health and wellbeing outlook among students. Every month, the corner can be linked with specific Ayushman Bharat School Health and Wellness Programme module so that all the modules are covered within the academic session (Annexure 2).
- 4. The existing platforms in schools such as school assemblies, parent-teacher meetings, annual functions, and School Management Committees may be effectively used to sensitise school students, parents and management about themes, available services and commodities under Ayushman Bharat-School Health and Wellness Programme and Rashtriya Kishor Swasthya Karyakram for adolescents, and the existence of Health and Wellness Ambassadors as well as Health and Wellness Messengers in schools and classes respectively.



Chapter 6:

Conclusion

Adolescence is a unique opportunity for positive development among young people during their profound biological, cognitive, psychosocial, and emotional changes. This period is when children begin to form their own identities, establish independence, and develop the skills and behaviors they will carry into adulthood. Appropriate support and guidance from adults around them, during this critical stage, can encourage healthy habits, resilience, and overall wellbeing. Significant efforts and progress have been made in India to address the health needs of adolescents. However, a strategic focus in several key areas is still necessary.

The State-level School-based Adolescent Health Survey, conducted in Himachal Pradesh, presents an indepth understanding of the health behavior of adolescents aged 13-17 years. These insights, together with information and observations related to school environment, highlight the areas for improving the health and well-being of adolescents.

Nutrition, physical activity, personal hygiene, digital device use, violence, substance use, reproductive and sexual health, menstrual hygiene, mental health, and access to related government schemes are noteworthy interventions. This emphasizes the need for contextual strengthening of existing health communication and services, resources to protect adolescent from risk factors and adverse experiences to positively impact their potential to thrive in adulthood.

For the wellbeing of adolescents, there is a need to foster coordinated efforts between various government departments, school authorities and related committees, parents, and community in every school. Through this, Himachal Pradesh can systematically work towards improving the health and well-being of its adolescent population, leading to improved health outcomes, and setting a strong foundation.

This survey does have the potential of repeating in the State and scaling up at National level to benefit both, the government, and the adolescents.

Annexure: 1 Module Wise Prevalence

per day(%) 3.5 3.7 3.6 4.3 3.8 3.3 per day(%) 4.8 5.3 5.3 5.1 5.4 per day(%) 8.2 8.7 7.5 9.0 I time a day(%) 24.1 24.1 24.0 21.9 26.4 23.9 24.6 PLACE OF RESIDENCE GENDER AGE a day(%) 13.0 13.1 13.0 13.8 14.0 12.2 13.3 1-3 times a day (%) 31.8 30.8 29.8 31.2 31.8 32.1 consume(%) 14.3 14.5 15.6 12.8 13.9 14.9 3833 5073 2490 7563 6687 876 13-15 16-17 Urban Total Rural ij Воу

A significant proportion, 14.3%, did not include fruits in their regular diet. Notably, this trend was more among rural adolescents, girls, and individuals aged 16-17 years.

Table I. I: Students ate fruits daily

Table 1.2: Students drink milk or eat milk products daily

4 times per day(%)	5.1		5.2	4.2		5.6	4.6		5.6	4
3 times per day(%)	4.5		4.5	4.7		4.7	4.4		4.5	4.6
2 times per day(%)	7:11		8	9:01		13.0	10.4		11.2	12.8
l time a day(%)	32.4	ENCE	32.3	32.8		31.5	33.3		31.7	33.8
4-6 times a day(%)	16.3	PLACE OF RESIDENCE	16.3	16.2	GENDER	16.8	15.8	AGE	17.1	14.7
I-3 times a day (%)	20.1		19.8	22.4		18.9	21.3		20.0	20.2
Did not consume(%)	6.6		10.0	9.1		9.5	10.3		10.0	7.6
z	7563		2899	876		3833	3730		5073	2490
	Total		Rural	Urban		Воу	Girl		13-15	16-17

About one-third (32.4%) of the surveyed adolescents, adhered to guideline of healthy diet. Notably, there was no significant difference observed in consumption of milk and its products between rural and urban adolescents. However, there were gender and age-based distinctions, with girls consuming milk or milk products, more than boys, and a similar trend is seen among 16-17-year-olds compared to the 13-15-year-old counterparts. Concurrently, there were 10% of adolescents who did not consume these products, suggesting inadequate diet.

Table 1.3: Students eat fried food daily

4 times per day(%)	2.3		2.4	9.1		2.3	2.2		2.4	2.0
3 times per day(%)	4 4:		4.6	3.4		4.7	4.2		6.4	3.4
2 times per day(%)	8.9		7.0	5.8		6.7	7.0		7.0	6.5
l time a day(%)	16.2	ENCE	16.5	13.8		15.0	17.4		16.6	15.3
4-6 times a day(%)	 	PLACE OF RESIDENCE	7.9	9.5	GENDER	9.4	9.9	AGE	7.9	8.5
I-3 times a day (%)	34.3		33.8	38.1		35.8	32.8		33.1	36.9
Did not consume(%)	27.9		27.9	27.7		26.0	29.8		28.1	27.4
z	7563		2899	876		3833	3730		5073	2490
	Total		Rural	Urban		Воу	Girl		13-15	16-17

Majority of the adolescents (72.1%) reported the consumption of fried foods such as poori, samosa, and pakoda, regardless of the frequency in a day. In 39.7% school, as reported by principal, and no hawkers around schools within 50 meters selling food high in fat, salt or sugar was observed. Approximately 27.9% of the population abstained from the consumption of these fried foods. Disaggregated data analysis revealed that girls and younger adolescents (aged 13-15 years) reported healthier eating behaviours compared to their older counterparts when these unhealthy options are setting in.

Table 1.4: Students consume soda beverages daily

	z	Did not consume(%)	I-3 times a day (%)	4-6 times a day(%)	l time a day(%)	2 times per day(%)	3 times per day(%)	4 times per day(%)
Total	7563	43.3	25.6	6.4	15.2	5.2	2.4	6.1
				PLACE OF RESIDENCE	ENCE			
Rural	2899	42.9	25.3	6.5	15.4	5.4	2.5	2.0
Urban	876	46.0	28.2	5.6	13.9	3.8	1.5	1.0
				GENDER				
Воу	3833	40.5	27.9	7.3	14.6	5.3	2.6	8. 1
Girl	3730	46.1	23.3	5.5	15.8	5.2	2.2	6:1
				AGE				
13-15	5073	4.14	26.1	6.2	16.1	5.7	2.8	8:1
16-17	2490	47.1	24.7	6.9	13.3	4.3	9.1	6:1

On an average, 56.7% of the adolescent population consumed soda beverages on a daily basis with varying frequencies. Notably, almost one-fourth of the population (43.3%) refrained from daily soda beverage consumption, and this trend was more among urban students, adolescent girls, and older adolescents.

Table 1.5: Students consumed food with high sugar daily

4 times per day (%)	3.8		3.9	3.		3.4	4.2		1 .	3.3
3 times per day (%)	5.2		5.3	1.4		4.6	5.8		5.9	3.8
2 times per day (%)	7.4		7.4	7.5		7.6	7.2		7.5	7.2
l time a day (%)	18.4	CE	18.8	15.9		18.5	18.3		0.61	17.3
4-6 times a day (%)	14.6	PLACE OF RESIDENCE	14.0	18.8	GENDER	15.4	13.8	AGE	14.8	14.2
I-3 times a day (%)	37.3		37.3	37.8		36.8	37.9		36.2	39.7
Did not consume (%)	13.3		13.3	12.8		13.8	12.7		12.6	14.6
z	7563		2899	876		3833	3730		5073	2490
	Total		Rural	Urban		Воу	Girl		13-15	16-17

More than thirteen percent of the students abstained from consuming processed foods high in sugar, such as pastries, cakes, biscuits, gulab jamun, etc. Intriguingly, this pattern was more reported by urban adolescents, boys, and older adolescents.

Table 1.6: Students consume foods with high salt and fats daily

	Z	Did not consume (%)	I-3 times a day (%)	4-6 times a day (%)	l time a day (%)	2 times per day (%)	3 times per day (%)	4 times per day (%)
Total	7563	21.2	32.5	12.8	18.8	6.4	4.5	3.7
				PLACE OF RESIDENCE	CE			
Rural	2899	21.1	31.7	13.0	1.61	9.9	4.7	3.8
Urban	876	21.7	38.8	11.5	16.9	5.0	3.3	2.7
				GENDER				
Boy	3833	21.8	32.9	13.3	17.8	6.1	4.8	3.4
Girl	3730	20.6	32.1	12.3	6.61	8.9	4.3	4.0
				AGE				
		20.8	31.5	12.9	19.5	6.5	4.7	4.
16-17	2490	22.1	34.5	12.6	17.5	6.3	4.2	3.0

There is a considerable reporting of daily consumption of processed foods rich in salt and fats, including items like chips, burgers, pizza, and noodles, among the students. Approximately 78.8% adolescents reported regular consumption of processed foods rich in salt and fats. Notably, however, 21.2% of adolescents -- more boys and older adolescents-- did not include these foods in their daily diet

Table 1.6: Students reading information on nutritional levels on packaged food

	z	No (%)	Yes (%) L	Don't know that there is a nutrition label (%)
	7563	36.1	53.9	0.01
		PLACE (PLACE OF RESIDENCE	
	2899	35.7	53.9	10.3
Urban	876	38.9	53.8	7.3
		0	GENDER	
	3833	38.0	51.7	10.3
	3730	34.2	56.2	7.6
			AGE	
13-15	5073	35.3	54.2	9.0
	2490	37.8	53.2	10.0

The dietary guidelines for Indians advise individuals to consistently read available food labels to note nutrient content, shelf-life, and additives in the packaged food items. Over half (53.9%) of the adolescent respondents reported reading packaged food labels, specifically to understand about sugar, salt, fat, and additives. Interestingly, there was no discernible difference between rural and urban adolescents. Girls and older adolescents reported this practice more frequently.

Table 1.7: Students reported eating breakfast

	Z	Never (%)	Rarely (%)	Sometimes (%)	Most of the times (%)	Always (%)
Total	7563	7.0	4.6	11.6	10.3	66.5
			PLACE OF RESIDENCE	ENCE		
Rural	2899	7.1	4.6	4: I	10.2	66.7
Urban	876	6.3	4.8	12.7	I:II	65.2
			GENDER			
Воу	3833	- 8	1 .4	10.2	10.1	67.5
Girl	3730	6.0	5.1	12.9	10.4	65.5
			AGE			
13-15	5073	8.9	4.2	11.2	9.3	68.5
16-17	2490	7.4	5.4	12.2	12.4	62.6

Around 66 % of adolescents reported daily consumption of breakfast in the past 30 days, more among adolescents from rural areas, boys, and younger adolescents. Seven percent of adolescent respondents, however, reported never having their breakfast in past 30 days prior to survey.

Module – C (Physical Activity)

7 days (%) 24.5 24.3 26.1 24.4 24.5 22.5 28.6 6 days (%) 6.5 5.9 5.8 6.8 6.4 7. 5.7 5 days (%) 6.0 6.5 5.6 6.0 6.2 <u>-</u>. 7. 4 days (%) 0.0 10.4 9.4 9.7 9.4 9.4 PLACE OF RESIDENCE GENDER 3 days (%) AGE 12.4 1.2 12.5 12.3 17. 12.3 12.3 2 days (%) 12.0 12.2 12.5 10.7 I day (%) 0: 1.2 9.01 <u>=</u> 4: 1.7 9.6 89. 89. 0 day (%) 18.0 17.8 8.3 18.8 8.8 16.3 19.5 17.7 2490 5073 7563 6687 3833 3730 876 Z Urban 13-15 16-17 Rural Total Gir Воу

Almost one-fourth (24.5%) of the adolescent respondents reported daily mild exercise, which includes activities such as yoga or walking slowly to a friend's house. More girls, adolescents residing in urban areas, and older age groups participated in mild exercise while 18% adolescents did not engage even in mild exercise over the past 7 days, despite the availability of playgrounds in the schools (95.1%), physical education subject (94.6%) being taught by physical education teacher (89.7%) almost every day i.e. 6 days in a week (75%) as reported by principals.

Table 2.2: Students undertaking moderate exercise

	z	0 day (%)	l day (%)	2 days (%)	3 days (%)	4 days (%)	5 days (%)	6 days (%)	7 days (%)
Total 7563	7563	17.0	10.7	13.2	13.1	10.5	7.8	6.3	21.4
				II.	PLACE OF RESIDENCE	н.			
Rural	2899	17.1	0.11	13.1	12.9	10.3	7.8	6.3	21.5
Urban	9/8	16.2	8.7	13.2	15.3	12.0	7.5	6.3	20.8
					GENDER				
Boy	3833	17.0	10.1	12.6	13.1	10.3	7.3	6.4	23.1
Girl	3730	17.0	4.	13.7	13.2	10.7	8.3	1.9	9.61
					AGE				
13.15	5073	16.3	11.3	13.4	13.2	9.01	7.8	6.4	20.9
1617	2490	18.5	9.4	12.7	13.1	10.2	7.7	0.9	22.3

Over one-fourth (21.4%) of adolescents reported daily moderate physical activity such as walking briskly/ cycling slowly, and dancing. Interestingly, in contrast to mild exercise patterns, more adolescents from rural areas and boys reported engaging in moderate exercises on a daily basis. Around 17% adolescents did not involve in any moderate activity in past 7 days.

Table 2.3: Students undertaking strenuous exercise

	Z	0 day (%)	l day (%)	2 days (%)	3 days (%)	4 days (%)	5 days (%)	6 days (%)	7 days (%)
Total	7563	18.2	8	13.1	13.7	8.6	7:8	6.3	19.3
					PLACE OF RESIDENCE	ZCE			
Rural	2899	<u>8</u>	6.11.	13.1	13.5	6.6	7.7	6.4	19.3
Urban	876	18.7	10.5	13.7	14.6	8.6	8.9	5.7	19.3
					GENDER				
Воу	3833	14.9	7.6	12.7	13.8	8.6	8.6	6.9	23.6
Giri	3730	21.6	13.9	13.6	13.5	7.6	7.1	5.7	14.9
					AGE				
13-15	5073	17.0	12.1	13.4	13.3	10.1	7.8	9.9	9.61
16-17	2490	20.6	0.11	12.7	14.3	1.6	7.9	5.7	18.7

Approximately one-fourth (19.3%) of adolescents participated in strenuous activities such as fast cycling, skating, and football. Notably, boys were more engaged in these activities compared to girls, and similarly, younger adolescents reported higher participation.

Module – D (Personal Hygiene)

Always (%) 80.8 81.3 80.7 79.3 82.3 9.62 Most of the times (%) 10.3 10.3 10.5 0.0 10.4 12.4 9.2 Sometimes (%) 5.4 5.4 5.3 5. 4.9 5.7 5.7 PLACE OF RESIDENCE AGE Rarely (%) 2.4 2.4 2.5 7. 7. 2.9 <u>~</u> Never (%) 0.8 <u>~:</u> 7. 0.9 0. 7. 9: 5073 7563 3833 3730 2490 6687 876 Z Urban 13-15 16-17 Rural Total Ģ Воу

Table 3.1: Students washing hands with soap and water or using sanitizer after visiting restroom

Majority of the adolescents (80.8%) always followed hygienic practices by either washing their hands with soap or using sanitizer every time after using the restroom. Higher percentage of urban adolescents, girls, and younger adolescents always follow these hygienic practices. But, close to ten percent (9.9%) of adolescents do not follow these hygienic practices.

as reported by principals. Observations by the survey team in the schools, however, reported that 83.3% had washing facility in toilet, 65.2% had soap for washing, 92.2% had running water available. Disparate observations highlight the need for strengthening individual handwashing practices promoting High adherence could be due to the availability of hand washing facilities in all school with the availability of soap (98.5%) and regular water supply (95.1%) nealth and well-being.

Table 3.2: Students washing hands with soap and water or use sanitizer before eating food

C C								
Total 7563 1.1 2.3 6.2 12.6 77.9 Rural 6687 1.1 2.3 6.1 12.4 78.0 Urban 876 0.9 2.1 6.4 13.7 76.9 Boy 3833 1.4 3.0 6.7 13.0 75.9 Girl 3730 0.7 1.5 5.6 12.2 79.9 13-15 5073 1.0 2.5 5.9 12.0 78.6 16-17 2490 1.2 1.8 6.6 13.7 76.6								
Never (%) Rarely (%) Sometimes (%) Most of the times (%) All All All All All All All All All Al								
7563 1.1 2.3 6.2 12.6 PLACE OF RESIDENCE 6687 1.1 2.3 6.1 12.4 876 0.9 2.1 6.4 13.7 GENDER 3833 1.4 3.0 6.7 13.0 AGE 5073 1.0 2.5 5.9 12.0								

adolescents from rural areas, girls, and younger adolescents compared to their counterparts in urban areas, boys and older adolescents. Hand washing Nearly 80% of the students reported always washing hands with soap or using sanitizer before eating food. Hygienic practice was more reported by facility was available in all school with regular water availability (95.1%) and soap availability (98.5%) as reported by the principals.

Table 3.3: Students washing hands with soap and water or using sanitizer before handling/cooking food

	Z	Never (%)	Rarely (%)	Sometimes (%)	Most of the times (%)	Always (%)
Total	7563	2.0	3.8	10.0	17.4	8.99
			PLACE OF RESIDENCE	VCE		
Rural	2899	2.1	3.9	8.6	17.1	67.0
Urban	876	l.3	3.0	5.11	9.61	64.6
			GENDER			
Воу	3833	3.0	4.6	Ξ	18.2	63.1
Girl	3730	0.1	3.0	9.0	16.5	70.5
			AGE			
13-15	5073	2.0	3.8	10.1	16.5	67.7
16-17	2490	2.1	3.9	0.01	19.1	64.9

Close to 67% adolescents reported that they are always wash hands with soap and water or sanitize their hands before cooking or handling food. More rural adolescents, girls and younger age group adolescents reported this behaviour.

Table 3.4: Students using toilets or latrines in school

	Z	No toilet or latrine in school (%)	Never (%)	Rarely (%)	Sometimes (%)	Most of the times (%)	Always (%)
Total	7563	9.0	5.9	1.81	29.5	10.5	35.4
				PLACE OF RESIDENCE			
Rural	2899	9.0	5.6	17.5	29.5	10.3	36.5
Urban	876	0.5	7.8	22.4	29.5	12.3	27.6
				GENDER			
Воу	3833	0.7	6.4	1.91	27.1	0.11	38.7
Girl	3730	0.5	5.4	20.0	32.0	0.01	32.1
				AGE			
13-15	5073	9.0	5.3	17.6	29.1	0.01	37.4
16-17	2490	0.7	7.0	19.0	30.3	9:11	31.5

Almost half of the adolescent respondents (46%) reported using toilets or latrines in school always or most of the time in the past 30 days. Among these adolescents, a higher percentage of those from rural areas, boys, and older age groups reported using these facilities in schools more frequently when compared to others. It was also reported by adolescents that some schools (0.6%) have no toilet or latrine in school. School principals, however, reported that all the sampled schools in the survey were having toilets or latrines for student use.

Table 3.5: Separate latrines and toilets for boys and girls

Not applicable* (%)	6.5		ı	I		ı	ı		:	ı
Yes (%)	89.8		7.79	83.2		95.5	9.96		96.4	95.5
No (%)	3.7	PLACE OF RESIDENCE	2.3	16.8	GENDER	4.5	3.4	AGE	3.6	4.5
z	7563		6268	804		3833	3730		4773	2299
	Total		Rural	Urban		Воу	Girl		13-15	16-17

* Question is applicable for co-educational schools

Majority of the adolescents (89.8%) reported availability of separate toilets for boys and girls in their schools. However, 3.7% of adolescents reported the lack of facility in their schools. Non availability was reported more by urban adolescents, boys, and older adolescents. On the contrary, school principals reported availability of separate latrines and toilets for boys and girls in 92.6% and 93.6% schools respectively.

Table 3.6: Cleanliness of latrines and toilets

z	No (%)	Yes (%)	Not applicable* (%)
7563	12.2	81.3	6.5
	PLACE OF RESIDENCE	щ	
6268	4:11	88.6	:
804	26.4	73.6	ł
	GENDER		
3560	15.6	84.4	ŀ
3512	10.5	89.5	:
	AGE		
4773	10.8	89.2	:
2299	17.7	82.3	;

 $^*Question\ is\ applicable\ for\ those\ students\ who\ have\ ever\ used\ to ilets\ or\ latrines\ in\ school$

appeared to be more commonly reported by urban adolescents, boys, and older adolescents. Principals, informed that toilets were being cleaned on a Almost 81% adolescent reported that school toilets were clean whereas, 12.2% of adolescents reported that toilets were not clean. Unclean toilets daily basis in 98% of schools but observation by the survey team documented that 80% toilets were clean.

Table 3.7: Availability of running water in latrines and toilets

Not applicable* (%)	6.5		:	:		i	;		1	;
Yes (%)	76.9	ENCE	82.1	82.7		80.3	84.2		81.4	84.0
No (%)	16.6	PLACE OF RESIDENCE	17.9	17.3	GENDER	19.7	15.8	AGE	18.6	16.0
Z	7563		6268	804		3560	3512		4773	2299
	Total		Rural	Urban		Воу	Girl		13-15	16-17

 $^*Question\ is\ applicable\ for\ those\ students\ who\ have\ ever\ used\ toilets\ or\ latrines\ in\ school$

A majority of toilets had running water. One-sixth (16.6%) of adolescents, however, reported a lack of running water in the toilets, more so, by boys and younger adolescents. Observation by the survey team showed that 92.2% of the schools had water in the toilet.

Table 3.8: Availability of washing area inside latrines and toilets*

Yes (%) Not applicable* (%)	87.5	ENCE	93.5	93.9		92.3	94.8		93.8	- 60
No (%)	6.0	PLACE OF RESIDENCE	6.5	6.1	GENDER	7.7	5.2	AGE	6.2	6.7
z	7563		6268	804		3560	3512		4773	2389
	Total		Rural	Urban		Воу	Girl		13-15	14 17

 st Question is applicable for those students who have ever used toilets or latrines in school

As many as 87.5% adolescents reported availability of washing area inside the toilets. Younger adolescents and girls reported more compared to older adolescent and boys.

Table 3.9: Cleaning of dustbin inside the classroom everyday

Yes (%)	0.06		60.6	83.4		89.0	1.19		91.3	87.5
(%) oN	0.01	PLACE OF RESIDENCE	1.6	9.91	GENDER	0.11	8.9	AGE	8.7	12.5
z	7563		2899	928		3833	3730		5073	2490
	Total		Rural	Urban		Воу	Girl		13-15	16-17

Daily cleaning of dustbins was reported by majority of adolescents (90%) and school principals (96.1%) This indicates compliance with the guidelines for maintaining a hygienic environment in schools.

Module – E (Digital Device Use)

> 8 hours 2.0 2.0 9. 2.4 <u>∞</u>. 9. 2.7 7 to 8 hours 4. 4. <u>~</u> 9. __ __ \equiv 5 to 6 hours (%) 4. 8. 3.6 3.5 4.9 4. 4. 2.8 <u>--</u> 3 to 4 hours 10.9 10.4 13.0 15.8 15.2 % 8.8 8.6 PLACE OF RESIDENCE GENDER AGE I to 2 hours 31.6 32.2 36.3 30.2 36.3 31.7 32.7 39.3 42.3 43.0 38.4 31.4 34.7 29.1 ossess (%) <u>=</u> <u>~</u> 12.3 ____ Ξ 8.7 9.6 7563 6687 3833 3730 5073 2490 876 13-15 Rural Urban 16-17 Total Ğ Воу

computer/tablet etc. More urban adolescent (23.6%), boys (21.5%) and older adolescent (24.9%) reported spending more than 2 hours of screen time Overall, 18% of adolescents reported exceeding the recommended screen time limit of 2 hours per day for watching television/ mobile phone/ per day in last 7 days prior to survey.

Table 4.1: Time spent by students on digital device per day in past 7 days

Table 4.2: Students having a mobile phone for use on a regular basis

(%) oN -	26.7		25.5	36.4		32.8	20.5		20.7	39.0
Yes (%)	73.3	PLACE OF RESIDENCE	74.5	63.6	GENDER	67.2	79.5	AGE	79.3	0.19
z	7563	PLA	2899	876		3833	3730		5073	2490
	Total		Rural	Urban		Воу	Girl		13-15	16-17

Majority of adolescents (73.3%) possess mobile phones for regular use. This ownership is more among rural adolescents, girls, and those in the younger age group.

Table 4.3: Non-usage of digital device by students in past 7 days*

	z	Finishing homework (%)	During travel (%)	During meals (%)	During household chorus (%)	During bed time (%)	When battery runs out (%)
Total	7563	48.3	14.5	21.9	14.0	29.1	14.0
			PL	PLACE OF RESIDENCE			
Rural	2900	47.7	14.3	21.2	13.7	28.9	13.6
Urban	800	52.9	16.6	26.6	1.91	30.5	17.3
				GENDER			
Воу	3407	45.8	16.3	23.6	13.6	31.4	15.9
Girl	3293	50.9	12.8	20.0	14.5	26.8	12.0
				AGE			
13-15	4448	48.5	14.5	22.0	14.0	27.8	13.0
16-17	2252	47.9	14.7	21.5	14.2	31.7	16.0

^{*}Question is applicable for those students who do possess any digital device

Percentage is more than 100% as it was a multi-response question Multiple reasons were reported

Among adolescents who owned mobile phones, 48.3% reported that they stop using mobile phones only when they needed to complete homework, 29.1% adolescents reported that that they stop using mobile phone before going to bed. Additional reasons included during travels, while having meals, and during household chores.

Table 4.4: Students reporting bullying someone online in past 12 months

Yes (%)	9.6		9.3	12.4		12.5	6.7		8.7	11.6
(%) oN	90.4	PLACE OF RESIDENCE	7.06	87.6	GENDER	87.5	93.3	AGE	91.3	88.4
z	7563		L899	876		3833	3730		5073	2490
	Total		Rural	Urban		Воу	Girl		13-15	16-17

Majority of adolescents reported that they have not engaged in bullying behaviour. Nearly one-tenth (9.6%) of the adolescents admitted to bullying another individual and this was more among urban adolescents, boys, and older adolescents.

Table 4.5: Students report being bullied online in past 12 months

	z	(%) Vo (%)	Yes (%)
Total	7563	92.1	7.9
	PLACE OF RESIDENCE	ESIDENCE	
Rural	6687	92.5	7.5
Urban	876	89.0	11.0
	GENDER	JER .	
Воу	3833	1.06	6.6
Girl	3730	94.2	5.8
	AGE		
13-15	5073	92.8	7.2
16-17	2490	206	9.3

About 8% of adolescents reported facing online bullying. More urban adolescents (11%), boys (9.9%), and older age groups (9.3%) reported dealing with online bullying. Cyber bullying with notable social and emotional consequences, may necessitate focused interventions and educational efforts to encourage responsible and respectful online conduct.

Module - F (Connect to Parents/Guardians)

Always (%) 36.8 39.0 32.0 35.3 37.2 36.1 36.7 Most of the times (%) 43.9 43.9 43.8 43.5 44.4 42.6 46.6 Sometimes (%) ∞. <u>≕</u> Ξ 10.9 Ξ PLACE OF RESIDENCE AGE Rarely (%) 6.5 6.3 5.8 7.8 6.2 8.9 7.9 Never (%) <u>∞</u> 7. <u>∞</u>. 2.0 6: <u>-</u> 9. 5073 7563 3833 3730 2490 **6687** 876 Urban 13-15 Rural Total 16-17 Воу Girl

Table 5.1: Parents/guardians spending time with students in past 30 days

Approximately 80.6% of adolescents' report that their parents/guardians primarily spend the majority of their time with them, while 19.4% indicated that the frequency of parental interaction falls into categories of sometimes, rarely, or never. Connecting with parents/ guardians always was reported higher among rural adolescents, boys and younger adolescents compared to their counterparts in the survey subject.

Table 5.2: Students reporting how often their parents/guardians try to know what they do in their free time in past 30 days

	z	Never (%)	Rarely (%)	Sometimes (%)	Most of the times (%)	Always (%)
Total	7563	6.9	6.01	24.6	23.9	33.7
			PLACE OF RESIDENCE	NCE		
Rural	2899	8.9	0.11	24.1	23.9	34.2
Urban	876	7.1	10.3	28.5	24.1	30.0
			GENDER			
Воу	3833	6.9	11.5	26.4	23.3	31.9
Girl	3730	8.9	10.2	22.8	24.5	35.6
			AGE			
13-15	5073	7.3	10.4	24.5	23.0	34.9
16-17	2490	6.1	6:11	25.0	25.7	31.3

More than half (57.6%) adolescents reported that their parents or guardians make an effort as they know what their child is doing in free time most of time and always to understand their activities during leisure time. However, a notable 42% mentioned that parents rarely (10.9%), sometimes (24.6%) or never (6.6%) attempt to inquire about their free time activities.

Module – G (Health Seeking Behaviour)

Poor (%) 7. 9. 2.3 7. Fair (%) 33.0 33.1 32.8 3.. 35.0 32.1 34.9 PLACE OF RESIDENCE AGE 65.0 65.0 65.2 67.3 1.99 67.9 62.7 6268 4773 3560 7563 3512 2299 804 Rural Urban 13-15 16-17 Total Воу Gir

Table 6.1: Students describing their health in general

Students described their health as either good or fair - 98%. However, around 2% of adolescents reported poor health and more by urban adolescents, girls, and older adolescents.

Table 6.2: Actions by students when they experience any health condition

Discuss with teachers (%)	0.7		0.7	0.7		8.0	9.0		0.7	9.0
Discuss with community health worker (%)	0.2		0.2	0.0		0.2	0.2		0.2	0.2
Discuss with friends (%)	3.4		3.4	3.1		3.5	3.3		2.7	4.8
Home remedies (%)	2.7		2.6	3.7		3.2	2.3		2.1	1 .
Consult staff in health room in school (%)	0.7		0.7	9.0		0.7	9.0		0.7	9.0
Visit pharmacy (%)	6.0	DENCE	0.8	<u></u>	~	0.7	9.0		0.7	Ξ
Visit traditional healer (%)	6.4	PLACE OF RESIDENCE	0.5	0.1	GENDER	Ξ	9.0	AGE	0.5	4.0
Visit Adolescent Friendly Health Clinic (%)	9:0	PL	9.0	0.5		9.0	9.0		0.7	0.3
Consult family doctor (%)	6.1		6:1	6:		2.0	<u>8.</u>		1.7	2.2
Visit a health facility on their own (%)	7.3		7.2	- 8		8.8	5.8		6.4	9.2
Inform parents/ guardians (%)	81.2		4.18	1.08		78.6	83.9		83.6	76.4
Z	7563		2899	876		3833	3730		5073	2490
	Total		Rural	Urban		Boy	Girl		13-15 5073	16-17 2490

In response to the question as what the adolescents do if they experience any health problem, 81.2% reported that they inform their parents or guardians, reported across all demographic groups. About one-tenth (9.8%) sought advice from a healthcare professional, either by visiting a health facility (7.3%), an Adolescent Friendly Health Clinic (0.6%), or by consulting a family doctor (1.9%), indicating that existing public health system utilisation was low. But, 2.7% relied on home remedies and 3.4% discussed with their friends. And, very few adolescents discussed their issues with the community health workers and

Module – H (Access to Government Schemes)

Yes (%) 70.8 71.2 71.6 6.69 72.5 72.0 68.4 (%) oN 28.8 31.6 28.4 30.1 27.5 29.2 28.0 PLACE OF RESIDENCE AGE 3833 3730 5073 2490 7563 **6687** 876 Urban 13-15 Rural Total 16-17 Воу Ģ

Table 7.1: Students reported having undergone health screening since April 2023

More than 71% adolescents reported that they have participated in annual health screening in their school. But. about one-fifth of adolescents (28.8%) did not avail this screening facility in their school. This pattern was more among urban adolescents (31.6%), boys (30.1%), and the younger age group (29.2%) in comparison to their counterparts in the survey. 95% of the principals reported that yearly health screening was conducted in respective schools.

Table 7.2: Students reported to have been informed about any disease or complication during health screening

(%	_		5	4		9	7		6	7
Yes (%)	36.1		36.5	33.4		35.6	36.7		36.9	34.7
(%) oN	63.9	PLACE OF RESIDENCE	63.5	9.99	GENDER	64.4	63.3	AGE	63.1	65.3
z	5384		4785	299		2681	2703		3592	1792
	Total		Rural	Urban		Boy	Girl		13-15	16-17

Approximately one-third (36.1%) adolescent received information about identified health condition or complications. More adolescents from rural areas, boys, and younger age groups compared to their respective counterparts reported that they were informed of any disease or complication during their health screening.

Table 7.3: Students provided with a referral slip for government health facility

Yes (%)	39.7		40.3	35.1		40.0	39.4		40.1	39.0
No (%)	60.3		59.7	64.9		0.0	9.09		59.9	0.19
٥Z	9	PLACE OF RESIDENCE	2	9	GENDER	9	9	AGE	S	9
z	2179		4785	599		2681	2703		3592	1792
	Total		Rural	Urban		Boy	Girl		13-15	11-91

Among those adolescents who underwent screening and were identified with a health condition or complication, over one-third (39.7%) were referred to a public health facility for further management. Notably, the referrals were more frequent for adolescents from rural areas and those in younger age groups. However, it is concerning that nearly 60% of adolescents were identified with a health condition but were not referred to the public health system.

Table 7.4: Students reported receiving weekly iron folic acid tablets in school

	z		Yes (%)
	7563	21.4	78.6
	PLACE OF RESIDENCE	ENCE	
	6687	19.8	80.2
Urban	876	33.8	66.2
	GENDER		
	3833	23.1	76.9
	3730	19.8	80.2
	AGE		
13-15	5073	20.0	80.0
16-17	2490	24.4	75.6

Approximately one-fifth of the surveyed adolescents reported of not receiving the Weekly Iron Folic Acid tablet in the month before the date of survey. Stock-out / non-availability of weekly iron folic acid tablets in the schools was shared by 10.3% of principals identifying a supply chain logistics issue under Weekly Iron Folic Acid supplementation implementation during the data collection period.

Table 7.5: Students having consumed weekly iron folic acid tablets

Yes (%)	92.9		93.1	91.6		93.3	92.6		93.6	91.6
No (%)	1'2	PLACE OF RESIDENCE	6.9	8.4	GENDER	6.7	7.4	AGE	6.4	8.4
Z	5942	PLACE	5362	280		2949	2993		4059	1883
	Total		Rural	Urban		Воу	Girl		13-15	16-17

Out of those who reported receiving the Weekly Iron and Folic Acid Supplementation in one month before the survey, 92.9 % adolescents had consumed the supplement. However, around 7%, reported that they did not consume the provided IFA supplementation. Of this, lower consumption was reported among urban adolescents, girls and older adolescents compared to their counterparts in the surveyed population.

Table 7.6: Students received deworming tablets from school

Yes (%)	87.7		88.3	82.9		85.8	89.7		89.3	84.5
(%) oN	12.3	PLACE OF RESIDENCE	7.11	17.1	GENDER	14.2	10.3	AGE	10.7	15.5
z	7563		2899	876		3833	3730		5073	2490
	Total		Rural	Urban		Воу	Girl		13-15	16-17

More than 12% of adolescents reported that they did not receive deworming tablets from school. More urban adolescents, male students, and older adolescents reported not receiving deworming tablets. All principals, however, reported the availability of the deworming tablets in the school.

Table 7.7: Students consumed deworming tablets

Yes (%)	94.4	94.4	93.8		94.2	94.6		94.6	93.9
(%) oN	5.6 PLACE OF RESIDENCE	5.6	6.2	GENDER	5.8	5.4	AGE	5.4	6.1
z	6632	2906	726		3288	3344		4528	2104
	Total	Rural	Urban		Воу	Girl		13-15	16-17

Among those who received deworming tablets in the past six months prior to survey, 5.6%, adolescents reported that they did not consume the provided tablets. Notably, lower compliance was reported among urban adolescents, boys, and older-aged adolescents

Table 7.8: Students reported discussion on health-related topics in school assembly sessions

Yes (%)	89.2		89.5	87.2		87.2	91.3		89.7	88.4
(%) oN	10.8	PLACE OF RESIDENCE	10.5	12.8	GENDER	12.8	8.7	AGE	10.3	11.6
z	7563		6687	876		3833	3730		5073	2490
	Total		Rural	Urban		Воу	Girl		13-15	16-17

 $A \ majority \ (89.2\%) \ of students \ reported \ that school \ assemblies \ are \ being \ utilised \ as \ a \ forum \ to \ discuss \ health-related \ topics.$

Table 7.9: Students reported discussion on health conducted in respective classes in the past I week

I3-15 5073 31.3 68.7 16-17 2490 33.8 66.2	Total Rural Urban Boy Girl	N No (8 7563 32. PLACE OF RESIDENCE 6687 31. 876 GENDER 3833 34.		Yes (%) 67.9 68.9 59.8 65.9 69.9
5073 31.3 2490 33.8				
	7	5073 2490	31.3	68.7

Around one-third (32.1%) of students reported no discussions or lectures held in class in past week before the survey on health.

Table 7.10: Students reported 'Health Mela' organized inside school premises in the last 3 months

Yes (%)	45.6		46.9	35.7		44.9	46.2		46.0	44.6
(%) oN	54.4	PLACE OF RESIDENCE	53.1	64.3	GENDER	55.1	53.8	AGE	54.0	55.4
		PLACE			O					
z	7563		6687	876		3833	3730		5073	2490
	Total		Rural	Urban		Boy	Girl		13-15	16-17

Half of the adolescents reported that in the past three months, no health mela was organized as per the guidelines. More boys, adolescents from urban areas and older adolescents reported this than others.

Table 7.11: Students knew their Health Ambassador

z		Yes (%)
7563	41.2	58.8
PLACE OF RESIDENCE	NCE	
6687	41.0	59.0
928	42.1	57.9
GENDER		
3833	42.1	57.9
3730	40.2	59.8
AGE		
5073	41.7	58.3
2490	40.2	59.8

and younger aged adolescents. This may be that the Health and Wellness Ambassadors were designated in 75% of schools and 58.3% of them were trained at the time of survey as reported by principals. According to the principals, nearly half of schools (47.5%) had two teachers, 8.8% had more than two More than 41% of adolescents reported that they are not aware of the concerned Health and Wellness Ambassador in their school and more by urban, teachers and 18.1% had one teacher designed at health and Wellness Ambassadors.

Table 7.12: Students knew their Health and Wellness Messenger

	z	No (%)	Yes (%)
Total	7563	41.7	58.3
	PLA	PLACE OF RESIDENCE	
Rural	2899	40.7	59.3
Urban	876	48.9	51.1
		GENDER	
Воу	3833	42.7	57.3
Girl	3730	40.6	59.4
		AGE	
13-15	5073	41.4	58.6
16-17	2490	42.2	57.8

Wellness Ambassador was low among urban adolescents, boys and older adolescents compared to the counterparts. The limited awareness can be attributed to the fact that the initiative is being implemented in 60.8% of schools. Furthermore, 44.6% of schools with multiple sections reported having Like awareness about Health and Wellness Ambassador, 41.7% were unaware of the Health and Wellness Messengers. The awareness about Health and two health and wellness messengers, according to information provided by teachers during interviews.

Module - I (Violence and Road Safety)

Yes (%) 22.6 27.6 28.6 17.5 23.6 22.3 23.1 (%) oN 76.9 77.4 71.4 82.5 76.4 72.4 77.7 PLACE OF RESIDENCE AGE 7563 3833 3730 5073 2490 6687 876 Rural Urban 13-15 Total 16-17 Gir Воу

Table 8.1: Students engaged in physical fight

While most adolescents abstained from involvement in physical fights in past 12 months, a significant segment, approximately 23.1%, reported having indulged in such behaviour. 95.6% of the principals informed that schools have policies that prohibit fights in schools. Engagement in physical fights was reported more among urban adolescents, boys, and younger age groups

Table 8.2: Students reported bullied someone in past 12 months

No (%)	88.6 II.4 PLACE OF RESIDENCE	89.2	84.0	GENDER	84.7	92.7 7.3	AGE	88.6	700
Z	7563	1899	876		3833	3730		5073	0000
	Total	Rural	Urban		Воу	Girl		13-15	7 7 7 1

Principals reported that policies prohibiting fighting and other forms of violence were in place in 96.1% of schools. Additionally, the data indicated that The majority of adolescents (88.6%) reported that they have not bullied anyone during the past 12 months. However, concurrently, nearly one-tenth (11.4%) of the adolescents admitted that they have bullied others this was more among urban adolescents and boys. policies against the physical abuse of students by teachers reported in 98.5% of schools.

Table 8.3: Students reported bullied by someone in past 12 months

	z	No (%)	Yes (%)
Total	7563	0.98	14.0
	PLACE OF RESIDENCE	ENCE	
Rural	6687	86.6	13.4
Urban	876	82.1	17.9
	GENDER		
Воу	3833	82.2	17.8
Girl	3730	89.9	10.1
	AGE		
13-15	5073	86.4	13.6
16-17	2490	85.4	14.6

While majority of adolescents (80%) reported that they have not been bullied by anyone, although 14% adolescents admitted that they have been bullied by someone in last 12 months. This was reported more by urban adolescents and boys in the older age group.

Table 8.4: Students wore helmet when pillion riding or driving motorcycle in the past 30 days

	z	Neither pillion ride nor driving (%)	Never (%)	Rarely (%)	Sometimes (%)	Most of the times (%)	Always (%)
Total	7563	40.9	13.1	6.2	8.7	6.3	24.8
				PLACE OF RESIDENCE			
Rural	2899	40.6	13.2	6.3	8.7	6.5	24.8
Urban	978	43.5	12.0	5.9	8.2	5.5	24.9
				GENDER			
Воу	3833	34.6	14.6	7.2	8.6	7.7	26.1
Girl	3730	47.5	4.	5.2	7.6	4.9	23.4
				AGE			
13-15	5073	39.8	13.5	6.2	9.0	5.8	25.6
16-17	2490	43.2	12.0	6.2	8.0	7.4	23.1

Nearly 41% of adolescents reported that they neither drove nor took a pillion ride in the past 30 days. Among those who did, approximately 31.1% reported wearing helmets in most occasions or always while riding or driving. And, 28% of adolescents admitted to wearing helmets occasionally, rarely (6.2%), or never (13.1%).

Table 8.5: Students wore seat belt when driving car or other motor vehicle in the past 30 days

	z	Not driving (%) Never (%)	Never (%)	Rarely (%)	Sometimes (%)	Most of the times (%)	Always (%)
Total	7563	39.7	10.7	6.0	8.2	7.5	27.9
				PLACE OF RESIDENCE	NCE		
Rural	2899	39.7	10.7	6.1	8.2	7.5	27.8
Urban	876	39.6	10.8	5.4	8.0	8.0	28.2
				GENDER			
Воу	3833	36.2	11.7	6.7	8.5	7.9	29.0
Ģ Fi	3730	43.3	7.6	5.3	7.8	7.2	26.7
				AGE			
13-15	5073	39.1	6.01	5.9	8.3	7.5	28.2
16-17	2490	40.9	10.4	6.1	7.8	7.6	27.2

A significant 60.3%, of surveyed adolescents of 13-17 years admitted to violating the legal age for driving by operating a car or a motor vehicle below the legal age. Additionally, only 35.4% of these adolescents reported consistently wearing seat belts while driving, indicating a potential unsafe road behaviour and disregard for the crucial safety measure.

Table 8.6: Students skipped school because they felt unsafe at school or while going and coming back from school in the past 30 days

	z	0 day (%)	l day (%)	2 or 3 days (%)	4 or 5 days (%)	6 or more days (%)
Total	7563	77.4	9.3	7.7	2.2	3.4
			PLACE OF RESIDENCE	SIDENCE		
Rural	2899	77.8	1.6	7.7	2.0	3.4
Urban	876	74.4	11.2	7.5	3.4	3.4
			GENDER	ER		
Воу	3833	73.5	10.7	8.9	2.5	4.4
Girl	3730	81.4	7.9	6.4	8:	2.4
			AGE			
13-15	5073	77.3	9.5	7.5	2.3	3.4
16-17	2490	77.6	8:9	8.0	2.0	3.5

About 77% of adolescents felt secure at school though 22.4% adolescents missed schools as they felt unsafe at school or while going and coming back from school in the past 30 days prior to survey. Rural adolescents, girls, and older adolescents indicated feeling less safe than others.

Module - J (Substance Use)

Table 9.1: Students reported their classmates using substance in last 12 months prior to survey

* Multi response

adolescents who consumed other substances such as cocaine, inhalants, and sleeping pills. Across all substances, a consistent pattern emerges, revealing substances, majority of schools have the policies (96.7%) and specific policies for prohibiting tobacco use by students was seen in 100% schools. Schools Approximately 90% students have refrained from substance misuse. However, 6.6% students reportedly engaged in such behaviour. The most common substances used by adolescents include tobacco (6.1%), e-cigarettes (2.4%), alcohol (1.1%), and cough syrup (1%). Additionally, there were a minority of higher consumption behaviour among urban adolescents (8.2%), boys (8%), and disturbingly younger adolescents (7%). Understanding these demographic patterns is crucial for tailoring strategies to address specific groups more prone to substance misuse. Although to discourage any misuse of also have protocols in place for taking actions if students are caught using substance misuse as reported by principals in the survey.

Table 9.2: Students smoked or chewed tobacco during the past 30 days

	z	0 times (%)	0 times (%) I or 2 times (%) 3 to 5 times (%)	3 to 5 times (%)	6 to 9 times (%)	10 to 19 times (%)	20 or more times (%)
Total	7563	96.2	1.7	0.7	9.0	6.0	6.0
				PLACE OF RESIDENCE	ENCE		
Rural	2899	1.96	1.7	0.7	9.0	6.4	0.4
Urban	876	6.96	1.7	0.7	0.2	0.2	0.2
				GENDER			
Воу	3833	94.8	2.1	1.0	0.1	0.5	0.7
Girl	3730	7.76	<u>E. I</u>	4.0	0.2	0.3	0.1
13-15	5073	96.5	<u></u>	0.7 AGE	9.0	0.4	0.4
16-17	2490	95.5	2.2	0.7	9.0	6.4	0.5

Almost 4% of adolescents self-reported tobacco consumption in the past 30 days prior to survey. Notably, a higher frequency of consumption was reported by rural adolescents and boys. Concurrently, principals reported that 100% schools observe policy prohibiting tobacco use by students on all school premises.

Table 9.3: Students used e - cigarette during the past 30 days

	z	0 times (%)	l or 2 times (%)	3 to 5 times (%)	6 to 9 times (%)	3 to 5 times (%) 6 to 9 times (%) 10 to 19 times (%)	20 or more times (%)
'	7563	96.5	<u>+</u> .	9.0	0.7	0.4	0.4
				PLACE OF RESIDENCE	ENCE		
	2899	96.4	4.	9.0	0.8	0.4	0.4
	928	97.4	9:1	0.5	1.0	0.2	0.2
				GENDER			
	3833	95.3	1.7	8.0	6.0	0.7	9.0
	3730	7.79	Ξ	6.4	0.5	0.1	0.2
				AGE			
	5073	9.96	7.	0.7	0.7	0.4	0.3
	2490	86.3	1.5	0.5	0.7	4.0	9.0

Around 3.5% of adolescent respondents have self-reported using e-cigarettes in varying frequency in the past 30 days. Rural adolescents, boys, and younger adolescents reported more on this behaviour, indicating the need to strengthen enforcement of the legal framework.

Table 9.4: Students consumed alcohol in past 30 days

Z	0 times (%)		l or 2 times (%)	6 to 9 times (%)	10 to 19 times (%)	20 or more times (%)
7563	2'96	<u>F.3</u>	8.0	0.5	0.3	6.0
			PLACE OF RESIDENCE	ENCE		
2899	2.96	1.3	0.7	9.0	0.3	0.4
876	6.96	9.1	6:0	0.0	0.1	0.5
			GENDER			
3833	92.6	<u>8:</u>	6:0	9.0	0.5	9.0
3730	6.79	0.8	9.0	4.0	0.1	0.2
			AGE			
5073	97.0	0.1	8.0	0.5	0.2	0.4
2490	1.96	<u>8.</u>	9.0	0.5	0.5	0.5

More than 3% of adolescents have self-reported consuming alcohol in the past 30 days, with varying frequencies. Discouraging alcohol consumption, schools have also prohibited alcohol use on school premises as reported by 98.5% of principals in the survey.

Table 9.5: Students used hashish during the past 30 days

	Z	0 times (%)	l or 2 times (%) 3 to 5 times (%)	3 to 5 times (%)	6 to 9 times (%)	6 to 9 times (%) 10 to 19 times (%)	20 or more times (%)
Total	7563	96.2	1.7	9.0	9.0	0.5	0.5
				PLACE OF RESIDENCE	INCE		
Rural	2899	1.96	1.7	9.0	9.0	0.5	0.5
Urban	876	97.3	Ξ	0.7	0.5	0.0	0.5
				GENDER			
Воу	3833	95.1	6:1	0.8	8.0	9.0	8.0
Ģ	3730	97.3	7.1	0.3	4.0	6.0	0.1
				AGE			
13-15	5073	1.96	<u>8.</u>	0.7	9.0	0.5	0.4
16-17	2490	96.4	<u>.</u> 5	0.3	0.7	6.4	9.0

Almost 4% adolescents, more than those reporting either tobacco and e-cigarette use, reported use of hashish with varied frequency in the last 30 days before the survey. Notably, this was more reported by rural adolescents, boys, and younger-aged adolescents.

Table 9.6: Students used cocaine/heroin/opium during the 12 months

	0 times (%)	0 times (%) I or 2 times (%)	3 to 5 times (%)	6 to 9 times (%)	10 to 19 times (%)	10 to 19 times (%) 20 or more times (%)
7563 96	8.96	1.2	0.7	0.5	9.4	0.3
			PLACE OF RESIDENCE	ш		
7.96 7899	.7	<u>E.</u>	0.7	9.0	0.5	0.3
876 97.9	6	6.0	0.7	0.3	0.0	0.1
			GENDER			
3833 96	0.96	4.1	0.1	0.7	9.0	0.4
3730 97.7	.7	1.0	0.4	0.4	0.2	0.1
			AGE			
5073 96	2.96	<u>1.3</u>	0.8	0.5	0.4	0.3
2490 9	97.1	13	0.5	9.0	0.4	0.3

Almost 4% adolescents have reported consumption of cocaine in the past 12 months.

Table 9.7: Students used hallucinogens during the past 30 days

	z	0 times (%)	l or 2 times (%)	3 to 5 times (%)	6 to 9 times (%)	10 to 19 times (%)	0 times (%)
Total	7563	95.9	6:1	9.0	7:0	0.5	0.3
				PLACE OF RESIDENCE	JOE		
Rural	2899	95.8	6:1	0.7	7:0	9.0	6.4
Urban	876	97.3	9:1	0.5	0.3	0.2	0.1
				GENDER			
Воу	3833	95.3	8:	0.7	1.0	0.7	0.5
Girl	3730	9.96	6:1	9.0	0.3	4.0	1.0
				AGE			
13-15	5073	95.9	2.0	9.0	0.7	0.5	9.4
16-17	2490	1.96	9:1	0.7	0.7	9.0	0.3

Approximately 4.1% of adolescents have self-reported consuming hallucinogens with a consumption trend comparable to that of other substances used by adolescents. Increased consumption among boys and adolescents from rural areas has been reported.

Table 9.8: Students used an injectable drug during their life

	Z	0 times (%)	_ o	3 to 5 times (%)	2 times (%) 3 to 5 times (%) 6 to 9 times (%)	10 to 19 times (%)	10 to 19 times (%) 20 or more times (%)
Total	7563	91.0	5.1	1.5	0.1	9.0	8.0
				PLACE OF RESIDENCE	4CE		
Rural	2899	90.7	5.3	1.5	0.1	9.0	6.0
Urban	876	93.0	4. L.	Ξ	0.8	0.2	2.0
				GENDER			
Воу	3833	8.06	4.5	9:1	<u>1.3</u>	7.0	Ξ
Girl.	3730	91.2	5.7	E.1	0.7	9.0	9.0
				AGE			
13-15	5073	8.68	5.9	1.7	1.0	9.0	1.0
16-17	2490	93.4	3.5	Ξ	6.0	9.0	0.5

Some 9% adolescents self-reported use of injectable drugs, highest among all subgroups of drug misuse. This trend is particularly more among rural adolescents and those in younger age groups.

Table 9.9: Students used inhalants during the past 12 months

	Z	0 times (%)	l or 2 times (%)	or 2 times (%) 3 to 5 times (%) 6 to 9 times (%)	6 to 9 times (%)	10 to 19 times (%)	10 to 19 times (%) 20 or more times (%)
Total	7563	95.5	2.2	6.0	9.0	0.3	0.4
				PLACE OF RESIDENCE	ICE		
Rural	2899	95.5	2.2	6.0	9.0	9.4	0.4
Urban	928	0.96	2.3	Ξ	0.2	0.0	0.3
				GENDER			
Воу	3833	94.8	2.3	1.2	0.7	0.4	7.0
Giri	3730	96.3	2.1	7.0	0.5	0.2	0.2
				AGE			
13-15	5073	95.5	2.2	6:0	9.0	0.4	0.5
16-17	2490	95.6	2.3	0.1	0.5	0.2	0.3

Almost 4.5% of adolescents self-reported use of inhalants in the past 12 months with varying frequency. Rural adolescents and boys reported comparatively higher uses.

Table 9.10: Students consumed cough syrup without prescription during the past 12 months

	Z	0 times (%)	l or 2 times (%)	0 times (%)	6 to 9 times (%)		10 to 19 times (%) 20 or more times (%)
Total	7563	77.2	15.7	4.0	9:1	6:0	2.0
				PLACE OF RESIDENCE	(CE		
Rural	2899	76.9	15.7	4. L.	1.7	6:0	0.7
Urban	876	79.2	15.5	3.5	0.7	0.5	9.0
				GENDER			
Воу	3833	77.9	4.4	4.3	1.7	6:0	6.0
Girl	3730	76.5	17.0	3.7	<u>-</u>	6.0	0.5
				AGE			
13-15	5073	76.3	16.2	1 .	1.7	1.0	0.7
16-17	2490	79.0	14.6	3.9	l.3	0.5	8.0

Around one-third of adolescents respondents reported consuming medicinal cough syrup without a prescription. Pattern of syrup consumption was reported more among rural adolescents, boys, and those in younger age groups.

Table 9.11: Students consumed sleeping pills during the past 12 months

	Z	0 times (%)		3 to 5 times (%)	6 to 9 times (%)	10 to 19 times (%)	l or 2 times (%)
Total	7563	92.6	2.1	1.0	0.5	0.5	0.3
				PLACE OF RESIDENCE	CE		
Rural	2899	92.6	2.0	Ξ	9.0	0.5	0.3
Urban	876	96.2	2.2	0.8	0.0	0.3	0.5
				GENDER			
Воу	3833	94.8	2.2	1.3	0.5	0.7	0.5
Giri	3730	96.5	2.0	0.8	0.5	0.3	0.1
				AGE			
13-15	5073	95.3	2.2	1.2	0.5	0.4	0.3
16-17	2490	96.2	1.7	0.8	0.5	0.5	0.3

Almost 5% of adolescents self-reported consumption of sleeping pills without a doctor's prescription in the past 12 months. More rural adolescents, boys, and younger-aged adolescents reported this behaviour.

Module – K (Reproductive and Sexual Health)

Yes (%) 5.9 9.0 <u>4.</u> 9.0 9.9 7.7 (%) oN 94.0 94.1 92.3 95.9 94.0 93.4 94.1 PLACE OF RESIDENCE AGE 7563 3833 5073 2490 2899 876 Rural Urban 13-15 Total 16-17 Воу Ģ

About 6% of students self-reported ever having sexual intercourse. More males and adolescents residing in urban areas reported having had sexual encounter ever.

Table 10.1: Students ever had sexual intercourse

Table 10.2: Students reported reasons for not having sexual intercourse

Parents restriction (%)	0.1		1.0	0.0		1.0	0.2		0.2	0.0
Not interested (%)	1.2		6.0	3.2		9.0	1.7		Ξ	1.2
Do not want to answer (%)	l.5		<u>+:</u>	<u>8.</u>		1.2	<u>~</u>		<u></u>	<u>1.5</u>
Against moral value (%)	6:01		10.7	12.6		4.8	13.3		9.01	
Against religious belief (%)	10.4		10.8	7.3		7.9	12.8		10.7	9.6
Did not get chance (%)	1.7	PLACE OF RESIDENCE	1.5	3.5	GENDER	2.5	0.1	AGE	<u>-</u> .	2.4
Risk of HIV or AIDS (%)	2.2	PLACE C	2.2	2.3	35	8.	2.7		2.1	2.6
Unwanted pregnancy (%)	2.2		2.4	<u>1.5</u>		8:	2.7		1.9	2.9
Till marriage (%)	35.2		35.4	33.9		35.1	35.3		33.3	39.2
Till older (%)	34.5		34.6	33.9		40.5	28.6		37.2	29.1
Z	7113		6295	818		3537	3576		4771	2342
	Total		Rural	Urban		Воу	Girl		13-15	16-17

Majority of adolescents (94%) have self-reported to refraining from engaging in sexual intercourse. Personal values, beliefs, and cultural considerations are factors highlighted in self-reports of adolescents. Among those abstaining, the most frequently cited reasons were a preference to wait until marriage (35.2%), appropriate age until they were older (34.5%). Additionally, a significant portion mentioned that engaging in sexual intercourse was against their moral values (10.9%) and religious beliefs (10.4%).

Table 10.3: Age at first sexual intercourse

17 years (%)	5.6		5.4	6.9		8.1	9.6		:	9.6
16 years 17 (%)	6.9		5.9	13.8		8.1	4.5		;	4.5
15 years 16 ; (%)	11.3		11.2	12.1		12.8	8.4		7.3	8.4
14 years 15 ; (%)	13.8	띩	14.0	12.1		14.5			15.2	12.3
13 years 14 (%)	17.1	PLACE OF RESIDENCE	16.3	22.4	GENDER	16.6	18.2	AGE	21.2	18.2
12 years 13 (%)	20.7	<u>a.</u>		15.5		17.6			25.8	76.6
Less than 12 years (%)	24.7		25.8	17.2		22.3			30.5	29.2
N Less 12 ye:	450 2-		392 2	58		296 2	154 2		302 30	148 2
	Total 4		Rural 3	Urban		Boy 2	Girl		13-15 3	16-17

Among adolescents who reported to be ever engaged in sexual activity, approximately for one-fifth (24.7%) initiated sexual behaviour before the age of 12 years. However, a declining trend was observed among survey respondents by the progression of age. This early initiation was particularly more among rural adolescents, girls, and younger-adolescents.

Table 10.4: Students reported on whom to reach out to for information about sexual encounter and sexual behaviour

Pornography (%)	<u></u>		4.	0.1		6:1	8.0		1.2	9:1
Staff in health room (%)	2.0		2.1	<u></u>		2.0	2.0		<u>8</u> .	2.4
Google or social media (%)	7.8		7.1	13.0		9.4	6.2		1.9	H .
Friends (%)	16.2		15.6	21.0		22.1	10.2		14.7	19.4
Brothers or Friends sisters (%) (%)	2.4	SIDENCE	2.2	3.3	ER	<u>8:</u>	2.9	ш	2.5	2.0
Community health worker (%)	<u></u>	PLACE OF RESIDENCE	<u></u>	<u>1.3</u>	GENDER	<u>1.3</u>	1.2	AGE	Ξ	9:1
Health care provider (%)	14.0		14.3	12.0		15.1	12.9		6.11	18.4
Teachers or other adults (%)	8.3		8.3	8.3		8.9	7.7		8.5	- .
Parents or Teachers or guardians (%) other adults (%)	46.6		47.6	38.8		37.4	26.0		52.2	35.1
Z	7563		2899	876		3833	3730		5073	2490
	Total		Rural	Urban		Воу	Girl		13-15	16-17

The survey findings highlight that, when seeking information about sexual behaviour, nearly for half of adolescents (46.6%) parents or guardians, health care providers (14%) are the source of information, Friends (16.2%), internet (7.8%), sibling (2.4%), pornography (1.4%) are other sources and often with an increasing risk of receiving inaccurate information. Notably, 8.3% of adolescents choose to contact Health and Wellness Ambassadors.

Module – L (Menstrual Hygiene)

Yes (%) 73.9 73.5 92.5 78.1 73.9 65.I ; (%) oN 26.5 34.9 21.9 26.1 26.1 ŀ 7.5 PLACE OF RESIDENCE AGE 3730 3370 3730 2536 1194 360 ł Urban Rural 13-15 Total 16-17 <u>F</u> Воу

According to the survey, 73.9% of girls reported attainment of menarche. There were 26.1% who have not started menstruating and majority of them were in the lower age group (13-15 years).

Table 11.2: Students reported menstrual hygiene practices during menstrual cycle

Old cloth (%)	0.1		Ξ	0.7		;	0.1		1.2	0.8
Menstrual cup (%)	8.0		0.8	0.0		ţ	0.8		0.8	0.7
Tampon (%)	F:-	PLACE OF RESIDENCE	4:	0.7	GENDER	i	1.3	AGE	8:1	0.7
Sanitary pad (%)	6.96		7.96	98.6		:	6.96		96.3	7.79
z	2757		2476	281		;	2757		1652	1105
	Total		Rural	Urban		Воу	Girl		13-15	16-17

More than 99% adolescents reported using hygienic menstruation products - sanitary pads, tampons, or menstrual cups. A small percentage of adolescents (1%) mentioned using old cloth, more among rural adolescents and in the age group of 13-15 years. As reported by school authorities, 66.5% schools provided sanitary napkin to adolescent girls. Schools are actively promoting the use of hygienic products, as indicated by principals (86.4%), and are facilitating this initiative by providing a secure place for disposal of sanitary napkins. Observation checklist captured that 58.3% schools had dustbins in

Table 11.3: Students experienced any menstrual problem during the past 30 days

Yes (%)	30.4		30.2	32.0		ŀ	30.4		30.9	29.7
e),)		r.)	(**)			ייי		ei	2
No (%)	9.69	PLACE OF RESIDENCE	8.69	68.0	GENDER	ŀ	9.69	AGE	1.69	70.3
		PL/								
z	2757		3370	360		:	3730		2536	1194
	Total		Rural	Urban		Воу	Gir		13-15	16-17

Of the adolescent girls whose menstrual cycles had started, approximately one-in three girls (30.4%) self-reported facing menstrual issues in the last 30 days. More urban adolescents, from the younger age group are affected. It's worth noting that these findings may present the actual prevalence of issues faced by adolescent girls, but there's also a possibility that some girls might not be aware of certain menstruation related issues, considering them as normal aspects of menstruation.

Table 11.4: Students reported their preferred source of treatment for menstrual problem

Health room in school (%)	2.1		2.1	2.2		;	2.1		2.5	<u>.</u> 5
Teacher (%)	4.0		4.0	0.0		ł	4.0		4.0	0.3
ASHA/ Aww (%)	0.2		0.3	0.0		ŀ	0.2		0.2	0.3
Adolescent Friendly Health Clinic (%)	Ξ		0.8	3.3		ŀ	Ξ		4:	9.0
ANM Sub centre (%)	4.0	NCE	4.0	0.0		:	4.0		4.0	0.3
Private doctor (%)	7.4	PLACE OF RESIDENCE	7.6	5.6	GENDER	ł	7.4	AGE	8.2	1.9
Private hospital (%)	7.3	PLACE	7.4	6.7		:	7.3		7.3	7.3
Government health facility (%)	16.2		15.4	23.3		ł	16.2		15.9	8.91
Medicine from chemist (%)	8.9		8.7	Ξ		:	8.9		4.8	8.6
Home remedy (%)	0.61		19.5	4. 4.		:	0.61		18.6	19.5
Did nothing/ Subsided (%)	37.0		37.4	33.3		:	37.0		36.7	37.5
Z	838		748	06		:	838		210	328
	Total		Rural	Urban		Воу	ية آ		13-15	16-17

Of the students who have reported of having menstrual problem, 37% of them did nothing, and reported that the issues subsided on their own. This passive management approach was reported more by older adolescents and from rural areas. Approximately 44% however sought help from professionals, including health facilities, private hospitals, chemists, Auxiliary Nurse Midwives, Adolescent Friendly Health Clinics, Accredited Social Health Activists, teachers, or health room counsellors. However, 19% of adolescents opted for home remedies for the problems they were experiencing.

Module – M (Mental Health)

Always (%) 3.7 3.5 3.6 3.7 3.7 Most of the times (%) 5. 7. 4. -9.9 4. 4. 7.2 Sometimes (%) 22.0 27.9 26.1 25.4 24.9 24.7 23.9 PLACE OF RESIDENCE AGE Rarely (%) 24.0 22.3 22.3 22.0 22.8 21.7 21.4 Never (%) 44.2 41.2 47.5 40.1 45.1 7563 6687 3833 3730 5073 2490 876 Urban 13-15 Rural 16-17 Total Воу G F

Approximately one in three (33.8%) adolescents reported experiencing disappointment, depression, hopelessness, had little interest in doing things in the past 12 months, with varying frequency of sometimes (24.9%), mostly (5.3%), or always (3.6%).

Table 12.1: Students felt disappointed, depressed, hopeless or have little interest in doing things

Table 12.2: Students reported losing appetite or over-eating when worried

Always (%)	2.6		2.6	2.3		2.7	2.5		2.6	2.6
Most of the times (%)	3.8		3.8	4.0		2.6	5.0		3.2	5.1
Sometimes (%)	18.0	PLACE OF RESIDENCE	7.71	20.8	GENDER	15.5	20.6	AGE	7.71	18.7
Rarely (%)	20.6	PLACE O	20.5	21.5	U	19.3	21.9		19.4	23.0
Never (%)	55.0		55.4	51.5		59.8	50.0		57.0	50.7
z	7563		6687	876		3833	3730		5073	2490
	Total		Rural	Urban		Воу	Ğ		13-15	16-17

Students' report on the frequency of losing their appetite or eating more when worried. Loss of appetite or gobbling due to stress was reported by 6.4% of adolescents mostly or always. Such erratic behaviour was more among rural adolescent and boys. On the other hand, 75.6% reported that they had never (55%) faced such situation or had experienced rarely (20.6%).

Table 12.3: Students felt nervous or anxious or not able to control worrying

	Z	Never (%)	Rarely (%)	Sometimes (%)	Most of the times (%)	Always (%)
Total	7563	57.1	19.7	17.1	3.6	2.5
			PLACE OF RESIDENCE	NCE		
Rural	6687	57.7	19.5	17.0	3.4	2.5
Urban	876	52.4	21.5	18.3	5.4	2.5
			GENDER			
Воу	3833	9.09	19.5	14.8	2.3	2.7
Girl	3730	53.4	6.61	19.4	4.9	2.3
			AGE			
13-15	5073	58.5	0.61	17.1	2.9	2.4
16-17	2490	54.2	21.1	17.1	5.0	2.7

Around 57.5% of adolescents have not or rarely (19.7%) felt nervous or anxious in past 12 months. However, 23.2% have experienced being nervous or anxious either sometime (17.1%), mostly (3.6%) or always (2.5%). Urban students appear to have a higher rate of worry than rural students at all three levels of frequency: always, most of the time, and sometimes.

Table 12.4: Students reported having a difficult time staying focused

	z	Never (%)	Rarely (%)	Sometimes (%)	Most of the times (%)	Always (%)
Total	7563	48.2	20.6	20.1	5.6	5.5
			PLACE OF RESIDENCE	ENCE		
Rural	2899	49.6	20.2	9.61	5.3	5.3
Urban	876	37.9	23.6	23.5	7.9	7.1
			GENDER			
Воу	3833	48.1	20.4	19.2	5.9	6.4
Girl	3730	48.3	20.8	21.0	5.3	4.6
			AGE			
13-15	5073	50.7	19.9	19.5	4.6	5.3
16-17	2490	43.3	22.0	21.2	7.6	6.0

More than 48% adolescent reported that they did never face an issue of focussing on their homework or any other task. Urban adolescents and older adolescents were more vulnerable. Nearly half of responding students, however, felt that it was hard to focus on doing homework during the past 12 months, specifically, 5.6% most of the time, and 5.5% always.

Annexure: 2

Health and Wellness Corner - Model

	January	February	March	April	Мау	June	۸۱۰۱	August	September	September October November December	November	December
Theme	Food preference and choice	Physical activity	Hygiene	Digital device use	Connect to parents	Health seeking behaviour	Access to government schemes	Violence and road safety	Substance use	Reproductive and sexual health	Mental health	Any other relevant theme
Information Education Material and activities photograph				Across all	Across all 11 themes							
Health and Wellness Messenger				Name, clas	Name, class, section, and photograph	d photograpl	_					
Health and Wellness Ambassador				Name, desi	ignation, pho	ne number a	Name, designation, phone number and photograph	ے				
Number Number				Tobacco q Services fo Nearest A Nearest H De-addicti Anti-raggir CHILDLIN Women in Violence ag	Fobacco quit line number (1800 112 356, Services for tobacco cessation (1800 112 356), Nearest Adolescent Friendly Health Clinic, Nearest Health and Wellness Centers, De-addiction Centre (Deaddiction and Rehabili Anti-ragging Helplines Numbers (1800-180-552 CHILDLINE on 1098, Women in distress on 1091, Violence against women (7827-170-170 123)	er (1800 11; sssation (180 endly Health illness Cente Seaddiction i Numbers (18 1091,	Fobacco quit line number (1800 112 356, Services for tobacco cessation (1800 112 356), Nearest Adolescent Friendly Health Clinic, Nearest Health and Wellness Centers, De-addiction Centre (Deaddiction and Rehabilitation Centre, Bhuntar, Kullu), Anti-ragging Helplines Numbers (1800-180-5522), CHILDLINE on 1098, Momen in distress on 1091, Violence against women (7827-170-170 123)	tion Centre,	Bhuntar, Kullı	, 'r'		

References

- United Nations. Accessed December 18, 2023. https://population.un.org/wpp/publications/files/wpp2019_highlights.pdf
- 2. Sharma H, Singh SK. Socioeconomic inequalities in contraceptive use among female adolescents in south Asian countries: a decomposition analysis. BMC Womens Health. 2022;22(1):151. doi:10.1186/s12905-022-01736-8
- 3. Sawyer SM, Afifi RA, Bearinger LH, et al. Adolescence: a foundation for future health. Lancet Lond Engl. 2012;379(9826):1630-1640. doi:10.1016/S0140-6736(12)60072-5
- 4. Adolescent health-WHO. Accessed December 26, 2023. https://www.who.int/southeastasia/health-topics/adolescent-health
- 5. More than 1.2 million adolescents die every year, nearly all preventable. Accessed June 20, 2024. https://www.who.int/news/item/16-05-2017-more-than-1-2-million-adolescents-die-every-year-nearly-all-preventable
- 6. Global Accelerated Action for the Health of Adolescents (AA-HA!): guidance to support country implementation, second edition. World | ReliefWeb. Published October 11, 2023. Accessed December 26, 2023. https://reliefweb.int/report/world/global-accelerated-action-health-adolescents-aa-ha-guidance-support-country-implementation-second-edition
- 7. Adolescent health SEARO. Accessed June 20, 2024. https://www.who.int/southeastasia/health-topics/adolescent-health
- 8. Dandona R, Pandey A, Kumar GA, Arora M, Dandona L. Review of the India Adolescent Health Strategy in the context of disease burden among adolescents. Lancet Reg Health-Southeast Asia. 2024;20.
- 9. Mukherjee D, Behal S, Kurian OC. Investing in Adolescent Health: Harnessing India's Demographic Dividend. Published online 2020.
- National Family Health Survey. Accessed May 29, 2024. https://rchiips.org/nfhs/nfhs3_national_report.shtml
- 11. National Family Health Survey. Accessed May 29, 2024. https://rchiips.org/nfhs/NFHS-4Report.shtml
- 12. International Institute of Population Sciences. National Family Health Survey (NFHS-5). International Institute of Population Sciences; 2021.
- Implementation_Guidelines_Rashtriya_Kishor_Swasthya_Karyakram(RKSK)_2018.pdf. Accessed December 26, 2023. https://nhm.gov.in/New_Updates_2018/NHM_Components/RMNCHA/AH/guidelines/Implementation_Guidelines_Rashtriya_Kishor_Swasthya_Karyakram(RKSK)_2018.pdf
- 14. Barua A, Watson K, Plesons M, Chandra-Mouli V, Sharma K. Adolescent health programming in India: a rapid review. Reprod Health. 2020;17(1):1-10.

- 15. Bahl D, Bassi S, Maity H, et al. Compliance of Adolescent Friendly Health Clinics with National and International Standards: Quantitative findings from the i-Saathiya study. BMJ Open. 2024;14(2):e078749.
- 16. A joint initiative of Ministry of Health & Family Welfare and Ministry of Human Resources & Development, Government of India. Operational Guidelines on School Health Programme under Ayushman Bharat. Published online April 2018. https://nhm.gov.in/New_Updates_2018/NHM_Components/RMNCHA/AH/guidelines/Operational_guidelines_on_School_Health_Programme_under_Ayushman_Bharat.pdf
- 17. The Global Action for Measurement of Adolescent health (GAMA). Accessed December 26, 2023. https://www.who.int/groups/the-global-action-for-measurement-of-adolescent-health
- 18. Patton GC, Azzopardi P, Kennedy E, Coffey C, Mokdad A. Global Measures of Health Risks and Disease Burden in Adolescents. In: Bundy DAP, Silva N de, Horton S, Jamison DT, Patton GC, eds. Child and Adolescent Health and Development. 3rd ed. The International Bank for Reconstruction and Development / The World Bank; 2017. Accessed December 18, 2023. http://www.ncbi.nlm.nih.gov/books/NBK525243/
- Chandra-Mouli V, Plesons M, Adebayo E, et al. Implications of the Global Early Adolescent Study's Formative Research Findings for Action and for Research. J Adolesc Health. 2017;61(4 Suppl):S5-S9. doi:10.1016/j.jadohealth.2017.07.012
- 20. Roberts C, Freeman J, Samdal O, et al. The Health Behaviour in School-aged Children (HBSC) study: methodological developments and current tensions. Int J Public Health. 2009;54(Suppl 2):140-150. doi:10.1007/s00038-009-5405-9
- 21. WHO. Global Youth Tobacco Survey. Accessed December 26, 2023. https://www.who.int/teams/noncommunicable-diseases/surveillance/systems-tools/global-youth-tobacco-survey
- 22. WHO. Global school-based student health survey. Global school-based student health survey. Accessed December 26, 2023. https://www.who.int/teams/noncommunicable-diseases/surveillance/systems-tools/global-school-based-student-health-survey
- 23. Shinde S, Harling G, Assefa N, et al. Counting adolescents in: the development of an adolescent health indicator framework for population-based settings. eClinicalMedicine. 2023;61:102067. doi:10.1016/j.eclinm.2023.102067
- 24. National Family Health Survey. Accessed May 29, 2024. https://rchiips.org/nfhs/pub_nfhs-I.shtml
- 25. National Family Health Survey. Accessed May 29, 2024. https://rchiips.org/nfhs/pub_nfhs-2.shtml
- 26. Centers for Disease Control and Prevention, World Health Organization, International Institute for Population Sciences, Ministry of Health and Family Welfare, Government of India. Global Adult Tobacco Survey 2009-2010.; 2010. /https://ntcp.mohfw.gov.in/assets/document/surveys-reports-publications/Global-Adult-Tobacco-Survey-India-2009-2010-Report.pdf

- 27. Tata Institute of Social Sciences (TISS), Mumbai and Ministry of Health and Family Welfare,, Government of India. Global Adult Tobacco Survey GATS 2 India 2016-17.
- 28. India Global Youth Tobacco Survey 2003. Accessed May 29, 2024. https://extranet.who.int/ncdsmicrodata/index.php/catalog/847
- 29. Ministry of Health and Family Welfare, Government of India, World Health Organization. Global Youth Tobacco Survey India 2006. Accessed March 13, 2023. https://www.who.int/ncds/surveillance/globalsurvey/GYTS_FS_INDIA_2006.pdf?ua=1
- 30. India Global Youth Tobacco Survey 2009. Accessed May 29, 2024. https://extranet.who.int/ncdsmicrodata/index.php/catalog/241
- 31. Ministry of Health and Family Welfare, Government of India, International Institute for Population Sciences. Global Youth Tobacco Survey (GYTS-4) India 2019. https://ntcp.mohfw.gov.in/assets/document/surveys-reports-publications/GYTS%204%20Final%20Report.pdf
- 32. National Institute of Mental Health and Neuro Sciences. National Mental Health Survey of India, 2015-16: Mental Health Systems.; 2016. https://main.mohfw.gov.in/sites/default/files/National%20Mental%20Health%20Survey%2C%2020 15-16%20-%20Mental%20Health%20Systems_0.pdf
- 33. Ministry of Health and Family Welfare, Government of India, UNICEF. Comprehensive National Nutrition Survey (CNNS) 2016-18. Accessed March 13, 2023. https://www.unicef.org/india/reports/comprehensive-national-nutrition-survey-cnns-2016-18
- 34. Census of India Website: Office of the Registrar General & Census Commissioner, India. Accessed March 10, 2022. https://censusindia.gov.in/2011census/C-series/C-13.html
- 35. Himachal Pradesh School Education Society. Statistical Data Unified District Information System for Education. Government of Himachal Pradesh; 2020:36.
- 36. Romesh Dutt. HP to make education up to Class VIII must. The Tribune. https://www.tribuneindia.com/2003/20030629/himachal.htm. Published June 29, 2003. Accessed April 12, 2022.
- 37. De A, Khera R, Samson M, Shiva Kumar A. Probe Revisited: A Report on Elementary Education in India. Oxford University Press; 2011.
- 38. Dreze J. A surprising exception. Himachal's success in promoting female education. Manushi. 1999;(112):12-17.
- 39. Cochran WG. Sampling Techniques. john wiley & sons; 1977.
- 40. Questionnaire. Accessed April 26, 2024. https://www.who.int/teams/noncommunicable-diseases/surveillance/systems-tools/global-school-based-student-health-survey/questionnaire
- 41. G-SHPPS questionnaire (2023). Accessed May 27, 2023. https://www.who.int/publications/m/item/g-shpps-questionnaire-(2023)

- 42. KoboToolbox. Accessed June 6, 2024. https://www.kobotoolbox.org/
- 43. Ruiz-Canela M, Burgo CL del, Carlos S, et al. Observational research with adolescents: a framework for the management of the parental permission. BMC Med Ethics. 2013;14:1-9.
- 46. Ranjani H, Mehreen T, Pradeepa R, et al. Epidemiology of childhood overweight & obesity in India: A systematic review. Indian J Med Res. 2016;143(2):160-174.
- 45. World Obesity Federation, World Obesity Atlas 2023. https://data.worldobesity.org/publications/?cat=19
- 46. Sharma M, Kishore A, Roy D, Joshi K. A comparison of the Indian diet with the EAT-Lancet reference diet. BMC Public Health. 2020;20(1):812.
- 47. Indian Council of Medical Research. Dietary Guidelines for Indians.; 2024.
- 48. Lera L, González CG, Yáñez M, Fretes G, Montenegro E, Salinas J. Consumo, hábitos alimentarios y habilidades culinarias en alumnos de tercero a quinto año básico y sus padres. Rev Chil Nutr. 2015;42(4):374-382.
- 49. Ministry of Health and Family Welfare and Food Safety and Standard Authority of India. Ministry of Health and Family Welfare and Food Safety and Standard Authority of India, Notification, New Delhi.; 2020.
- 50. Bhawra J, Khadilkar A, Krishnaveni GV, Kumaran K, Katapally TR. The 2022 India Report Card on physical activity for children and adolescents. J Exerc Sci Fit. 2023;21(1):74-82.
- 51. Telama R, Yang X, Leskinen E, et al. Tracking of physical activity from early childhood through youth into adulthood. Med Sci Sports Exerc. 2014;46(5):955-962.
- 52. Ding D, Lawson KD, Kolbe-Alexander TL, et al. The economic burden of physical inactivity: a global analysis of major non-communicable diseases. The lancet. 2016;388(10051):1311-1324.
- 53. WHO guidelines on physical activity and sedentary behaviour: at a glance. Accessed April 25, 2024. https://www.who.int/europe/publications/i/item/9789240014886
- 54. Rabie T, Curtis V. Handwashing and risk of respiratory infections: a quantitative systematic review. Trop Med Int Health. 2006;11(3):258-267.
- 55. Ejemot-Nwadiaro RI, Ehiri JE, Meremikwu MM, Critchley JA. Hand washing for preventing diarrhoea. Cochrane Database Syst Rev. 2008;(1).
- 56. Curtis VA, Danquah LO, Aunger RV. Planned, motivated and habitual hygiene behaviour: an eleven country review. Health Educ Res. 2009;24(4):655-673.
- 57. Aiello AE, Coulborn RM, Perez V, Larson EL. Effect of hand hygiene on infectious disease risk in the community setting: a meta-analysis. Am J Public Health. 2008;98(8):1372-1381.
- 58. World Health Organization. Guidelines on Hand Hygiene in Health Care.

- 59. Department of School Education and Literacy, Ministry of Human Resource Development. Swachh Vidyalaya Initiative.
- 60. Ministry of Urban Development, Government of India. Swachh Schools Standard Operating Procedures.
- 61. ASER 2023: Male youth in rural India dominate smartphone ownership, girls lag in digital skills. The Indian Express. Published January 17, 2024. Accessed May 14, 2024. https://indianexpress.com/article/education/aser-2023-male-youth-in-rural-india-dominate-smartphone-ownership-girls-lag-in-digital-skills-9113331/
- 62. Tokunaga RS. Following you home from school: A critical review and synthesis of research on cyberbullying victimization. Comput Hum Behav. 2010;26(3):277-287.
- 63. McAfee. Life Behind the Screens of Parents, Tweens, and Teens.; 2022. https://www.mcafee.com/content/dam/consumer/en-in/docs/reports/rp-connected-family-study-2022-india.pdf
- 64. Lenhart A. Teens, social media & technology overview 2015. Published online 2015.
- 65. Espelage DL, Holt MK. Suicidal ideation and school bullying experiences after controlling for depression and delinquency. J Adolesc Health. 2013;53(1):S27-S31.
- 66. Nansel TR, Overpeck MD, Haynie DL, Ruan WJ, Scheidt PC. Relationships between bullying and violence among US youth. Arch Pediatr Adolesc Med. 2003;157(4):348-353.
- 67. Kowalski RM, Limber SP. Psychological, physical, and academic correlates of cyberbullying and traditional bullying. J Adolesc Health. 2013;53(1):S13-S20.
- 68. Rivers I, Noret N. Potential suicide ideation and its association with observing bullying at school. J Adolesc Health. 2013;53(1):S32-S36.
- 69. Operational_guidelines_on_School_Health_Programme_under_Ayushman_Bharat.pdf. Accessed December 26, 2023. https://nhm.gov.in/New_Updates_2018/NHM_Components/RMNCHA/AH/guidelines/Operational_guidelines_on_School_Health_Programme_under_Ayushman_Bharat.pdf
- 70. Injuries and violence: the facts 2014. Accessed May 15, 2024. https://www.who.int/publications-detail-redirect/9789241508018
- 71. World Health Organization. Child and Adolescent Injury Prevention: A Global Call to Action.; 2005. https://iris.who.int/handle/10665/43279
- 72. Hyder AA, Amach OH, Garg N, Labinjo MT. Estimating the burden of road traffic injuries among children and adolescents in urban South Asia. Health Policy. 2006;77(2):129-139.
- 73. World Health Organization. Global Status Report on Road Safety.; 2021.
- 74. Wolke D, Lereya ST. Long-term effects of bullying. Arch Dis Child. 2015;100(9):879-885.

- 75. Gini G, Pozzoli T. Association between bullying and psychosomatic problems: A meta-analysis. Pediatrics. 2009;123(3):1059-1065.
- 76. Wolke D, Lereya ST. Bullying and parasomnias: a longitudinal cohort study. Pediatrics. 2014;134(4):e1040-e1048.
- 77. Zwierzynska K, Wolke D, Lereya TS. Peer victimization in childhood and internalizing problems in adolescence: a prospective longitudinal study. J Abnorm Child Psychol. 2013;41:309-323.
- 78. Lexicon of alcohol and drug terms. Accessed May 15, 2024. https://www.who.int/publications-detail-redirect/9241544686
- 79. Luikinga SJ, Kim JH, Perry CJ. Developmental perspectives on methamphetamine abuse: Exploring adolescent vulnerabilities on brain and behavior. Prog Neuropsychopharmacol Biol Psychiatry. 2018;87:78-84.
- 80. NATIONAL COMMISSION FOR PROTECTION OF CHILD RIGHTS. NATIONAL CONSULTATION ON DRUG/SUBSTANCE USE AMONG CHILDREN.; 2019. https://ncpcr.gov.in/uploads/165650678462bc49a042e86_report-on-national-consultation-on-drug-substance-use-among-children-1892-kb.pdf
- 81. Substance Use in Adolescents Children's Health Issues MSD Manual Consumer Version. Accessed May 15, 2024. https://www.msdmanuals.com/en-in/home/children-s-health-issues/problems-in-adolescents/substance-use-in-adolescents
- 82. Nath A, Choudhari SG, Dakhode SU, et al. Substance abuse amongst adolescents: an issue of public health significance. Cureus. 2022;14(11).
- 83. Ban flavoured vapes, WHO says, urging tobacco-style controls. Reuters. https://www.reuters.com/business/healthcare-pharmaceuticals/ban-flavoured-vapes-who-says-urging-tobacco-style-controls-2023-12-14/. Published December 14, 2023. Accessed April 25, 2024.
- 84. Child Drug Addiction & Substance Abuse in India | Case Study by CHILDLINE. Accessed May 15, 2024. https://www.childlineindia.org/a/issues/addiction
- 85. Remesh Kumar R. Substance Use: Focus on Adolescent Health. Indian Pediatr. 2022;59(2):103-104.
- 86. Vega WA, Gil AG. Revisiting drug progression: long-range effects of early tobacco use. Addiction. 2005;100(9):1358-1369.
- 87. Ministry of Law and Justice, Government of India. THE PROHIBITION OF ELECTRONIC CIGARETTES (PRODUCTION, MANUFACTURE, IMPORT, EXPORT, TRANSPORT, SALE, DISTRIBUTION, STORAGE AND ADVERTISEMENT) ACT, 2019. Published online 2019.
- 88. Comprehensive Dangerous Drugs Act of 2002 (Republic Act No. 9165). | FAOLEX. Accessed April 25, 2024. https://www.fao.org/faolex/results/details/en/c/LEX-FAOC174225/
- 89. GOAF. Accessed August 13, 2024. https://goaf.gov.in/main/ndpsrulesandacts

- 90. Juvenile Justice (Care and Protection of Children) Act, 2015. Published online December 31, 2015. Accessed August 13, 2024. http://indiacode.nic.in/handle/123456789/214
- 91. Ministry of Health and Family Welfare, Government of India. Guidelines for Tobacco Free Educational Institution (Revised).
- 92. National Tobacco Control Programme. Accessed August 13, 2024. https://ntcp.mohfw.gov.in/cigarettes_and_other_tobacco_products
- 93. Kar SK, Choudhury A, Singh AP. Understanding normal development of adolescent sexuality: A bumpy ride. J Hum Reprod Sci. 2015;8(2):70-74.
- 94. World Health Organization. Dening Sexual Health: Report of a Technical Consultation on Sexual Health, 28-31 January 2002, Geneva. World Health Organization; 2006.
- 95. Hashemiparast MS, Sedighian M, Jafarabadi M, Allahverdipour H. Explaining risky and unprotected sexual behaviors among young people and related reasons: a qualitative study. Published online 2017.
- 96. National Institute Of Hygiene, Cortés Alfaro A. Adolescence And Risk Of Sexually Transmitted Infections. AIDS Clin Res STDs. 2019;6(1):1-6. doi:10.24966/ACRS-7370/100024.
- 97. Mamdani M. Adolescent Reproductive Health: The Experience of Community-Based Programmes in India. London School of Hygiene & Tropical Medicine; 1999.
- 98. Anton B, Kim W, Nair A, Wang E. Menstrual hygiene management-evidence from the 6th round of MICS. Data Anal Sect Div Data Anal Plan Monit UNICEF N Y. Published online 2021:11.
- 99. Roeckel S, Cabrera-Clerget A, Yamakoshi B. Guide to menstrual hygiene materials. UNICEF. 2019; 6–36.
- 100. Chauhan S, Kumar P, Marbaniang SP, Srivastava S, Patel R, Dhillon P. Examining the predictors of use of sanitary napkins among adolescent girls: a multi-level approach. Plos One. 2021;16(4):e0250788.
- 101. Sharma S, Mehra D, Brusselaers N, Mehra S. Menstrual hygiene preparedness among schools in India: A systematic review and meta-analysis of system-and policy-level actions. Int J Environ Res Public Health. 2020;17(2):647.
- 102. Kumari S, Muneshwar KN. A Review on Initiatives for Promoting Better Menstrual Hygiene Practices and Management in India. Cureus. 2023;15(10).
- 103. Garg S, Bhatnagar N, Singh MM, et al. Menstrual hygiene management and its determinants among adolescent girls in low-income urban areas of Delhi, India: a community-based study. Osong Public Health Res Perspect. 2022;13(4):273.
- 104. Patton GC, Coffey C, Romaniuk H, et al. The prognosis of common mental disorders in adolescents: a 14-year prospective cohort study. The Lancet. 2014;383(9926):1404-1411.
- 105. Rushton JL, Forcier M, Schectman RM. Epidemiology of depressive symptoms in the National Longitudinal Study of Adolescent Health. J Am Acad Child Adolesc Psychiatry. 2002;41(2):199-205.

- 106. Ahir R, Singhal YK, Dhaked MS, Sharma P. A comparative study on protective factors, mental health and violence among male adolescents students of urban and rural school of Udaipur (Rajasthan), India. Int J Community Med Public Health. 2015;2(4):421-424.
- 107. Patel V. Reducing the burden of depression in youth: what are the implications of neuroscience and genetics on policies and programs? J Adolesc Health. 2013;52(2):S36-S38.
- 108. Rc K. Lifetime prevalence and age-of-onset distributeions of DSM-IV disorders in the National Comorbidity Survey replication. Arch Gen Psychiatry. 2005;62:593-602.
- 109. CDC WISQARS Web-based Injury Statistics Query and Reporting System. Centers for Disease Control and Prevention. Accessed May 16, 2024. https://wisqars.cdc.gov/
- 110. Cavioni V, Grazzani I, Ornaghi V, Agliati A, Pepe A. Adolescents' mental health at school: The mediating role of life satisfaction. Front Psychol. 2021;12:720628.
- III. Mental health of adolescents. Accessed April 23, 2024. https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health
- 112. Mental health action plan 2013 2020. Accessed February 9, 2024. https://www.who.int/publications-detail-redirect/9789241506021
- 113. Guidelines for Making Available Wholesome, Nutritious, Safe, and Hygienic Foods to School Children in India. India: Food Safety and Standards Authority of India.; 2015. https://archive.fssai.gov.in/dam/jcr:b986ccf3-85b4-446a-9f13-ca1d960b0685/Order_Draft_Guidelines_School_Children.pdf.
- 114. Report of Working Group on Addressing Consumption of Foods High in Fat, Salt and Sugar (HFSS) and Promotion of Healthy Snacks in Schools of India.; 2015. https://wcd.nic.in/acts/report-working-group-addressing-consumption-foods-high-fat-salt-and-sugar-hfss-and-promotion.
- 115. KheloIndia Fitness. Accessed May 14, 2024. https://schooltness.kheloindia.gov.in/StaticPage/LandingPage.aspx
- 116. WHO Philippines | Handwashing and handwashing alternatives. Accessed May 14, 2024. https://www.who.int/philippines/emergencies/covid-19-response-in-the-philippines/information/handwashing
- 117. (10) Cyberbullying and Legal Remedies in India | LinkedIn. Accessed May 14, 2024. https://www.linkedin.com/pulse/cyberbullying-legal-remedies-india-centriksocial-h4nqf/
- 118. Mahawar S. Overview of concept of cyber bullying in India. iPleaders. Published April 29, 2023.
 Accessed May 14, 2024. https://blog.ipleaders.in/overview-of-concept-of-cyber-bullying-in-india/
- 119. School Initiatives | delhitrafficpolice. Accessed May 15, 2024. https://traffic.delhipolice.gov.in/node/902024. https://ramanagara.nic.in/en/national-tobacco-control-program-ntcp/

- 120. The Motor Vehicles (Amendment) Act, 2019 (No. 32 of 2019) | Ministry of Road Transport & Highways, Government of India. Accessed May 15, 2024. https://morth.nic.in/motor-vehicles-amendment-act-2019-no-32-2019
- 121. Road Signs. Accessed May 15, 2024. https://ctp.gov.in/RoadSigns.htm
- 122. National Tobacco Control Program (NTCP) | RAMANAGARA DISTRICT | India. Accessed May 15, 2024. https://ramanagara.nic.in/en/national-tobacco-control-program-ntcp/
- 123. m cessation helpline number Google Search. Accessed July 25, 2024.
- 124. National Tobacco Control Programme. Accessed May 15, 2024. https://ntcp.mohfw.gov.in/mcessation
- 125. International technical guidance on sexuality education: an evidence-informed approach for schools, teachers and health educators UNESCO Digital Library. Accessed May 16, 2024. https://unesdoc.unesco.org/ark:/48223/pf0000183281
- 126. NCW Women Helpline. Accessed May 16, 2024. https://www.ncwwomenhelpline.in/
- 127. Child Sexual Abuse & Harassment in India | POSCO Act | Case Study. Accessed May 16, 2024. https://www.childlineindia.org/a/issues/sexual-abuse
- 128. SPUWAC. Accessed May 16, 2024. https://spuwac.in/helplines.html
- 129. Ipas. The POSCO Act and MTP Act Key Information for Medical Providers. chrome-extension://efaidnbmnnnibpcajpcglclendmkaj/https://pratigyacampaign.org/wp-content/uploads/2019/09/the-pocso-and-the-mtp-act-key-information-for-medical-providers-ipas-development-foundation.pdf
- 130. Early Identication and Intervention for Mental Health Problems in School Going Children and Adolescents | Ministry of Education, Gol. Accessed May 16, 2024. https://dsel.education.gov.in/node/2155
- 131. India crosses a signicant milestone for The National Tele Mental Health Programme of India: Over 200,000 calls received on the Tele-MANAS Helpline since its launch in October 2022. Accessed May 16, 2024. https://pib.gov.in/pib.gov.in/Pressreleaseshare.aspx?PRID=1941620





