World Health Organization

Timor-Leste

Final Report

Baseline Survey: SAY NO TO 5S in Schools in Timor-Leste, 2022

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Preface

I am delighted to present the preface for the School Health Project Baseline Survey Report on behalf of the World Health Organization (WHO) Timor-Leste country office. This report signifies a significant milestone in our collaboration with the Korea International Cooperation Agency (KOICA) and the implementation of the WHO-WFP joint school-going child health and nutritional intervention, "SAY NO TO 5S (Starvation, Soil Transmitted helminthiasis, Skin Diseases, Smoking and Sugary and Alcoholic drinks) in Schools."

The baseline study had two objectives: to establish impact and outcome/output indicators for future evaluation, and to inform the targeting and design of the Say No to 5S (SN5S) program. This survey aimed to collect comprehensive data that would assess the intervention's effectiveness and impact on school-aged children's health in Timor-Leste.

The report presents a comprehensive analysis of the survey data, highlighting key findings, emerging patterns, and areas requiring targeted interventions. It serves as a vital resource for policymakers, health professionals, educators, and stakeholders involved in child health and nutrition programs in Timor-Leste.

I extend my gratitude to the dedicated team of researchers, data collectors, and the SN5S team who contributed their knowledge and expertise to the survey. Their commitment and meticulousness have set the stage for evidence-based decision-making. Let's take inspiration from the findings presented in this report to refine our strategies, ultimately making a positive impact on the children in Timor-Leste. My heartfelt thanks to the Ministry of Health (MoH), the Ministry of Education (MoE), and all other governmental partners including teachers who have supported this endeavour.

The collaboration between WHO, KOICA, MoH, and MoE reflects our shared commitment to addressing school child health and nutrition issues. Our goal is to improve the lives of children in Timor-Leste and lay a foundation for their well-being. The baseline survey provides a starting point for identifying challenges, tailoring interventions, and monitoring progress.

Your unwavering commitment to the health and well-being of school children in Timor-Leste is commendable, and I am confident that, together, we will achieve remarkable progress in our shared pursuit of a healthier future.

Dr. Arvind Mathur
WHO Representative

Foreword

On behalf of the Korea International Cooperation Agency (KOICA), I would like to extend my congratulations on the release of the Baseline Survey Report of the SAY NO TO 5S (Starvation, Soil-transmitted Helminthiasis, Skin disease, Smoking, and Sugary/Alcoholic Drinks) Project. I would also like to express my heartfelt appreciation to the Government of Timor-Leste and World Health Organization (WHO) for your invaluable contribution to publication of this report.

KOICA has prioritized the Health Security Strengthening as the cornerstone of our support strategy for Timor-Leste, and has carried out various projects in alignment with this vision. In particular, in response to the Timor-Leste government's request for comprehensive support for the well-being of infants and children, we have made substantial investments in the public health sector to ensure the promotion of healthy lives among children.

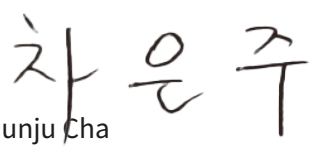
As a pivotal component of our commitment, KOICA has partnered with WHO and the World Food Programme (WFP) on the SAY NO TO 5S project from 2021 to 2025, with a total funding commitment of US$7.86 million.

The report we are presenting today, which is part of the SN5S project, serves as an essential instrument for gauging the current health status of school-aged children in Timor-Leste. The report will also guide us in the direction that all implementing partners should take with the evolution of the project.

I firmly believe that this report will provide important insights into the impact that the SN5S project has had on the nation's development. Furthermore, it is a significant reference point for continued support from the Government of Timor-Leste, the United Nations, and other donors such as KOICA.

I express my deepest gratitude to the Ministry of Health, the Ministry of Education, and WHO for their unwavering dedication to the production of this report. I also reserve special commendation for the researchers and enumerators who tirelessly traversed the country to conduct this survey. I am fully cognizant that your strenuous endeavors have played a critical role in shaping a brighter future for Timor-Leste.

KOICA will continue to support Timor-Leste to promote public health and child development. Our aspiration is to contribute to a Timor-Leste that is better today than yesterday and even better tomorrow than today.



Eunju Cha
Country Director of KOICA Timor-Leste

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EXECUTIVE SUMMARY

This base line survey was undertaken on behalf of the World Health Organization Timor-Leste country office, which is part of the collaboration supported by Korea International Cooperation Agency (KOICA) that is planning and implementing a child health and nutritional intervention titled “SAY NO TO in Schools in Timor-Leste”. The objective of the baseline study was to provide a baseline for impact and outcome/output indicators to serve as a point of comparison for a final evaluation and to inform the Say No to 5S (SN5S) programme targeting and design.

The nationally representative baseline survey covering a representative sample of 65 schools, 217 class teachers, and 1966 students was carried out in July 2022. The head of the school was the respondent for the school questionnaire, which also had a section to be filled by the survey enumerator after observing the amenities and surroundings in and around the school. The teachers from a randomly selected class from each of the grades 4 to grade 9 available in the schools sampled, responded to the school questionnaire. The student questionnaire was administered among a random sample of students in grade 7 to grade 9, in the schools sampled.

Results of the baseline survey shows, that the current health related activities in the schools were largely restricted to immunization and school meal programme. Limited interaction was reported between schools and its surrounding health system, as only a negligible share of schools were reportedly having a health worker available for at least one day in a week (3 percent) or having a monthly interaction with community health centers and health posts (6 percent). Less than 20 percent of the schools were in a partnership with NGOs and community based organizations for health promotion in the school.

Apart from their school meal programme (65 percent), majority of the schools were not having a trained staff in charge of promotion of healthy WASH practices, healthy diets, tobacco control and anti-alcohol use activities, counselling for students prone to/or consuming tobacco/alcohol, and physical activities. Shortage of health communication materials related to health promotion activities in schools were observed. Other than WASH related domain (37 percent), the display of posters relating to health promotion were negligible for all type of activities planned under SN5S intervention.

Self-reported symptoms of STH and skin diseases in last one year was higher among the students. Symptoms like experiences of worms in stool (29 percent), anal itching (26 percent), swollen orange like skin on legs and private parts (22 percent), itching of skin (39 percent), itching of private part under arms and skin folds (29 percent), where common in the students. All these symptoms were higher in boys than girls, governments schools than private schools, rural areas than urban areas and poorest wealth quintile than richest wealth quintile. Teacher interviews showed they were unaware of explicitly visible symptoms of STH and skin diseases. An orientation on the same can contribute to early detection and initiation of treatment in school children.

One fifth of the students in grade 7 to grade 9 reported to have consumed tobacco products and alcohol products in last one year. Ever use of alcohol and tobacco products in last one year was noted to be higher in boys than girls, in government schools than in private schools and in student's from poorer households than in wealthier households. Still only 16 percent of teachers interviewed reported that they inspected students for possession or use of alcohol inside the school in last one year. Another critical was the observation that alcohol (30 percent) and tobacco products (40 percent) were sold in front of the school entrance or adjacent to school premises. Only 22 percent of the schools were having signs post marking a tobacco free zone. The school level policy for prohibition of alcohol and tobacco use among students in the school premises was nearly universal, but about one fourth of the schools were not having the same rule for school teachers.

Advertisement and sale of alcohol, tobacco, carbonated drinks, sugary drinks and fast food in front of the school entrance, was more of an issue in urban areas than in rural areas. The proportion of schools having sale of carbonated drinks, sugary drinks, and fast food in front of the schools were 58 percent, 62 percent, and 68 percent respectively. Less than a quarter of the teachers reported to have discussed about the benefits of avoiding; sugary drinks, energy drinks & carbonated drinks, and food items high in salts and trans fats, as part of the promotion of healthy dietary behavior among students in this academic year. At the same time, only 4 percent of the students reported that they were taught in school about the need to avoid carbonated and sugary drinks, salty and sugary food and fast food. More than 75 percent of students were reported to be consuming these food/drink items more than once in a week.

The teacher involvement in promotion of healthy dietary behaviors is important. The proportion of teachers reported to have discussed the importance of home cooked meals (18 percent), eating seasonal foods (22 percent), and avoiding packaged food items (21 percent) was low. Only 30 percent of the teachers reported to have checked homemade food brought by the students to schools for healthy diet. The consumption of healthy food items every day among students can be improved further. The percentage of students reportedly consuming the following every day in last 7 days was 64 percent for milk/ milk products, 55 percent for seasonal fruits, 49 percent for vegetables and 53 percent for meat/ egg/ fish.

Impact of poor dietary practices is reflected in the nutritional status of the children. About 43 percent of children were stunted and this risk was noted to be higher in boys than girls and in rural areas than urban areas. Similarly, one fifth of the students were under-weight, which also was higher among boys (24 percent) than girls (15 percent). Obesity though low, was noted to be higher in boys than girls. Differentials in stunting and overweight across wealth quintiles were not observed.

Promotion of proper handwashing practices is considered as one of the cost-effective school health level intervention for prevention of STH and several contagious diseases. More that 95 percent of teachers reported to have taught the students about hand washing with soap and running water and about hand washing and its relation to STH. About 59 percent of students have seen posters promoting hand washing in their school. But the proportion students who reported to have been taught in school about the need for handwashing before and after eating meals (22 percent) and use toilet (6 percent), was unexpectedly low. Only a negligible share of schools was having a fully functional hand washing area near the toilet facility (6 percent) and school eatery (12 percent).

The observation that only a minor share of the schools were equipped with functional amenities like; piped water source (14 percent), piped drinking water (7 percent), toilets with running water (20 percent), regular cleaning of toilets (10 percent), hand washing area near toilet (6 percent), and waste management facility (6 percent) will be a major hindrance to promotion of healthy WASH related practices under school health programme.

ACRONYMS AND ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
BMI	Body Mass Index
CHC	Community Health Centres
COVID-19	Coronavirus Disease
CSD	Carbonated Soft Drinks
DHS	Demographic and Health Survey
GSHS	Global School-Based Student Health Survey
HIV	Human Immunodeficiency Virus
HP	Health Posts
IIPS	International Institute for Population Sciences
IMCI	Integrated Management of Childhood Illness
KOICA	Korea International Cooperation Agency
KONSSANTIL	Timor-Leste's National Council for Food Security, Sovereignty, and Nutrition
LDC	Less Developed Countries
LIC	Low Income Countries
MDA	Mass Drug administration
MoEYS	Ministry of Education, Youth, and Sports
MoH	Ministry of Health
MOU	Memorandum of Understanding
N	Number of cases/observation
NCD	Non-Communicable diseases
NGO	Non-Government Organisation
NSDP	National Strategic Development Plan
NSP	National School Policy
SD	Standard Deviation
SFP	School Feeding Program
SIs	Skin Infections
SN5S	Say No to 5S
SNIP	Specific Nutrition Intervention Package
STHs	Soil-Transmitted Helminthiasis
TLDHS	Timor-Leste Demographic and Health Survey

TLS	Timor-Leste
TLSLS	Timor-Leste Survey of Living Standards
UN	United Nations
WASH	Water, Sanitation and Hygiene
WFP	World Food Programme
WHO	World Health Organization
WHO-TLS	World Health Organization Timor-Leste

Acknowledgements

The baseline survey was sponsored by the World Health Organization, Office for Timor-Leste (WHO-TLS). We thank WHO Representative to Timor-Leste. Dr Arvind Mathur for entrusting study to the International Institute for Population Sciences (IIPS) and for the providing constant encouragement throughout the study. We gratefully acknowledge the encouragement and assurance received from Dr K S James, Senior Professor and Director IIPS for taking up this study.

Ms. Mokryeon Cho (Mora) has been providing leadership for the ***Say No to 5S project*** at the WHO-TLS. The baseline survey could be completed within this short time due to her persistent efforts in coordinating with the study Ministry of Health, Ministry of Education, Youth and Sport, various stakeholders based in Timor-Leste. We are indebted to her for valuable inputs at every stage of the survey and for the generous amount of time she spent with us in survey planning, implementation and development of this report. We especially thank her team members Ms Dircia, Mr Felix, Ms Filomena, and Ms Veneza for full-fledged support provided during translation and pretesting of questionnaires, training of investigators and in execution of the field survey. We also express our sincere gratitude to Ms Ermelita for her guidance on financial management throughout the study.

The following staff from SABEH, Dili, Timor-Leste participated in the data collection; Mr Crispim, Ms Lourenca, Ms Manecas, Mr Mario, Ms Paulina, Ms Santina, Ms Salustiana and Mr Zito. We are thankful each of them for the highly sincere efforts that they have put together during the filed level data collection.

Dr. Bushra Shaikh who interned with us at IIPS has supported us in drafting the study tools at the earlier stage of study. On completion of data collection and analysis, Dr Bushra as a consultant supported us in in drafting a few chapters of the report. Dr CS Krishnakumar as a consultant successfully organized data entry operation and preparation of tables as per the tabulation plan. We deeply appreciate all dedicated efforts of Dr Bushra and Dr Krishnakumar towards this project.

This acknowledgment cannot be completed without expressing our gratitude to the finance and administrative staff at IIPS, especially Mr Aniket, Ms Bhavika, and Ms Priyanka, for the for assisting us at all stages of the study.

Dr T R Dilip and Prof US Mishra

IIPS, Mumbai

Chapter I

Introduction

Background and review of literature

Timor-Leste has emerged from instability and significant erosion of development gains to successfully graduate from fragility status, to qualify the status of a least developed country (LDC) according to per-capita income criterion in 2015, and become a democratic nation in the Southeast Asia region since its independence in 2002(1). According to the World Bank's East Asia & Pacific region classification, it is now (in 2011) a tiny lower middle-income country; this transition is largely shaped by the country's oil income with high global oil prices. It is a post-conflict country that emerged from a lengthy period of occupation, a bloody war for independence, and internal strife between 1999 and 2006. Timor-Leste (commonly known as East Timor) and Indonesian West Timor share the island of Timor; with a constitutionally outlined administrative decentralization, the country is split into 14 administrative districts, with each district further subdivided into sub-districts (65 in total), sucos (442 in total), and aldeias (2225 total). Timor-Leste has a population of 1.17 million people; according to the 2015 Population and Housing Census (2), 60% of the overall population is under the age of 25.

The country faces significant challenges due to persistent structural challenges such as public spending that is still heavily dependent on oil and gas revenue, low private sector investment due to a poor business environment, inadequate infrastructure for growth and connectivity, and the unprecedented shocks of economic recessions. However, according to a recent government fragility assessment, economic underpinnings remain weak, as seen by chronically high young unemployment, low human development outcomes, regional disparities, and food insecurity. Recent advances in poverty alleviation have been made; according to data from the recently completed 2014-15 Timor-Leste Survey of Living Standards (TLSLS-3), the proportion of the Timorese population living in poverty has decreased from 50% in 2007 to an estimated 41.8% in 2014(3).

The country’s poor socioeconomic status in the deprived background of its colonial aftermath and financial instability explains the prevailing circumstance with educational catastrophe being one of them. During July and August 2009, Timor-Leste's elementary schools had their reading skills assessed by a study

conducted by Ministry of Education consultants with support from the World Bank and the Education Fast Track Initiative, which discovered that 70% of students could not read a single word of a simple text by the end of grade one, 40% could not read a single word by the end of grade two, and 20% could not read a single word by the end of grade three. The study shows that many Timorese students spend years in elementary school without any reading ability. The fact that students do not master these most basic of skills contributes significantly to the high rates of grade repeat and dropouts in Timor-Leste's elementary institutions. This must be understood in a perspective that between a quarter and a third of Timor-Leste's primary school-age children are not enrolled and, presumably, have little or no reading skills (4). Education being the catalyst in improving the socio-economic status of any population, with the current education system and schooling environment such a change seems far-fetched.

The current conditions are not limited to poor schooling in Timor-Leste. A life cycle lens demonstrates a series of interconnected adversities resulting in a flawed socioeconomic, cultural and political environment. With a prevailing high fertility and infant mortality rate, the country experiences high maternal and child undernutrition which eventually translates in poor educational outcomes and hence the vicious cycle of poverty. All direct and underlying features of malnutrition appear to be widely prevalent and strongly associated with stunting in areas with a high prevalence of malnutrition(3). Unfortunately, there is limited evidence generated with quantitative surveys to indicate the dietary habits and variations in nutritional make-up of the country's inhabitants. Low rates of continuous breastfeeding and dietary diversity are significant barriers to ensuring appropriate diets for babies and young children. Early first birth, poor contraceptive prevalence, and high fertility are risk factors for anemia and low birth weight, perpetuating a starvation cycle across generations. Open defecation and poor hygiene practices increase the risk of infectious illness, decrease nutritional absorption, and lead to stalling progress in development. This is exacerbated by low service delivery quality, lack of facility preparedness, and physical distance, all of which restrict access to crucial health and nutrition services such as immunization, ante-/post-natal care, and contraception. Timorese women face varying disempowerment and toxic stress, which has its own bearing on nutritional absorption, disruption in mental health and caregiving behaviours hindering cognitive development, all of which are subsequently experienced by children. When women's empowerment in agriculture was investigated in Timor-Leste in relation to household production and the dietary diversity of children 12-59 months old and their mothers, it was discovered that empowered women and their children's dietary diversity scores were higher than those disempowered. As a result, nutrition-sensitive policies and initiatives in Timor-Leste might benefit from prioritizing women's empowerment and encouraging agricultural diversification as significant intervention

towards improving mothers' and children's diets and well-being(5). Hence a concatenation of the country's political, social, cultural, and economic factors frames itself to a compromised environment that does not correspond to simple policy input and population output-based system.

The Country is experiencing an epidemiological shift that is in its early stages. Timor-Leste appears to be in Omran's early third stage of epidemiological transition with parallel presence of infectious and communicable diseases alongside maternal health, and nutritional concerns comprising the health burden that are tackled with drug-based intervention, along with the emergence of new challenges such as the increase of overweight population and diet-related NCD risk factors that may be attributed to increased consumption of packaged and processed convenience foods. Regardless of the fact that child and maternal malnutrition continues to be the most significant risk factors for ill-health, cigarette smoking, dietary hazards, high blood pressure, and raised fasting plasma glucose were among the top ten risk factors in 2013(6). Critically, the rising burden of non-communicable illnesses and risk factors largely remain overlooked. According to WHO, the people in resource constraint countries experience the triple burden of diseases; communicable diseases, non-communicable diseases, and socio-behavioural diseases.

Health is a critical component of the development of a nation. The policy response comes in the form of the Ministry of Health establishing a Specific Nutrition Intervention Package (SNIP) that was provided as part of the Primary Healthcare service package delivering services aligned with global evidence. However, SNIP supplementation therapies continue to be underutilized: In 2013, 53% of women took more than 90 iron-folic acid tablets during their last pregnancy; 33% of toddlers got zinc for diarrhea therapy, and training for baby and child feeding programs are yet to be completed. Critical gaps in SNIPs include encouraging MOH leadership and ownership over strategic directions; poor development partner coordination; scaling up the coverage and quality of SNIP interventions without finalizing the supportive policy and strategy frameworks required to guide future interventions and failing to build the nutrition capacity of frontline health workers and improve community-based nutrition delivery. Nutrition is still a vertical program, with supply procurement, distribution, monitoring and evaluation, and supervision taking place outside mainstream Primary Healthcare.

The country has a strong political commitment, overarching strategy frameworks, and a multi-sectoral coordinating organization to provide the groundwork for a robust national response to malnutrition. Nutrition has been openly championed by the Honourable President and Prime Minister, and the NSDP emphasizes nutrition as a critical element for social and economic growth. The School Feeding Program (SFP)

is a component of the Social Inclusion Policy that offers free daily school meals to all children in grades 1–6. Timor-Leste's National Council for Food Security, Sovereignty, and Nutrition (KONSSANTIL) is a high-level coordinating organization formed to coordinate the country's multi-sectoral response to food insecurity and malnutrition. Hence the prioritization of the National Strategic Development Plan (2011-2030).

The Timor-Leste Demographic and Health Survey (TLDHS) (7) was carried out in 2016 to provide current and trustworthy data on fertility and family planning behaviour, child mortality, adult and maternal mortality, child nutritional status, use of maternal and child health care, and HIV/AIDS awareness. This survey offers optimism on many fronts like; the maternal mortality ratio has been steadily declining, from 660 in 2003 to 218 in 2016. The total fertility rate has fallen from 7.8 in 2003 to 4.2 in 2016. There has been an increase in the prevalence of contraception (26.1%), an increase in pregnant mothers seeking Antenatal Care (ANC) from 60% to 84.4%, an increase in the number of births assisted by healthcare professionals (56.7%), and an increase in the number of mothers delivering at health facilities from 10% to 49%. The report also highlights that 7% of women aged 15-19 have previously given birth or are pregnant with their first child. Teenage pregnancy was also much greater (15%) among women with little or no education than moms with a secondary or higher education degree. The percentage of teens who had started childbearing was likewise greater in the bottom three wealth quintiles compared to the top two wealth quintiles. There has been consistent progress in child health care, with current measures indicating that under-five death rates have decreased from 115/1000 in 2003 to 41/1000 in 2016. Infant mortality has decreased from 83 to 30 deaths per 1,000 live births. 49% of children aged 12 to 23 months had been completely vaccinated, up from 17.8% in 2003.

The children's status of the reports can be summarised as 46% of children aged five years have stunting. Almost 24% are underweight for their age; 10% are extremely underweight for their age. Almost 46% of children under the age of five are stunted, with nearly 23% severely stunted. Anaemia affects 40% of Timorese children aged 6 to 59 months. The frequency of dental caries was frequent (69.2%) in school-aged children aged 6-17 years old. In 2016, the indicators for the Integrated Management of Childhood Illness (IMCI) Program revealed that Timorese children face three significant diseases: diarrhoea, pneumonia, and malaria. 11% of all children under the age of five experienced diarrhoea in the two weeks preceding the survey. Timor-Leste's nutritional status for children and adults remains far below acceptable global levels.

In September 2010, a qualitative study (8) of risk factors related to child malnutrition in Aileu District, Timor-Leste, was conducted to identify potential risk factors connected with the high incidence of child

malnutrition. Early exclusive breastfeeding termination, a short lactation time, and an unhygienic living environment were shown to be associated with children's nutritional status in the research location. The identified potential risk factors for child malnutrition were all interconnected and mainly modifiable.

Another qualitative study (9)in rural Timor-Leste looked into the connection between child size and household characteristics by interviewing parents in 102 households to assess reproductive histories, the amount and type of resources available, and the anthropometric measures of the child as well as family composition. Children were short in height and weight in comparison to international standards, and older children performed worse than under-fives. The number of children in a home was shown to be adversely related to height, but not weight, i.e., the signs of chronic malnutrition were prevalent. They also highlighted that in rural Timor, social and cultural variables impact resource distribution and children's health.

A longitudinal study (10) of 1,245 children from two ecologically diverse rural districts of Timor-Leste used z-scores, modelled height, and weight velocity to compare Timorese children's growth to World Health Organization (WHO) criteria. Children display early-life development faltering and stunting throughout infancy and adolescence, according to WHO criteria. This group's median height and weight are below the WHO fifth centile. Males develop slower than females in both BMI and height-for-age (p 5.018), but unlike females, they continue to grow into normal adulthood. Therefore, identifying national health priorities and intervention areas using current health research data is critical for understanding Timor's needs and developing resource-optimized strategies.

Health is a dynamic state of being with a complete physical, mental, and social balance; while achieving a complete state of health might be questionable, the health policies aim at achieving a sustainable state that allows an individual to function optimally in the current situational context. While it is difficult to pinpoint and quantify investable health priorities in Timor-Leste, i.e., resource constraint setup, the issue of malnutrition must take precedence.

Research conducted as part of the World Bank's Externally Financed Output "Support Nutrition Analysis and Activities in East Asia and Pacific Region" (3) examines malnutrition in the country, estimating the economic impact through donor mapping, causes, and potential responses. The report points out that.

- Despite the fact that the state is young and vulnerable, it possesses the necessary precursors for long-term growth. Malnutrition, on the other hand, threatens to stymie attempts to alleviate poverty, capitalize on human and skill development gains, and impede economic growth. Poor development and malnutrition, particularly maternal and child malnutrition, are the single most important contributors to early mortality and disability in the country, posing a development challenge unlike any other.

- Timor-Leste has the world's third highest stunting prevalence, greater than all other G7+ nations(11), and a major outlier in relation to its degree of economic development. In 2013, nearly half of all children under the age of five were stunted in their physical and intellectual development, and almost one-third (6-59 months) were anaemic. A secondary analysis of DHS 2016 data to evaluate the prevalence and predictor of stunting, wasting, and underweight in Timor-Leste children under five years of age, covering urban and rural household populations from all 13 districts, shows astonishing results. 44.4% of children were stunted, 37.5% were underweight, and 25% were wasted(12). Despite the fact that the country is no longer in an emergency situation, the incidence of wasting (11%) is an indication of acute malnutrition and a major risk factor for child death that surpasses the WHO criteria for greater public health diligence.

- Immediate causes of child malnutrition include nutrient intake and disease burden. The underlying causes can be traced to childcare and feeding practices; reproductive health and women's status; household hygiene environment; dietary diversity and food insecurity; and demand for and access to quality health services; and fundamental causes can be identified in household poverty and macroeconomic context, sociocultural factors, and political context). Overweight and obese children are significant problems in the East Asia Pacific area. It raises the likelihood of adult obesity and serves towards the beginning of NCDs at an early age. Since 2009-10, the prevalence has more than doubled. Although the country is yet to face the double burden of malnutrition, it seems inevitable unless the emerging problem goes unaddressed.

The report (3) also highlights that the critical partners in addressing malnutrition in Timor-Leste are the Ministries of Agriculture and Fisheries, Social Solidarity, Education, Commerce, Industry, Environment, and State Administration. These multiple stakeholders play an essential role in responding to malnutrition and its determinants, but more focus and coordination is essential to optimize the impact of possible efforts,

especially when civil society members have filled a significant void in nutrition-specific and nutrition-sensitive program delivery and finance. They have helped to develop systems and increase capability in all relevant ministries. But the present level of nutrition investment is insufficient to meet the targets specified in national programs. The Zero Hunger Action Strategy will cost roughly US$176.0 million annually to implement the plan over ten years. However, total fiscal headroom decreases as oil revenues fall and vital KONSSANTIL Ministries undergo budgetary contractions due to infrastructure frontloading. Because of significant recurring human resource expenses, ministries are increasingly relying on donor assistance to augment goods and services budgets.

The positive impacts of school-based health intervention are often seen when the health intervention receives greater political support. When working in the context of national and international civil society collaborations, these interventions often result in local government capacity building. A descriptive, mixed-methods assessment of a school and community-based intervention to promote eye health in rural Timor-Leste was conducted to see whether there was an increase in students' knowledge, attitudes, and behaviours following the Healthy Eyes in Schools Project intervention (13). The research used four primary schools in Aileu District, Timor-Leste, with local teachers receiving training and resources to execute nine eye health courses. The intervention increased students' eye health knowledge as well as some attitudes and habits. Teachers' attitudes, as well as backing from administrators and an international non-governmental organization, proved to be significant components in the project's success. The intervention's success may have been impacted by the lack of eye health in the previous curriculum, low parent engagement, and availability of good food. Several advantages emerged from incorporating eye health subjects in Timor-Leste school health and hygiene teaching.

Undernutrition in children is a global health problem and it coincides with childhood over nutrition as well which is of growing concern. The increased intake of refined carbohydrates will augment the country’s malnutrition by providing energy without fibres and vitamins. Due to the vast availability of these fast-food packets, sugary carbonated drinks and high-salt food are often considered cost-effective snacks. Often these snacks are sold in proximity to schools and replace the traditional home cook tiffin.

The Global School-based Student Health Study in Timor-Leste in 2015(14) was the first countrywide survey in Timor-Leste to offer complete data on numerous behavioural risk factors among teenagers, including food habits, physical activity, mental health, tobacco, and drug use. According to the poll, 43% of

students admitted to consuming carbonated drinks more than once a day (and 17.2% reported drinking carbonated soft drinks two or more times a day), while 27% consumed fast food more than twice a week. Overweight and obesity were seen in 4.4 and 0.8% of teenage children, respectively. Most Timorese students (60.1%) do not walk or ride a bicycle to or from school; a considerably higher proportion of female students (66.8% female students versus 53.5% male students) assume a sedentary lifestyle. Furthermore, a sizable number of pupils (15%) spent three or more hours each day sitting.

A study was conducted to examine the relationship between excessive carbonated soft drink intake, health risk behaviour, and poor mental health among school-aged adolescents in six Southeast Asian countries using cross-nationally representative samples (15). The data from 36173 school-aged adolescents from Bangladesh, Indonesia, Laos, the Philippines, Thailand, and Timor-Leste were analysed in this cross-sectional national "Global School-Based Student Health Survey (GSHS)." According to the findings, 23.9% of research participants had drunk no carbonated soft drinks (CSD) in the previous 30 days, 38.8% had consumed CSD once/day, 19.9% once/day, and 17.5% twice/day. Higher CSD intake was linked to a history of loneliness, anxiety, suicidal thoughts, suicide planning, and suicide attempts.

Using data from selected Demographic and Health Surveys and household expenditures on soft drinks and biscuits from four Living Standards Measurement Studies(16), the researchers analysed the proportion of children 6-23 months of age consuming sugary snack foods in 18 Asian and African nations. Sugary snack food consumption rose with child age and household affluence and was generally greater in urban areas. Sugary snacks were taken by more than one-fifth of babies aged 6-8 months in one-third of nations. In their second year of life, three-fourths of Asian children and 46% of African youngsters ingest these meals. In general, the proportion of children who consumed sugary snack foods was more remarkable than those who consumed fortified baby cereals, eggs, or fruit.

The consequent changes in the oral health status of children of Timor-Leste demonstrated by a longitudinal study (17) done between 2002 and 2014, a smaller number of children (97% vs. 100%, p=0.01) reported cleaning their teeth the previous day, and a higher proportion (40% vs. 19%, p0.001) reported suffering toothache in the preceding 12 months. In 2014, the mean number of decaying, missing, or filled teeth in the primary and permanent dentition was higher than in 2002 (4.2 vs. 3.5, p=0.01). In 2014, the

prevalence of decay in permanent dentition was higher (70% vs. 53%, p0.001) than the mean DMFT. (2.3 vs 1.7, p=0.04).

Most contemporary users of cigarettes, alcohol and narcotics begin using them in their early adolescent years, often out of curiosity or peer pressure, and subsequently progress to become regular users. The Global School-based Student Health Study (14) found that 27.6% reported currently using any tobacco product, and 15.7% reported currently drinking alcohol. National youth tobacco surveys conducted in Timor-Leste in 2006, 2009, and 2013 among students aged 13 to 15 years revealed a very high prevalence of tobacco use, ranging from 41% in 2006 to 42.4% in 2013, with men using tobacco at a substantially higher rate. This is one of the WHO South-East Asia Region's highest rates of cigarette usage among teenagers.

Almost half of the pupils (45.2%) who had smoked cigarettes had done so between the ages of 13 and 15. The poll also demonstrates that adolescents begin using tobacco at a young age, and any effort to combat the tobacco pandemic must target young adolescents. 31.7% of respondents reported having parents or guardians who smoked tobacco in any way. Students stated that they began drinking at a young age. Among pupils who had previously consumed alcohol, 60% of pupils admitted to using alcohol before the age of 14. Among students who presently consumed alcohol, the three most common sources of alcohol were stated to be buying from a store, shop/street sellers, obtaining it from a friend, and getting it from family, in that order. 10.5% of students said they have ever consumed so much alcohol that they were utterly inebriated (one or more times in their life). As a result of drinking alcohol, around 9% reported getting into difficulty with family or friends, missing school, or getting into fights.

Clean hands, bodies, and teeth may dramatically enhance health and lower the risk of illnesses like skin infections (SIs) and soil-transmitted helminthiasis (STHs), which is a growing cause of concern in Timorese children. Handwashing is an excellent first-line preventative strategy for minimizing the occurrence of diarrhoea and respiratory illnesses, including influenza. According to the WHO, every year, about 2 million children and adolescents die from diarrhoeal infections worldwide, despite the fact that half of these cases are completely preventable via proper hygiene education and handwashing. Personal hygiene issues can lead to worm infestations, which affect readily affects millions of school-aged children worldwide and are linked to nutrition, growth, and development issues.

In the GSHS 2015, 16.8% of students never reported or rarely washing their hands before eating, while 22.2% never reported or rarely washing their hands after using the toilet or latrine. Access to clean drinking water appears to be a concern in schools, with 49.6% reporting that they had no supply of clean drinking water at school. Therefore, handwashing habits remain poor in Timor-Leste, with a large proportion of students not washing their hands after using the restroom or before eating. This might be due to a shortage of clean water, as almost half of the children claimed that safe drinking water is not available in classrooms. Poor hygiene practices and a scarcity of clean water may be contributing to or worsening Timor-Leste's prevalence of undernutrition.

The country's mass drug administration (MDA) drive has successfully reduced the STH prevalence in school-going children across the districts, yet it continues to be a matter of public health concern. Over the last two decades, there has been a renewed worldwide effort to finance and execute control techniques to lower parasite disease burdens. The 54th World Health Assembly issued a resolution in 2001 requiring three-fourths of at-risk school-age children to get regular deworming therapy by 2010, identified as the figure necessary to eradicate STH as a public health concern in childhood(18).

The success of MDA and water, sanitation and hygiene (WASH) has led to a discussion of investigating the differential impact of school and community-based integrated control programs for STH(19) in Timor-Leste, with recent modelling studies suggesting STH management programs be expanded to cover all age groups across the community. While investigating the association between STH anaemia and child development (19) indices in the country, a randomized controlled trial considered stool testing, the child's serum haemoglobin level, height, and weight. The research community found that children had very high stunting, underweight, and wasting rates but modest anaemia prevalence. While STH was not shown to be substantially related to morbidity outcomes, the area's high endemicity highlights the need for STH management efforts.

Timor-Leste is an agrarian civilization that has adapted to the tropical environment of wet and dry seasons, with over 70% of the people residing in rural regions. The hot and mid environment without access to electricity in many districts ensures a stringent continuity of skin infections. Without proper hygiene practices, these infections usually continue for years and are easily transmitted by sharing personal articles. Many tropical, low- and middle-income nations have endemic scabies and impetigo. Eczema is frequently chronic, and fungal infections flourish in damp environments.

In April-May 2019, a cross-sectional school survey (20) was carried out at six primary schools in a semi-urban (Dili) and two rural (Emera and Manufahi) settings, with trained health professionals interviewing and examining 1043 individuals to clinically detect scabies. According to the findings, the total weighted prevalence of scabies was 30.6%, while the overall weighted prevalence of impetigo was 11.3%. Impetigo was twice as likely in children with scabies as in children without, resulting in a 22.7% attributable risk of scabies as a cause of impetigo.

Another cross-sectional survey was conducted (21)in 14 distinct geographical locations, including community health centres, schools, and hospitals. A multidisciplinary team investigated participants for five illnesses (scabies, pyoderma, fungal infections, leprosy, and yaws). There were 1535 participants ranging in age from four months to 97 years. The majority of participants were interested in at least one condition. Fungal infections were the most prevalent (39.0%), and males were more likely to be afflicted than females (42.3% vs. 34.0%, p-value 0.0001). Scabies with either pyoderma or a fungal infection were the two most prevalent co-infections among patients with more than one disease (38.0% and 32.0%, respectively). The survey found 29 previously undetected leprosy cases and six yaws.

Understanding a country's requirements and improving health outcomes need extensive health research. A scoping systemic review (22) of available healthcare data was used to identify national health research priorities in Timor-Leste using published and unpublished research from 2001 to 2011; The result shows that young children have the largest disease burden, with respiratory infections, febrile diseases, and diarrheal disease predominating. Childhood malnutrition is a major unsolved public health concern. There is a lack of access to and usage of healthcare services. Infant and under-five mortality rates have been steadily declining, according to studies. The illness burden is greatest among children, according to a categorization of the top notifiable diseases reported by health management information system in 2010. Another retrospective study (used in SRS) discovered that respiratory tract infections (44%; primarily pneumonia or bronchiolitis), diarrheal disease (17%), febrile illness due to malaria, dengue, or central nervous system infection (13%), tuberculosis (9%), and malnutrition (5%), are the most common diagnoses on the admission of children to the national referral hospital. The most prevalent causes of mortality in that research were respiratory tract infection (29%), central nervous system infection (16%), and diarrheal illness (14%).

Hence the priority setting in health policy must reflect population needs. With the growing concerns of malnutrition, substance, alcohol, and tobacco abuse, smoking, STH, and SI, the policy must address these issues in adolescents. Investing in health ensures a healthy, economically productive young population, especially when Timor-Leste has a significant young population. Many development partnerships finance and/or deliver nutrition-specific and nutrition-sensitive activities, but in order to synchronize efforts and population-based outcomes, the sector needs more government leadership and coordination. Converging programs at the district and suco levels, as well as ensuring that donor funding is dispersed appropriately to address the incidence of malnutrition that lacks the required attention. UN agencies and bilateral donors are critical in creating an enabling environment for nutrition, as well as financing and delivering nutrition-specific interventions, but these activities must receive a receptive environment to deliver at their maximum potential.

Say No to 5S in Schools Programme

Towards improving the scenario of child health and nutrition in the country World Health Organization Timor-Leste (WHO-TLS) country office and World Food Programme (WFP) with financial support from the Korea International Cooperation Agency (KOICA) has launched a joint school health and nutrition programme with support from Korea International Cooperation Agency (KOICA). The intervention is titled, “SAY NO TO 5S (Starvation, Soil-transmitted helminthiasis, Skin diseases, Smoking and Sugary/Alcoholic Drinks) in Schools, 2021-2025”. The SN5S is designed to have two ultimate outcomes: 1) school-age children are provided with a primary health package and health education in a safe and healthy school environment to mitigate risks of priority diseases at school, and 2) schools are upgraded to provide a safe and healthy environment as well as safe and nutritious school meals. WHO targets the first outcome under the scheme of Health Promoting School for all primary and pre-secondary school children while WFP targets the second outcome in selected three districts. A major outcome of this project is to increase gains in health and nutrition by coordinated efforts between WFP and WHO, to assure against regression.

The baseline survey

This baseline study was a contractual obligation included in the project’s Memorandum of Understanding (MOU) with KOICA. Along with the Agency-specific monitoring and evaluation processes, WFP, WHO, KOICA and the Ministries will consider a harmonized approach to plan, develop, and

implement the baseline survey and report its findings with an additional in-depth assessment in each Agency's target area.

The baseline study was undertaken to provide a baseline for impact and outcome/output indicators to serve as a point of comparison for a final evaluation and to inform program targeting and design. The baseline study will help key stakeholders to:

- Update the indicator targets to be more realistic and achievable if required;
- Update the activity implementation plans to reflect the findings from the study;
- Understand the status quo of the outcome/output indicators at the onset of the project; and
- Review and confirm the monitoring and evaluation framework for all indicators

WHO-TLS will share the baseline provisional outcomes at the SN5S Project Steering Committee meeting.

The International Institute for Population Sciences (IIPS), Mumbai, India under the administrative control of the Ministry of Health and Family Welfare, Government of India was engaged to provide technical support to the WHO in implementation of this baseline survey. IIPS is considered as a premier institution for demographic training and survey research in the Southeast Asia Region. The team from IIPS is responsible for study design, the development and use of appropriate data collection tools, data processing and analysis, summarizing the findings, and drafting of baseline survey report. IIPS worked in close collaboration with the SN5S team of the WHO Country Office, Timor-Leste, relevant school health and nutrition departments of the Ministry of Health (MoH) and the Ministry of Education, Youth, and Sports (MoEYS) and other stakeholders. WHO-TLS implemented the field-based data collection for this baseline survey.

Methodology

A quantitative survey was designed to arrive at the baseline indicators for the 5S related interventions planned under the school health programme. The survey mainly focussed on school health programmes for school children in grades 4-6 and those in grade 7-9. The head of the school was interviewed, and school premises was observed using a check list for basic amenities, to understand the school preparedness for such a large school health programme. School teachers were interviewed to obtain information on their existing knowledge, attitude, and practices related to activities planned/proposed under SAY No TO 5S intervention. Students were interviewed to understand their characteristics and perception about school health programmes components at the time of baseline. In short baseline survey was intended to obtain level of outcome/output indicators at the inception of the proposed school health programme. The baseline survey will provide disaggregated indicators on account of schools, teachers and students independently as regard the functioning and performance of the school health programme.

1. **School Level indicators:** Disaggregated by (1) primary and pre-secondary, (2) public and private schools. and (3) rural and urban schools.

2. **Teacher level indicators**: Disaggregated (1) primary and pre-secondary, (2) public and private schools, (3) rural and urban schools, and (4) districts

3. **Student level indicators**: Disaggregated by (1) primary and pre-secondary, (2) public and private schools. and (3) rural and urban schools, and (4) districts

Inclusion and exclusion criteria for the study sample

As the primary target beneficiary of proposed school health programme was children aged 6-14 years studying in primary and pre-secondary schools, this exercise includes school going children enrolled in graded 1-9 in the country families. However overaged children studying at a particular grade in school needs to be included due to operational issues in implementing the survey. It is considered that

children in grade 1-3 or children aged below 8 years will be unable to comprehend (both self-administered and canvassed) the survey questions and hence are excluded from the baseline survey. Further they have just began basic learning and hence may not be ready for school level health centric behavioural change interventions. Thus, the study will focus on children studying in grades 4-9 in schools across the country. During pretesting, we observed that even children in grade 4-6 were unable to answer a self-administered questionnaire hence were excluded. Even some of the teachers pointed out that the Tetum is not spoken in some of the Municipalities and students are only learning as it is their national language. This is a common challenge posed during surveys in countries with multiple regional dialects. For this reason, the student questionnaire survey was finally administered only among children studying in grades 7 to grade 9. However, the school coordinators and class teachers for grade 4-6 were interviewed.

Methods of data collection and analysis

The baseline survey has the following questionnaires for schools, teachers and students;

1. ***School questionnaire:*** This covered (1) Infrastructure availability for healthy school environment: (WASH- clean drinking water and sanitation facilities, electricity, class rooms, playgrounds, sports equipment's, recreation space, functional first aid kits), (2) Outreach of health intervention in schools in last 1 year (health rooms, health clubs, health promotion related posters; health promotion activities and epidemiological screenings), (3) Availability of school health focal points and interaction with the community health centres (CHC) and Health posts (HP) in last one year, and (4) Willingness to participate in safe school certification programme and baseline score for the school. School questionnaire was in two parts part I filled up by the survey enumerators with head of the school as the respondent and part II filled by the enumerator based on his/her observation of the school health related infrastructural facilities in the school and on sale and marketing of tobacco/alcohol/unhealthy food items in the areas adjacent to the school.

2. ***Teacher questionnaire:*** A teacher questionnaire to obtain information on (1) Knowledge, awareness and practice and knowledge about primary health package being implemented, (2) Awareness about national school safety standards including tobacco/alcohol and other drug

free school environment, (3) Participation in school health training programmes in last 3 years, (4) Knowledge about the Comprehensive Health Program curriculum from school health perspective, and (5) Interactions with CHC and health posts in last 1 year.

3. ***Student questionnaire:*** A self-administrable schedules for school students to obtain data on their (1) Anthropometry (Height and Weight)-stunting, wasting and underweight, (2) Knowledge about My body, good hygiene and health, and Family and community health, (3) Practice of good hygiene methods and (4) High risk behaviours: Tobacco use, alcohol use, drug use, high fat, sugary, salt foods and physical inactivity. The questionnaire content was different for younger children studying in grades 4-6 and older children studying in grades 7-9 grades. As mentioned above questionnaire for children in grades 4-6 were dropped due to difficulties among those students in answering the same. The anthropometric measures (height and weight) of were recorded by the survey enumerators, in the respective questionnaires.

Adaptation and pretesting of Questionnaire

The tools drafted by IIPS by referring to Global School Health Survey questionnaire (GSHS) and related surveys was adapted to TLS context in consultation with the stakeholders in the proposed school health programme in Timor-Leste. Firstly, a joint meeting on survey contents was held between WHO, Ministry of Health and Ministry of Education Youth and Sports. Separate consultation was held with the Ministry of Education, Youth and Sports (27th June 2022), Ministry of Health (28th June 2022) and corresponding WHO focal points at the WHO-TLS (27th & 28th June 2022). The adapted tools were translated into local language. Before the full-fledged field implementation, the tools were pretested in three schools in Dili, identified by the WHO-TLS/MoEYS. Feedback received from the pretesting exercise were incorporated into the questionnaires.

Two key observations noted in pretesting was addressed before finalizing the questionnaires for the main survey. First was the length of student questionnaire due to which the students were taking more time to fill them. As a result, the total number of questions were reduced from 193 to 90 questions in the student's questionnaire. The school health programme is in the very nascent stage in TLS and

hence questions relating school health programme in greater detail were removed as the students themselves are not familiar about such activities. Second major change was the decision to drop the use of self-administered questionnaire for children studying in Grade 4 to Grade 6. This was required as they were not having the ability to comprehend the questions and respond to them. Interactions about this with the teachers and coordinators indicated that this is mainly because of limited awareness about school health activities out of lack of a such a programme in place and due to the linguistic barriers in handling the Tetum language at that schooling level. Here the decision was that the specific baseline indicators for children enrolled in grades 4-6 will be based on responses of teachers and school coordinators/ Director. In addition, a few minor modifications were incorporated to bring in more clarity in all the three questionnaires.

Sampling

The proposed survey was to be carried out in a sample school across Timor-Leste. The list of schools for the calendar year 2020 obtained by the WHO country office from the MoEYS was used as the sampling frame for selection of schools for the baseline survey. According to the list there are 1283, primary and presecondary schools spread across 13 districts in Timor-Leste (Table 1).

Table 1.1: Number of schools and students across districts in Timor-Leste, 2020

District	No. of schools	Distribution of schools (%)	No. of students	Distribution of students (%)
Aileu	76	5.9	11345	3.9
Ainaro	82	6.4	17110	5.8
Baucau	173	13.5	30972	10.6
Bobonaro	150	11.7	25849	8.8

Cova Lima	94	7.3	15656	5.4
Dili	103	8.0	56187	19.2
Ermera	130	10.1	35294	12.1
Lautem	84	6.6	18711	6.4
Liquica	65	5.1	17436	6.0
Manatuto	76	5.9	12580	4.3
Manufahi	75	5.9	13465	4.6
Oecusse	75	5.9	18527	6.3
Viqueque	100	7.8	19476	6.7
Total	1,283	100	292608	100.0

Source: Figures based on school list received from WHO Country Office/ MoEYS

The baseline survey was planned to cover 5 percent of 1283 schools of Timor-Leste to arrive at the targeted school level, teacher level and student level baseline indicators. The sampling was carried out at the district level and appropriate sampling weights were computed to arrive at national and district level estimates. Since the primary aim was to arrive at the disaggregated level of baseline indicators, hence the rural-urban distribution of schools, ownership of schools and size of schools were considered while distributing the target sample size across all districts in Timor-Leste.

Selection of Schools: Schools with less than 100 students were not considered for baseline survey due to operational inconvenience in collecting data from these smaller entities. There were 392 schools with

less than 100 children with 23,811 students, which accounts for about 8 percent of students enrolled in grade 1-9 in the country.

Table 1.2: District wise distribution of list of schools selected for baseline survey by location of school and type of school

	Location of school		Type of school			Total
District	Rural	Urban	Catholic	Private	Public	
Aileu	2	3	1	0	4	5
Ainaro	3	2	1	0	4	5
Baucau	2	3	1	0	4	5
Bobonaro	3	2	1	0	4	5
Cova Lima	3	2	1	0	4	5
Dili	2	3	1	0	4	5
Ermera	3	2	1	0	4	5
Lautem	3	2	1	0	4	5
Liquica	3	2	0	1	4	5
Manatuto	2	3	1	0	4	5
Manufahi	3	2	1	0	4	5
Oecusse	3	2	1	0	4	5
Viqueque	2	3	1	0	4	5
Total	34	31	12	1	52	65

Hence the sampling frame comprised of remaining 891 schools out of 1283 schools in Timor-Leste. Of these 750 were public schools, 122 were catholic church owned schools and remaining 19 were other private schools. The public/ government schools were made into two segments based of strength of students. The schools in each district were classified as those with less than 300 students (smaller schools) and more than 300 students (larger schools). One smaller school and a larger school were randomly selected from both urban and rural areas of the districts. Thus 4 public schools were selected from each district. In order to make sample representative for catholic/private schools, one such school was randomly from each district. Thus, there are 13 randomly selected catholic/private schools in the sample from 13 districts in the country. This random selection of 65 schools from 891 schools was performed using STATA 16 software.

Selection of classes, teachers, and students: Next is selection of classes in each of the sample of 65 schools selected for the survey. Considering the need for disaggregated level baseline indicators, and time and resources available for the exercise, two grades were randomly selected for each school selected for the survey. Selection of 2 grades with a school was performed in advance and enumerators were provided the same along with the list of schools selected for the survey. In schools with only one class in grade selected the respective class teachers and students were interviewed.

For schools with more than one class within each grade, a class was randomly selected with respective grade and the respective class teachers and students were interviewed. The random selection of a class within a grade was performed by enumerators on the survey day using the class list provided by the school coordinator. Here information on number of students in each class (boys, girls, and total) within a grade was obtained from the school. The classes within a grade were sorted based on student strength and middle ranked class was selected as a sample to represent the students of respective grade from that school. In case of tie in ranking the class with more girls was chosen. All the students in the randomly selected classes were provided the self-administered student questionnaire for obtaining their response.

The enumerators were trained in making this random selection of class within a grade, using the class list available in each school. For schools having students in grade 4 to grade 6, a class teacher/professor for each grade was selected by the enumerators using the same procedure. The professor/teacher in charge of all the classes were interviewed as part of the survey.

Training of the field enumerators

The WHO-TLS had already identified 12 enumerators for this executing this baseline survey. Of these 4 belonged to WHO-TLS and 8 were recruited for the purpose of the survey. All the enumerators were graduates in ether medicine or nursing or public health. A three-day training of enumerators was held between 29th June 2022 and 1st July. These trained enumerators participated in both pretesting of the questionnaire held on 1st July 2022. On finalization of the questionnaire, they also had a field practice session with final questionnaires on 4th July 2022 in a selected school in Dili. A debriefing session was held with them after the field practice. The participation in both pretesting and field practice ensured that the enumerators are well acquainted with this school health survey protocols.

Field data collection

The field survey was executed under the leadership of WHO-TLS, MoEYS and MoH. Actual survey was launched on 5th July 2022. The six teams (2 member each) formed using 12 enumerators who participated in the training. The teams were assigned to each of the 13 districts in the country. The expectation was that one team will cover a school in a day and one Municipality in a week. MoEYS had nominated one officer in each municipality to coordinate survey teams visit to schools selected in the respective municipality. Data collection was completed between 5th to 21st July 2022.

Table 1.3: Number of schools, teachers and students covered in the baseline survey

Schools with	Number
School sampled	65
School questionnaire completed*	64
Teacher questionnaire completed	217
Student questionnaire be completed	1966

*One school not covered due to flooding in the locality during the data collection period

The final sample size at the end of the survey was 64 school director/ principal, 217 professors and 1966 students studying in grades 7 to grade 9 (Table 3).

Survey weights

Survey weights were assigned to the data sets to arrive at the national and district level estimates of baseline survey for the country. Baseline survey is designed for self-weighting at the domain level. The domains are the school size, location of the school i.e., urban school and rural school in each district

and type of school i.e., government and catholic/private school in each district. Survey weight at national and district weights were the inverse of overall sampling fraction at national and district level, respectively. All schools in same domain will share a common school weight, teacher weight and student weight.

Baseline Indicators

Key related questions indicators associated with each of the 5S interventions and proportion with that attribute were examined. Means score was computed for selected domains within a 5S intervention as summary baseline indicator. Mean score is the arithmetic mean of corresponding attributes is expected to portray current levels as well temporal progress in respective 5S related domains.

Results from each of the information collected from each of these questionnaires are presented separately in the following chapters.

CHAPTER II

School Status at Baseline Point

The objective of this section is to provide an overview of the status prior to the implementation of the 5S interventions. Information on exposure of the schooling system to concepts that are part of 5S intervention activities and key gaps in the capacity of schools for initiating such intervention are collected using a structured school questionnaire. The school questionnaire has two sections: Section I was canvassed by the survey enumerators with the head of the school as a respondent, and Section II was filled out by the enumerator based on their observations of the school's basic infrastructure and physical environment of the school, and its surrounding.

Part I enumerates

1. Outreach of health intervention in schools in last year (health rooms, health clubs, health promotion-related posters, health promotion activities, and epidemiological screenings).

2. Availability of school health-focal points and the interaction with the CHC and HP in last year.

3. Willingness to participate in safe school certification program and baseline score for the school.

Part II enumerates- Infrastructure availability for a healthy school environment (WASH- clean drinking water and sanitation facilities, electricity, classrooms, playgrounds, sports equipment, recreation space, functional first aid kits).

Respondent and school characteristics

The school assessment included in depth quantitative structured interviews of the school coordinator/director (88%) and deputy director/others (12%). Males headed a significant majority of schools, 83% against a 17% female leadership, and majorities of such heads (60%) were above the age of fifty. The government-owned about 84 percent of schools, and the Catholic bodies and private sector owned the remaining 16 percent, reflecting the overall school distribution in the country. Three fourth

of the rural schools (72%) were taken in the sample against 28% of urban schools, as 70% population resides in rural areas. Of the schools surveyed, 32% had grades 4-9, 44% had grades 4-6, and 23% had grades 7-9.

Majority of schools, 57% comprised of less than 250 students, while 21% had 250-500 students. 20% had 500-1000 students, and merely 2% had 1000 plus students.

Comprehensive primary care is expected to be available in order to ensure adequate health services at school. The available services can be utilized adequately when they are accessible, comprehensive, and organised with adequate interaction with the health facility, have a written health policy with well-trained staff, and has meaningful collaboration. The mere availability of health services is pointless if these services cannot translate into the desirable population-based outcomes and can seldom be called a health program. Optimal return on health outcomes requires seamless coordination between the district health department, school heads, health committee in school, nearest health facility, student clubs, and ultimately the proactive involvement of civil society members.

Provision for school health services in the school

The utilization of health services is influenced by several factors, proximity to a health facility is one of them. Studies indicate that if health services are near, they are utilized more efficiently. The survey evaluated their availability in terms of within school and as separate facilities, which was the case for 12% of schools in Timor-Leste, only at school for 52% of schools, only at a separate facility in 15% of schools, 20% schools provided health services in emergencies alone and no health services were available in 1% of schools. The importance of making these services available and nearby health facilities cannot be emphasized enough. It is imperative to engage schools in health activities, but not all health services can be brought to school grounds; hence, it is essential to establish connectivity with nearby health centres.

Though a majority of schools (52% public & 49% private) provide health services at the nearest health facility, it is noteworthy that 20% and 25% of public and private schools provide health services only in case of emergencies and approximately 1/10th of schools had services provided both at school and health facility. More than half of rural schools (58%) had health services at schools alone compared

to 36% of urban schools; moreover, 19% of rural schools provided health services in emergencies alone against the same being 24% in urban schools.

An analysis of district-wise distribution on this count exhibits a similar pattern of high availability of health services provided at school, as high as presence in all sampled schools in Ermera and nil in the three districts. In the district of Lautem, most schools offered services at school and health facilities. While Cova Lima and Viqueque had one-fifth of sampled schools with no health services, and a majority of schools provided health services only in emergencies.

Components within in school health services

A package of essential services must be available at school towards adequate and efficient functioning of the school health program. Hence, the sampled schools were examined as regard available services as a part of the school health program, i.e., eye and vision, immunization, ear & hearing, oral health, and nutrition; apart from these, the availability of health workers (at least once a week) was taken into consideration to calculate the average score, so that a comparative assessment can be made. Across the schools of Timor-Leste, only half of the schools (average score of 44) qualify in provisioning of some form of health services (Table 2.4) The best performance was seen in immunization services, i.e.,85% of schools in the nation offer immunization services in school, while only 3% of schools have health workers available within the facility, approximate half 51% of schools offer oral health services; 43% & 46% of schools had offered eye& vision and nutrition services respectively, while only 37% had ear& hearing services at school.

Figure 2.1 Percentage of schools with health prevention activities by location of school, Timor-Leste 2022

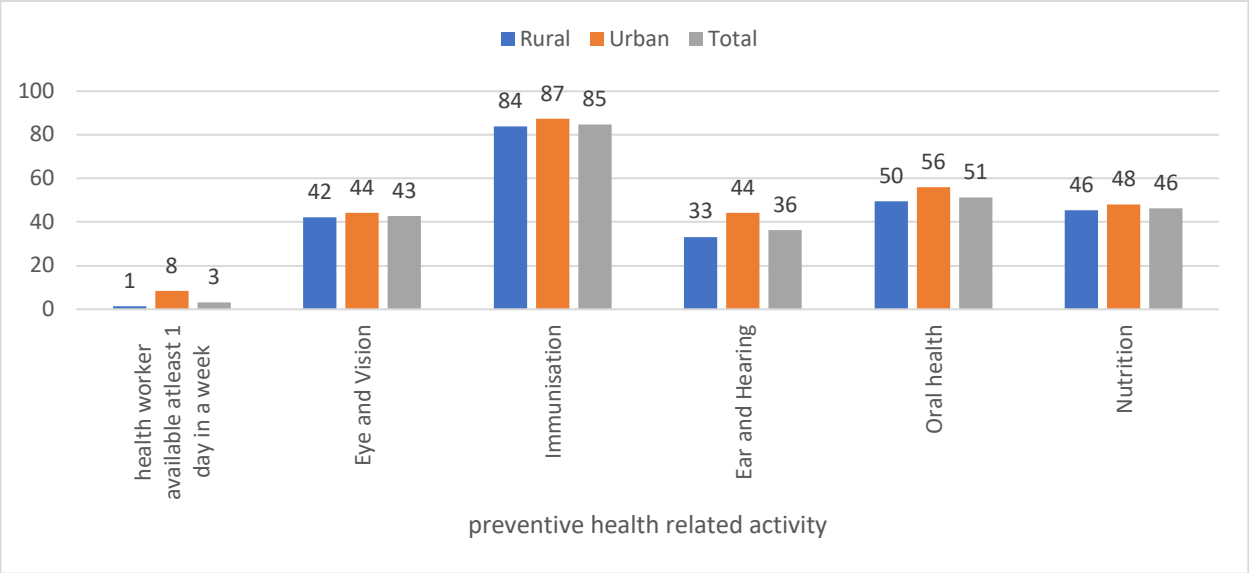
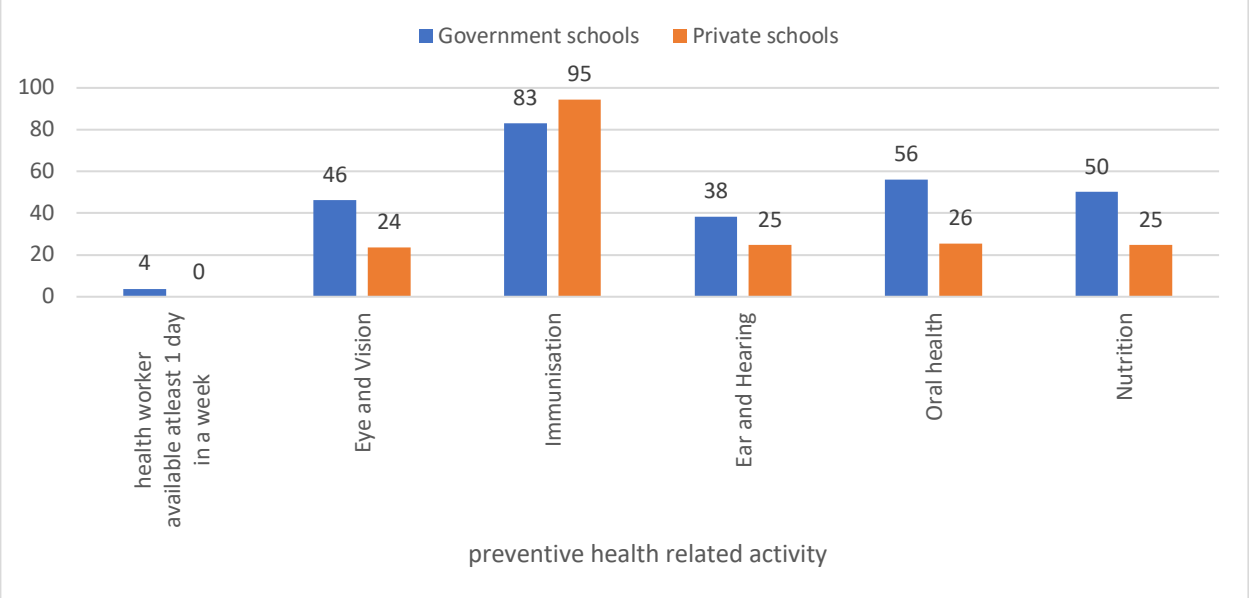


Figure 2.2 Percentage of schools with health prevention activities by type of school, Timor-Leste 2022

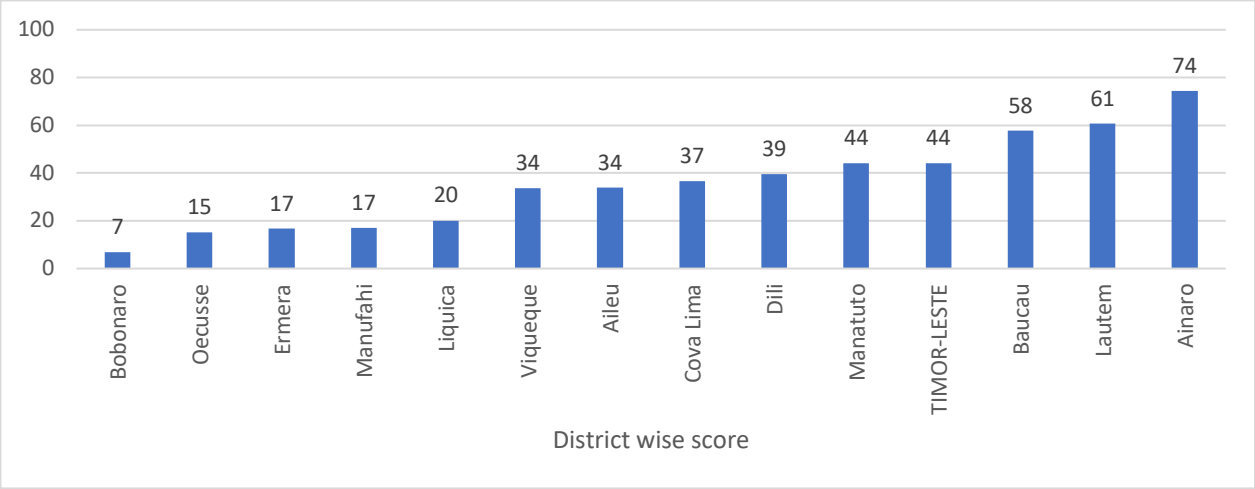


The public school outperformed private schools with a score of 55 (against private schools having a score of 39); almost all services were better provided by public schools except immunization, where private schools had a positive edge with 95% of schools providing the service against 83% of public schools. The availability of health workers was poor in both cases; only 4% of public schools had health workers available at least once a week compared to no private schools having health workers.

The urban rural divide on this count was marginally different with an urban advantage (the combined score of 51 rural and 56 urban) along with the urban availability of health workers (8%) being better compared to its rural part (1%). A combined score of this dimension remaining less than 10% is a cause for concern.

While both schools with grades 4-6 &7-9 perform poorly on availability front, schools with standard 4-9 perform slightly better at 13%. While comparing the average school scores, primary schools serve relatively better compared with the other two, with an average score of 55. The immunization services remain one of the best-performing domains across the schools. In contrast, health worker availability remains the worst-performing aspect across the grades, public/private schools, and districts.

Figure 2.3 District wise score for provisioning of preventive health related activities in schools, Timor-Leste 2022

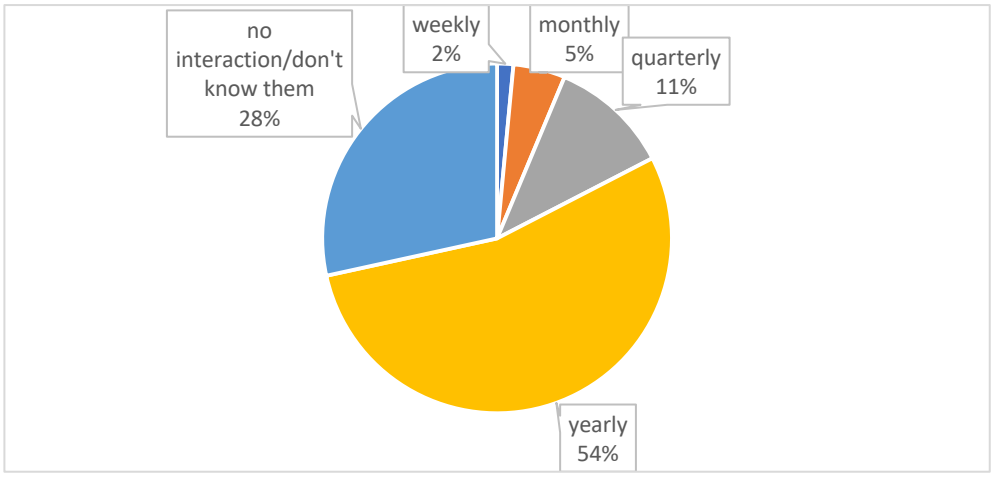


The districts of Baucau, Ainaro, Cova Lima, Ermera, and Manatuto had greater availability (all the sampled schools had immunization services) of immunization against Bobonaro and Oecusse districts, which had only moderate availability of vaccination. Ainaro, with an average score of 74, was reported to be the best performing district; it also had a one fifth of schools reporting availability of health worker on a weekly basis. Apart from Bobonaro and Ainaro, all other districts had complete absence of health workers on campus. The districts of Bobonaro, Ermera, and Liquica had no nutrition services on campus. The district of Bobonaro is identified as the worst performing district with an average score of 7. Similarly, the district of Ermera had a score of 17, having immunization services at all sampled schools but without any other services.

Interaction with community health centers and health posts

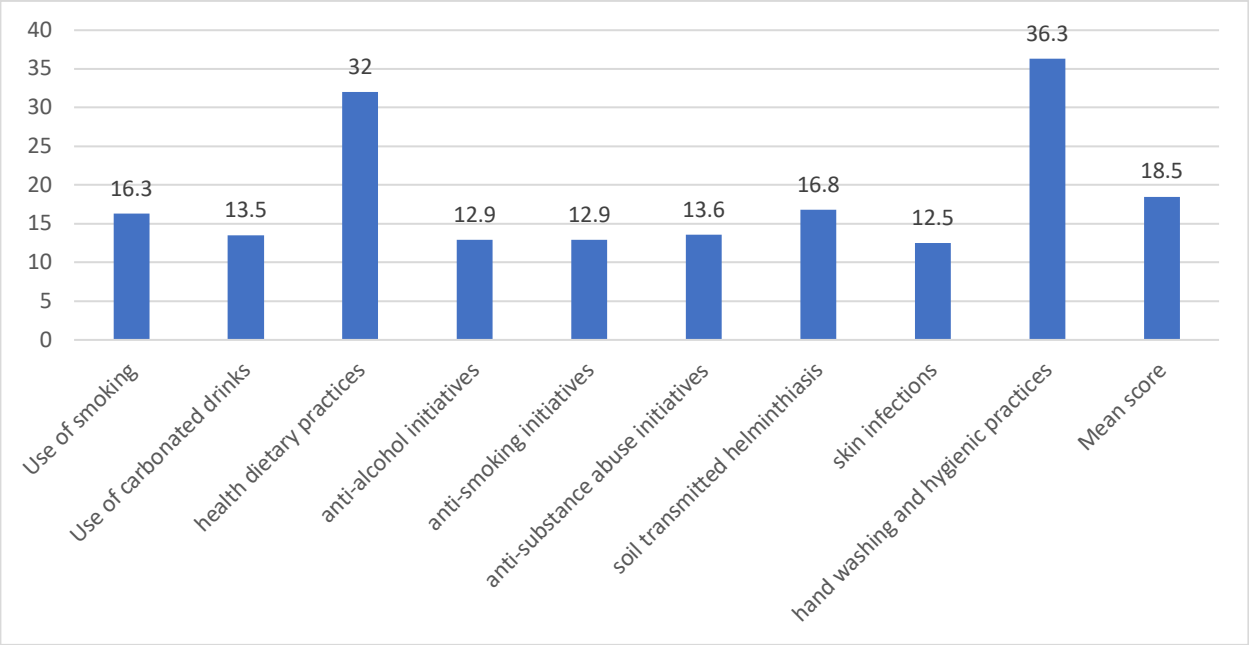
The seamless provisioning of health services to schools requires timely interaction with the health facilities, which ensures continuity of service and facilitates quality improvement and community engagement on this front. Increasing the interaction also helps to maintain follow-up and strengthen referral to appropriate facilities and hence must be optimized. A prompt analysis across the nation shows 72 % of schools made some form of interaction amounting to 54 percent of them interacting annually and merely 1 % interacting weekly. Approximately one-third, 28% of schools made no interaction, while only 5% and 11% interacted on a monthly and quarterly basis.

Figure 2.4 Frequency in school's interaction with community health centres and health posts, Timor-Leste 2022



The interaction of public schools (76%) was relatively better than private schools (48%); in total, 72% of schools interacted with a health facility. Most of such interaction was only once a year (public-58% & private 32%), and though private schools interacted less, 9% of them interacted weekly while none of the public schools had weekly interaction. Half of the private schools did not interact with a health facility. Rural schools were found to interact better, i.e., 74% compared to 65% of urban schools but 5% of urban schools were able to maintain weekly interaction; in contrast, rural schools failed to maintain any. Following a similar pattern, yearly interactions were frequent in rural and urban schools, and weekly interactions were least frequent.

Figure 2.5: Percentage of schools with a Partnership with NGOs and community-based organizations for health promotion



When we read the same across schools with varying grades, only 39% of schools with grades 4-9 interacted with health facilities compared to 84% of schools with grades 4-6 and 83% of schools with grades 7-9. However, none of the schools with grades 4-6 and 7-9 had weekly interactions while only 3% of schools with grades 4-9 made weekly interactions. Overall, poor weekly, monthly, and quarterly interactions were noted, with most schools interacting only once a year across the grades.

Almost all the schools (average score 98) in the district of Ainaro made interaction, with most of schools interacting quarterly and only a few of them having yearly interaction. Similarly, though all of the schools in Manatuto interacted with CHC and HP, most of these interactions were annual. One-tenth of schools in Aileu made regular weekly interactions, with more than half of schools interacting annually; this district had a majority of schools that made some form of communication with the health facilities.

Written school health policies

The failure of programmatic interventions to translate into population-based outcomes has been directly linked to a lack of well-planned and framed policy or failure in its implementation on the ground. Though most policies become victim of its wrongful implementation, the absence of a structured policy framework is ought to offer poor outcomes. Therefore, a documented policy with systemic indicators to monitor the program is a prerequisite for a successful health intervention. On this front, an evaluation obtains an average score of 61 for Timor-Leste as a whole, with 92% of schools having policies on hand washing and sanitation facilities and only 43% of schools having written policies for promoting healthy diets, 44% for SIs and 45% for first aid. About half of schools had written policies for clean drinking water (50%) and STH (51%). Approximately three-fourths of schools had written policies for anti-alcohol, 75%, anti-smoking, 78%, and 74% of schools had policies for promoting physical activities.

Though the public as well as private schools have a comparable average score 61 each, 70% of private schools and 45% of public schools have written policies for drinking water. The written policies for STH and SI are significantly better in public schools, and both sectors have performed considerably well in having written policies for hand washing and sanitation due to the state's WASH initiatives. This is observed across the rural/urban, national level, and grades in schooling.

Both rural and urban counterparts have a comparable average score, 60 and 64, respectively. The clean drinking water policies were way better in urban schools (77% of urban schools compared to 39% of rural schools); however, policies for anti-smoking, anti-alcohol, and SIs were frequently in place among rural schools.

A comparison across schools of different grades shows the higher performance of schools with grades 7-9 with an average score of 68; with all of the schools having written policies for hand washing and sanitation, anti-alcohol and anti-smoking activities; however, only 15% of schools had written policies for first aid. Most of the schools had written policies for the promotion of physical activities across the grades; however, only 29% of schools with grades 4-6 had written policies for promoting healthy diets and only 29% of schools with grades 4-9 and 28% of schools with grade 7-9 had written policies for SIs.

Ainaro had the highest average score of 87, followed by Aileu at 84 and Manatuto at 82, while Lautem had the least average score of 29, followed by 33 for Cova Lima and Bobonaro at 35. Ainaro, the best performing district, have all the school in the district with written policy for sanitation and hand washing, promotion of physical activity, and skin infections. Sanitation and hand washing policies are common in all schools for most districts like Aileu, Ainaro, Baucau, Cova Lima, Dili, Ermera, Liquica, Manatuto and Oecusse. This is followed by written policies for anti-smoking (Aileu, Dili, Ermera, and Manatuto) and promotion of physical activity (Ainaro, Dili, Ermera and Oecusse). Though Cova Lima has the lowest average score, it performs well, with all the schools with written policies for first aid and district Baucau. Written policy for promoting healthy diets remains poor across districts. All the schools in Manatuto had written policies.

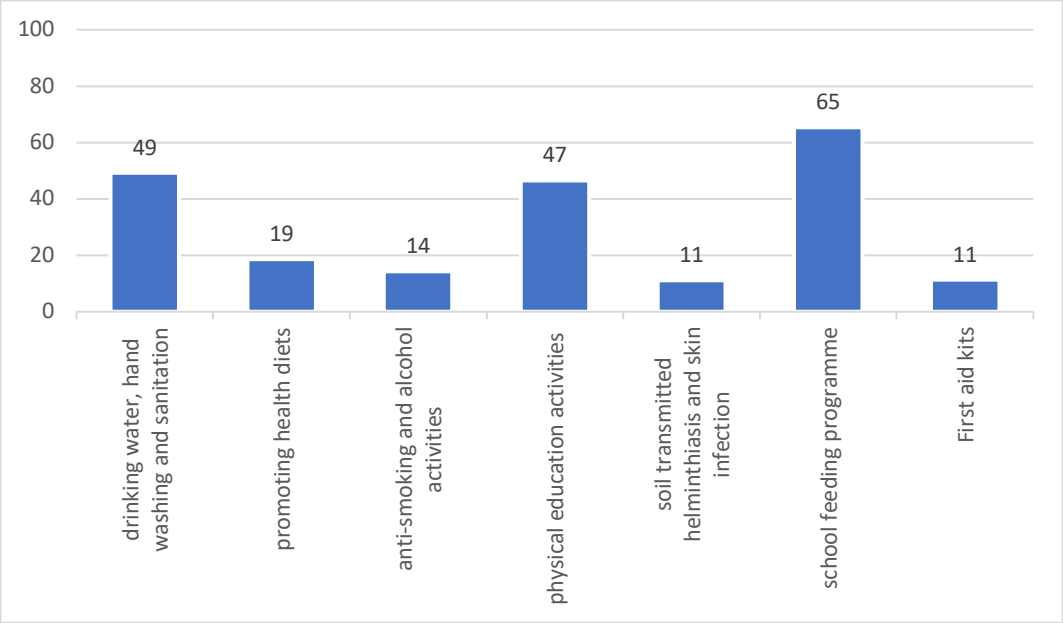
Trained staff for school health program

The delivery of health services can be optimized with skill-based training to reduce the burden on the health system, especially in the less developed country countries. Therefore, national school policies (NSP) suggest the presence of trained staff for various health programs on campus so that seamless delivery of these can be ensured, with regular monitoring and optimization. The training included in the module ensures schools' participation in health promotion, as it maximizes the potential in a local context. The NSP includes trained staff for WASH, right-eating habits, anti-abuse, and health promotion activities.

The provision of trained health staff across Timor-Leste has an average score of 59, with 65% of schools having trained staff for mid-day meal programs and 11% having trained staff for STH&SIs, and first aid services is a grave matter of concern. Almost half of the schools have trained staff for WASH, a

relatively long-running campaign in the country, followed by 46% of schools having trained personnel for physical activities. The promotion of healthy diets as well as anti-abuse activities receives minimum attention here; only 19% and 14% of schools had trained personnel for these activities.

Figure 2.6: Percentage of schools with trained staff in charge of various school health programmes, Timor-Leste 2022



Though public schools tend to have better availability of trained health staff across the services available (average score of 32 against the average score of 23 in private schools), there are more private schools (57%) with trained staff in charge of WASH activities. One-fifth of public schools (22%) had in-charge trained staff to promote healthy diets against less than one percent (0.8%) of private schools. Therefore, there is an immense need to upscale the training program and modules in private schools.

Unlike most health services, the urban areas had a better performance score of 36 than rural areas (29). Except for the availability of in-charge trained staff for WASH in rural areas (51% of schools had trained personnel for WASH), urban schools had comparable or better results. This can be attributed to training being more manageable in urban areas. Two third of rural schools (66%) had trained personnel for noon meals, but only 4% of schools had trained first aid kit personnel.

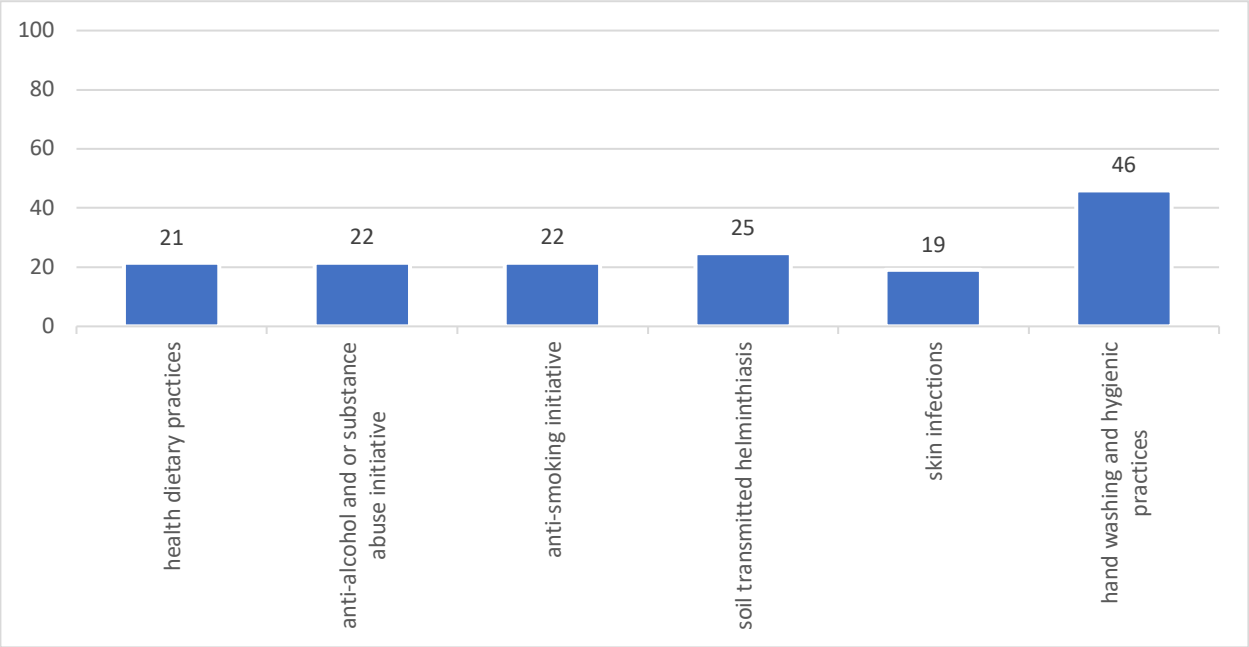
An analysis across schools of different levels shows the highest performance score for the presence of a trained person was seen in schools with grades 7-9, i.e., 40.3 compared to 30 and 27 for grades 4-6 & 4-9, respectively. The majority of schools had trained personnel for noon meals, with the highest present in section 4-9 grades (92% of schools with grade 7-9) and least trained staff were seen in case of personal for STH and SI activities, even though the state has a high burden of these infectious diseases. The availability of trained staff for first aid was the second lowest across the grades. Almost half of schools across grades had staff for WASH activities. Least number of trained staff was seen in schools with grades 4-9.

Evaluating the performance across the districts highlights an average score of 80 in Manatuto (all of the sampled schools in the district had trained staff for physical activities, mid-day meals & first aid) with trained staff for health programs, which is followed by Ainaro (80). The anti-smoking activities had a maximum of seven districts where all of the sampled schools had trained personnel, followed by mid-day meals activities (7 districts with all of the schools having trained staff) followed by STH and SI activities (5 districts). Though Bobonaro has a mean score of 64, the district had all the sampled schooled-trained staff for promoting a healthy diet, anti-abuse, STH &SI, and mid-day meal activities. The district of Liquica is a noteworthy mention having trained staff in all the sampled schools for anti-abuse, STH&SI, promoting physical activities and mid-day meals; the state also has a score of 69. The state of Manufahi performed poorly with a score of 25; however, the district had 100% trained staff for promoting physical activities.

Schools with student's committees for health promotion

Community engagement not only aims at maximizing the population-based outcomes but also increases the social capital by capacity building the community. A community that participates in health activities reaps the benefits of improved health awareness as well as better health services. Therefore, involving students in decision-making for health is aimed at creating educated, socially aware citizens actively participating in optimizing health programs. However, the presence of these student committees remains poor across the nation, districts, grades, rural-urban setup, and public-private schools. The mean score of 26 across Timor-Leste is due to the schools having maximum participation in WASH (46% of schools had WASH student clubs) and minimum in SIs (19% of schools); except for WASH, about only 1/5 to 1/4 schools had students' clubs.

Figure 2.7: Percentage of schools reporting existence of student committee/ clubs for promoting school health activities, Timor-Leste 2022



With a score of 28, public schools had a student committee for roughly 1/3rd, while private schools with an average score of 12 had these committees roughly for 1/10th of schools sampled. Both public and private schools had maximum involvement in WASH initiatives, 50% of public schools and 28% of private schools had WASH student committees. The prevalence of these student clubs was found to be poor both in urban and rural counterparts, with slightly better conditions in rural areas (rural 28 and urban 21). The predominance of WASH activities was found here, with 46% of rural schools and 44% of urban schools having student WASH clubs. Only 10% and 12% of urban schools have SIs and healthy diet practice student committees.

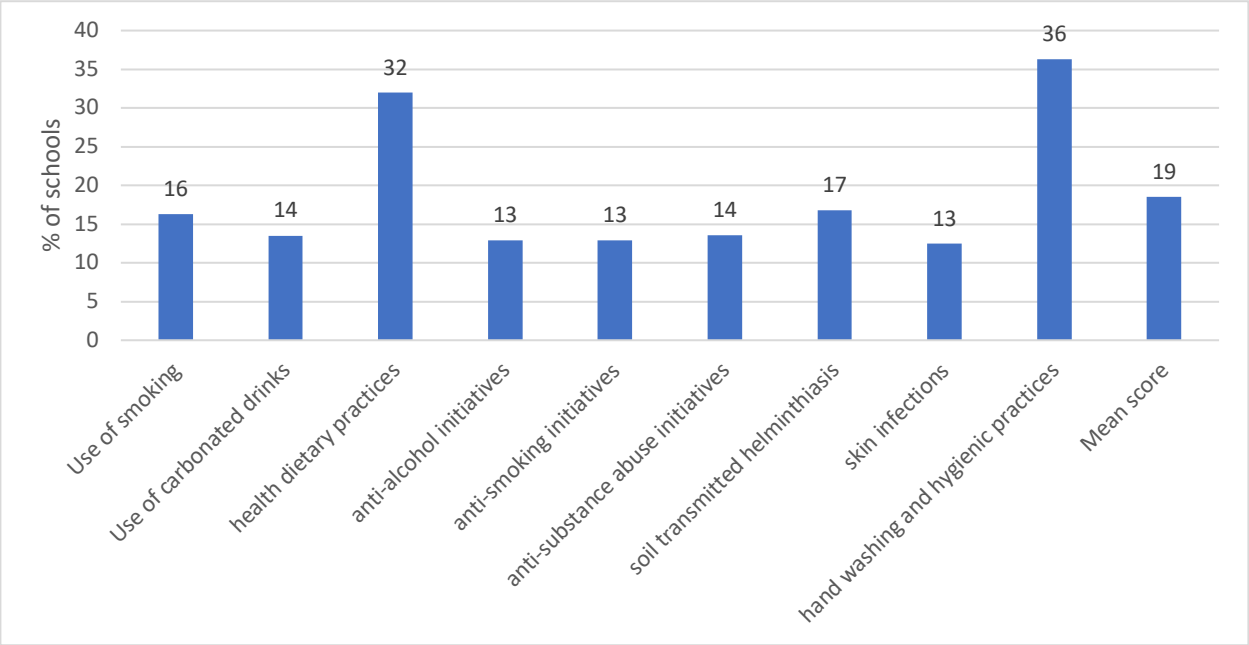
Poor performance across grades was also noted, with an average score of 39 for grades 4-6, 13 for grades 7-9 and 7.9 for grades 4-9. The well-performed sector was WASH having 62% of schools with grades 4-6, 26% with 7-9 and 23% with grades 4-9. The schools with grades 4-9 mainly performed poorly, with only 1% of schools with student clubs for STH and SIs and 5% with clubs for anti-abuse activities. The performance for STH and SI was suboptimal as only 6% of schools with grades 7-9 had these clubs.

The district of Ainaro remains the best performing district with an average score of 71, the district has all schools with WASH student clubs, and most of schools in the district have all other clubs. The districts of Baucau, Bobonaro, Manufahi and Oecusse had no student clubs even for WASH activities. The district of Ermera had a majority of schools with a WASH student committee and healthy dietary practices committee but no schools with STH and SI clubs. Only four districts (Aileu, Ainaro, Dili and Viqueque) had student clubs for STH and SIs.

Community-based organization/NGO collaborations

Several strategic collaborations often facilitate the provision of health, and this is particularly true for low-income countries like Timor-Leste, where the government spending on health is checked by poor economic status. Therefore, intervention by national and international civil society organizations is detrimental to the provision of health services; such collaboration often brings about positive changes and opportunities for sustained assistance for LICs. The work of community-based organizations often augments and optimizes the government program to build capacity for delivering population-based outcomes, which have been emphasized in public health literature. Such collaboration was found to be poor at the national level with an average score of 19 across all districts. Maximum associations were seen in WASH activities with 36% of schools having them, followed by 32% of schools having NGO collaborations for dietary health practices. Still, only 14% of schools had NGO collaboration against the use of carbonated drinks, which is currently a matter of concern in the nation. Poor collaborative efforts were seen for SIs and anti-abuse activities (only 13% of schools had a collaboration for anti-alcohol and substance abuse while 16% of schools had collaborations for anti-smoking activities). Despite being a tremendous avoidable disease, STH and SI is still poorly focused upon; only 17% and 13% of schools had a collaboration for STH & SI, respectively.

Figure 2.8: Percentage of schools having partnership with NGOs and community based organizations for various health promotion activities, Timor-Leste 2022



Analysis across the public and private schools, though the public schools have done better than private schools, both performed inadequately. Public schools had an average score of 20 compared to 11 of private schools. The collaboration for WASH in public schools was double that of private schools in the sample (40% of public schools had collaborations with NGOs compared to 16% of private schools), and less than 10% of private schools had (apart from collaborations for WASH and anti-smoking activities) had NGO collaboration for school health services.

Contrary to other health activities, the urban schools had a better collaboration with an average score of 25, compared to rural areas with an average score of 16, with 46% of urban schools having collaboration for WASH and 40% of urban schools for anti-smoking activities compared to 32% and 7% or rural schools respectively. The collaboration for right dietary practices was seen better in rural Timor-Leste (38% of rural schools) compared to urban schools (16%); however, 35% of urban schools targeted sugary carbonated drinks (compared to 5% of rural schools). When we divide schools by grade, schools with grade 7-9 performs better with an average score of 28, followed by 22% or schools with grade 4-6, while schools with grade 4-9 perform much less (only 5%). Less than 2% of schools with grades 7-9

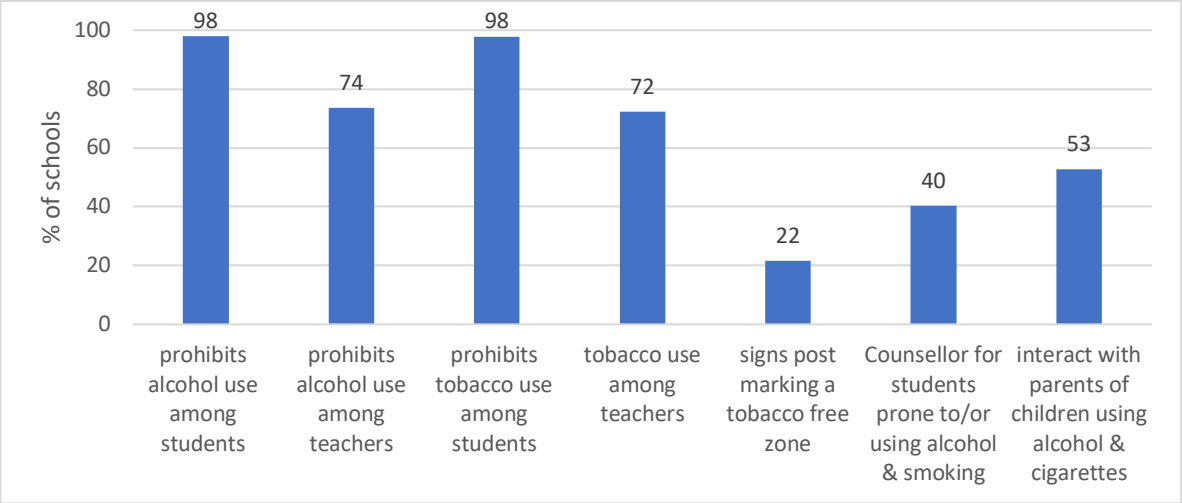
collaborated with NGOs, while 55% and 42% of schools with grades 7-9 interacted with NGOs for WASH and anti-smoking activities.

Like many other health activities, the district of Aileu performed the best (average score 91) in establishing community based collaborations with all of its sampled schools in WASH, STH&SIs, anti-abuse activities, and health dietary practices. Aileu was followed by Ainaro, which had an average score of 66. Bobonaro and Manufahi had no collaborations in the sampled schools, followed by the district of Cova Lima and Lautem, which had minimal collaborative average scores (1.2 and 1.6).

Prohibition of alcohol and tobacco use on school premises

Tobacco and alcohol abuse often begins in early adolescence, turning teenagers into chronic abusers and creating a population with high-risk factors for NCD. These substances are often sold near school playgrounds and campuses, making easy access for the adolescent population, who often have grown up seeing its frequent use in their households. Therefore, creating awareness regarding their abuse through a tolerant amiable environment alongside calculated framing of anti-abuse policy must be optimized. Like other LICs, Timor-Leste faces a high burden of tobacco and alcohol abuse; hence, the policy must target interventions at the school level to ensure its population-based reduction. The use of alcohol and tobacco are prohibited in the school campus in the nation; therefore, an average performance score of 65 can be observed across Timor-Leste, with 98% of schools restricting their use among students and 73% of schools prohibiting it among teachers (74%-prohibits use of alcohol while 72% prohibits the use of tobacco). However, only 1/5th of schools was found to have tobacco-free zone signs posted (22%); therefore, an increased effort towards information education and communication, and survey around the school is indispensable. The interaction with parents of children who were found to be users of tobacco and alcohol was 53%. i.e., only half of the schools made such interactions and about 40% of schools referred children using or prone to abuse of these products to a counsellor.

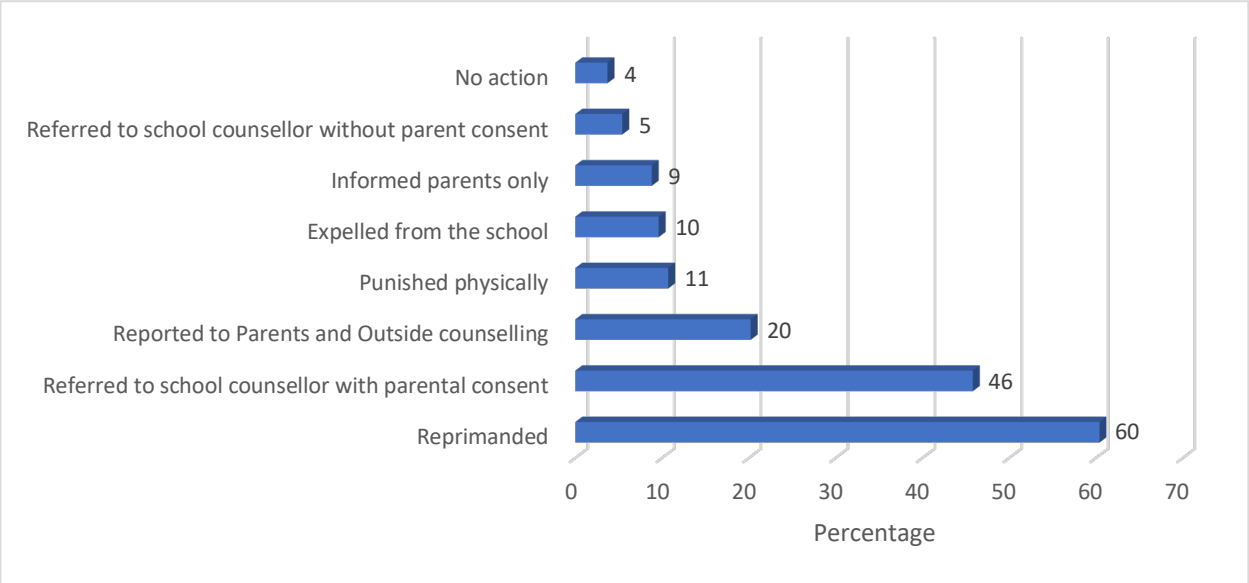
Figure 2.9: Level of prohibition of tobacco and alcohols in the school, Timor-Leste 2022



As regard prohibition, we found comparable average scores in government and private schools (61-Public schools and 88 private schools); however, private schools performed better. In fact, almost all private schools prohibited the use of tobacco and alcohol among students as well as teachers. While government schools did reasonably well in banning its use amongst children, only 68% of schools prohibited the use among teachers too. Four-fifth of private schools (81%) referred students to counsellors against 33% of government schools. Comparable results were seen in urban-rural setups (the average score of rural schools-51, while that of urban schools is 59). However, when we analyse across grades, schools with grades 7-9 performed better with an average score of 84 compared to schools with grades 4-6 (56) and 4-9 (74). While prohibition among students remains the best, poor prohibition among the teacher is seen particularly for schools with grades 4-6 (58%). Schools with grades 7-9 interacted better with parents than schools with grades 4-6.

The district of Lautem performed best with an average score 88 with all of the sampled schools prohibiting the use amongst teacher and students this was followed by Manufahi with an average score of 87. The district of Bobonaro performs the poorest with an average score of 50, here all of the sampled school prohibited the use amongst students but the focus on staff was poor.

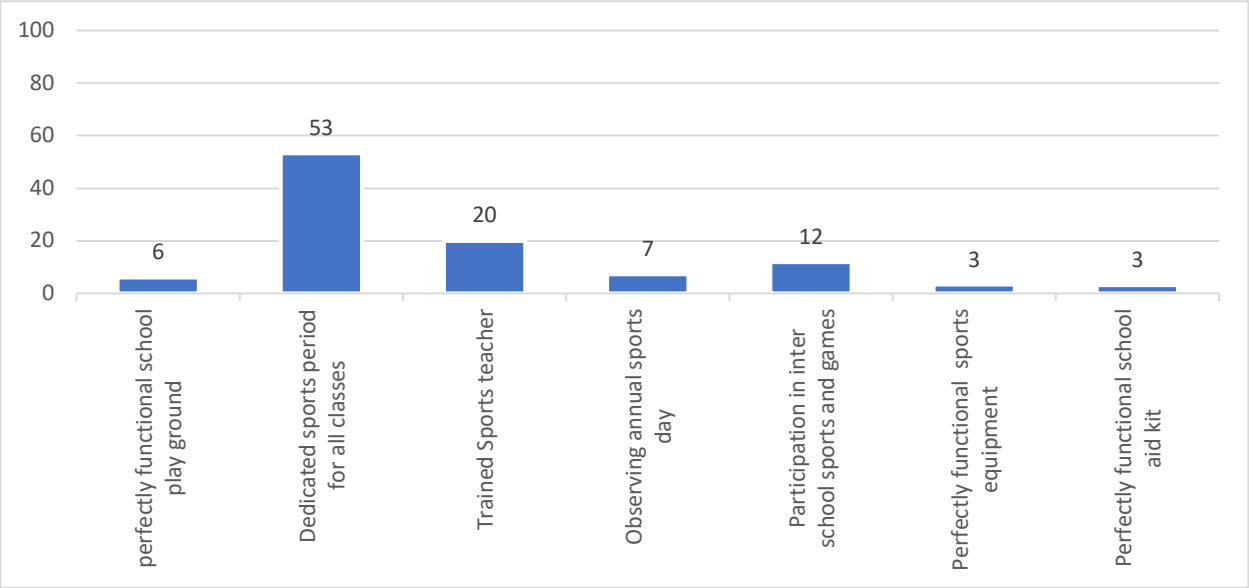
Figure. 2.10 Actions taken by the school if students smoking or consuming alcohol on school premises, Timor-Leste 2022



Promotion of physical activities in the school

Rising sale of packaged and bottled food items being frequent in urban space, the intake of refined carbohydrates, and reduced physical activities have their own implication towards a population with risk factors for several chronic diseases. With the onset of an era of digitalization, physical activities amongst adolescents have taken a hit, and the condition in LICs is not much different. Therefore, policies focus on building habits to promote physical activities, with a growing concern on malnutrition that involves over-nutrition as well. The rising trend in consumption of sugary carbonated drinks paired with low physical activity is a matter of concern, as the national average score for the promotion of physical activities is only 16. Much of the score contribution comes from 53% of schools having dedicated sports periods for all classes. Roughly 20% [of] schools have trained sports teachers while 20% of schools have an untrained teacher for sports, while only 12% of schools participate in interschool sports competitions. The nation's performance remains poor in physical activities promotion given that only 6% of schools across Timor-Leste had perfectly functional playgrounds and merely a hand full of schools had perfectly functional sports equipment and school aid kits (3% each). The poor emphasis on physical activity is revealing based on the assessment wherein only 7% of schools have designated annual sports days.

Figure. 2.11 Percentage of schools with amenities for promoting sports and physical activities, Timor-Leste 2022



In this section, a vast difference in the performance of the public and private schools is not seen; their performance indicators show comparable values (16-Public and 19-Private). While 76% of private schools have dedicated sports teachers for all classes against 49% of public schools, equipment availability was found in only 0.8% of private schools against 4% of public schools.

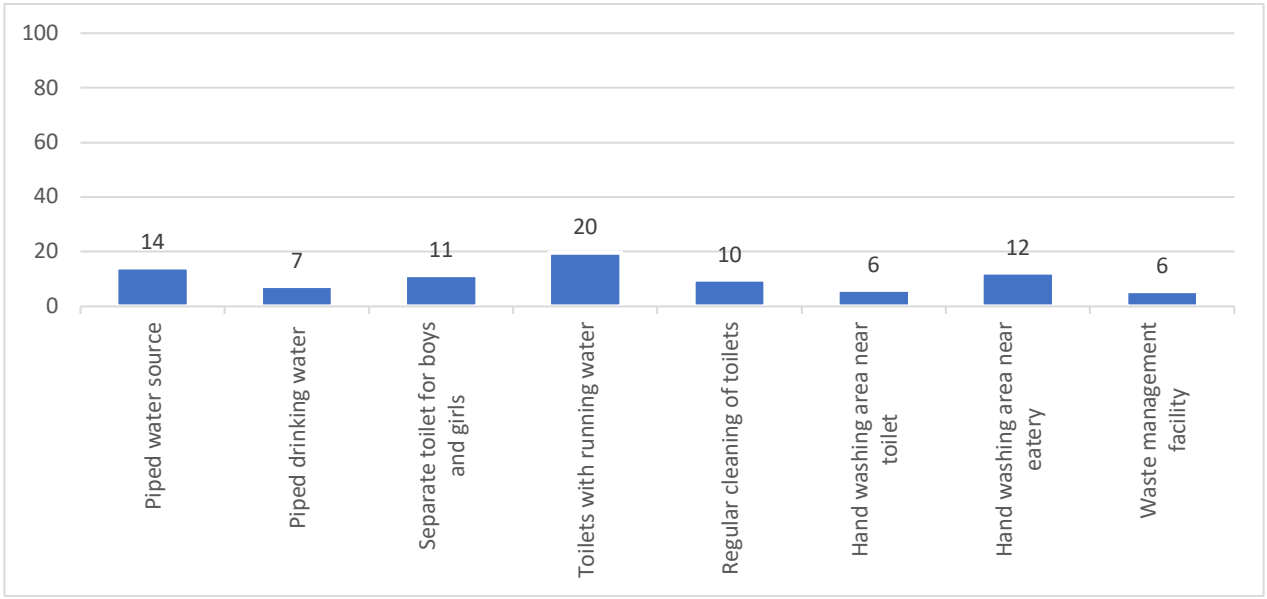
Comparable average scores (21&21) were seen for schools with grades 7-9 and 4-9. However, schools with grades 4-6 had an average score of 9 only. Most schools across grades performed poorly when it came to the availability of functional school grounds, equipment, and first aid kits but performed reasonably well in the availability of dedicated school periods and sports teachers (trained and untrained).

When comparing across the districts, a majority performed poorly, with the highest performing district having a score of 41 i.e., Dili, while Liquica had an average score of six. The availability of school first aid kits was inferior, especially in schools of Cova Lima and Bobonaro. This was also observed in Bobonaro, and Cova Lima having limited functional playgrounds. However, the provision of sports periods was generally found to be good (53% of schools in Timor-Leste), but only a few schools in Aninaro and Liquica had them.

Amenities for drinking water, sanitation, and hygiene in the schools

WASH has been one of the longest-running initiatives in the country; since its inception, the program has focused on augmenting the availability of safe drinking and washing water. The initiative has multiple facets, including control of STH, decreasing absenteeism in children due to diarrheal diseases and increasing educational adherence in adolescent girls. The availability of palatable water, safe and separate toilet facilities with running water, regular cleaning of washrooms, promotion of hand washing habits and tactical water management are the pillars of the WASH initiative in school. Hence, we judged the performance of the school on these parameters. Though the initiative was long-standing, the performance across the nation was poor, with an average score of just 11, only one-fifth of schools had toilets with running water and merely 14% of schools had piped water sources. Poor waste management facilities were seen, with only 6% of schools having them. Separate toilets for girls and boys were found in 11% of schools with only 10% of schools regularly cleaning toilets we found only 6% of schools having hand washing facility near the bathroom. Piped drinking water was available only in 7% of schools and 12% of schools had hand washing facilities near the eatery.

Figure. 2.12 Percentage of schools with fully functional amenities for drinking water, sanitation and personal hygiene, Timor-Leste 2022



The shortage of WASH amenities was seen more in public schools than private schools, with private schools having an average score of 25, the public school had a score of 10. Private schools were better at ensuring hand washing facilities near eateries (36% of private schools compared to 7% of public schools) and toilets with running water (i.e., 44% of private schools compared to 14% of public schools) as well as the availability of piped water source (36% of private school against 9% of public school). Public schools were better in ensuring separate toilet facilities (14% of public schools) than private schools (1% of private schools).

When comparing rural-urban setups, not much difference was observed; rural schools had an average score of 10 against 12 of urban schools; however, waste management facilities were much better in urban setup (13% of urban schools had a waste management system against 2% or rural schools) as well as the availability of piped water source and hand washing facility near the toilet. Rural schools performed better in the case of toilet with running water (rural-22%, urban 15%) and hand washing near eatery (rural 14%, urban-9%).

Analysing the grades in school shows a better performance of schools with grades 4-9 with an average score of 20 against schools with grades 4-6 having a score of 10, while schools with grades 7-9 perform the poorest with a score of 3. While 21% of schools with grades 4-6 had a waste management system, hand washing near eatery was available in 31% of schools with grades 4-9. No schools with grades 7-9 had separate toilet facilities, regular cleaning of toilets and hand washing near the eatery.

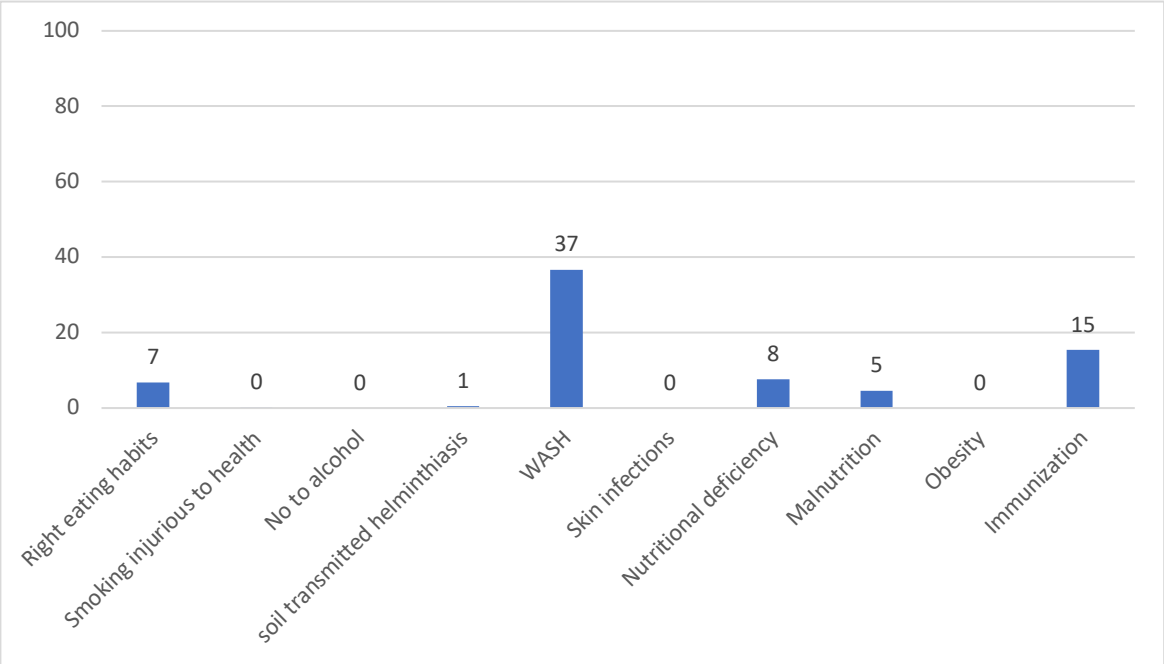
A deplorable state of toilet facilities, drinking water and waste management were seen in the districts of Aileu, Ainaro, Dili and Lautem (each having a total average score of zero). Districts that performed marginally better were Manatuto (average score 15), Baucau (13) and Liquica (11).

Health Promotion, Posters, and communication

The IEC activities serve as an excellent means to spread awareness and reiterate the importance of the health initiative. The posters used are often eye-catching and provide necessary information on the issue; when these are published in the local language, they are easy to comprehend and help in achieving the desired goals. Designing a poster for children in primary and secondary school is quite challenging and often requires explaining it to them by teachers or trained staff to increase its efficacy,

nevertheless its presence in the campus is a prerequisite to draw their attention to health-building habits and warn them about harmful practices of abuse and diseases.

Figure 2.13: Percentage of schools with school health promotion related posters, Timor-Leste 2022



However, the performance of schools across Timor-Leste was poor in this regard, hence an average score of 7; the schools were judged on the presence of at least one clear and easy-to-understand poster. Even the long-standing WASH program had only 37% of schools of the nation having such posters, followed by immunization posters in 15% of schools. Among all 65 sampled schools, there were no posters regarding obesity, SI&STH (0.5% of schools had STH posters i.e., some schools in the district of Oescusse), anti-alcohol and anti-smoking, though these are emerging health concerns facing the nation. 8% of schools had posters for nutritional deficiencies, followed by 7% for right eating habits and 5% for posters for malnutrition.

Though both public and private sectors perform poorly, government schools (average score 8) perform better in comparison to private schools (average score 2); while 44% of public schools had posters for WASH, only 5% of private schools had posters; this was followed by 17% of public schools and 10% of private schools with the poster for immunization. Neither public nor private schools had posters for SIs, obesity, and anti-alcohol initiatives. The rural and urban schools had a comparable

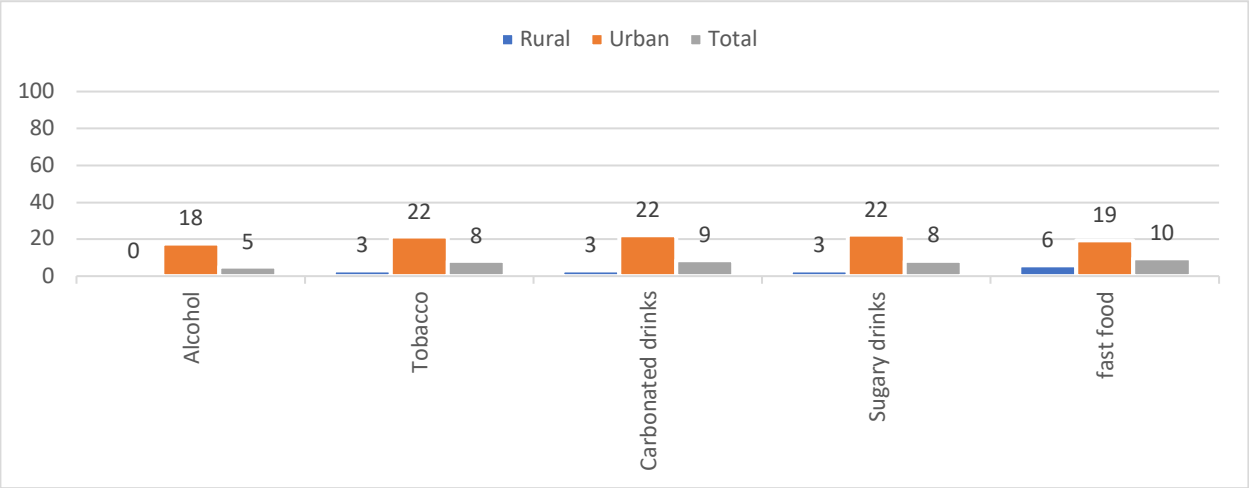
average score of 7, with 43% of rural schools and 23& of urban schools having posters for WASH. The performance across grades was found to be poor as well; however, schools with grades 4-6 performed better (average score 10) compared to schools with grades 4-9 (average score 5) and schools with grades 7-9 with the lowest score of 4. The obesity, SIs, and anti-smoking posters were also largely missing, while WASH posters were comparatively prominent.

The district of Liquica performed slightly better, with an average score of 28, with posters in most schools for WASH, immunization, malnutrition, and nutritional deficiency. This was followed by Ermera (average score 18) and Baucau (average score 15). The poorly performing districts include Ainaro and Lautem, with no posters and Bobonaro, with an average score of less than one.

Exposure of students to advertisements promoting health-related risky behaviours in school surrounding

Increasing acceptance of refined carbohydrates is a matter of growing concern especially in LICs, where prevalent malnutrition and infectious diseases weaken the immune system of children and adolescents. An increased intake of refined carbohydrates and saturated fats with an early onset of use of tobacco and alcohol adds to the level of ill health and addictions in the population. This, combined with the flashy advertisements for carbonated drinks, bottled sugary drinks, locally sold fast food, alcohol, and tobacco, ensure their easy and early uptakes. The survey team did an observational analysis of such advertisements in the vicinity of school to look for ads of these health-related risky behaviours in general. The average school score in this section was 8 at national levels, with 10% of schools having ads related to fast food and 9% of schools having ads related to carbonated drinks. Advertisements for sugary beverages and tobacco were seen near 8% of schools each, while only 5% of schools had advertisements related to alcohol near their campus.

Figure 2.14: Percentage of schools having the following advertisements in front or near to the entrance to the school, Timor-Leste 2022



About 9% of public and 4% of private schools had these advertisements near the schools. The advertisements for fast food were seen near 11% of public schools compared to their availability of 2% near private schools. The urban-rural divide was prominent here; 21% of urban schools had these advertisements in their vicinity compared to 3% of rural schools. In fact, 18% of urban schools had advertisements related to alcohol in their vicinity compared to no rural schools having them.

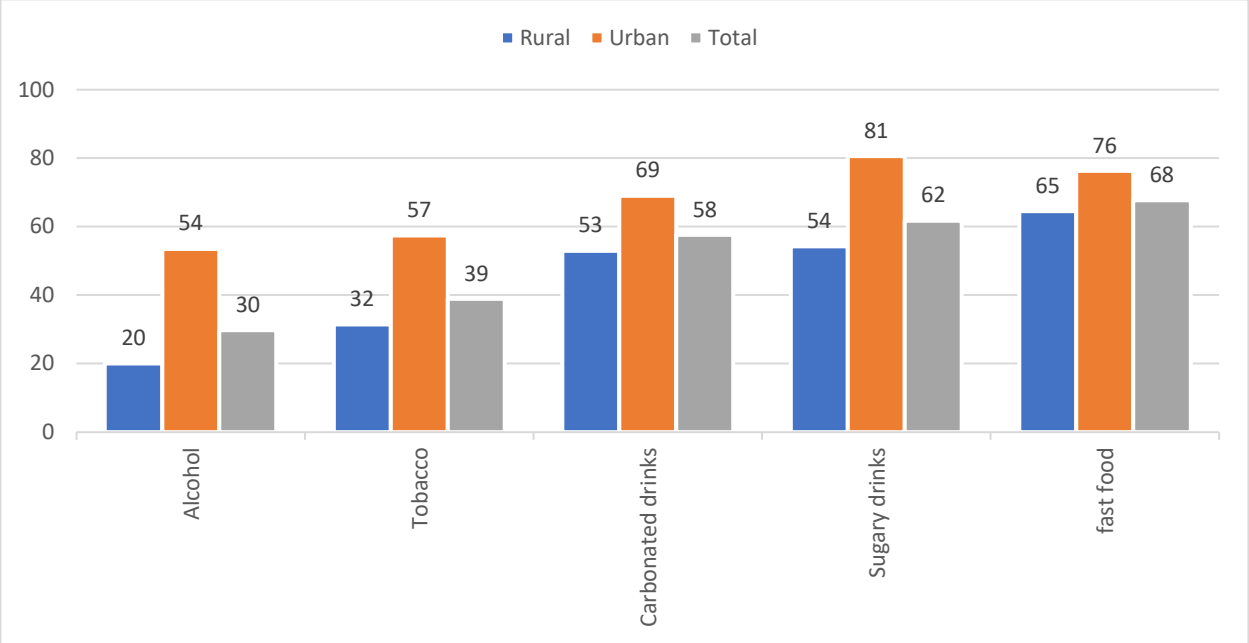
Schools with grades 7-9 having adolescent children had more advertisements near their campus 15%, compared to 5% of schools with grades 4-6 and 9% of schools with grades 4-9. Therefore, adolescent students were targeted more compared to primary schools and schools with primary and secondary grades.

A comparison across districts shows a high presence of these advertisements in the district of Lautem, having an average score of 50, i.e., 50% of schools had some form of advertisements in their vicinity, and district Dili followed this with an average score of 45; Dili a majority of schools having advertisements related to fast food in their vicinity. The best performing district was Manatuto, Ermera and Bobonaro.

Sale of alcohol, tobacco, and unhealthy diets in school surroundings

Though the national performs well-averting advertisements near schools, identical results are not observed when selling health-related-risky items in the vicinity of schools. These substances' easy availability and accessibility ensure their utilization and easy uptake in children and adolescents. Across Timor-Leste, 68% of schools have fast food near them, while 62% have readily available sugary drinks in the vicinity. This is followed by the availability of carbonated drinks in 58% of schools, tobacco products in around 39% of schools, and alcohol in around 30% of schools. Their easy access drives the rising trend in their uptake in population and therefore policy-based interventions with multisectoral collaborations are the need of the hour.

Figure 2.15: Percentage of schools having the sale of the following in front or near to the entrance to the school, Timor-Leste 2022



The availability of these substances across public schools is twice more in case of alcohol, tobacco, and sugary drink and thrice more in the case of carbonated beverages. Across the rural-urban divide, easy access is seen in urban areas, with the availability of fast food as high as around 76% (of urban schools) and 80% of schools had sugary drinks sold in their surrounding areas.

When we analyse across the grades, a higher presence of these substances was seen across schools with grades 7-9, with 75% of these schools having sugary drinks sold and 42% of schools having alcohol sold around them. Schools with grades 4-9 performed comparatively better but still had 66% of schools with fast food sold around them.

A comparison across the district shows almost all of the schools in the district of Dili sell fast food and sugary drinks and almost all the sampled schools in the district sold alcohol around them. The district Viqueque had no schools with alcohol and tobacco sold near them, while Ermera had all the sampled schools in the vicinity of tobacco and alcohol shops.

Chapter III

Teacher's: Attitude and Perceptions

This section examines the teacher's knowledge, attitude, and involvement in school health - activities in the baseline period. The classes were randomly selected from list of all classes in the selected schools. The concerned teachers too were randomly selected who responded to the survey.

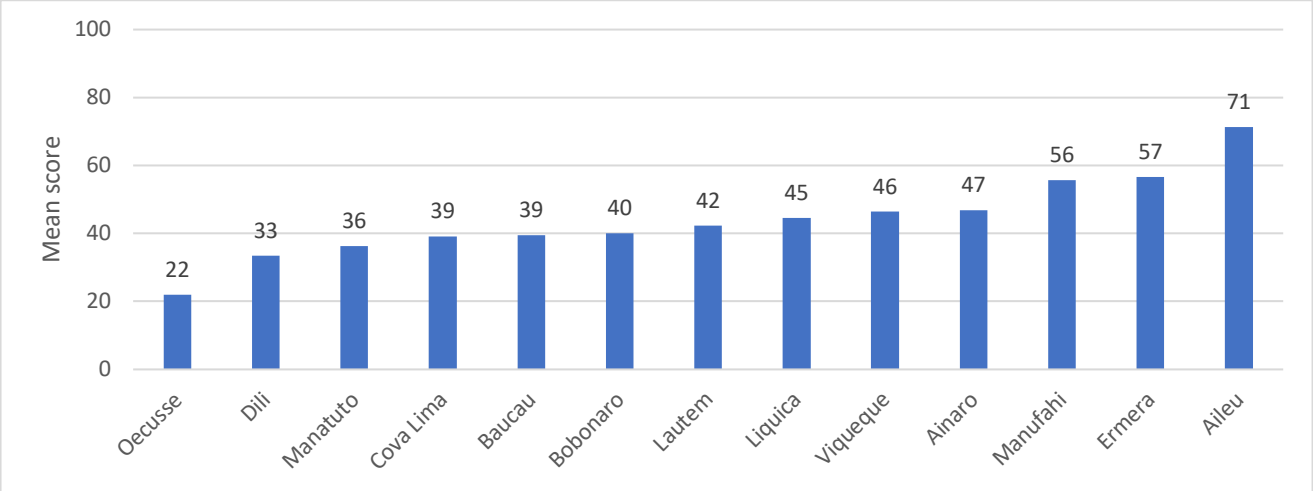
Teacher's characteristics

More than half of the class teachers were aged over 40 years. Share of male teachers (52 percent) was marginally higher than female teachers (48 percent). About 69 percent of teachers were from schools located in rural areas and 31 percent from those in urban areas. Majority of them were from the government schools (86 percent). About 74 percent were class teachers in grade 4-6 and 26 percent in grades 7-9. This characteristic description of teachers in our sample does indicate a desirable representation of the schoolteachers in the country as a whole.

Provision for school feeding programme

The school need to have a staff officially responsible for managing or coordinating the existing school feeding program. About 80 percent of the teachers reported that they had a staff designated for this activity and this was reported to be limited in the private/catholic schools (20 percent). Enquiries were also made from the teachers as to whether clean drinking water, fruits, vegetables and milk or milk products are part of their part of your routine school feeding program. Only 45 percent reported provision for clean drinking water and this share was noted to be relatively higher in urban areas (66 percent) than in rural areas (36 percent). About 59 percent of the teachers reported vegetables to be part of the routine school feeding programme, whose availability was more in rural schools than in urban schools. Only 9 percent of teachers reported fruits to be part of regular school feeding programme and similar low proportion was noted in the case of milk/ milk products (19 percent) as well. Mean scores illustrate the large district-wise disparities in implementation of school feeding programme (Figure 3.1)

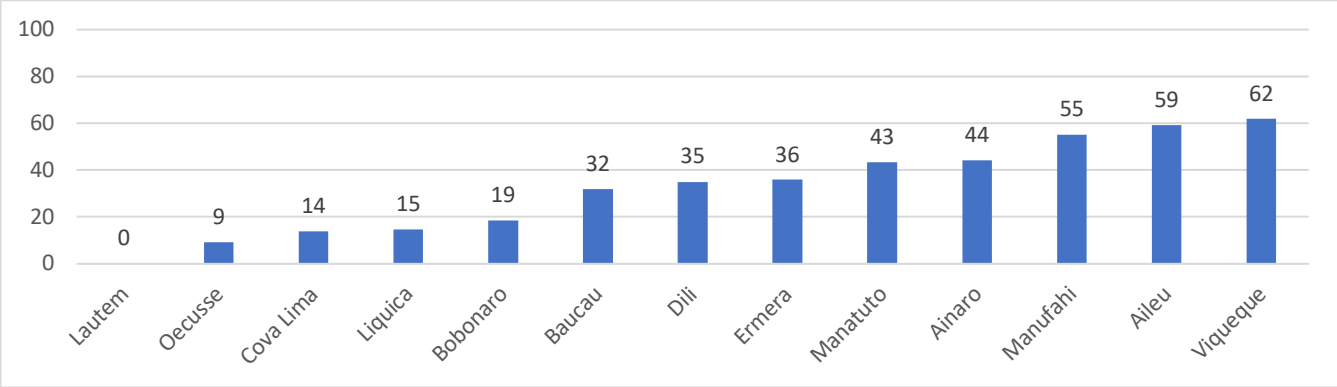
Figure 3.1: District-wise variation in scores for implementation of school feeding programme, Timor-Leste 2022



Promotion of healthy eating and dietary behaviour

The baseline survey also collected information on teacher's involvement in promotion of health dietary habits among the school children. On account of this, questions were asked on whether the teachers have discussed the importance of healthy eating and dietary behaviours in their class in this academic year. In this context healthy eating includes eating home cooked meals, eating seasonal fruits, avoiding packaged food items, avoiding sugary/energy/ carbonated drinks, avoiding salty food, avoiding food with high trans fats. In addition, teachers were asked whether they discussed the importance of balanced diet and hand washing before eating, in this academic year with their students.

Figure 3.2: District-wise variation in scores for teacher involvement in promotion of health dietary behaviour in the students in this academic year, Timor-Leste 2022



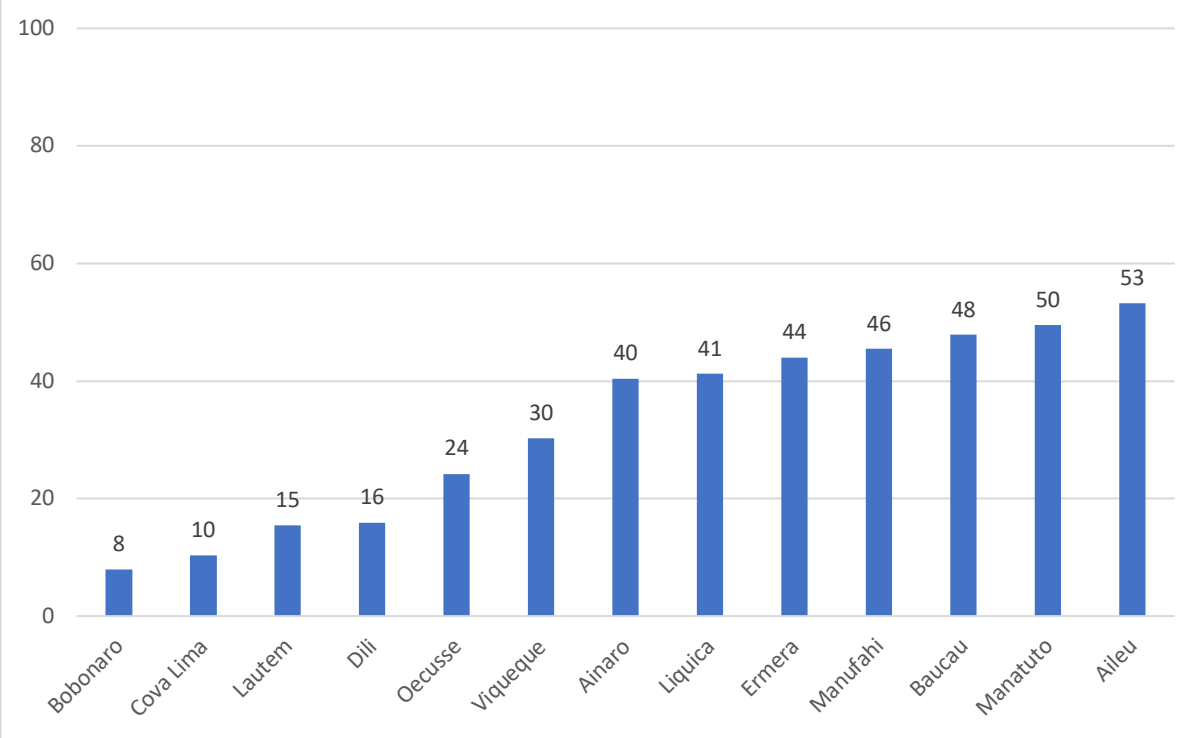
Results (Table 3.3) indicate very limited involvement of the teachers in promoting these healthy eating and dietary behaviours. The teachers from private/charitable schools were ahead of their counterparts in government schools in promotion of these behaviours. Only 64 percent have discussed about the importance of handwashing with their students in this academic year. One out of every 4 teachers have spoken about the need to be engaged in healthy eating habits in this academic year. Teachers in urban schools (score 42) fared better than those in rural areas (score 21) in promotion of the said habits in their schools. According to the teachers, students from districts of Viqueque, Aileu and Manufahi were better performing in this indicator and Lautem, Oecusse Cova Lima, Liquica and Bobanaro were the worst performers.

Participation in nutritional interventions

As assessment on teacher's direct involvement other than discussing the importance of healthy eating and dietary behaviour was also covered in the survey. This is based on their participation in health dietary promotional programs in past three years. Here 3 year reference period was used because of closure of schools due to COVID-19. Only 11 percent had reported to have participated in the same. The participation level reported was comparatively higher in Ainaro, Manufahi and Ermera districts. The second indicator regarding teacher's participation related to their verifying whether homemade food was brought by the students to make sure they bring healthy food. Only 30 percent were reported to be checking the homemade food being brought by the students, which was more among teachers from government schools when compared with other schools and in grades 4-6 than in grades 7-9. Inter-district variations in this indicator were distinct as this was

reported to be practiced by 78 percent of teachers in Baucau district, followed by 52 percent in Aileu district, less than 10 percent in Bobonaro, Cova Lima and Dili.

Figure 3.3 District-wise variation in mean score for teacher participation in implementation of healthy dietary intervention in the schools, Timor-Leste 2022



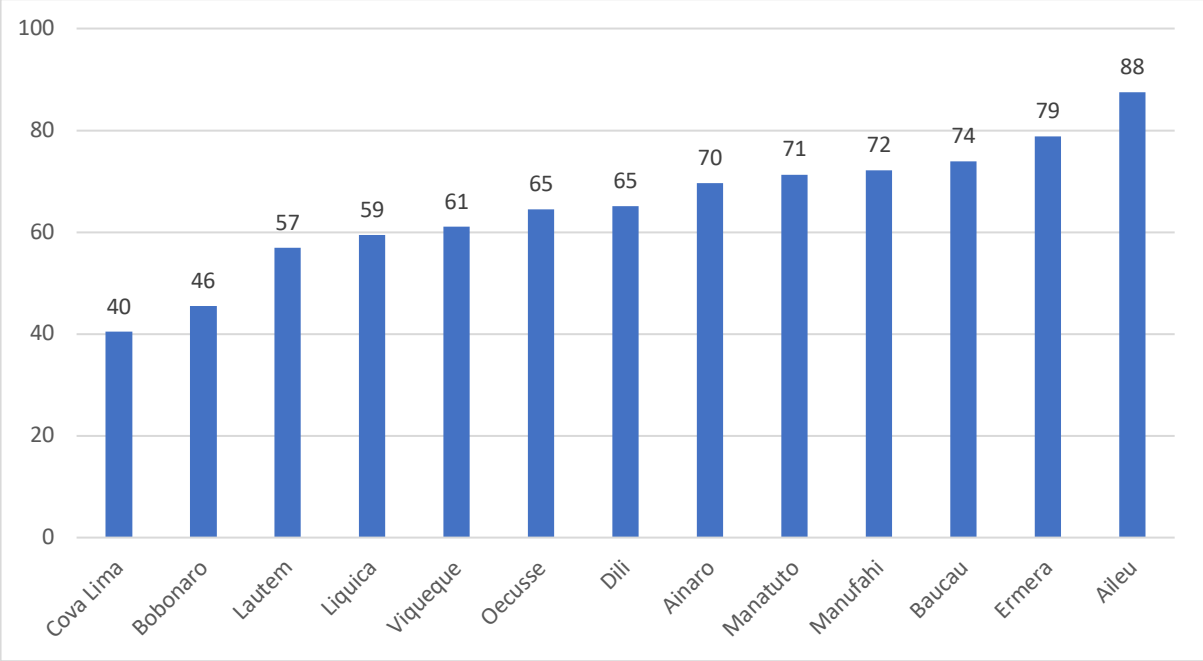
Third is the interaction of teachers with the community health centre (CHC) and health post regarding nutritional activities during the last year. This is expected to provide the frequency of interaction between frontline health care workers and schoolteachers. Here about 60 percent of teachers reported to have interacted in last one year, which again was more among rural teachers than in urban areas and those in charge of grades 4-6 than in grade 7-9. Inter-district variation was notable as the same was at least 90- percent in Aileu, Ermera, Liquica and Manatuto and only 13 percent Cova Lima.

Prevention and control of alcohol use and smoking

Survey enquired about the respondent's involvement in enforcement of prohibition of use of alcohol and smoking among students. The teacher reporting involvement in enforcement of prohibition of use of alcohol and tobacco smoking among students was 77 percent. As can be

expected, participation rate was marginally higher among teachers in higher schooling grade (81 percent) than in lower schooling grades (76 percent). Participation in enforcement was complete in Dili and Baucau, and lowest in Cova Lima and Lautem. Close to two third of the teachers encouraged their students to participate in antiaddiction programs related to tobacco and alcohol use. Higher share among those teaching in higher grades and in rural schools is reportedly encouraging student's participation in anti-addiction activities than their counterparts from lower grades and urban areas. Districts that fared better in teacher involvement in enforcement of prohibition of use of alcohol and tobacco were noted to be behind in encouraging students to participate in anti-addiction related activities.

Figure 3.4 District-wise score for the teacher involvement in prevention and control of alcohol use and smoking, Timor-Leste 2022



Monitoring of smoking and drinking in schools

The teachers were enquired if they inspect students for cigarette or alcohol in last one year (Table 3.6). Only 16 percent of teachers reported to have been involved in such inspections. Such inspections were reported to be more in grades 7-9 (28 percent) than in grade 4-6 (12 percent) and in government schools (18 percent) than private schools (6 percent). About 2.5 percent and 0.4 percent of teachers have reported to have caught students in the school for smoking and drinking

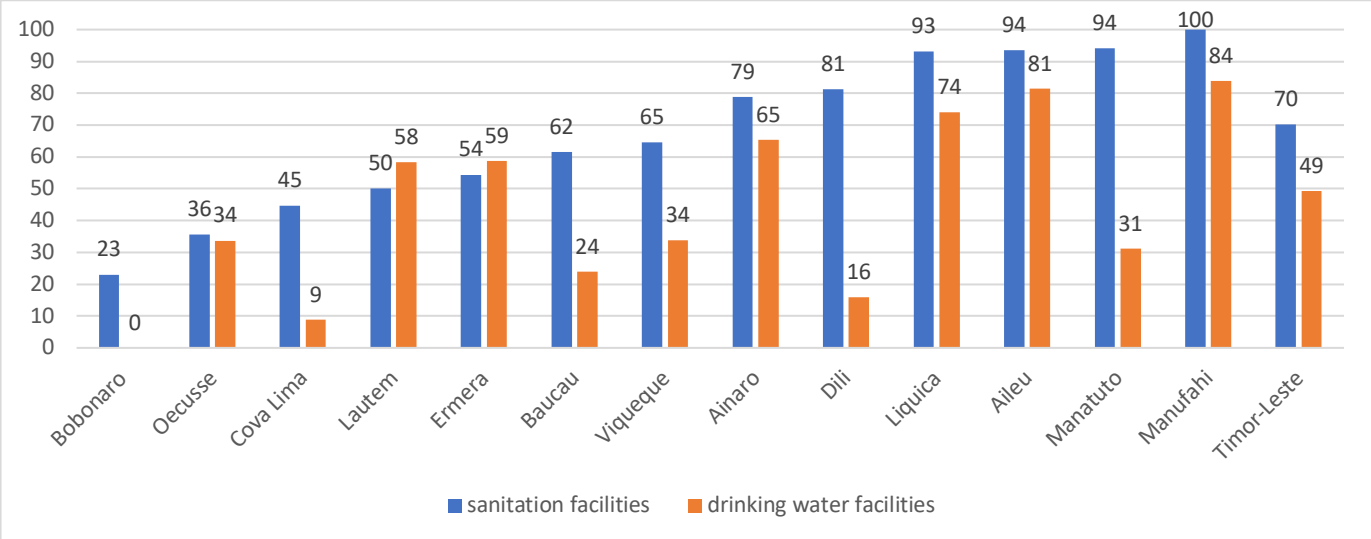
respectively. Those reported to have caught students for smoking was more in private/catholic schools than government schools, urban areas than rural areas and in grades 7-9 than in grade 4-6. Only teachers from Lautem and Oecusse reported that they have caught students drinking in the school, but inspection of students for cigarettes and alcohol was reported to be relatively limited in these two districts. A sizeable share of teachers in Manaufahi, Liquica, Aileu and Dili too have performed inspection of students for cigarettes and alcohol in last one year.

Teachers also reported on the various actions taken by the school when students are caught smoking or consuming alcohol on school premises. The most common action was to refer student to a school counsellor/ de-addiction program with parental consent.

Cleaning of toilets and drinking water facilities

Information on daily cleaning of school's sanitation facilities (such as toilets or latrines) and drinking water facilities in this academic session was obtained from teachers (Table 3.7). Only 70 percent of the teachers reported that the toilets were often cleaned as per the schedule, while 28 percent reported that they were not cleaned as per the schedule. The teachers from private/catholic schools, rural schools, and those from grade 7-9 were more worried about the cleanliness of toilets than their respective counterparts. Manufahi, Manatuto Liquica and Aileu were performing better in this regard while Bobonaro and Oecusse were far behind other districts.

Figure 3.5 Percentage of teachers reporting sanitation and drinking water facilities are cleaned as per schedule, Timor-Leste 2022



Only about half of the teachers reported that drinking water facilities are cleaned as per schedule. Situation is reported to be worse in private/catholic schools (52 percent) than in government schools (31 percent). Teachers for grade 4-6 reported (53 percent) cleaning of drinking water as per schedule than their -counterparts from grade 7-9 (39 percent). Clean drinking water premises were severely lacking in the districts of Bobanaro and Cova Lima, followed by Dili and Baucau.

Involvement in soil transmitted helminthiasis (STH) and WASH interventions

Promotion of proper handwashing practices is considered as one of the cost-effective school health level interventions for prevention of STH. Almost all of the teachers reported to have taught students about the relation between handwashing and STH (Table 3.8). Similarly, most of them have also taught the students on how to do hand washing with soap and running water. About 90 percent of teachers have spoken to students about WASH and STH posters, however school questionnaire showed most such posters displayed in schools were related to handwashing to prevent coronavirus disease (COVID-19). However less than one-third of teachers reported to have conducted regular sessions on handwashing and STH. Regular sessions by teachers about WASH and STH was reported to be more frequent in the government schools (35 percent), rural schools (38 percent) and in grades 4-6 (38 percent). Only negligible share of teachers in Bobanaro, Cova Lima and Dili were conducting regular sessions on WASH and STH in schools.

Figure 3.6 Percentage of teachers conducting regular sessions for students about WASH and STH, Timor-Leste 2022

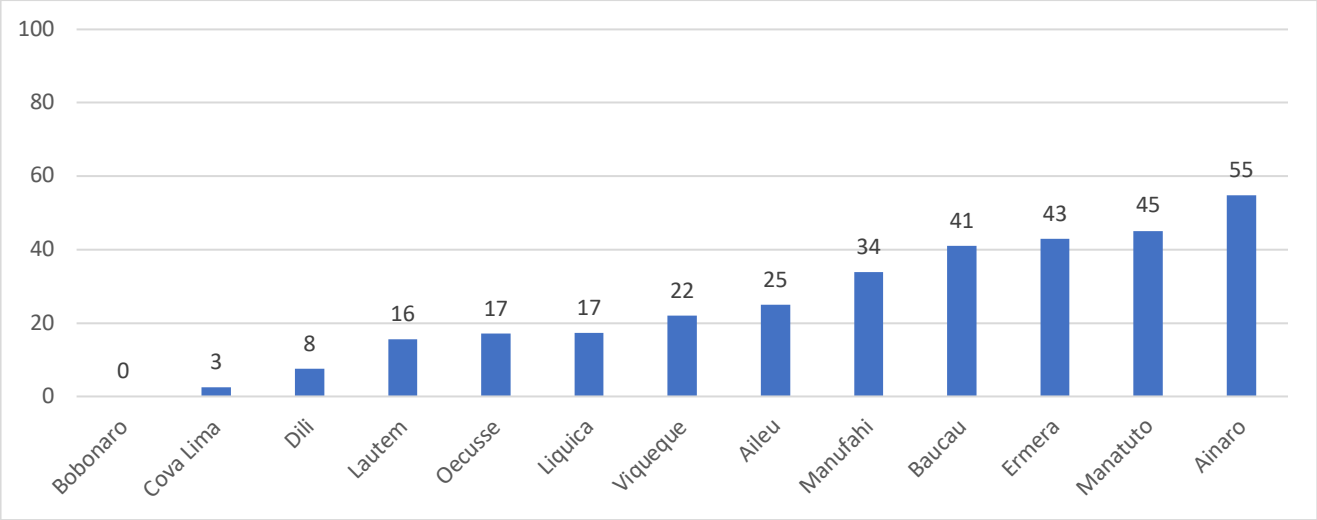
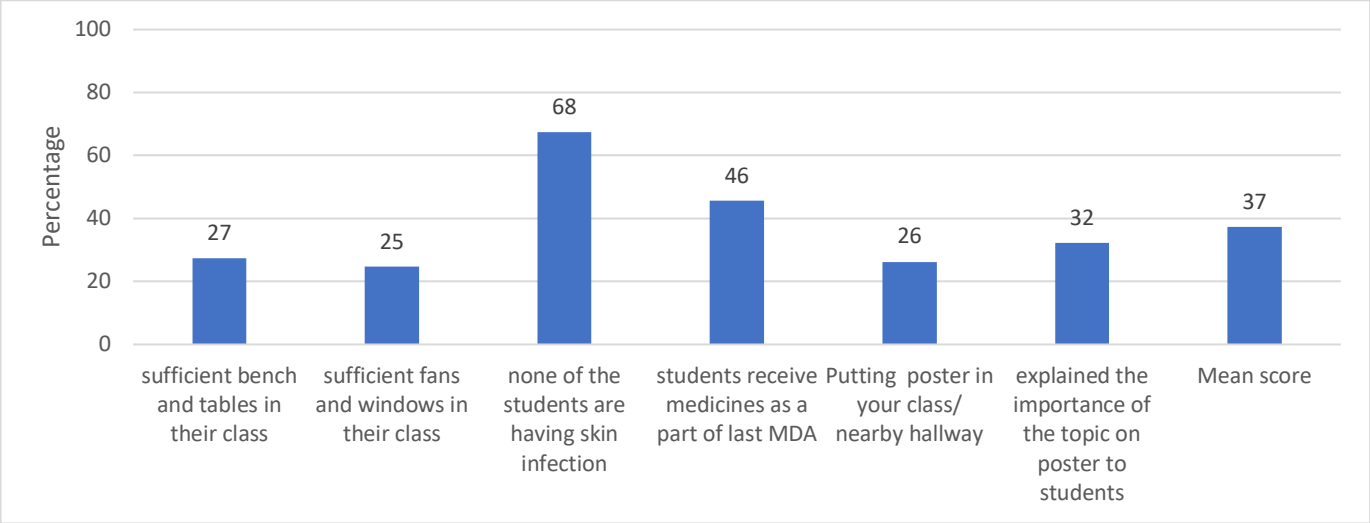
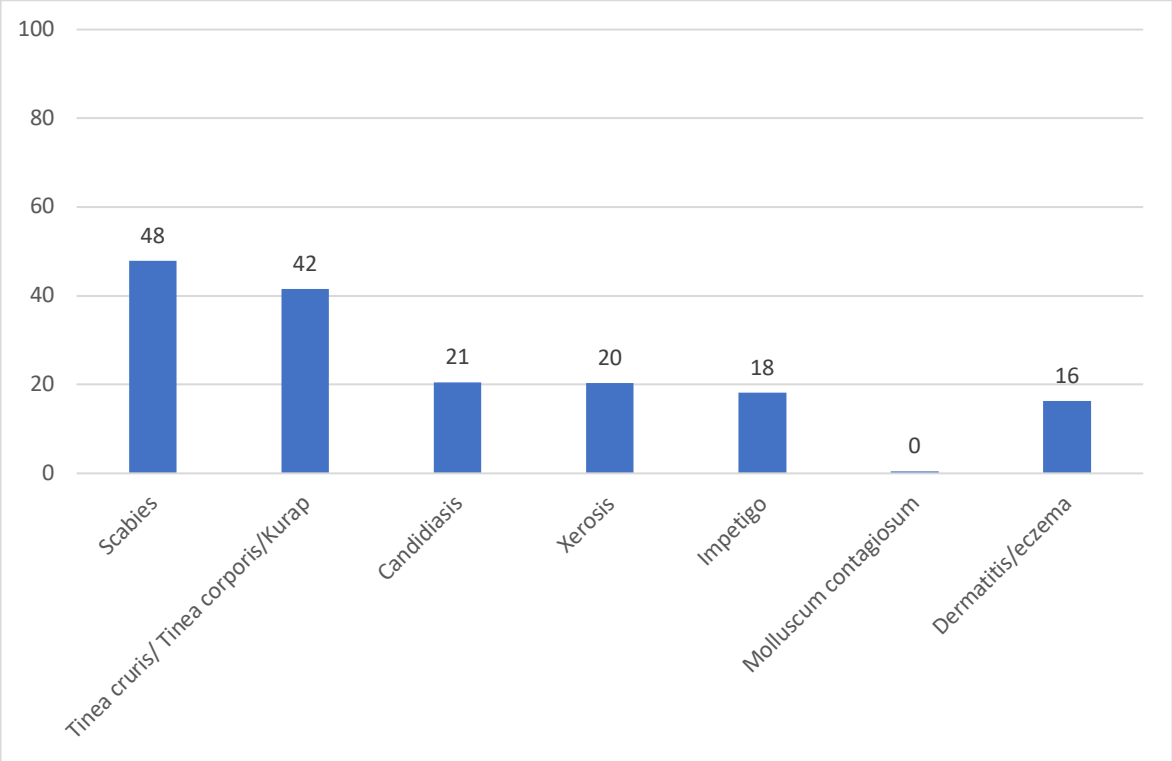


Figure 3.7 Teacher perception on risks of skin infection in students, medicines and educating students on skin infection, Timor-Leste 2022



Students are risk of spreading skin infection if there is crowding of students in the class or insufficient ventilation in the classroom. Availability of sufficient benches and tables is taken as a proxy for crowding and availability of sufficient number of fans and windows is the indicator of ventilation (table 3.9). Only one fourth of the teachers made a positive response when enquired about these two amenities in the classroom. These infrastructure shortages related risk of spreading skin infections were higher in government schools (26 percent and 24 percent) than in private schools (36 percent and 30 percent) and in classrooms for students in grade 4-6 than in grade 7-9. About one-third of the teachers admitted that none of their students are having skin infections, which again reported to be higher in government schools than private schools and reported by teacher in charge of grade 4-6 than grade 7-9.

Figure 3.8. Variation in mean score for teacher self-reported capacity to identify selected skin infection, Timor-Leste



The observation that two third of the teachers reported that none of the students in their class are having skin infections (Table 3.9), indicates that the prevalence of skin diseases in the students. This information is to read in tandem with self-reported capacity of teachers to identify skin infection by seeing in the students (Table 3.10 & Fig 3.8). The teacher capacity in this regard is limited mean score in identifying such disease was 24 percent. Hence likelihood of skin infection is students is reported to higher than that reported in Table 3.9, and there is need to build capacity on teachers' capacity to identify visually identifiable skin diseases in school children for control as well as for promoting earlier medical attention for such conditions.

Teacher perception on facilities for physical activity in the school

According to 69 percent of respondents there is a dedicated teacher in their school to promote physical activities (Table 3.11). Dedicated teacher for physical activities was more in private/catholic schools than government schools, schools in rural areas than in urban area, and for students in grade 7-9 than those in grade 4-6. Most of the schools in Manaufahi, Bobanaro and Cova Lima were having this position but the same was reported to be less than 35 percent in Ermera and

Manatuto. Only 75 percent were having space for students to engage in physical activities. The share come down to 58 percent when teachers were enquired about the availability of equipment's for students to engage in physical activity. About 80 percent of teachers reported regular schedule of physical activity in the school, however only 8 percent reported scheduled physical activity session at least twice in a week. Inter district disparities were severe in promotion of with district like Viqueque, Manatuto, Liquica Ainaro and Aileu lagging well behind districts of Manufahi, Baucau and Bobanaro.

Chapter IV

Student's Assessment at the Baseline

Following the assessment made in the domain of schools and teachers, the final enquiry was focused on children that covered a range of aspects relating to the health intervention along with their individual and household characteristic features. Here most of the outcomes and responses have been analysed against a fixed axis of rural/urban, School type, gender, grade, and districts. Before moving into the details of the reporting by students, we present a brief profile of students in terms their characteristic features.

Students' characteristics

The surveyed count of students amounted to 1966 with gender composition of 45 percent male and fifty-five percent female and an age composition consisting of a majority (61 per cent) between ages 12-14 and 35 per cent of ages fifteen and above. Their rural/urban representation was 69 percent rural and 31 percent urban with the type of school they came from were mainly form govt schools (77 per cent against 23 percent from private/catholic schools. As revealed by the age distribution, their grade profile also was more or less even across grades 7,8 and 9.

The household characteristic feature of the students was comprehended in terms of parental attributes along with the housing condition. The father/mother occupation pattern reveals that fathers were mostly (54 per cent) were engaged in agricultural work and similarly most mothers were home makers (44 per cent). The professional profile of parents was diverse in terms of govt/private job, business, and others. Apart from this attribute, a meagre 25 percent reported to be staying in well-built house leaving a three quarter of them coming from poor quality housing. As regard provisioning drinking water and sanitation in the households, it is apparent that fifty per cent of them have piped drinking water and about thirty percent had access to safe toilet facility. This summarises the deprivation of home environment among majority of the students that makes the school environment all the more significant to make a health intervention (See table 4.2). A wealth quintile variable was created using the following household assets; household structure, improved source of drinking water, improved sanitation, dustbin, air conditioner, washing machine, refrigerator, television, cooler, gas stove, and pedestal fan.

Dietary behaviour

On enquiring about the consumption of food items in four varieties like milk products, seasonal fruits, vegetable, and meat/fish/egg at least four times during the last week, there is an overall prevalence of two third children answering in affirmative of having consumed these food items. Rural students were marginally ahead of urban students in terms of healthy dietary behaviour. There is marginal variation in this outcome across the characteristic axis of gender, type of school and district where in frequency seems to be more in certain districts like Ainaro, Oecusse and few others (See Table 4.3 and Table 4.3a). A similar analysis on consumption of these food items on a daily basis, the prevalence comes down to about 50 per cent except for milk products but variation pattern across the said axis of analysis remains the same.

Figure 4.1. Percentage consuming the following healthy food items every day in last 7 days, Timor-Leste 2022

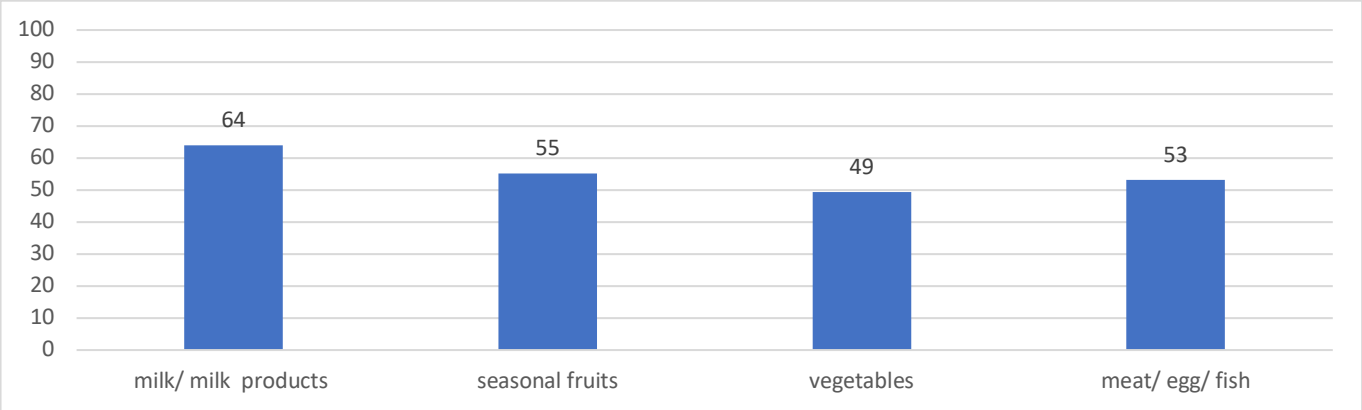
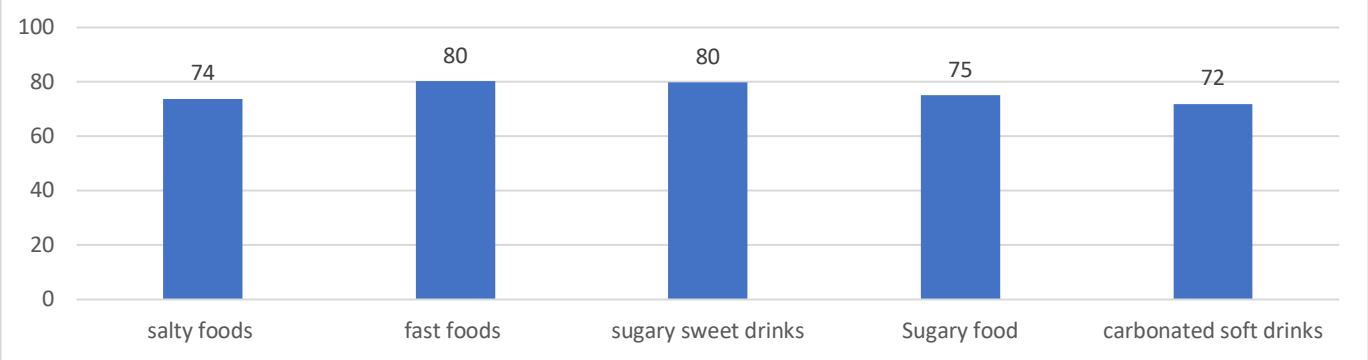


Figure 4.2. Percentage consuming the following unhealthy food items more than once in last 7 days, Timor-Leste 2022

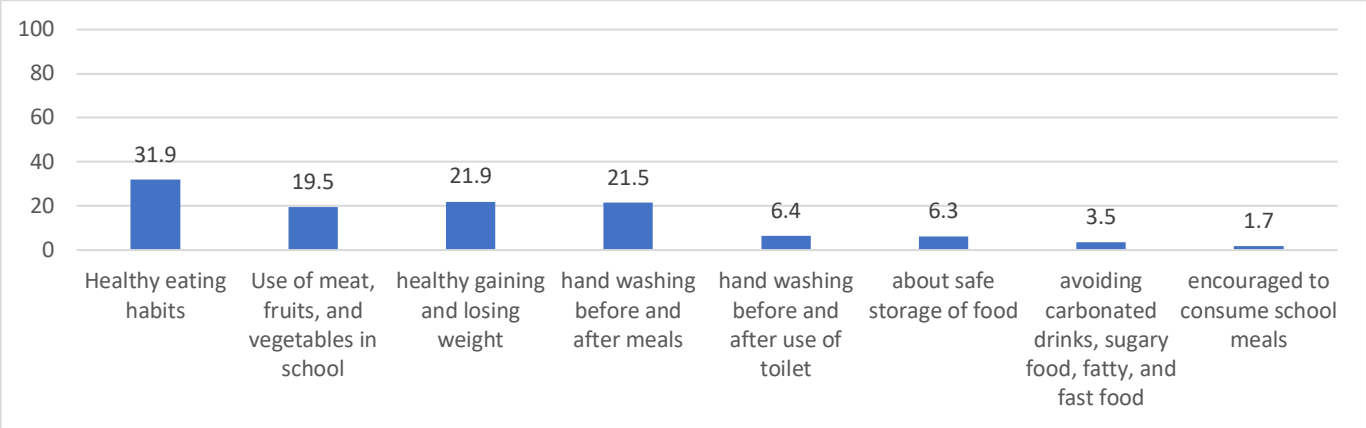


Consumption of high salt, high fat, sugary/ carbonated drinks is observed among more than seventy per cent of the children and fast food and sugary drinks is even to the extent of eighty percent. About three fourth of the students were indulging in consuming these high salty/sugary food or carbonated/sugary drinks every week (see Table 4.4). Exposure to these unhealthy food items was below 70 percent in Lautem and Ermera and above 80 percent in Ainaro and Oecusse districts.

Promotion of health diet intake and eating habits in the schools

Given the food habits of children in terms their consumption of fast food and sugary drinks etc, it is evident that there is an expected consequence of the same on their long-term health and nutritional make-up. On recognition of the risk of long term NCD in life course and its ill-health implications, there is every need for making the school health programme vibrant and functional to serve as a remedial step towards prevention of its long-term consequences. While enquiring on the preventive measures in the form of awareness formation in this regard among school children, there is very meagre share of children reporting on its learning at the school. For instance, 32 per cent of children report learning on healthy eating habits with minor characteristic variation. The details of enquiry on a range of healthy habits like consumption of a balanced diet, avoiding certain food items and adopting hygienic habits like hand washing before and after and meals along with recognition of ideal gain/loss of body weight being taught in the schools obtains an aggregate score of 11.6 which is quite poor given that many components of teaching besides healthy eating habits remain overlooked in so far as their being informed to the students in school. Surprisingly this average score displays least variation across the five axes of analysis i.e., school type, rural/urban, gender, school grades and districts (See Table 4. 5).

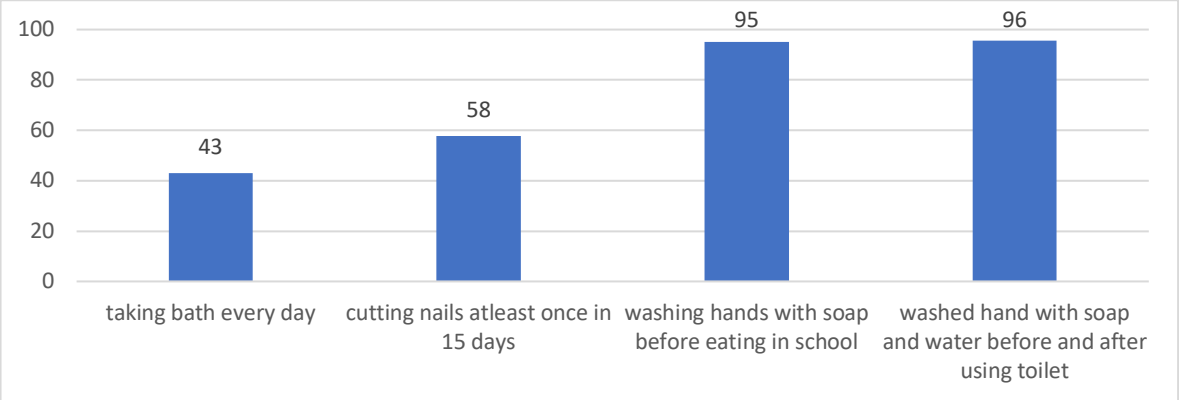
Figure: 4.3 Percentage of students reporting exposure to promotion of healthy eating and dietary behaviour in their school, Timor-Leste 2022



Personal Hygiene

Despite the poor information transmission on healthy practices to the students in the school, the practice of basic hygienic habits like having bath every day, cutting nails in periodic intervals, use of soap in hand washing practiced by the students returns a desirable score of 72.9 on the whole. This score suffers from a clear deficit in two domains of healthy practice like having a bath every day and cutting nails in periodic intervals which is qualified by about fifty percent of children. It may be arising out of their living conditions compromised in terms of provisioning of water. Variations in this score across districts ranges between 80.8 in Ermera against 63 in Baucau. Such a wide regional variation should be noted as the determining factor of differential adoption of hygienic habits among school children (See Table 4.6).

Figure: 4.4 Percentage of students reported the following hygienic practices in last 30 days, Timor-Leste 2022



Menstrual hygiene related practices in girl students

Furthering this enquiry on hygienic habits among girl children regarding menstrual management with information on use of sanitary pads to the kind of impact it has on their school attendance and facilitation for the same in the school, an average score of 68.5 is obtained overall. This score had an advantage among urban children then rural ones and was found to be better among the older girls as depicted by the higher-grade students obtaining a better score. Besides, this score did show a variation across districts with the poorest being Oecusse and the best being Baucau (See Table 4.7 & Table 4.8).

Figure: 4.5 Percentage of girl students who have started menstruation reporting the following practices, Timor-Leste 2022

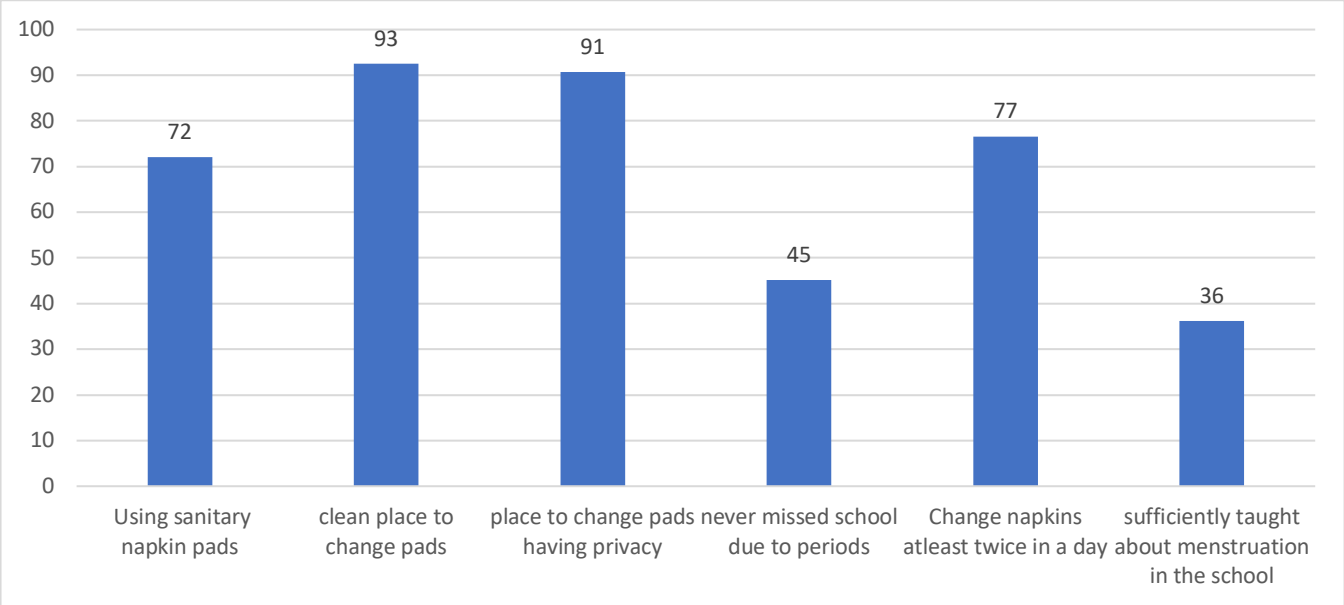
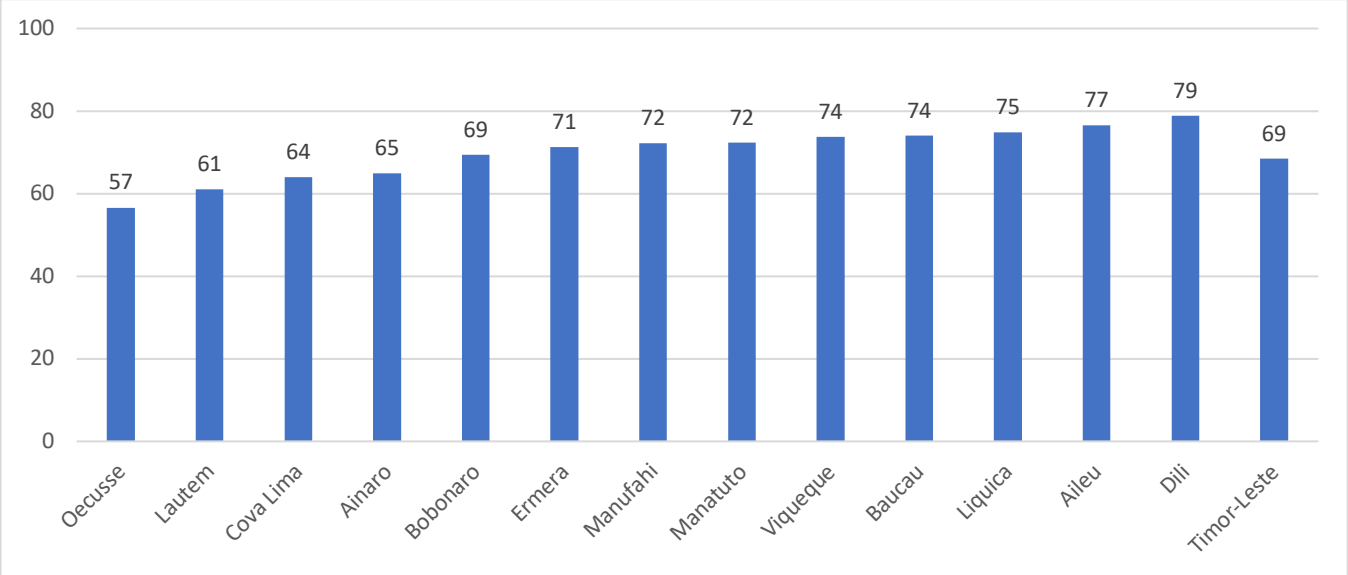


Figure: 4.6 District-wise variation in mean score for men menstruation related practices reported in girl students, Timor-Leste 2022



Exposure to health promotion related posters in school

As regard exposure to WASH Posters in schools that related to hand washing, brushing teeth and physical exercises, such posters relating to hand washing was reported by only by 59 percent of students but not on the other two. A comparatively higher share of female students was exposed to posters than male students. District wise differentials were also severe (Table 4.9).

Skin Infection and Soil transmitted Helminthiasis

As regard prevalence of soil transmitted helminthiasis and skin diseases in last one year, an average score of 31 percent was reported in the country as a whole. This included a range of parameters like worm manifestation, anal itching, skin itching, itching of private parts along with non-receipt of deworming medication. The aggregate score thus arrived at informs that near one third of school children have some form of soil transmitted disease or skin disease. On this count a strict variation was observed with male children having a disadvantage along with children form private school having an advantage. In fact, while urban children have an advantage in this regard, the younger children are worse off in comparison with the older ones as revealed by the score across children of different grades. Besides characteristic differences, there is a regional pattern as well with some regions manifesting this to a level of 52 per cent children being victim in Oecusse as against hardly a quarter of children in Dilli.

Figure 4.7 Percentage of students reporting soil-transmitted helminthiasis and skin diseases in last one year, Timor-Leste 2022

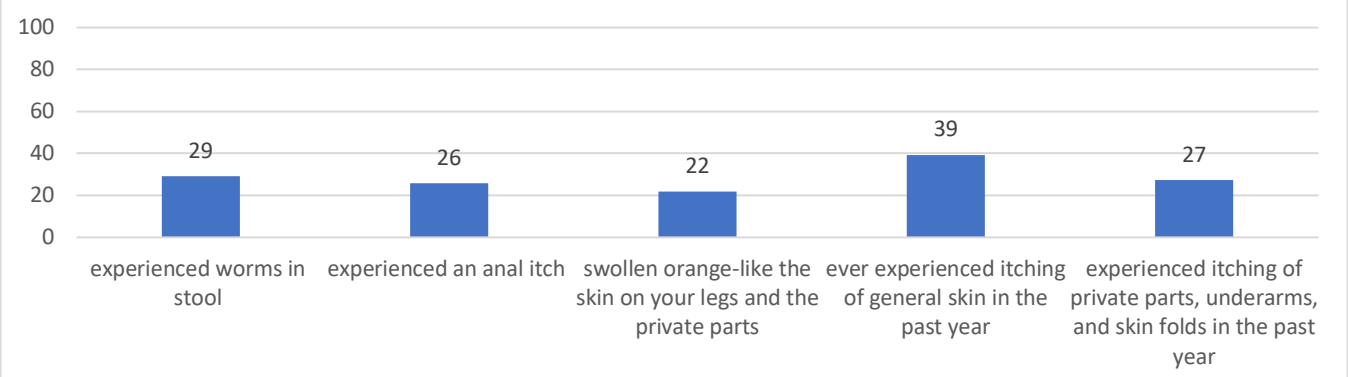
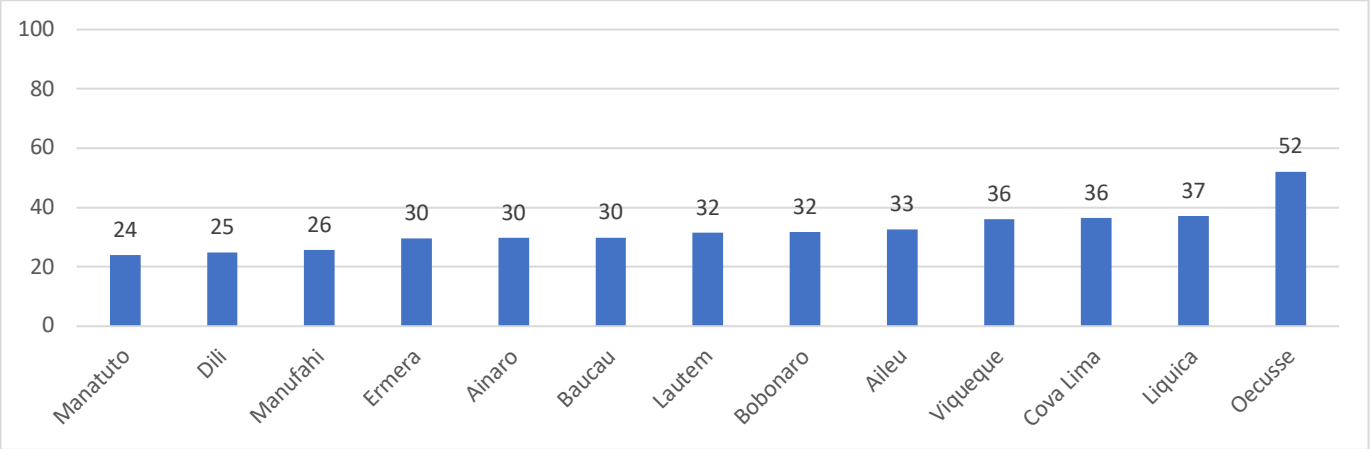


Figure 4.8 District wise variation in mean score for self-reported prevalence of soil-transmitted helminthiasis and skin diseases in students in last one year, Timor-Leste 2022

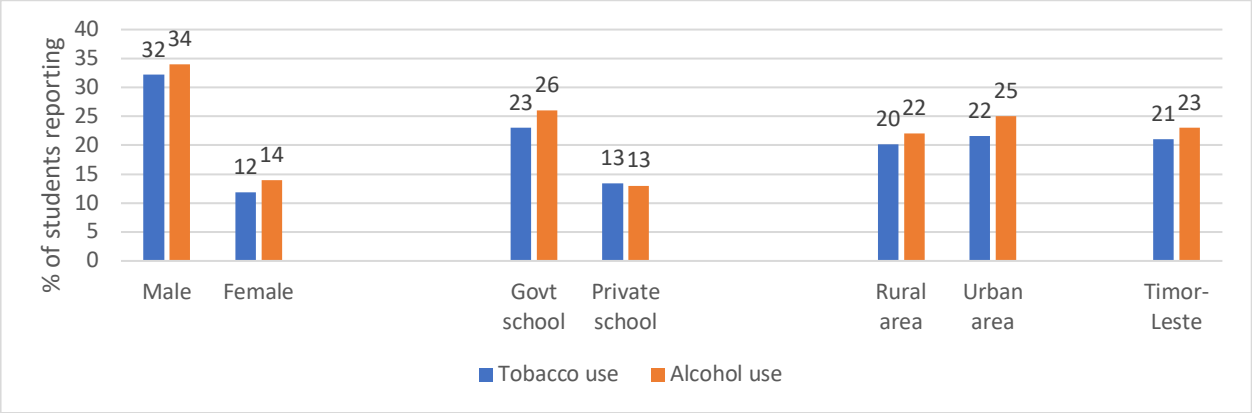


This understanding of the prevalence of worm manifestation and skin diseases prompts us to enquire into the student's exposure to education related materials on these ailments. It is observed that more than fifty percent of children reported to have been exposed such material in the past year (See table 4.11). Such exposure to poster on skin diseases are more among rural children (61 per cent) and male children (66 per cent). There are also districts with 70 per cent of children having exposure to such education material as against districts with 40 percent children exposure. Differentials were nearly similar for posters on intestinal worms at the school.

Tobacco and alcohol use

Finally, information on the prevalence of tobacco and alcohol use among the children is gathered to understand the extent of its use among them. Fortunately, the large majority of children about more than two third of them report against the use of tobacco or alcohol. As regard ever-use and current use of tobacco, around 79 per cent of children are found to be never-user of tobacco. One third of males used tobacco while the same was only one out of eight among females. Similarly, tobacco use is noted to be high in children in government schools than private schools. The ever use of tobacco in last one year is higher in lost quintile (25 percent) against highest quintile (16 percent).

Figure 4.9 Percentage of students reporting tobacco and alcohol use in last one year by selected characteristics, Timor-Leste 2022



The current user of smoking tobacco is about 18 per cent in all which displays a wide difference in characterization with greater prevalence among male children (20 percent as against 7 per cent of female children and similarly this prevalence is greater in govt schools as well as among older children as revealed by a greater frequency among children of higher grades. There are also regional differences in this context with a district having 23.5 per cent of children reporting to be current users of smoking tobacco as against regions where this prevalence is about 12.5 per cent. Cigarettes is the more popular in students than other tobacco products.

Figure 4.10: Student reported difficulty in getting tobacco products, Timor-Leste 2022

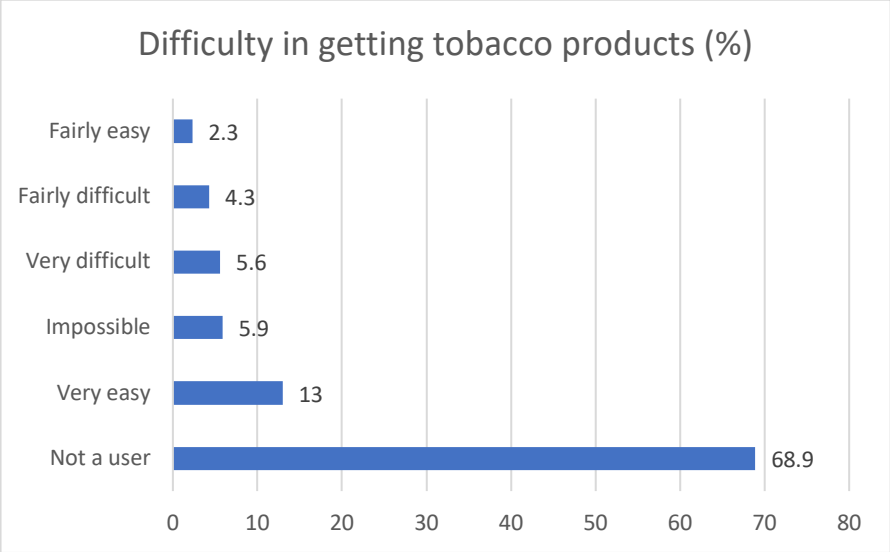
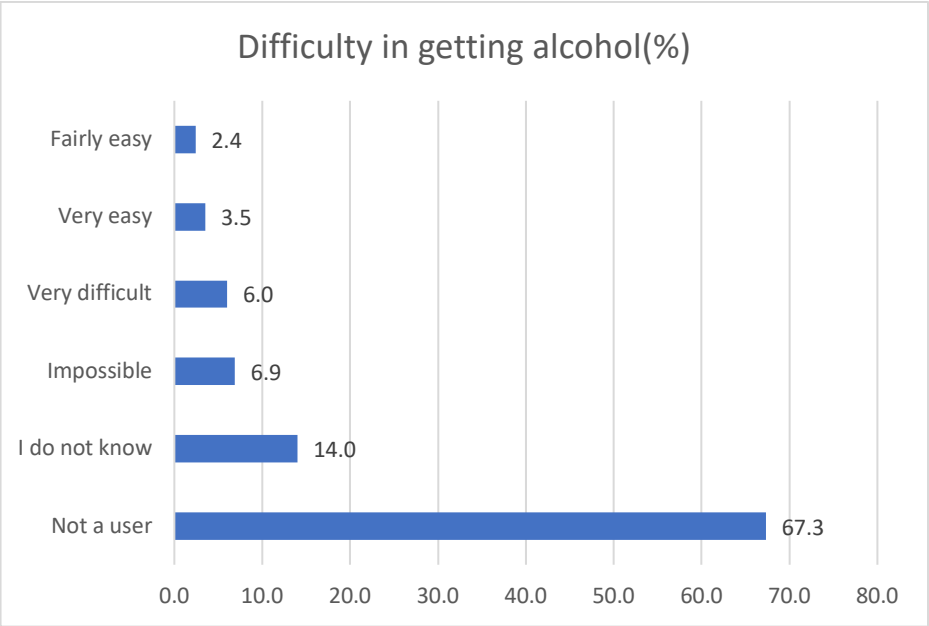


Figure 4.11: Student reported difficulty in getting tobacco products, Timor-Leste 2022



Similar to tobacco, ever use of alcohol too is denied by two third of the children with hardly one percent reporting regular use of alcohol. Occasional drinking with friends was reported by 5 percent of the students, which is higher in males than females, in government schools than in catholic/private schools and in lowest wealth quintile than richest wealth quintile. This has a regional variation with up to five per cent reporting to be regular users and complete absence of alcohol use by children in some region.

Nutritional status

The ultimate parameter considered for assessment relates to nutritional make up of children evaluated in terms of the prevalence of stunting and under-weight. Overall, the stunting or the height for age <-2SD in the school children was 43 percent in the country. The stunting is noted to be higher in males (49 percent) than females (39 percent), private schools (40 percent) than government schools (53 percent), rural areas (49 percent) than in urban areas (30 percent). Though stunting is a major public health issue in the country, it is noted that there is a progressive decline in stunting in higher grade of schooling from 48 percent in grade 7 students to 45 percent in grade 8 students and 37 percent in grade 9 students. Stunting is lowest in Dili (23 percent) followed by Manatutu (28 percent) and Liquica and Alieu, while more than half of the students in Ainaro, Oecusse and Lautem were stunted.

Figure 4.12: District-wise variations in percentage of students stunted, Timor-Leste 2022

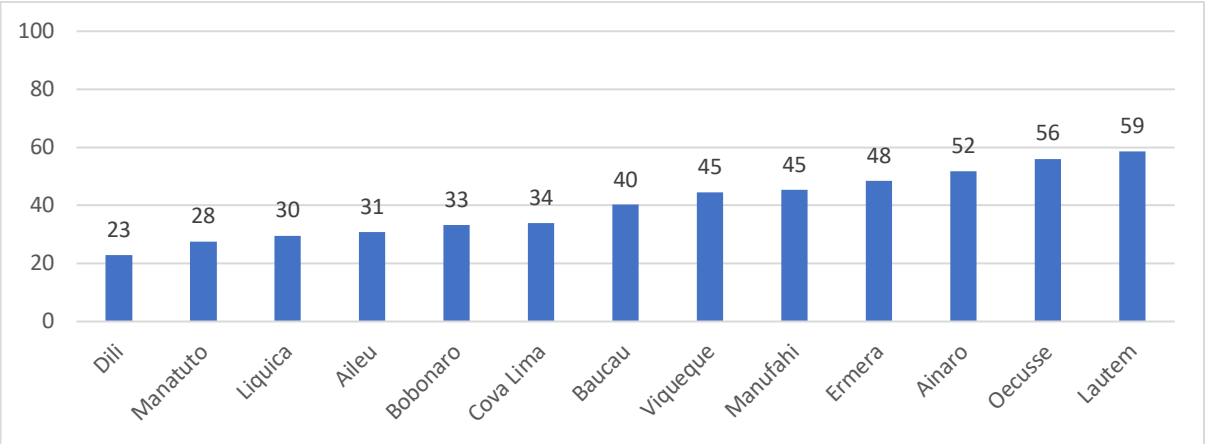
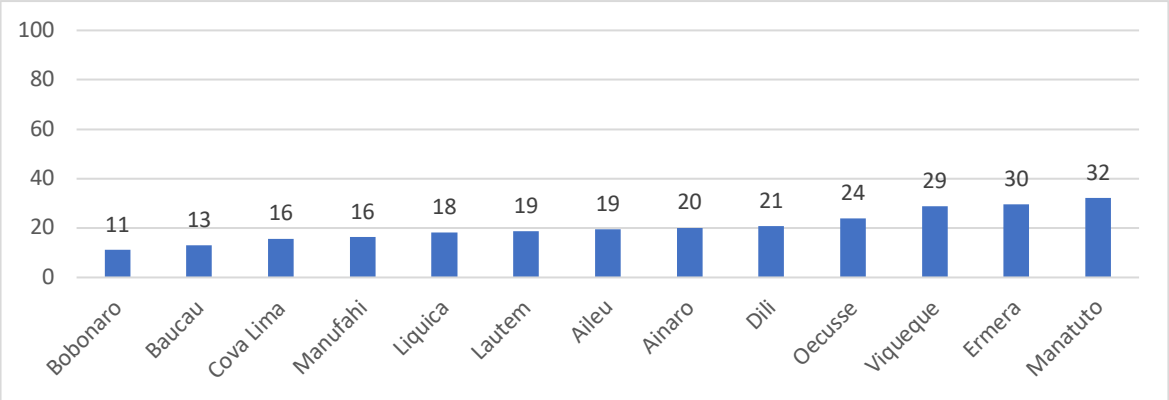


Figure 4.13: District-wise variations in percentage of students underweight, Timor-Leste 2022



The body mass Index or weight for height showed only half of the school children are having normal BMI. About 18.9 percent are underweight of BMI<-2SD, 2 percent are overweight, 1 percent are obese and remaining 30 percent were having less weight but not underweight. Underweight is higher in boys (24 percent) than girls (15 percent). Sex differentials in overweight and obesity were minimal. However underweight, overweight and obesity is noted to be marginally higher in students in urban areas than rural areas. Underweight as well as overweight/obesity is noted to be more in students in catholic/private schools than in government schools. District wise variation were prominent with proportion underweight being nearly 2.5 times in Viqueque, Emera and Manatutu when compared to Bobonaro and Baucau.

Chapter IV

Conclusion and Recommendations

This base line exercise was intended to assess the prevailing situation of health programme intervention in schools with a specific focus of 5S and generate a set of indicators that should serve towards evaluating the intervention impact at a later date. Given multiple stake holders in this endeavour, the approach of assessment here has been holistic form two standpoints; one evaluating the situation in three domains and another to generate parallel indicators of input and outcomes. The three domains are school, teachers and students, similarly the input feature has been the different mechanisms of health promotion and prevention measures in place and the outcomes has been the reported extent of prevalence of disease, hygiene and dietary habits, consumption of intoxicants as well as nutritional make-up.

The study design qualifies all scientific principles of representation and diversity that offers reasonably acceptable break-up of indicators in geographical disaggregation as well as characteristic disaggregation. The baseline survey indicates poor dietary practices coupled with high level of stunting, gaps in health promotion activities in the school including that for WASH, personal hygiene, physical activities and in control of smoking and alcohol use of students. The student, teacher, and community organization's engagement in promotive and preventive health services in schools is limited

Apart from generating indicators that may facilitate temporal monitoring of comparing pre and post intervention, this survey serves as a complement to many other existing enquiries by international bodies concerning child health and school health situation in Timor-Leste.

Following are some of the conclusive observations drawn based on this exercise:

- There is an apparent divide between the type of schools in terms of their compliance with proposed programme intervention

- The urban-rural divide in schools have a distinct pattern of provisioning that makes a distinct rural disadvantage

- ❖ Schools in selected districts outperform schools from other districts hinting at a regional disparity that needs a focus on account of effective program intervention

- ❖ The information obtained from teachers serves towards a reality check on the kind of engagement school governance has towards ensuring interventions to be effective and efficient to offer results

- ❖ Given that teachers are the means through whom the programme implementation becomes effective, their knowledge, awareness and perception remain vital to the success of the intervention.

- ❖ The revealed extent of awareness among teachers are indicative of the distortion in intervention efforts and due recognition and compliance of the proposed features of intervention

Conclusions and Recommendations

i. Infrastructure, personnel, and training for SN5S to be lacking and is to be strengthened across all districts. Bobonaro, Oecusse, Ermera, Manufahi, Liquica noted to be the most backward in promotion of school health program

ii. No major interaction between school with community health centers and health posts, and local community organizations. This is to be prioritized to widen the outreach of SN5S.

iii. Majority of schools do not have a written policy on components of SN5S in place. Hence policy as well as guidelines to be developed and copies to be made available in each school before implementing SN5S to ensure uniformity in implementation of interventions.

iv. Teachers unaware of explicitly visible symptoms of STH and Skin diseases. An orientation on the same can contribute to early detection and initiation of treatment in affected school children

v. Currently the trained school staff largely available only for school feeding programme. Large scale capacity building training of teachers/staff responsible for implementing SN5S is needed.

vi. No scope for student engagement in facilitating school health promotion activities. Clubs for each sub-intervention and class level monitor for same can make the programme more participatory and appealing for the student community.

vii. WASH facilities is a major bottle neck for school health programme. Infrastructure for clean drinking water, functional toilets and waste disposal is to be set up in most schools. Provision for maintenance and cleaning WASH facilities to be ensured in schools with such infrastructure.

viii. Limited facilities for promoting sports and physical activities in the schools. Infrastructure upgradation and trained staff for the same is essential for a positive transformation.

ix. High consumption of High fat, sugar, and salt (HFSS) foods and processed foods intake indicate need to prioritize healthy dietary promotion in the schools. Student exposure to related health communication materials in the school and periodic orientation for teachers on health eating and encouraging them to monitor eating habits will be effective.

x. Display of advertisements and sale of tobacco, alcohol, sugary and carbonated drinks, observed in front of the schools, to be regulated to reduce their consumption. Stricter enforcement essential for a reduction of consumption of these items observed in the baseline survey.

While this exercise is an eye opener on the prevailing environment of health status of school children alongside the functioning of interventions towards health promotion, there is every potential to go deeper in understanding the state of affairs from this triangular domain of information obtained in the survey. On the whole, the rich information at hand must serve towards advocacy, improved monitoring, and effective outcomes in the long run.

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Annex I. School level tables and indicators

Table 2.1: Selected characteristics of respondents for the school questionnaire, 2022

	Number	Percentage*
Age of the respondent		
<40 years	10	14.3
40-50 years	11	16.1
50+ years	43	69.6
Sex		
Male	53	82.5
Female	11	17.5
Role in the school		
Coordinator/Director	54	88.4
Deputy Director, and Others	10	11.6
Total	**64**	**100.0**

*weighted percentages and unweighted N are presented in the table

Table 2.2: Selected characteristics of the schools surveyed, Timor-Leste 2022

	Number	Percentage
Owner of the school		
Government	51	84.2
Private/ Catholic	13	15.8
Location of the school		
Rural	33	72.2
Urban	31	27.8
Number of students*		
<250	26	57.3
250-500	19	21.1
500-1000	16	19.6
1000+	2	2.1
School type		
Only grade 4-6	28	43.8
Only grade 7-9	15	23.4
Both grade 4-6 & 7-9	21	32.8
Total	**64**	**100**

Note : weighted percentages and unweighted N are presented in the table

Table 2.3: Provision for school health services in the schools, Timor-Leste 2022

	Percentage of schools providing school health services					Total	No. of Schools (N)
	both on school premises and at separate facilities	only on school premises	only at separate facilities	only provided on an emergency basis	No health services in school		
Owner of the school							
Government	12.7	52.0	14.3	19.7	1.4	100	51
Private/ Catholic	7.3	48.8	19.4	24.5	0.0	100	13
Location of the school							
Rural	10.1	57.7	13.0	19.3	0.0	100	33
Urban	16.3	35.3	20.6	23.6	4.1	100	31
School type							
Only grade 4-6	10.6	59.7	10.3	19.4	0.0	100	28
Only grade 7-9	24.4	32.9	34.9	7.8	0.0	100	15
Both grade 4-6 & 7-9	6.4	46.1	12.6	30.6	4.2	100	21
District#							
Aileu	10.3	17.9	33.3	38.5	0.0	100	5
Ainaro	27.7	72.3	0.0	0.0	0.0	100	5
Baucau	37.7	53.5	8.8	0.0	0.0	100	5
Bobonaro	0.0	0.0	40.0	60.0	0.0	100	5
Cova Lima	8.9	0.0	0.0	73.2	17.9	100	5
Dili	0.0	17.2	47.3	35.5	0.0	100	5
Ermera	0.0	100.0	0.0	0.0	0.0	100	5
Lautem	83.9	16.1	0.0	0.0	0.0	100	5
Liquica	0.0	92.6	0.0	7.4	0.0	100	5
Manatuto	0.0	76.0	14.0	10.0	0.0	100	5
Manufahi	0.0	69.6	0.0	30.4	0.0	100	5
Oecusse	15.9	14.3	69.8	0.0	0.0	100	5
Viqueque	0.0	0.0	0.0	83.3	16.7	100	4
Total	11.8	51.5	15.1	20.5	1.2	100	64

Note : weighted percentages and unweighted N are presented in the table
#indicator not to be interpreted or used due to limited number (4/5 cases)

Table 2.4: Provision for health prevention activities as part of school health services, Timor-Leste 2022

	Percentage of schools with following routine preventive health activities						Average score	No. of Schools (N)
	health worker available at least 1 day in a week	Eye and Vision	Immunisation	Ear and Hearing	Oral health	Nutrition		
Owner of the school*								
Government	3.8	46.3	83.1	38.4	56.2	50.3	46.4	51
Private/ Catholic	0.0	23.6	94.5	24.7	25.5	24.7	32.2	13
Location of the school*								
Rural	1.3	42.2	83.9	33.2	49.6	45.5	42.6	33
Urban	8.4	44.2	87.4	44.1	55.9	48.2	48.0	31
School type*								
Only grade 4-6	0.0	56.7	88.3	47.3	72.4	62.4	54.5	28
Only grade 7-9	0.0	19.7	72.6	20.7	31.9	29.1	29.0	15
Both grade 4-6 & 7-9	12.8	28.5	85.5	23.4	17.2	23.8	31.9	21
District#								
Aileu	0.0	10.3	66.7	10.3	66.7	48.7	33.8	5
Ainaro	23.1	95.4	100.0	32.3	95.4	100.0	74.4	5
Baucau	0.0	51.8	100.0	51.8	91.2	51.8	57.8	5
Bobonaro	2.4	0.0	38.5	0.0	0.0	0.0	6.8	5
Cova Lima	0.0	28.6	100.0	26.8	26.8	37.5	36.6	5
Dili	0.0	17.2	61.3	52.7	52.7	52.7	39.4	5
Ermera	0.0	0.0	100.0	0.0	0.0	0.0	16.7	5
Lautem	0.0	66.1	90.3	66.1	75.8	66.1	60.7	5
Liquica	0.0	7.4	55.5	0.0	57.4	0.0	20.1	5
Manatuto	0.0	82.0	100.0	24.0	24.0	34.0	44.0	5
Manufahi	0.0	4.3	80.4	4.3	0.0	13.0	17.0	5
Oecusse	0.0	0.0	39.7	0.0	25.4	25.4	15.1	5
Viqueque	0.0	30.5	80.0	30.5	30.5	30.5	33.7	4
Total	3.3	42.7	84.8	36.3	51.2	46.2	44.1	64

Note : weighted percentages and unweighted N are presented in the table
#indicator not to be interpreted or used due to limited number (4/5 cases)

Table 2.5: Percentage of schools interacting with community health centres and health posts, Timor-Leste 2022

	% interacting	Frequency of interaction[1]					Total	N
		weekly	monthly	quarterly	yearly	no interaction/don't know them		
Owner of the school								
Government*	76.3	0.0	4.6	13.3	58.4	23.7	100	50
Private/ Catholic	47.5	9.1	6.1	0.0	32.3	52.5	100	13
Location of the school								
Rural*	74.4	0.0	0.7	10.4	63.3	25.7	100	32
Urban	64.8	5.1	15.0	13.0	31.7	35.2	100	31
School type								
Only grade 4-6	84.5	2.6	0.0	13.8	68.1	15.5	100	28
Only grade 7-9*	83.3	0.0	7.9	0.0	75.4	16.7	100	14
Both grade 4-6 & 7-9	39.2	0.0	13.2	11.1	14.9	60.8	100	21
District#								
Aileu	89.8	10.3	23.1	0.0	56.4	10.3	100	5
Ainaro	98.4	0.0	0.0	86.1	12.3	1.5	100	5
Baucau	60.5	0.0	0.0	0.0	60.5	39.5	100	5
Bobonaro	85.9	0.0	0.0	62.4	23.5	14.1	100	5
Cova Lima	73.2	0.0	26.8	0.0	46.4	26.8	100	5
Dili	25.8	0.0	0.0	11.8	14.0	74.2	100	5
Ermera	53.3	0.0	36.5	16.8	0.0	46.7	100	5
Lautem	32.2	0.0	0.0	0.0	32.2	67.8	100	5
Liquica	72.3	0.0	0.0	44.5	27.8	27.8	100	5
Manatuto	100.0	0.0	8.0	10.0	82.0	0.0	100	5
Manufahi	76.1	0.0	0.0	0.0	76.1	23.9	100	5
Oecusse*	45.2	0.0	0.0	0.0	45.2	54.8	100	4
Viqueque	83.3	0.0	16.7	0.0	66.6	16.7	100	4
Total	71.5	1.5	4.8	11.1	54.1	28.4	100	64

*missing case=1

[1]For those interacting

Note: weighted percentages and unweighted N are presented in the table

#indicator not to be interpreted or used due to limited number (4/5 cases)

Table 2.6: Percentage of schools with written school health policies, Timor-Leste 2020

	% schools with written policy for										
	Clean drinking water ameniti es	Hand washing and sanitation facilities	Promoti ng health diets	Anti-alcohol initiative	Anti-smoking initiative	Promotion of physical activities	Soil transmitted helminthias is	Skin infection	First aid kits	Averag e policy score	N
Owner of the school											
Government	45.7	91.7	44.2	74.6	76.3	72.1	55.6	47.7	44.0	61.3	51
Private/ Catholic	70.1	93.9	34.0	77.5	86.0	82.2	28.6	23.4	50.4	60.7	13
Location of the school											
Rural	38.9	91.0	40.6	81.2	81.2	70.9	49.3	46.8	41.6	60.2	33
Urban	77.0	94.9	47.9	59.0	69.1	80.9	56.6	36.1	53.7	63.9	31
School type											
Only grade 4-6	42.2	90.2	28.7	66.8	64.9	65.2	60.8	55.6	48.7	58.1	28
Only grade 7-9	46.6	100.0	73.7	100.0	100.0	86.0	56.9	28.1	15.8	67.5	15
Both grade 4-6 & 7-9	66.4	91.0	51.8	76.2	90.8	83.3	28.6	29.5	53.9	63.5	21
District#											
Aileu	61.5	100.0	51.3	100.0	100.0	61.5	100.0	100.0	82.1	84.0	5
Ainaro	95.4	100.0	93.8	98.5	98.5	100.0	6.2	100.0	86.1	86.5	5
Baucau	8.8	100.0	91.2	91.2	91.2	46.5	39.5	39.5	100.0	67.5	5
Bobonaro	10.6	100.0	10.6	37.6	40.0	40.0	8.2	68.3	2.4	35.3	5
Cova Lima	42.9	53.6	26.8	19.6	53.6	35.7	10.7	28.6	25.0	32.9	5
Dili	55.9	100.0	86.0	100.0	100.0	100.0	40.9	40.9	91.4	79.5	5
Ermera	100.0	100.0	88.8	83.2	100.0	100.0	10.3	89.7	28.0	77.8	5
Lautem	25.8	33.9	24.2	16.1	16.1	16.1	16.1	16.1	100.0	29.4	5
Liquica	79.6	100.0	27.8	50.0	50.0	35.2	7.4	7.4	12.9	41.1	5
Manatuto	42.0	100.0	100.0	100.0	100.0	90.0	92.0	92.0	18.0	81.6	5
Manufahi	67.4	80.4	67.4	80.4	80.4	80.4	4.3	4.3	17.4	53.6	5

Oecusse	41.3	100.0	74.6	63.5	53.6	100.0	100.0	55.6	84.1	74.7	5
Viqueque	47.2	83.3	66.6	83.3	83.3	83.3	30.5	66.6	66.6	67.9	4
Total	49.5	92.1	42.6	75.0	77.8	73.7	51.3	43.8	45.0	61.2	64

Note: weighted percentages and unweighted N are presented in the tables
#indicator not to be interpreted or used due to limited number (4/5 cases)

Table 2.7: Percentage of schools with trained staff for school health programme

	% schools with a trained person in charge of								
	drinking water, hand washing and sanitation	promoting health diets	anti-smoking and alcohol activities	in physical activities	soil transmitted helminthiasis and skin infection	noon meal for students	First aid kits	Mean score for trained staff	N
Owner of the school									
Government	47.7	22.0	15.1	51.1	10.3	68.5	11.8	32.4	51
Private/ Catholic	57.1	0.8	9.9	22.2	15.0	48.8	9.1	23.3	13
Location of the school									
Rural	51.1	17.2	12.0	43.2	9.5	66.1	3.7	29.0	33
Urban	44.1	22.4	20.2	55.2	15.1	63.4	30.6	35.9	31
School type									
Only grade 4-6	48.7	12.9	11.6	53.2	10.9	62.4	9.6	29.9	28
Only grade 7-9	56.5	37.9	25.9	56.8	6.3	91.6	7.1	40.3	15
Both grade 4-6 & 7-9	45.5	18.3	12.6	26.4	14.4	55.1	17.5	27.1	21
District#									
Aileu	61.5	51.3	61.5	61.5	43.6	51.3	53.1	54.8	5
Ainaro	90.8	86.1	90.8	92.3	23.1	92.3	86.1	80.2	5
Baucau	22.8	39.5	46.5	62.3	39.5	100.0	100.0	58.7	5
Bobonaro	23.5	100.0	100.0	23.5	100.0	100.0	2.4	64.2	5
Cova Lima	26.8	26.8	100.0	42.9	100.0	37.5	8.9	49.0	5

Dili	14.0	100.0	100.0	61.3	100.0	25.8	11.8	59.0	5
Ermera	89.7	88.8	100.0	43.0	100.0	100.0	99.1	88.7	5
Lautem	9.7	100.0	100.0	16.1	16.1	100.0	100.0	63.1	5
Liquica	66.7	7.4	100.0	100.0	100.0	100.0	7.4	68.8	5
Manatuto	78.0	68.0	58.0	100.0	58.0	100.0	100.0	80.3	5
Manufahi	13.0	13.0	13.0	100.0	13.0	13.0	13.0	25.4	5
Oecusse	14.3	33.3	100.0	15.9	27.0	74.6	84.1	49.9	5
Viqueque	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5	4
Total	49.2	18.6	14.3	46.5	11.1	65.4	11.4	30.9	64

Notes: weighted percentages and unweighted N are presented in the table
#indicator not to be interpreted or used due to limited number (4/5 cases)

Table 2.8: Percentage of schools with students committees for health promotion in the school, Timor-Leste 2022

	% schools reporting existence of student committee/ clubs for						Mean score for student involvement in school health promotion	N
	health dietary practices	anti-alcohol and or substance abuse initiative	anti-smoking initiative	soil transmitted helminthiasis	skin infections	hand washing and hygienic practices		
Owner of the school								
Government	23.8	23.9	23.9	27.8	21.0	49.5	28.3	51
Private/ Catholic	9.1	9.1	9.1	9.1	9.1	27.6	12.2	13
Location of the school								
Rural	25.1	24.5	24.5	22.5	22.5	46.7	27.6	33
Urban	11.9	14.1	14.1	31.0	10.4	44.1	20.9	31
School type								
Only grade 4-6	31.6	31.6	31.6	41.9	31.6	62.6	38.5	28
Only grade 7-9	6.3	14.6	14.6	6.3	6.3	26.7	12.5	15
Both grade 4-6 & 7-9	10.1	5.3	5.3	1.4	1.4	23.9	7.9	21
District#								
Aileu	20.5	20.5	20.5	20.5	20.5	59.0	26.9	5
Ainaro	63.1	67.7	67.7	64.6	63.1	100.0	71.0	5
Baucau	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5
Bobonaro	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5
Cova Lima	17.9	0.0	0.0	0.0	0.0	44.6	10.4	5
Dili	5.4	5.4	5.4	5.4	5.4	17.2	7.4	5
Ermera	72.0	45.8	45.8	0.0	0.0	88.8	42.1	5
Lautem	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5
Liquica	0.0	0.0	0.0	5.5	0.0	77.8	13.9	5
Manatuto	0.0	0.0	0.0	0.0	0.0	24.0	4.0	5
Manufahi	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5
Oecusse	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5

Viqueque	30.5	0.0	0.0	30.5	30.5	30.5	20.3	4
Total	21.4	21.6	21.6	24.8	19.1	46.0	25.8	64

Notes: weighted percentages and unweighted N are presented in the table
#indicator not to be interpreted or used due to limited number (4/5 cases)

T*able 2.9: Percentage of schools having partnership with NGOs and community based organizations for health promotion in the school, Timor-Leste 2022*

	% schools reporting tie up with NGOs and other organizations for									Mean score for NGO involvement in school health promotion	N
	Use of smoking	Use of carbonated drinks	health dietary practices	anti-alcohol initiatives	anti-smoking initiatives	anti-substance abuse initiatives	soil transmitted helminthiasis	skin infections	hand washing and hygienic practices		
Owner of the school											
Government	16.3	14.3	36.4	13.6	13.6	14.4	18.2	13.1	40.1	20.0	51
Private/ Catholic	16.3	9.1	9.1	9.1	9.1	9.1	9.1	9.1	16.3	10.7	13
Location of the school											
Rural	7.4	5.1	38.4	11.8	11.8	14.7	11.8	11.8	32.4	16.1	33
Urban	39.5	35.4	15.7	15.8	15.8	10.7	29.8	14.3	46.4	24.8	31
School type											
Only grade 4-6	15.5	15.5	46.2	14.4	14.4	18.3	22.6	14.8	38.6	22.3	28
Only grade 7-9	42.4	25.9	22.8	25.9	25.9	17.5	17.5	17.5	55.4	27.9	15
Both grade 4-6 & 7-9	1.8	1.8	8.8	1.8	1.8	1.8	4.4	4.4	19.7	5.1	21
District#											
Aileu	61.5	61.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	91.4	5
Ainaro	69.2	69.2	63.1	67.7	67.7	63.1	64.6	63.1	69.2	66.3	5
Baucau	37.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.5	10.1	5
Bobonaro	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5
Cova Lima	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.7	1.2	5
Dili	0.0	0.0	17.2	0.0	0.0	0.0	0.0	0.0	8.6	2.9	5

Ermera	0.0	0.0	88.8	0.0	0.0	0.0	0.0	0.0	88.8	19.7	5
Lautem	0.0	0.0	14.5	0.0	0.0	0.0	0.0	0.0	0.0	1.6	5
Liquica	0.0	0.0	27.8	0.0	0.0	0.0	0.0	0.0	44.5	8.0	5
Manatuto	20.0	10.0	14.0	0.0	0.0	14.0	0.0	0.0	92.0	16.7	5
Manufahi	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5
Oecusse	25.4	25.4	25.4	0.0	0.0	0.0	25.4	25.4	25.4	16.9	5
Viqueque	0.0	0.0	0.0	0.0	0.0	0.0	16.7	16.7	16.7	5.6	4
Total	16.3	13.5	32	12.9	12.9	13.6	16.8	12.5	36.3	18.5	64

Note: Notes: weighted percentages and unweighted N are presented in the table
#indicator not to be interpreted or used due to limited number (4/5 cases)

T*able 2.10: Prohibition of alcohol and tobacco use in the school premises, Timor-Leste 2022*

	% schools reporting							Mean score for anti-tobacco and alcohol use interventions	N
	prohibits alcohol use among students	prohibits alcohol use among teachers	prohibits tobacco use among students	tobacco use among teachers	signs post marking a tobacco free zone	Counsellor for students prone to/or using alcohol & smoking	interact with parents of children using alcohol & cigarettes		
Owner of the school									
Government	97.5	68.7	97.5	67.1	15.9	32.7	46.3	60.8	51
Private/ Catholic	100.0	100.0	98.9	100.0	49.8	80.7	87.9	88.2	13
Location of the school									
Rural	100.0	70.0	100.0	68.0	18.0	40.9	50.7	63.9	33
Urban	92.3	83.0	91.7	83.3	30.2	38.8	58.5	68.3	31
School type									
Only grade 4-6	100.0	59.0	100.0	58.3	14.3	23.1	33.7	55.5	28
Only grade 7-9	100.0	91.9	99.0	94.7	29.8	70.9	90.2	82.4	15
Both grade 4-6 & 7-9	92.2	92.2	92.2	86.8	30.8	56.4	68.9	74.2	21
District#									
Aileu	100.0	61.5	100.0	61.5	23.1	38.5	61.5	63.7	5

Ainaro	100.0	100.0	100.0	100.0	29.2	27.7	12.3	67.0	5
Baucau	100.0	91.2	100.0	91.2	0.0	14.0	14.0	58.6	5
Bobonaro	100.0	40.0	100.0	40.0	8.2	31.8	31.8	50.3	5
Cova Lima	100.0	100.0	100.0	100.0	17.9	8.9	8.9	62.2	5
Dili	100.0	82.8	64.5	82.8	35.5	74.2	82.8	74.7	5
Ermera	100.0	83.2	100.0	37.4	20.7	54.2	83.2	68.4	5
Lautem	100.0	100.0	100.0	100.0	66.7	69.4	77.4	87.6	5
Liquica	100.0	64.8	100.0	66.7	0.0	42.6	100.0	67.7	5
Manatuto	100.0	100.0	100.0	100.0	100.0	66.0	42.0	86.9	5
Manufahi	95.7	95.7	95.7	95.7	0.0	95.7	95.7	82.0	5
Oecusse	100.0	85.7	100.0	100.0	39.6	44.4	84.1	79.1	5
Viqueque	100.0	100.0	100.0	100.0	0.0	63.9	100.0	80.6	4
Total	97.9	73.6	97.7	72.3	21.6	40.3	52.8	65.2	64

Note: Notes: weighted percentages and unweighted N are presented in the table
#indicator not to be interpreted or used due to limited number (4/5 cases)

Table 2.11: Promotion of physical activities in the schools, Timor-Leste 2022

	% schools reporting									
	perfectly functional Open school play ground	Dedicated sports period for all classes	Trained Sports teacher	Untrained but designated teacher for sports promotion	Observing annual sports day	Participation in inter school sports and games	Perfectly functional sports equipment	Perfectly functional school aid kit	Mean score for promotion of physical activity	N
Owner of the school										
Government	6.3	49.0	19.3	18.6	7.4	12.2	4.0	3.8	15.1	51
Private/ Catholic	5.2	75.8	23.6	24.1	6.3	10.2	0.8	4.8	18.9	13
Location of the school										
Rural	5.3	46.8	16.9	18.6	3.8	9.9	27.9	1.1	16.3	33
Urban	7.7	69.8	28.0	21.9	16.1	17.1	10.4	9.5	22.6	31

School type										
Only grade 4-6	2.0	38.7	4.8	11.2	7.7	8.5	0.3	0.0	9.2	28
Only grade 7-9	0.0	66.7	42.1	32.3	12.2	17.8	0.0	0.0	21.4	15
Both grade 4-6 & 7-9	16.0	74.5	37.5	28.6	3.0	15.1	9.7	9.4	24.2	21
District#										
Aileu	0.0	33.3	10.3	17.9	17.9	10.3	0.0	0.0	11.2	5
Ainaro	0.0	6.2	4.6	86.1	1.5	86.1	0.0	0.0	23.1	5
Baucau	0.0	100.0	0.0	0.0	0.0	0.0	39.5	0.0	17.4	5
Bobonaro	13.9	34.1	91.8	0.0	0.0	5.9	3.1	3.3	19.0	5
Cova Lima	10.7	80.4	26.8	35.7	0.0	0.0	47.6	17.9	27.4	5
Dili	0.0	82.8	94.6	35.5	35.5	82.8	0.0	0.0	41.4	5
Ermera	0.0	83.2	0.0	16.8	0.0	0.0	0.0	0.0	12.5	5
Lautem	0.0	82.3	16.1	8.0	0.0	25.8	0.0	0.0	16.5	5
Liquica	0.0	5.5	27.8	14.8	0.0	0.0	0.0	0.0	6.0	5
Manatuto	0.0	92.0	10.0	18.0	0.0	8.0	0.0	0.0	16.0	5
Manufahi	0.0	45.7	23.9	54.3	0.0	19.6	0.0	0.0	17.9	5
Oecusse	0.0	88.9	0.0	14.3	11.1	0.0	0.0	0.0	14.3	5
Viqueque	0.0	100.0	83.3	36.1	0.0	30.5	0.0	0.0	31.2	4
Total	6.1	53.2	20.0	19.5	7.2	11.9	3.4	3.1	15.6	64

Note: Notes: weighted percentages and unweighted N are presented in the table
#indicator not to be interpreted or used due to limited number (4/5 cases)

Table 2.12: Amenities for drinking water, sanitation and hygiene in the schools, Timor-Leste 2022

	% schools with perfectly functional								Mean wash score	N
	Piped water source	Piped drinking water	Separate toilet for boys and girls	Toilets with running water	Regular cleaning of toilets	Hand washing area near toilet	Hand washing area near eatery	Waste management facility		
Owner of the school										
Government	8.9	9.2	13.9	14.2	10.5	7.4	6.6	5.4	9.5	51
Private/ Catholic	36.3	45.5	0.8	43.5	6.1	23.7	36.3	6.1	24.8	13
Location of the school										
Rural	14.2	3.8	11.6	22.2	10.6	3.4	13.8	1.8	10.2	33
Urban	14.4	14.2	11.1	14.7	7.8	11.1	9.2	12.9	11.9	31
School type										
Only grade 4-6	6.8	6.3	13.3	13.5	12.4	4.6	4.8	20.7	10.3	28
Only grade 7-9	3.5	3.7	0.0	7.0	0.0	3.3	0.0	6.5	3.0	15
Both grade 4-6 & 7-9	31.0	10.9	15.4	36.5	11.6	10.0	30.5	12.8	19.8	21
District#										
Aileu	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5
Ainaro	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5
Baucau	15.8	7.0	55.2	15.8	0.0	7.6	0.0	0.0	12.7	5
Bobonaro	14.3	14.3	3.1	14.3	14.3	3.1	3.1	14.3	10.1	5
Cova Lima	17.9	17.9	0.0	0.0	0.0	17.9	0.0	0.0	6.7	5
Dili	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5
Ermera	1.0	12.4	10.3	11.2	0.0	10.3	0.9	0.0	5.8	5
Lautem	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5
Liquica	0.0	0.0	0.0	44.5	44.5	0.0	0.0	0.0	11.1	5
Manatuto	14.0	14.0	14.0	24.0	14.0	14.0	14.0	8.0	14.5	5
Manufahi	0.0	0.0	0.0	0.0	13.0	0.0	0.0	13.0	3.3	5
Oecusse	25.4	25.4	0.0	0.0	0.0	0.0	0.0	0.0	6.4	5
Viqueque	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.5	3.8	4

Total	14.3	7.4	11.4	19.7	9.7	6.0	12.3	5.6	10.8	64

Note: Notes: weighted percentages and unweighted N are presented in the table
#indicator not to be interpreted or used due to limited number (4/5 cases)

Table 2.13: Availability of school health promotion related poster for communication in the schools, Timor-Leste 2022

	% schools having at least one clear and easy to understand posters related to										Mean score for posters for health promotion	N
	Right eating habits	Smoking injurious to health	No to alcohol	soil transmitted helminthiasis	WASH	Skin infections	Nutritional deficiency	Malnutrition	Obesity	Immunization		
Owner of the school												
Government	6.9	0.3	0.0	0.6	43.7	0.0	9.1	5.3	0.0	16.6	8.3	51
Private/ Catholic	6.0	0.0	0.0	0.0	4.8	0.0	0.0	1.1	0.0	9.6	2.2	13
Location of the school												
Rural	6.4	0.0	0.0	0.0	42.7	0.0	6.6	4.6	0.0	13.9	7.4	33
Urban	7.4	0.9	0.0	1.7	23.0	0.0	10.3	4.6	0.0	19.5	6.7	31
School type												
Only grade 4-6	9.5	0.5	0.0	0.0	52.5	0.0	10.8	8.0	0.0	14.7	9.6	28
Only grade 7-9	3.3	0.0	0.0	2.9	14.4	0.0	0.0	1.2	0.0	12.8	3.5	15
Both grade 4-6 & 7-9	3.0	0.0	0.0	0.0	22.6	0.0	5.3	0.0	0.0	18.6	5.0	21
District#												
Aileu	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5
Ainaro	0.0	0.0	0.0	0.0	63.1	0.0	0.0	0.0	0.0	0.0	6.3	5
Baucau	39.5	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	7.0	14.7	5
Bobonaro	0.0	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.0	3.1	0.6	5

Cova Lima	0.0	0.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	16.1	4.1	5
Dili	0.0	0.0	0.0	0.0	17.2	0.0	0.0	0.0	0.0	47.3	6.5	5
Ermera	16.8	16.8	0.0	0.0	43.0	0.0	62.6	0.0	0.0	43.0	18.2	5
Lautem	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5
Liquica	7.4	0.0	0.0	0.0	51.9	0.0	79.5	71.8	0.0	66.7	27.7	5
Manatuto	15.2	0.0	0.0	0.0	58.0	0.0	0.0	0.0	0.0	8.0	8.1	5
Manufahi	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	5.0	5
Oecusse	25.4	0.0	0.0	14.3	0.0	0.0	0.0	0.0	0.0	0.0	4.0	5
Viqueque	0.0	0.0	0.0	0.0	30.5	0.0	0.0	0.0	0.0	0.0	3.1	4
Total	6.7	0.2	0.0	0.5	36.7	0.0	7.6	4.6	0.0	15.4	7.2	64

Note: Notes: weighted percentages and unweighted N are presented in the table
#indicator not to be interpreted or used due to limited number (4/5 cases)

Table 2.14: Exposure of students to advertisements promoting health related risky behaviours in school surrounding, Timor-Leste 2022

	% schools having the following advertisements in front or near to the entrance to the school					Mean score for exposure to risky advertisements	N
	Alcohol	Tobacco	Carbonated drinks	Sugary drinks	fast food		
Owner of the school							
Government	5.8	8.8	8.8	8.9	11.1	8.7	51
Private/ Catholic	1.1	5.6	6.7	5.9	2.0	4.3	13
Location of the school							
Rural	0.0	3.0	3.0	3.0	5.7	2.9	33
Urban	17.7	21.5	22.0	22.4	19.4	20.6	31
School type							
Only grade 4-6	2.2	6.7	6.9	6.7	4.5	5.4	28
Only grade 7-9	9.8	14.1	14.1	15.1	20.7	14.8	15
Both grade 4-6 & 7-9	8.0	7.8	8.0	8.0	13.3	9.0	21
District#							
Aileu	0.0	0.0	0.0	0.0	23.1	4.6	5

Ainaro	4.6	4.6	4.6	4.6	4.6	4.6	5
Baucau	0.0	0.0	39.5	0.0	39.5	15.8	5
Bobonaro	0.0	0.0	0.0	0.0	0.0	0.0	5
Cova Lima	0.0	0.0	0.0	0.0	34.0	6.8	5
Dili	35.5	35.5	35.5	35.5	82.8	45.0	5
Ermera	0.0	0.0	0.0	0.0	0.0	0.0	5
Lautem	50.0	50.0	50.0	50.0	50.0	50.0	5
Liquica	0.0	22.2	22.2	22.2	7.4	14.8	5
Manatuto	0.0	0.0	0.0	0.0	0.0	0.0	5
Manufahi	4.3	4.3	4.3	4.3	0.0	3.4	5
Oecusse	0.0	15.9	15.9	15.9	0.0	9.5	5
Viqueque	0.0	0.0	0.0	0.0	30.5	6.1	4
Total	5.1	8.3	8.5	8.4	9.6	8.0	64

Note: Notes: weighted percentages and unweighted N are presented in the table
#indicator not to be interpreted or used due to limited number (4/5 cases)

Table 2.15: Sale of alcohol tobacco and unhealthy diets in school surroundings, Timor-Leste 2022

	% schools having sale of the following in front or near to the entrance to the school					
	Alcohol	Tobacco	Carbonated drinks	Sugary drinks	fast food	N
Owner of the school						
Government	32.6	42.7	63.6	67.5	68.4	51
Private/ Catholic	15.0	19.5	26.8	32.8	64.5	13
Location of the school						
Rural	20.1	31.5	53.0	54.3	64.5	33
Urban	53.6	57.4	69.1	80.6	76.3	31
School type						
Only grade 4-6	30.0	34.7	63.3	63.3	74.9	28
Only grade 7-9	41.8	67.5	69.0	75.2	46.0	15
Both grade 4-6 & 7-9	22.0	30.2	39.7	51.0	65.8	21
District#						
Aileu	59.0	59.0	59.0	59.0	54.3	5
Ainaro	92.3	92.3	92.3	92.3	92.3	5
Baucau	55.2	55.2	55.2	55.2	55.2	5
Bobonaro	100.0	78.5	86.1	89.2	89.2	5
Cova Lima	16.1	26.8	35.7	35.7	53.6	5
Dili	55.9	55.9	61.3	100.0	100.0	5
Ermera	99.1	99.1	99.1	99.1	100.0	5
Lautem	50.0	50.0	83.4	83.4	76.2	5
Liquica	27.8	50.0	22.2	50.0	79.6	5
Manatuto	8.0	8.0	18.0	18.0	86.0	5
Manufahi	4.3	4.3	4.3	4.3	0.0	5
Oecusse	15.9	49.2	49.2	49.2	15.9	5
Viqueque	0.0	0.0	30.5	47.2	47.2	4
Total	29.7	38.9	57.6	61.8	67.7	64

Note: Weighted percentages and unweighted N are presented in the table
#indicator not to be interpreted or used due to limited number (4/5 cases)

Annex II. Teachers Questionnaire based tables and Indicators

Table 3.1: Selected characteristics of the class teachers surveyed, 2022

	Number	Percentage
Age of the class teacher*		
<40 years	79	30.1
40-50 years	56	31.1
50+ years	79	38.8
Sex*		
Male	125	51.5
Female	86	48.5
Location of the school		
Rural	110	69.4
Urban	107	30.6
Type of school		
Government	175	85.7
Private/ Catholic	42	14.3
School grade in charge		
Grade 4-6	151	74
Grade 7-9	66	26
Total	217	100

Note: Weighted percentages and unweighted N are presented in the table
*missing cases: age 3nos, sex 6 nos

Table 3.2: Teacher's perception on provision for school feeding programme in Timor-Leste, 2022

	Percentage of teachers reporting availability of the following for the school feeding programme					Score for school feeding program	No. of Teachers (N)
	A staff responsible coordinating this school feeding program	clean drinking water	Fruits	Vegetable	Milk or milk products		
Type of the school							
Government	89.7	49.8	10.0	66.1	22.0	47.5	175
Private/ Catholic	19.6	10.0	0.4	8.3	0.0	7.7	42
Location of the school							
Rural	80.9	36.0	9.4	67.4	17.9	42.3	110
Urban	78.9	66.4	7.6	40.5	22.9	43.3	107

School grade in charge							
Grade 4-6	82.6	46.6	10.6	64.6	23.7	45.6	151
Grade 7-9	73.9	40.9	3.9	44.6	7.4	34.1	66
District							
Aileu	93.1	96.4	57.1	80.4	29.5	71.3	15
Ainaro	92.3	91.9	0.0	50.2	0.0	46.9	16
Baucau	100.0	15.0	21.2	57.6	3.3	39.4	15
Bobonaro	91.2	13.0	0.0	93.6	2.8	40.1	16
Cova Lima	64.4	27.6	0.0	79.8	24.1	39.2	23
Dili	80.5	13.0	0.0	67.5	5.9	33.4	12
Ermera	97.4	76.2	20.2	76.2	12.8	56.6	20
Lautem	71.6	73.3	0.0	63.6	2.9	42.3	17
Liquica	100.0	41.7	19.4	61.9	0.0	44.6	13
Manatuto	100.0	35.3	0.0	32.7	13.1	36.2	16
Manufahi	88.3	63.7	21.3	79.6	25.7	55.7	19
Oecusse	53.9	37.3	0.0	13.5	5.2	22.0	17
Viqueque	74.4	51.8	25.0	57.7	23.2	46.4	18
Total	80.3	45.1	8.9	59.3	19.4	42.6	217

Note: Those reporting Yes, Often and Yes , always

Note: Weighted percentages and unweighted N are presented in the table

Table 3.3: Teachers discussing promotion of health dietary behaviour among students in this academic year, Timor-Leste 2022

	Percentage of teachers reported to have discussed the following with the students in this academic year								Average score	No. of teachers (N)
	Eating home cook meals	Eating seasonal foods	Avoiding packaged food items	Avoiding sugary drinks, energy drinks & carbonated drinks	Importance of balance diet	Avoiding salty food	Avoiding food with high trans fats	Washing hands before and after eating		
Owner of the school										
Government	15.8	21.1	20.0	22.0	19.9	22.8	25.0	62.8	26.2	175
Private/ Catholic	27.5	28.2	25.5	30.9	28.5	27.7	25.2	67.2	32.6	42
Location of the school										
Rural	14.1	16.7	11.0	15.7	16.8	16.9	17.9	55.9	20.6	110
Urban	25.2	34.5	42.6	41.1	31.4	38.7	41.2	80.5	41.9	107
School grade in charge										
Grade 4-6	16.9	21.2	18.3	22.6	18.0	22.9	25.5	63.1	26.1	151
Grade 7-9	19.2	24.6	27.8	25.3	30.1	25	23.6	64.4	30.0	66
District										
Aileu	58.3	51.7	31.0	67.2	64.2	54.2	45.8	100.0	59.1	15
Ainaro	19.8	44.0	27.9	49.3	33.8	27.5	56.3	95.2	44.2	16
Baucau	26.4	26.4	26.4	26.4	27.3	26.4	26.4	68.7	31.8	15
Bobonaro	0.0	0.0	22.2	22.2	2.5	11.3	2.9	87.5	18.6	16
Cova Lima	6.6	11.0	6.8	6.6	6.6	6.6	11.8	54.4	13.8	23
Dili	38.1	0.0	27.2	27.2	38.1	27.2	43.5	78.7	35.0	12
Ermera	23.4	37.7	23.6	17.7	39.1	25.0	27.2	94.2	36.0	20
Lautem	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17

Liquica	11.8	6.3	8.1	8.1	6.3	5.9	8.7	62.2	14.7	13
Manatuto	36.6	39.2	39.2	39.2	37.6	39.2	41.8	73.9	43.3	16
Manufahi	34.4	58.4	43.1	40.0	40.0	66.4	68.8	90.4	55.2	19
Oecusse	8.3	16.6	0.0	0.0	8.3	0.0	0.0	39.4	9.1	17
Viqueque	60.7	72.0	57.7	61.8	56.6	50.0	53.5	82.1	61.8	18
Total	17.5	22.1	20.8	23.3	21.1	23.5	25.0	63.5	27.1	217

Weighted percentages and unweighted N are presented in the table

Table 3.4. Teacher participation in implementation of dietary intervention under school health programme, Timor-Leste 2022

	% of teachers reporting				
	participated in dietary promotional programs in past three years	check homemade food brought by the students for healthy diet	interacted with CHC and health post regarding nutritional activities posts in last year	Total score	N
Owner of the school					
Government	12.7	32.4	60.1	35.1	175
Private/ Catholic	2.8	17.6	61.0	27.1	42
Location of the school					
Rural	13.2	31.4	68.4	37.7	110
Urban	6.9	27.8	41.6	25.4	107
School grade in charge					
Grade 4-6	12.9	31.8	61.4	35.4	151
Grade 7-9	6.8	25.9	57.0	29.9	66
District					
Aileu	14.5	51.6	93.5	53.2	15
Ainaro	32.0	40.1	49.1	40.4	16
Baucau	14.7	78.2	50.8	47.9	15

Bobonaro	0.8	0.8	22.2	7.9	16
Cova Lima	11.0	6.6	13.2	10.3	23
Dili	2.5	5.0	40.1	15.9	12
Ermera	23.4	10.9	97.8	44.0	20
Lautem	0.0	20.4	25.7	15.4	17
Liquica	0.0	33.8	89.9	41.2	13
Manatuto	12.4	44.5	91.5	49.5	16
Manufahi	28.6	28.6	79.2	45.5	19
Oecusse	0.0	29.5	43.0	24.2	17
Viqueque	3.6	46.4	40.5	30.2	18
Total	11.3	30.3	60.2	33.9	217

Weighted percentages and unweighted N are presented in the table

Table 3.5: Teacher involvement in prevention and control use of alcohol use and smoking in students, Timor-Leste 2022

	% of teachers reporting							
	involved in enforcement of prohibition of use of alcohol & smoking	encouraged students to participate in anti-addiction related activities	spoken to students about anti addiction posters	Interacted with CHC or Health Post regarding anti-addiction in the past year*	spoken about ill effects of smoking in class	spoken about ill effects of drinking alcohol in class	Average score	N
Owner of the school								
Government	77.6	63.4	68.0	42.2	82.5	83.3	69.5	175
Private/ Catholic	75.8	63.7	37.6	7.0	96.1	96.1	62.7	42
Location of the school								
Rural	79.1	69.3	63.2	42.3	85.1	87.0	71.0	110
Urban	73.6	50.0	64.8	25.6	82.8	80.8	62.9	107
School grade in charge								

Grade 4-6	76.1	57.7	70.0	39.4	81.7	81.6	67.8	151
Grade 7-9	81.1	80.2	45.7	30.7	92.3	95.5	70.9	66
District								
Aileu	71.0	93.5	100.0	60.5	100.0	100.0	87.5	15
Ainaro	81.1	70.0	77.0	72.1	61.3	55.9	69.6	16
Baucau	100.0	32.4	63.5	47.6	100.0	100.0	73.9	15
Bobonaro	74.5	0.0	2.1	2.1	97.0	97.0	45.5	16
Cova Lima	50.9	14.6	21.9	7.0	70.6	77.6	40.4	23
Dili	100.0	56.5	40.1	15.9	89.1	89.1	65.1	12
Ermera	96.4	85.7	81.9	36.3	87.9	84.3	78.8	20
Lautem	55.8	69.9	52.9	4.4	79.1	79.1	56.9	17
Liquica	77.7	59.0	61.2	45.3	55.4	57.6	59.4	13
Manatuto	96.7	55.4	61.4	57.5	78.4	78.4	71.3	16
Manufahi	67.5	58.6	77.3	79.2	75.0	75.0	72.1	19
Oecusse	74.6	53.4	54.9	14.5	94.8	94.8	64.5	17
Viqueque	67.3	54.2	86.3	13.7	58.4	86.9	61.1	18
Total	77.4	63.5	63.7	37.2	84.4	85.2	68.6	217

Weighted percentages and unweighted N are presented in the table
*q22, a=b=c=1, others =0

Table 3.6: Proportion reporting involvement in enforcement of tobacco control and alcohol use in school in last one year, Timor-Leste 2022

	% of teachers who reported this in last one year			Average score	N
	caught students smoking in school	caught students drinking in school	inspect students for cigarette or alcohol		
Owner of the school					
Government	2.4	0.2	18.0	6.9	175
Private/ Catholic	3.2	1.8	6.2	3.7	42
Location of the school					
Rural	2.1	0.4	15.6	6.0	110
Urban	3.3	0.5	17.8	7.2	107
School grade in charge					
Grade 4-6	1.5	0.5	12.3	4.8	151
Grade 7-9	5.3	0.0	27.7	11.0	66
District					
Aileu	7.3	0.0	29.0	12.1	15
Ainaro	8.1	0.0	1.4	3.2	16
Baucau	0.0	0.0	5.2	1.7	15
Bobonaro	8.4	0.0	0.0	2.8	16
Cova Lima	6.1	0.0	6.6	4.2	23
Dili	4.0	0.0	20.3	8.1	12
Ermera	0.0	0.0	0.0	0.0	20
Lautem	4.4	4.4	0.0	2.9	17
Liquica	0.0	0.0	36.0	12.0	13
Manatuto	0.0	0.0	3.3	1.1	16
Manufahi	0.0	0.0	42.2	14.1	19
Oecusse	3.6	3.6	5.2	4.1	17
Viqueque	0.0	0.0	3.6	1.2	18
Total	2.5	0.4	16.3	6.4	217

Weighted percentages and unweighted N are presented in the table. Yes, always and yes, often is 1 and others 0

Table 3.7 Teacher perception of cleaning of drinking water and sanitation facilities in the school, Timor-Leste 2022

	% reporting on sanitation facilities				% reporting on drinking water facilities				N
	Always/often cleaned on schedule	Not cleaned on schedule	don't know	Total	Always/often cleaned on schedule	Not cleaned on schedule	don't know	Total	
Owner of the school									
Government	73.6	24.2	2.2	100.0	52.2	43.7	4.1	100.0	175
Private/ Catholic	47.5	52.5	0.0	100.0	31.0	66.0	2.9	100.0	42
Location of the school									
Rural	67.2	30.1	2.7	100.0	49.2	46.8	4.1	100.0	110
Urban	76.7	23.3	0.0	100.0	49.2	47.0	3.7	100.0	107
School grade in charge									
Grade 4-6	73.5	25.9	0.6	100.0	52.7	45.9	1.4	100.0	151
Grade 7-9	60.3	34.2	5.5	100.0	39.3	49.5	11.2	100.0	66
District									
Aileu	93.5	6.5	0.0	100.0	81.4	18.6	0.0	100.0	15
Ainaro	78.8	21.2	0.0	100.0	65.3	34.7	0.0	100.0	16
Baucau	61.5	38.5	0.0	100.0	23.9	76.1	0.0	100.0	15
Bobonaro	23.0	55.7	21.3	100.0	0.0	97.9	2.1	100.0	16
Cova Lima	44.7	50.0	5.3	100.0	8.8	81.6	9.6	100.0	23
Dili	81.2	18.8	0.0	100.0	15.9	67.8	16.3	100.0	12
Ermera	54.4	45.6	0.0	100.0	58.7	41.3	0.0	100.0	20
Lautem	50.0	50.0	0.0	100.0	58.3	41.7	0.0	100.0	17
Liquica	93.1	6.9	0.0	100.0	74.1	25.9	0.0	100.0	13
Manatuto	94.1	5.9	0.0	100.0	31.1	65.5	3.4	100.0	16
Manufahi	100.0	0.0	0.0	100.0	83.8	12.3	3.9	100.0	19
Oecusse	35.7	64.3	0.0	100.0	33.7	47.2	19.2	100.0	17
Viqueque	64.5	35.5	0.0	100.0	33.9	58.3	7.7	100.0	18

Total	70.1	28.0	1.9	100.0	49.2	46.8	4.0	100.0	217

Weighted percentages and unweighted N are presented in the table

Table 3.8 Teacher involvement in soil transmitted helminthiasis (STH) and WASH interventions, 2022

	% of teachers reporting				Mean score	N
	teach about hand washing and its relation to STH	% who taught hand washing with soap and running water	spoken to students about WASH and STH posters	conduct regular sessions for students about WASH and STH		
Owner of the school						
Government	97.1	99.8	88.5	34.5	80.0	175
Private/ Catholic	96.4	100.0	95.6	11.6	75.9	42
Location of the school						
Rural	97.3	100.0	89.0	38.3	81.2	110
Urban	96.5	99.4	90.7	15.4	75.5	107
School grade in charge						
Grade 4-6	96.6	100.0	90.7	38.1	81.4	151
Grade 7-9	98.3	99.4	86.0	11.9	73.9	66
District						
Aileu	100.0	100.0	100.0	25.0	81.3	15
Ainaro	100.0	100.0	81.5	54.8	84.1	16
Baucau	97.4	97.4	96.7	41.0	83.1	15
Bobonaro	92.1	100.0	94.0	0.0	71.5	16
Cova Lima	88.2	100.0	63.5	2.5	63.6	23
Dili	100.0	100.0	100.0	7.5	76.9	12
Ermera	100.0	100.0	100.0	42.9	85.7	20
Lautem	100.0	100.0	87.9	15.5	75.9	17
Liquica	100.0	100.0	100.0	17.3	79.3	13
Manatuto	100.0	100.0	97.4	45.1	85.6	16
Manufahi	96.1	100.0	96.1	33.8	81.5	19

Oecusse	100.0	100.0	83.9	17.1	75.3	17
Viqueque	100.0	100.0	78.0	22.0	75.0	18
Total	97.0	99.8	89.5	31.3	79.4	217

Weighted percentages and unweighted N are presented in the table

Table 3.9: Teacher perception on risks of skin infection in students, medicines and educating students on skin infection, Timor-Leste 2022

	% teacher reporting							
	sufficient bench and tables in their class	sufficient fans and windows in their class	none of the students are having skin infection	students receive medicines as a part of last MDA	Putting poster in your class/ nearby hallway?	explained the importance of the topic on poster to students	Mean score	N
Owner of the school								
Government	25.9	23.8	70.7	49.1	28.4	31.9	38.3	175
Private/ Catholic	35.6	30.3	48.3	25.7	12.9	33.8	31.1	42
Location of the school								
Rural	29.3	21.9	65.7	48.7	32.5	32.6	38.5	110
Urban	22.9	31.1	71.6	39.0	11.8	31.2	34.6	107
School grade in charge								
Grade 4-6	23.1	21.0	73.5	49.4	30.1	34.1	38.5	151
Grade 7-9	39.4	35.3	50.3	35.3	15.0	26.6	33.7	66
District								
Aileu	54.0	5.6	38.7	55.6	64.5	40.3	43.1	15
Ainaro	32.0	25.4	92.8	70.7	14.9	53.6	48.2	16
Baucau	15.3	5.2	59.0	45.6	23.1	23.1	28.6	15
Bobonaro	8.4	100.0	65.3	0.0	0.0	0.0	29.0	16
Cova Lima	2.2	23.9	85.1	6.6	0.0	0.0	19.6	23
Dili	10.4	65.3	83.7	5.0	15.9	13.4	32.3	12
Ermera	8.1	72.6	45.7	40.7	26.8	46.6	40.1	20
Lautem	9.2	0.0	45.6	57.8	0.0	24.8	22.9	17
Liquica	17.3	58.3	36.0	92.8	31.7	31.7	44.6	13
Manatuto	40.5	26.8	72.5	81.0	7.8	29.4	43.0	16
Manufahi	9.1	20.1	70.8	84.4	68.2	90.3	57.2	19
Oecusse	41.9	0.0	13.5	23.8	4.7	48.2	22.0	17
Viqueque	63.7	25.6	52.4	63.1	7.2	44.7	42.8	18
Total	27.3	24.7	67.5	45.7	26.2	32.2	37.3	217

Note: Weighted percentages and unweighted N are presented in the table

Table 3.10: Teacher's self-reported capacity to identify skin infection on seeing, in students, Timor-Leste 2022

	% teachers reporting capacity to identify								
	Scabies	Tinea cruris/ Tinea corporis/Kurap	Candidiasis	Xerosis	Impetigo	Molluscum contagiosum	Dermatitis/eczema	Mean score	N
Owner of the school									
Government	49.9	43.8	22.4	22.4	19.6	0.2	18.5	25.3	175
Private/ Catholic	35.9	27.7	9.1	7.7	9.3	1.6	2.6	13.4	42
Location of the school									
Rural	50.4	47.9	23.0	24.5	21.5	0.3	21.3	27.0	110
Urban	42.3	27.1	14.7	10.7	10.5	0.5	4.8	15.8	107
School grade in charge									
Grade 4-6	51.8	42.4	23.8	22.3	21.2	0.0	17.7	25.6	151
Grade 7-9	36.7	39.0	11.1	14.6	9.7	1.4	12.2	17.8	66
District									
Aileu	49.2	66.9	22.6	0.0	12.1	7.3	26.6	26.4	15
Ainaro	5.9	14.9	28.8	51.8	0.0	0.0	0.0	14.5	16
Baucau	80.1	58.3	57.6	43.6	41.0	0.0	58.3	48.4	15
Bobonaro	2.1	12.5	10.5	0.0	0.0	0.0	0.0	3.6	16
Cova Lima	18.4	14.5	2.6	2.2	2.6	0.0	0.0	5.8	23
Dili	40.1	29.2	7.9	5.0	21.3	0.0	5.0	15.5	12
Ermera	29.0	23.4	19.8	0.0	0.0	0.0	0.0	10.3	20
Lautem	11.2	58.3	26.2	10.2	0.0	0.0	25.2	18.7	17
Liquica	17.3	0.0	0.0	2.9	43.9	5.8	0.0	10.0	13
Manatuto	72.5	15.7	34.6	15.7	12.4	0.0	0.0	21.6	16
Manufahi	48.1	35.1	26.0	14.9	5.8	0.0	3.9	19.1	19
Oecusse	48.2	38.3	16.6	40.4	4.7	0.0	19.2	23.9	17
Viqueque	44.0	40.5	28.0	10.1	27.4	0.0	11.3	23.0	18
Total	47.9	41.5	20.5	20.3	18.2	0.4	16.3	23.6	217

Weighted percentages and unweighted N are presented in the table

Table 3.11 Teacher perception on facilities for promotion of physical activity in the school, Timor-Leste 2022

	% of teachers reporting the following in the school					Mean score	N
	a dedicated teacher for promoting physical activities	space for students to engage in physical activities	equipment's for students to engage in physical activities	regular schedule for physical activity	scheduled physical activity atleast twice in a week		
Owner of the school							
Government	67.1	72.2	58.1	80.0	8.0	57.1	175
Private/ Catholic	82.5	74.8	55.3	77.6	10.6	60.2	42
Location of the school							
Rural	70.6	72.2	55.4	79.7	6.1	56.8	110
Urban	66.3	73.5	62.8	79.5	13.7	59.2	107
School grade in charge							
Grade 4-6	61.5	75.4	57.9	80.0	8.6	56.7	151
Grade 7-9	91.4	64.5	57.2	78.6	7.9	59.9	66
District							
Aileu	87.9	37.9	16.9	74.2	0.0	43.4	15
Ainaro	54.5	69.8	68.2	72.1	6.8	54.3	16
Baucau	80.1	17.6	42.4	83.4	14.7	47.6	15
Bobonaro	95.8	95.8	73.6	95.8	0.8	72.4	16
Cova Lima	92.5	92.1	79.4	97.4	0.0	72.3	23
Dili	81.2	100.0	75.7	74.3	0.0	66.2	12
Ermera	66.7	84.3	51.1	56.8	0.0	51.8	20
Lautem	34.0	77.7	64.1	74.8	22.8	54.7	17
Liquica	66.2	44.6	55.4	66.2	2.2	46.9	13
Manatuto	32.7	68.6	41.8	71.9	31.4	49.3	16

Manufahi	92.2	96.1	79.7	92.2	20.8	76.2	19
Oecusse	65.3	51.8	52.3	78.2	33.7	56.3	17
Viqueque	39.9	25.6	17.9	58.9	7.2	29.9	18
Total	69.3	72.6	57.7	79.6	8.4	57.5	217

Weighted percentages and unweighted N are presented in the table

Annex III. Student data: Tables & Indicators

Table 4.1: Selected characteristics of the students surveyed, Timor-Leste 2022

	Number	Percentage
Age of the student*		
<12 years	40	3.4
12-14 years	1016	61.1
15+ years	592	35.5
Sex**		
Male	816	45.0
Female	1010	55.0
Location of the school		
Rural	1058	69.0
Urban	908	31.0
Type of school		
Government	1590	77.0
Private/ Catholic	376	23.0
Schooling grade		
Grade 7	607	36.4
Grade 8	678	28.6
Grade 9	681	35.0
Total	1966	100.0

Note: * 318 missing; ** 140 missing
weighted percentages and unweighted N are presented in the table
Subgroup total will not add up to total number of students interviewed due to missing cases/responses

Table 4.2: Selected household characteristics of the students surveyed, Timor-Leste 2022

	Number of students*	Percentage
Father's occupation		
Government job	337	16.3
Private job	211	12.3
Agricultural work	955	54.5
Business	107	5.8
Homemaker	140	8.8
Don't know	40	2.4
Mother's occupation		
Government job	181	8.5
Private job	73	3.9
Agricultural work	444	26.3
Business	258	14.9
Homemaker	737	44.3
Don't know	41	2.2
Type of housing		
Well-built multi storied house	90	4.3
Well-built single storied house	415	21.9
Partially built house	946	53.4
Slum household	280	15.1
Thatched houses	94	5.3
Type of drinking water in household		
Piped into inside of the house building	394	21.5
Piped into yard	510	29.1
Borehole	322	17.2
Unprotected dug-well	371	20.5
Water from River	141	7.4
I don't know	91	4.4
Type of toilet in household		
Flush toilet	324	17.9
Non flush but Water seal	242	12.2
Pit type	841	44.2
Public toilet	346	20.1
River or bush (open defecation)	45	2.8
I don't know	52	2.8
Dust bin in the household		
Yes	1462	79.9
No	378	20.1
Total	1966	100.0

Note: weighted percentages and unweighted N are presented in the table

* Subgroup total will not add up to total number of students interviewed due to missing cases/responses

Table 4.3a: Consumption of healthy food items at least 4 times in last 7 days, Timor-Leste 2022

	Percentage of students who had the following atleast 4 times in last 7 days				No. of students (N)
	milk/ milk products	seasonal fruits	vegetables	meat/ egg/ fish	
Sex*					
Male	73.3	70.4	69.8	65.9	816
Female	70.9	64.9	67.6	66.8	1010
Type of the school					
Government	71.9	66.1	68.4	65.4	1590
Private/ Catholic	71.6	72.1	71.7	69.5	376
Location of the school					
Rural	73.0	68.9	69.0	67.2	1058
Urban	68.9	63.8	69.2	64.3	908
Class					
Grade 7	78.4	72.8	69.1	71.4	607
Grade 8	70.0	69.6	70.7	66.0	678
Grade 9	66.8	60.6	67.8	61.6	681
Wealth Quintile					
Lowest	72.9	67.4	66.4	61.8	345
Second	75.1	68.9	64.6	66.3	318
Middle	72.4	60.8	65.9	67.1	321
Fourth	71.7	72.4	77.2	70.3	333
Highest	69.7	66.2	72.7	61.3	279
District					
Aileu	78.9	71.4	74.3	70.8	150
Ainaro	88.0	73.0	79.2	72.8	102
Baucau	74.8	64.3	62.9	58.8	192
Bobonaro	59.5	59.3	73.3	61.3	120
Cova Lima	71.2	68.1	75.5	69.1	162
Dili	69.3	64.5	61.8	54.6	251
Ermera	66.4	60.1	56.0	58.7	230
Lautem	59.2	55.7	76.4	61.1	74
Liquica	71.3	67.0	71.5	69.8	105
Manatuto	64.2	67.1	72.7	71.5	108
Manufahi	66.1	68.2	72.7	67.0	172
Oecusse	90.2	74.9	68.5	69.3	145
Viqueque	71.5	68.4	66.5	67.3	155
Total	71.8	67.4	69.1	66.3	1966

Note: Weighted percentages and unweighted N are presented in the table

* Subgroup total will not add up to total number of students interviewed due to missing cases/responses

Table 4.3b: Consumption of healthy food items every day in last 7 days, Timor-Leste 2022

	Percentage of students who had the following every day in last 7 days				No. of students (N)
	milk/ milk products	seasonal fruits	vegetables	meat/ egg/ fish	
Sex*					
Male	64.3	58.1	51.4	51.4	816
Female	64.2	51.5	46.8	54	1010
Type of the school					
Government	63	53.8	49.7	54	1590
Private/ Catholic	67.6	60.1	48.4	50.3	376
Location of the school					
Rural	66.5	56.5	51.2	54.6	1058
Urban	58.5	52.2	45.4	50.2	908
Class					
Grade 7	71.1	58.5	50.4	54.3	607
Grade 8	65.3	57.2	48.8	53.6	678
Grade 9	56.1	50.4	49	51.9	681
Wealth Quintile					
Lowest	64.3	54.1	47.7	52.3	345
Second	65.8	54.4	48.8	54.6	318
Middle	61	47.2	47.3	51.1	321
Fourth	66.7	62.9	59	56.7	333
Highest	60.3	54.7	51.7	46.1	279
District					
Aileu	75.7	57.8	53.4	57.9	150
Ainaro	76.8	52.9	46.6	57.7	102
Baucau	70.9	52	45	48	192
Bobonaro	52.8	47.9	50.7	48.7	120
Cova Lima	61.6	56.6	58.9	54.3	162
Dili	65.2	48.6	38.1	42.5	251
Ermera	54.1	47.1	38.7	47.6	230
Lautem	53.5	44.3	61.1	45.8	74
Liquica	69	55.4	54	66.4	105
Manatuto	61.9	57	52	55.4	108
Manufahi	61.7	53.9	47.9	58.1	172
Oecusse	68.2	58	45.7	60.7	145
Viqueque	68.7	54.4	51.1	57.4	155
Total	64	55.2	49.4	53.2	1966

*Subgroup total will not add up to total number of students interviewed due to missing cases/responses

Note: Weighted percentages and unweighted N are presented in the table

Table 4.4: Uptake of food items high in salt, high fat, sugary and carbonated drinks among students in last 7 days, Timor-Leste 2022

	Percentage of students reported to have had the following more than once in last 7 days					Mean score	No. of students (N)
	salty foods	fast foods	sugary sweet drinks	Sugary food	carbonated soft drinks		
Sex*							
Male	74.1	80.8	80.7	76.0	70.1	76.3	816
Female	72.8	79.8	78.4	74.4	72.2	75.5	1010
Type of the school							
Government	73.3	81.1	80.7	77.3	72.3	76.9	1590
Private/ Catholic	75.6	76.9	76.6	66.9	70.6	73.3	376
Location of the school							
Rural	74.4	79.8	79.0	76.8	72.0	76.4	1058
Urban	72.5	81.2	81.7	71.4	71.7	75.7	908
Class							
Grade 7	75.5	77.9	81.8	77.6	71.1	76.8	607
Grade 8	72.6	83.0	78.0	73.5	70.7	75.6	678
Grade 9	73.1	80.3	79.5	74.1	73.6	76.1	681
Wealth Quintile							
Lowest	69.2	80.5	80.5	80.6	69.9	76.1	345
Second	76.6	79.9	79.4	79.6	72.0	77.5	318
Middle	73.6	85.3	82.1	74.3	73.8	77.8	321
Fourth	78.4	78.9	74.2	73.4	68.4	74.7	333
Highest	71.7	74.4	79.7	66.1	71.0	72.6	279
District							
Aileu	76.4	86.5	82.6	80.9	69.8	79.2	150
Ainaro	77.3	87.8	88.5	87.0	81.3	84.4	102
Baucau	72.4	86.5	83.0	74.2	73.1	77.8	192

Bobonaro	73.4	80.7	89.0	72.0	72.0	77.4	120
Cova Lima	75.1	75.6	77.1	68.4	67.6	72.8	162
Dili	76.8	82.6	84.1	73.3	76.8	78.7	251
Ermera	66.6	73.7	76.6	72.6	51.4	68.2	230
Lautem	55.6	78.1	58.9	66.7	52.2	62.3	74
Liquica	75.7	82.5	80.6	81.1	70.2	78.0	105
Manatuto	70.9	78.1	82.3	74.0	70.2	75.1	108
Manufahi	60.0	73.2	82.9	72.7	67.4	71.2	172
Oecusse	88.0	83.5	87.3	89.8	79.3	85.6	145
Viqueque	74.0	79.5	74.0	68.4	64.4	72.1	155
Total	73.8	80.2	79.9	75.1	71.9	76.2	1966

Note: Weighted percentages and unweighted N are presented in the table

*Subgroup total will not add up to total number of students interviewed due to missing cases/responses

Table 4.5 Exposure to promotion of healthy eating and dietary behaviour among students in the school, Timor-Leste 2022

	Percentage of students who have been taught the following in the schools								Average score	No. of students (N)
	Healthy eating habits	Use of meat, fruits, and vegetables in school	healthy gaining and losing weight	hand washing before and after meals	hand washing before and after use of toilet	about safe storage of food	avoiding carbonated drinks, sugary food, fatty, and fast food	encouraged to consume school meals		
Sex*										
Male	33.1	21.7	2.4	17.0	3.5	4.6	3.2	1.3	10.9	816
Female	30.3	17.9	2.0	26.2	9.1	8.5	3.6	1.6	12.4	1010
Owner of the school										
Government	30.9	20.1	2.2	21.5	7.3	6.4	3.8	1.9	11.8	1590
Private/ Catholic	34.9	17.2	2.0	21.4	3.4	6.1	2.5	1.3	11.1	376
Location of the										
Rural	33.4	18.2	2.0	19.4	4.4	4.4	1.7	1.6	10.6	1058
Urban	28.5	22.2	2.4	26.2	10.9	10.7	7.4	2.1	13.8	908
Class										
Grade 7	35.4	18.0	3.4	19.4	5.7	4.9	2.2	0.6	11.2	607
Grade 8	32.3	20.3	1.2	19.8	6.3	7.3	3.8	2.1	11.6	678
Grade 9	27.8	20.3	1.7	25.1	7.2	7.0	4.5	2.6	12.0	681
Wealth Quintile										
Lowest	35.2	14.7	1.7	21.8	3.7	3.7	3.9	2.2	10.9	345
Second	34.6	19.7	0.8	17.6	5.4	4.2	0.8	1.6	10.6	318
Middle	37.1	21.4	0.0	22.5	6.8	4.7	3.4	0.7	12.1	321

	Percentage of students who have been taught the following in the schools								Average score	No. of students (N)
	Healthy eating habits	Use of meat, fruits, and vegetables in school	healthy gaining and losing weight	hand washing before and after meals	hand washing before and after use of toilet	about safe storage of food	avoiding carbonated drinks, sugary food, fatty, and fast food	encouraged to consume school meals		
Fourth	32.3	20.6	4.9	18.5	4.8	6.4	3.5	3.2	11.8	333
Highest	29.7	24.6	3.3	28.6	13.8	16.3	7.3	0.4	15.5	279
District										
Aileu	35.0	17.1	2.1	23.4	6.3	4.2	3.4	1.1	11.6	150
Ainaro	35.0	27.5	1.6	11.1	5.2	4.2	0.7	0.0	10.7	102
Baucau	28.3	16.3	0.8	22.8	6.9	3.4	5.0	1.7	10.7	192
Bobonaro	30.6	13.8	7.3	11.4	3.2	11.9	0.9	3.0	10.3	120
Cova Lima	35.2	14.1	4.9	9.6	3.9	4.1	2.6	1.0	9.4	162
Dili	44.0	18.1	1.9	12.2	8.7	6.2	6.7	3.3	12.6	251
Ermera	20.5	17.2	1.5	29.9	6.9	6.8	4.0	1.3	11.0	230
Lautem	35.1	20.3	0.0	10.8	6.8	5.4	0.0	0.0	9.8	74
Liquica	38.4	14.5	2.4	20.4	0.6	7.2	2.4	0.0	10.7	105
Manatuto	31.3	25.3	4.6	29.2	18.4	15.7	8.9	3.5	17.1	108
Manufahi	22.5	32.0	3.6	24.4	10.9	4.9	2.1	0.4	12.6	172
Oecusse	37.9	17.1	2.2	25.3	3.8	0.8	1.5	1.0	11.2	145
Viqueque	21.1	15.8	0.0	14.4	2.8	4.6	7.4	3.1	8.7	155
Total	31.9	19.5	2.2	21.5	6.4	6.3	3.5	1.7	11.6	1966

Note: Weighted percentages and unweighted N are presented in the table

*Subgroup total will not add up to total number of students interviewed due to missing cases/responses

Table 4.6: Personal hygienic related practices among the students during the past 30 days, Timor-Leste 2022

	Percentage of students reported to				Average score	No. of students (N)
	taking bath every day	cutting nails atleast once in 15 days	washing hands with soap before eating in school	washed hand with soap and water before and after using toilet		
Sex*						
Male	43.6	56.0	95.5	93.3	72.1	816
Female	43.7	60.0	95.5	97.5	74.2	1010
Owner of the school						
Government	40.5	54.7	94.4	94.6	71.1	1590
Private/ Catholic	51.7	68.0	97.8	98.9	79.1	376
Location of the school						
Rural	43.5	60.9	96.1	96.1	74.2	1058
Urban	42.1	50.9	93.1	94.5	70.2	908
Class						
Grade 7	36.3	60.1	96.4	93.6	71.6	607
Grade 8	47.1	58.4	95.7	96.1	74.3	678
Grade 9	46.8	55.1	93.5	97.2	73.2	681
Wealth Quintile						
Lowest	43.3	58.6	96.4	92.1	72.6	345
Second	42.0	53.8	95.6	96.6	72.0	318
Middle	40.7	53.0	94.6	95.8	71.0	321
Fourth	43.3	61.0	95.5	95.2	73.8	333
Highest	47.1	59.6	94.8	99.0	75.1	279
District						
Aileu	53.1	63.2	98.0	96.3	77.7	150
Ainaro	34.4	66.3	98.9	94.5	73.5	102
Baucau	38.6	27.3	92.0	94.1	63.0	192
Bobonaro	27.7	33.9	92.7	97.9	63.1	120
Cova Lima	40.0	68.1	94.2	89.6	73.0	162
Dili	39.5	51.4	93.6	98.3	70.7	251
Ermera	64.4	64.1	97.5	97.1	80.8	230
Lautem	44.6	52.7	91.9	95.9	71.3	74
Liquica	38.7	68.3	100.0	95.2	75.6	105
Manatuto	37.4	49.6	93.9	99.1	70.0	108
Manufahi	36.5	62.8	87.4	95.6	70.6	172
Oecusse	26.8	53.2	94.2	88.6	65.7	145
Viqueque	47.2	41.9	89.6	94.8	68.4	155
Total	43.1	57.8	95.2	95.6	72.9	1966

Note: Weighted percentages and unweighted N are presented in the table

*Subgroup total will not add up to total number of students interviewed due to missing cases/responses

Table 4.7 Menstruation and use of sanitary napkins among girl students, Timor-Leste 2022

	Percentage of students where menstruation started	Percentage of girls reporting						Average score	No. of students (N)
		Using sanitary napkin pads	clean place to change pads	place to change pads having privacy	never missed school due to periods	Change napkins atleast twice in a day	sufficiently taught about menstruation in the school		
Owner of the school									
Government	71.8	73.6	93.1	91.2	42.3	77.5	38.3	69.3	820
Private/ Catholic	47.8	66.5	90.3	89.0	54.1	73.6	29.3	67.1	190
Location of the school									
Rural	62.9	69.9	91.0	91.6	42.2	75.7	32.5	67.2	523
Urban	72.3	76.1	95.5	88.9	51.0	78.4	43.7	72.3	487
Class									
Grade 7	48.0	64.7	88.0	87.1	45.7	64.5	29.2	63.2	304
Grade 8	62.3	68.1	92.8	91.7	47.6	79.0	36.0	69.2	343
Grade 9	85.4	80.9	96.2	93.1	42.7	85.2	42.7	73.5	363
Wealth Quintile									
Lowest	63.6	74.6	94.1	87.9	35.9	74.8	38.8	67.7	345
Second	66.2	73.5	91.2	89.0	34.5	77.4	41.0	67.8	318
Middle	61.8	70.4	91.5	90.1	41.7	77.2	37.7	68.1	321
Fourth	71.2	71.0	93.1	90.0	53.1	79.3	34.1	70.1	333
Highest	73.3	75.4	90.6	93.7	55.8	83.2	37.8	72.8	279
District									
Aileu	80.2	77.6	100.0	97.9	36.5	85.5	58.4	76.0	69
Ainaro	61.8	54.8	96.0	93.1	19.7	74.2	55.2	65.5	70
Baucau	74.9	81.2	96.4	93.7	51.2	77.8	43.0	73.9	98
Bobonaro	77.5	77.4	100.0	96.6	29.9	75.3	29.3	68.1	64
Cova Lima	56.4	69.3	93.3	81.8	36.5	72.7	38.3	65.3	68
Dili	72.7	91.1	94.8	95.4	62.1	91.2	44.0	79.8	121
Ermera	87.9	85.9	97.5	91.7	18.6	85.6	31.7	68.5	122
Lautem	59.5	67.6	75.7	78.4	70.3	59.5	16.2	61.3	38
Liquica	85.0	75.4	98.8	97.7	30.2	80.4	57.1	73.3	57
Manatuto	64.1	78.9	90.1	84.3	57.9	73.5	57.3	73.7	61
Manufahi	66.0	85.1	97.1	90.6	53.9	85.3	27.6	73.3	86
Oecusse	78.5	41.2	82.3	91.3	19.5	60.3	23.2	53.0	72
Viqueque	70.2	72.3	96.8	87.8	56.0	85.6	47.2	74.3	84
Total	66.1	72.0	92.5	90.7	45.1	76.6	36.2	68.9	1010

Note: Weighted percentages and unweighted N are presented in the table
Subgroup total will not add up to total number of students interviewed due to missing cases/responses

Table 4.8 Menstruation and use of sanitary napkins among girl students, Timor-Leste 2022

	Percentage of students where menstruation started	Number of students	Percentage of students menstruation reporting							No. of students (N)
			using sanitary napkin pads	clean place to change pads	place to change pads having privacy	never missed school due to periods	Change napkins atleast twice in a day	sufficiently taught about menstruation in the school	Average score	
Owner of the										
Government	71.8	820	77.9	97.1	95.2	38.1	84.6	41.8	72.5	565
Private/	47.8	190	64.6	99.3	95.0	42.2	78.1	41.2	70.1	109
Location of										
Rural	62.9	523	70.7	96.5	96.2	33.1	81.2	36.8	69.1	338
Urban	72.3	487	84.0	99.1	93.4	48.5	87.3	50.1	77.1	336
Class										
Grade 7	48.0	304	67.8	97.7	96.8	30.6	75.3	36.7	67.5	139
Grade 8	62.3	343	71.2	97.5	94.0	40.8	84.0	44.1	71.9	229
Grade 9	85.4	363	81.8	97.3	95.0	41.8	87.2	43.0	74.4	306
Wealth										
Lowest	63.6	345	73.7	99.6	94.4	28.2	80.5	40.6	69.5	110
Second	66.2	318	73.1	95.4	94.5	29.5	84.6	44.8	70.3	106
Middle	61.8	321	81.4	97.8	94.4	34.8	83.6	45.6	72.9	106
Fourth	71.2	333	74.9	99.8	91.8	46.2	90.7	44.3	74.6	108
Highest	73.3	279	78.4	94.1	98.2	48.5	91.8	43.2	75.7	121
District										
Aileu	80.2	69	79.9	100.0	98.8	35.8	86.7	62.3	77.3	49

	Percentage of students where menstruation started	Number of students	Percentage of students menstruation reporting							No. of students (N)
			using sanitary napkin pads	clean place to change pads	place to change pads having privacy	never missed school due to periods	Change napkins atleast twice in a day	sufficiently taught about menstruation in the school	Average score	
Ainaro	61.8	70	62.0	100.0	95.8	7.6	94.7	63.7	70.6	38
Baucau	74.9	98	83.0	98.1	94.5	51.8	83.9	44.4	76.0	65
Bobonaro	77.5	64	87.4	100.0	100.0	27.2	83.7	34.1	72.1	50
Cova Lima	56.4	68	76.8	100.0	94.4	29.6	87.4	54.8	73.8	41
Dili	72.7	121	93.3	95.8	98.1	62.9	96.7	45.7	82.1	77
Ermera	87.9	122	87.0	100.0	96.4	17.9	85.7	35.4	70.4	86
Lautem	59.5	38	68.2	90.9	86.4	68.2	68.2	27.3	68.2	22
Liquica	85.0	57	78.0	100.0	100.0	23.4	83.7	60.4	74.3	49
Manatuto	64.1	61	86.2	100.0	95.0	46.5	94.0	71.0	82.1	36
Manufahi	66.0	86	91.5	100.0	91.7	51.1	86.1	25.0	74.2	58
Oecusse	78.5	72	46.8	86.0	95.5	18.1	68.6	22.1	56.2	46
Viqueque	70.2	84	79.3	97.9	96.8	52.5	89.6	51.0	77.9	57
Total	66.1	1010	75.6	97.5	95.2	38.8	83.4	41.7	72.0	674

Note: Weighted percentages and unweighted N are presented in the table

Subgroup total will not add up to total number of students interviewed due to missing cases/responses

Table 4.9 Exposure to selected health promotion related posters in the school, Timor-Leste 2022

	% of students seeing posters related			N
	Hand washing	Brushing the tooth	Physical exercise	
Sex*				
Male	44.5	15.2	0.6	816
Female	71.1	19.3	1.5	1010
Owner of the school				
Government	54.2	19.2	0.9	1590
Private/ Catholic	74.3	12.9	1.7	376
Location of the school				
Rural	58.3	17.2	0.6	1058
Urban	59.9	19.0	1.9	908
Class				
Grade 7	56.0	17.7	0.1	607
Grade 8	63.4	17.8	2.2	678
Grade 9	58.0	17.9	1.0	681
Wealth Quintile				
Lowest	53.5	22.0	0.9	345
Second	58.6	17.5	0.4	318
Middle	58.4	14.7	1.0	321
Fourth	56.5	19.8	0.5	333
Highest	68.5	19.1	1.2	279
District				
Aileu	67.4	26.0	0.4	150
Ainaro	63.7	3.3	0.0	102
Baucau	42.5	12.7	1.1	192
Bobonaro	49.4	22.7	0.0	120
Cova Lima	49.3	25.9	0.0	162
Dili	64.8	15.8	0.0	251
Ermera	64.1	26.5	0.8	230
Lautem	41.9	14.9	0.0	74
Liquica	56.7	30.0	4.7	105
Manatuto	59.8	20.5	4.1	108
Manufahi	66.8	16.4	1.5	172
Oecusse	35.2	22.8	0.0	145
Viqueque	57.4	14.7	2.2	155
Total	58.8	17.8	1.0	1966

Note: Weighted percentages and unweighted N are presented in the table
*Subgroup total may not add up to total number of students interviewed due to missing cases/responses

Table 4.10 Risk of Soil-transmitted Helminthiasis and skin diseases in school children, Timor-Leste 2022

	% of student reporting the following in last one year						mean score	N
	experienced worms in stool	experienced an anal itch	swollen orange-like the skin on your legs and the private parts	not received the deworming medication in last 1 year	ever experienced itching of general skin in the past year	experienced itching of private parts, underarms, and skin folds in the past year		
Sex*								
Male	34.6	29.8	27.6	39.4	43.7	31.8	34.5	816
Female	24.8	22.2	17.4	44.3	34.3	23.2	27.7	1010
Owner of the school								
Government	30.6	27.8	24.0	43.1	40.2	30.0	32.6	1590
Private/ Catholic	25.3	19.4	15.3	40.0	36.4	18.8	25.9	376
Location of the school								
Rural	31.4	26.9	24.3	38.7	41.7	28.8	32.0	1058
Urban	24.7	23.2	16.6	50.4	34.1	23.7	28.8	908
Class								
Grade 7	41.8	34.6	27.3	34.3	47.6	34.2	36.6	607
Grade 8	22.1	22.6	18.5	44.7	35.5	24.1	27.9	678
Grade 9	23.1	19.9	19.4	47.9	34.5	23.2	28.0	681
Wealth Quintile								
Lowest	36.7	32.7	28.4	39.2	42.9	30.9	35.1	345
Second	32.1	27.0	26.1	35.8	37.8	28.1	31.2	318
Middle	31.0	27.8	24.3	48.8	42.1	25.4	33.2	321
Fourth	19.9	23.3	17.7	40.1	37.0	25.7	27.3	333

	% of student reporting the following in last one year						mean score	N
	experienced worms in stool	experienced an anal itch	swollen orange-like the skin on your legs and the private parts	not received the deworming medication in last 1 year	ever experienced itching of general skin in the past year	experienced itching of private parts, underarms, and skin folds in the past year		
Highest	27.4	19.9	17.4	48.6	34.0	25.3	28.8	279
District								
Aileu	35.2	24.0	22.6	37.9	48.5	28.0	32.7	150
Ainaro	31.0	16.8	15.9	39.2	37.9	37.9	29.8	102
Baucau	27.3	18.6	18.3	45.6	44.8	24.8	29.9	192
Bobonaro	19.0	34.5	26.3	42.9	35.8	31.6	31.7	120
Cova Lima	35.4	31.5	30.7	37.7	44.3	38.8	36.4	162
Dili	21.7	15.2	13.9	54.5	27.8	16.1	24.9	251
Ermera	25.3	25.3	19.5	39.1	34.7	32.9	29.5	230
Lautem	25.4	25.7	21.4	60.6	32.9	23.2	31.5	74
Liquica	35.2	28.4	28.2	46.5	41.6	42.7	37.1	105
Manatuto	23.7	22.0	8.3	46.7	30.6	11.9	23.9	108
Manufahi	22.3	14.0	12.3	41.1	44.7	19.5	25.7	172
Oecusse	59.2	63.9	51.2	21.9	60.0	56.4	52.1	145
Viqueque	30.4	32.2	23.9	52.2	42.1	35.6	36.1	155
Total	29.3	25.8	21.9	42.4	39.3	27.2	31.0	1966

Note: Weighted percentages and unweighted N are presented in the table

Subgroup total will not add up to total number of students interviewed due to missing cases/responses

Table 4.11 Exposure to education materials related intestinal worms and skin diseases, Timor-Leste 2022

	% of student reporting the following in last one year			N
	informed about intestinal worms at your school in the past year	seen a poster about intestinal worms at your school	a poster about skin diseases at school	
Sex*				
Male	66.1	53.5	65.6	816
Female	58.9	43.4	51.6	1010
Owner of the school				
Government	62.8	48.7	56.8	1590
Private/ Catholic	58.4	47.9	57.8	376
Location of the school				
Rural	64.0	51.3	60.6	1058
Urban	56.8	42.4	49.1	908
Class				
Grade 7	65.1	52.7	63.2	607
Grade 8	65.0	47.7	56.4	678
Grade 9	56.1	45.3	51.9	681
Wealth Quintile				
Lowest	62.5	53.4	64.7	345
Second	65.2	49.8	55.1	318
Middle	57.9	45.3	51.4	321
Fourth	62.3	52.4	56.2	333
Highest	59.1	48.5	57.1	279
District				
Aileu	66.7	50.4	62.2	150
Ainaro	65.4	47.3	46.8	102
Baucau	58.9	41.3	47.2	192
Bobonaro	71.7	45.3	64.1	120
Cova Lima	67.0	59.9	55.9	162
Dili	45.1	34.9	30.0	251
Ermera	70.4	57.2	62.7	230
Lautem	45.7	35.2	46.4	74
Liquica	63.5	43.2	68.4	105
Manatuto	49.5	47.9	39.6	108
Manufahi	57.1	42.6	51.3	172
Oecusse	70.6	68.5	73.9	145
Viqueque	61.5	47.0	55.7	155
Total	61.7	48.5	57.1	1966

Note: Weighted percentages and unweighted N are presented in the table
*Subgroup total will not add up to total number of students interviewed due to missing cases/responses

Table 4.12: Tobacco consumption among students last one year, Timor-Leste 2022

	% of reporting				Total	% of reporting use of					Total
	No	Yes, I have tried it once or a few times	Yes, I take it occasionally with friends	Yes, I regularly consume alcohol		Not a user	Cigarette (LA, Malboro, Surya)	Electronic cigarette	Chewing tobacco	Maseri / others	
Sex*											
Male	67.8	17.0	12.8	2.4	100.0	73.8	20.4	2.1	0.6	3.2	100.0
Female	88.1	7.4	3.1	1.4	100.0	87.9	7.3	1.0	1.3	2.4	100.0
Owner of the school											
Government	77.0	12.6	8.7	1.7	100.0	79.7	14.2	1.3	1.2	3.6	100.0
Private/ Catholic	86.6	8.5	2.9	2.0	100.0	88.8	8.8	1.8	0.2	0.4	100.0
Location of the											
Rural	79.8	10.8	7.2	2.3	100.0	81.7	12.4	1.7	1.2	3.1	100.0
Urban	78.4	13.3	7.5	0.8	100.0	82.2	14.0	0.9	0.5	2.4	100.0
Class											
Grade 7	77.7	13.1	6.1	3.1	100.0	83.5	9.7	1.4	2.0	3.4	100.0
Grade 8	83.0	9.2	7.4	0.5	100.0	83.9	11.6	2.2	0.6	1.8	100.0
Grade 9	78.1	12.0	8.3	1.7	100.0	79.0	16.7	0.8	0.3	3.1	100.0
Wealth Quintile											
Lowest	75.2	10.7	10.3	3.8	100.0	76.1	14.0	3.1	3.1	3.8	100.0
Second	76.8	14.5	7.0	1.6	100.0	78.1	16.4	1.0	1.0	3.5	100.0
Middle	76.8	14.0	7.9	1.3	100.0	80.5	16.4	0.7	0.1	2.2	100.0
Fourth	81.1	10.4	6.0	2.4	100.0	87.1	7.6	1.3	0.5	3.5	100.0
Highest	84.3	9.4	5.6	0.6	100.0	83.1	13.7	1.8	0.0	1.4	100.0

	% of reporting				Total	% of reporting use of					Total
	No	Yes, I have tried it once or a few times	Yes, I take it occasionally with friends	Yes, I regularly consume alcohol		Not a user	Cigarette (LA, Malboro, Surya)	Electronic cigarette	Chewing tobacco	Maseri / others	
District											
Aileu	82.0	12.8	4.5	0.7	100.0	79.6	15.3	1.0	1.5	2.5	100.0
Ainaro	84.1	11.9	3.4	0.6	100.0	83.9	12.6	0.0	0.0	3.4	100.0
Baucau	69.8	13.4	15.8	1.0	100.0	77.0	15.8	0.5	0.0	6.7	100.0
Bobonaro	82.1	12.1	3.0	2.8	100.0	79.8	12.1	5.4	0.0	2.7	100.0
Cova Lima	64.1	20.2	12.3	3.4	100.0	73.6	13.1	7.6	2.7	3.0	100.0
Dili	75.4	13.1	9.2	2.3	100.0	78.7	13.6	3.4	1.6	2.7	100.0
Ermera	80.7	9.7	8.5	1.0	100.0	79.1	14.6	1.9	1.0	3.4	100.0
Lautem	83.8	8.8	7.4	0.0	100.0	79.1	11.9	1.5	0.0	7.5	100.0
Liquica	81.2	10.3	7.8	0.7	100.0	73.8	17.5	2.0	0.0	6.6	100.0
Manatuto	83.6	5.8	9.2	1.3	100.0	85.8	11.7	1.4	0.0	1.1	100.0
Manufahi	84.9	10.9	4.2	0.0	100.0	79.0	17.0	0.0	0.0	4.0	100.0
Oecusse	64.4	16.3	14.6	4.8	100.0	74.6	17.7	0.9	4.1	2.8	100.0
Viqueque	69.0	15.7	12.7	2.6	100.0	73.3	23.5	0.0	2.1	1.1	100.0
Total	79.3	11.6	7.3	1.8	100.0	81.9	12.9	1.4	0.9	2.9	100.0

Note: Weighted percentages and unweighted N are presented in the table

*Subgroup total will not add up to total number of students interviewed due to missing cases/responses

Table 4.13: Alcohol consumption among students last one year, Timor-Leste 2022

	% of reporting alcohol use				Total	% of reporting use of				Total
	Not a user	Yes, I have tried it once or a few times	Yes, I take it occasionally with friends	Yes, I regularly consume alcohol		Not alcohol user	Beer, lager, or stout	Wine	Locally made Spirits/ others	
Sex										
Male	65.8	23.5	8.6	2.1	100.0	65.4	9.1	5.6	19.9	100.0
Female	85.8	9.8	3.9	0.5	100.0	83.9	3.2	2.9	9.9	100.0
Owner of the school										
Government	74.2	17.7	6.8	1.3	100.0	74.2	6.4	4.0	15.4	100.0
Private/ Catholic	86.5	10.1	2.7	0.8	100.0	79.9	4.0	4.0	12.1	100.0
Location of the										
Rural	78.4	14.3	5.8	1.4	100.0	76.8	5.2	3.8	14.2	100.0
Urban	74.7	19.0	5.8	0.5	100.0	73.1	7.1	4.5	15.3	100.0
Class										
Grade 7	74.7	18.0	6.3	1.0	100.0	72.7	5.2	6.6	15.6	100.0
Grade 8	79.1	15.5	3.9	1.5	100.0	75.2	8.7	2.4	13.8	100.0
Grade 9	78.2	14.0	6.7	1.0	100.0	78.6	4.3	2.9	14.2	100.0
Wealth Quintile										
Lowest	74.3	16.8	7.8	1.2	100.0	75.2	4.7	3.1	17.0	100.0
Second	74.2	16.2	8.5	1.1	100.0	78.9	5.2	3.3	12.7	100.0

	% of reporting alcohol use				Total	% of reporting use of				Total
	Not a user	Yes, I have tried it once or a few times	Yes, I take it occasionally with friends	Yes, I regularly consume alcohol		Not alcohol user	Beer, lager, or stout	Wine	Locally made Spirits/ others	
Middle	75.9	20.1	3.1	0.9	100.0	71.3	7.5	7.1	14.0	100.0
Fourth	80.4	13.3	5.2	1.1	100.0	77.9	3.1	3.6	15.4	100.0
Highest	81.5	13.3	4.2	1.0	100.0	74.1	10.4	2.5	12.9	100.0
District										
Aileu	75.9	22.4	0.0	1.7	100.0	76.6	2.7	4.7	16.1	100.0
Ainaro	81.0	16.2	0.0	2.8	100.0	85.9	12.9	0.0	1.2	100.0
Baucau	72.5	14.9	11.7	0.9	100.0	67.9	8.1	4.1	19.9	100.0
Bobonaro	82.3	14.8	0.3	2.7	100.0	72.5	2.9	8.7	15.9	100.0
Cova Lima	66.8	20.8	11.5	0.9	100.0	65.3	15.2	5.9	13.6	100.0
Dili	68.0	27.8	3.8	0.4	100.0	70.4	2.1	8.7	18.9	100.0
Ermera	77.9	16.0	5.9	0.2	100.0	75.4	9.5	4.2	10.9	100.0
Lautem	71.0	20.3	5.8	2.9	100.0	81.3	7.8	1.6	9.4	100.0
Liquica	63.9	25.1	6.9	4.1	100.0	69.6	9.6	4.1	16.7	100.0
Manatuto	75.1	21.1	3.7	0.0	100.0	68.4	12.0	6.0	13.7	100.0
Manufahi	78.1	16.6	3.3	1.9	100.0	75.9	2.9	2.4	18.9	100.0
Oecusse	63.6	21.2	13.3	1.9	100.0	76.2	2.7	5.2	15.9	100.0
Viqueque	62.8	21.6	12.4	3.2	100.0	67.9	3.7	6.6	21.8	100.0
Total	77.3	15.8	5.8	1.1	100.0	75.6	5.8	4.0	14.6	100.0

Note: Weighted percentages and unweighted N are presented in the table

Subgroup total will not add up to total number of students interviewed due to missing cases/responses

Table 4.14: Percentage of school students stunted, Timor-Leste 2022

	Male students (%)	Female Students (%)	Any students (%)	N
Owner of the school				
Government	46.1	34.9	40.0	1477
Private/ Catholic	56.7	50.9	53.4	349
Location of the school				
Rural	54.9	43.8	49.0	978
Urban	32.7	28.8	30.4	848
Class				
Grade 7	49.1	47.0	48.0	548
Grade 8	50.7	39.8	44.8	638
Grade 9	45.9	29.6	36.8	640
Wealth Quintile				
Lowest	50.1	41.6	45.8	326
Second	48.3	41.7	44.9	307
Middle	42.9	31.6	36.7	303
Fourth	51.4	38.1	45.0	313
Highest	45.8	37.2	40.8	272
District				
Aileu	32.8	29	30.8	132
Ainaro	51.8	51.8	51.8	90
Baucau	38.6	41.6	40.2	171
Bobonaro	44.1	23.6	33.2	116
Cova Lima	40.7	26.4	33.9	144
Dili	28.7	17.9	22.8	227
Ermera	65.4	33.1	48.4	222
Lautem	68.8	50	58.6	70
Liquica	51.3	11.7	29.6	99
Manatuto	23.1	31.2	27.6	107
Manufahi	59.8	30.2	45.4	167
Oecusse	52.7	59.1	56.0	136
Viqueque	47.4	42.5	44.6	145
Total	48.5	38.7	43.1	1826

Stunting defined as Height for age < -2SD based on The WHO Growth reference data 2007
Note: Weighted percentages and unweighted N are presented in the table

Table 4.15: Percentage of school students under-weight (BMI<-2SD), Over weight (BMI >1 SD), and Obesity (BMI>2 SD) Timor-Leste 2022

	% of normal weight	% of under weight <-2SD	% less weight, <-1 SD	% over weight (>1 SD)	% Obesity (>2SD)	N
Owner of the school						
Government	50.6	18.1	27.6	2.9	0.9	1477
Private/ Catholic	40.2	21.7	36.4	0.7	0.9	349
Location of the school						
Rural	47.9	18.0	31.6	1.9	0.6	978
Urban	48.9	21.0	25.4	3.3	1.5	848
Class						
Grade 7	42.8	24.3	30.4	1.5	1.0	548
Grade 8	46.5	18.5	31.7	2.7	0.6	638
Grade 9	55.1	13.7	27.2	3.0	1.0	640
Wealth Quintile						
Lowest	47.9	20.7	28.7	2.7	0.0	326
Second	46.8	17.5	32.3	2.4	0.9	307
Middle	51.3	20.5	25.0	1.9	1.3	303
Fourth	39.9	25.3	32.4	1.8	0.6	313
Highest	51.2	14.8	29.6	3.1	1.3	272
District						
Aileu	55.4	19.4	24.8	0.0	0.5	132
Ainaro	51.8	20.1	27.4	0.7	0.0	90
Baucau	64.1	12.9	16.2	6.0	0.6	171
Bobonaro	56.5	11.1	29.9	2.3	0.2	116
Cova Lima	54.9	15.7	26.0	2.8	0.5	144
Dili	47.2	20.8	26.6	5.2	0.2	227
Ermera	36.8	29.6	32.9	0.6	0.0	222

Lautem	32.9	18.6	41.4	5.7	1.4	70
Liquica	42.5	18.3	39.3	0.0	0.0	99
Manatuto	40.0	32.2	25.1	1.7	1.0	107
Manufahi	50.1	16.3	29.2	2.8	1.5	167
Oecusse	49.4	23.9	25.7	0.0	1.1	136
Viqueque	41.3	28.9	24.5	2.1	3.1	145
Total	48.2	18.9	29.6	2.4	0.9	1826

Note: Weighted percentages and unweighted N are presented in the table

Subgroup total will not add up to total number of students interviewed due to missing cases/responses

Table 4.16a: Percentage of boys under-weight (BMI<-2SD), Over weight (BMI >1 SD), and Obesity (BMI>2 SD) Timor-Leste 2022

	% of students normal	% of under weight <-2SD	% less weight, <-1 SD	% over weight (>1 SD)	% Obesity (>2SD)	N
Owner of the school						
Government	42.6	23.0	30.7	2.4	1.3	657
Private/ Catholic	32.6	26.9	38.5	0.8	1.2	159
Location of the school						
Rural	39.9	22.6	34.8	1.5	1.2	455
Urban	41.5	26.9	26.7	3.3	1.6	361
Class						
Grade 7	39.1	26.4	31.1	1.2	2.1	244
Grade 8	38.4	23.5	35.5	1.8	0.7	295
Grade 9	43.4	21.5	31.2	3.0	0.9	277
Wealth Quintile						
Lowest	41.6	22.5	32.4	3.4	0.0	158
Second	38.2	23.0	34.2	3.2	1.4	142
Middle	47.7	26.6	23.4	2.1	0.3	144
Fourth	24.5	30.6	43.6	0.2	1.1	150
Highest	45.9	22.6	28.1	1.6	1.9	113
District						
Aileu	44.5	28.0	27.5	0.0	0.0	63
Ainaro	26.8	23.2	48.2	1.8	0.0	20
Baucau	56.8	16.6	19.5	5.7	1.4	73
Bobonaro	47.6	7.3	40.9	3.8	0.3	52
Cova Lima	54.4	12.5	28.4	3.7	0.9	76
Dili	43.6	27.0	27.3	1.7	0.3	106
Ermera	25.7	40.5	33.4	0.4	0.0	100
Lautem	25.0	34.4	40.6	0.0	0.0	32
Liquica	29.1	30.6	40.3	0.0	0.0	42
Manatuto	36.3	36.3	27.4	0.0	0.0	46
Manufahi	40.4	19.0	36.4	1.7	2.5	81
Oecusse	44.3	29.3	24.1	0.0	2.3	64
Viqueque	40.0	36.8	18.6	1.8	2.7	61
Total	40.4	23.9	32.4	2.0	1.3	816

Note: Weighted percentages and unweighted N are presented in the table
Subgroup total will not add up to total number of students interviewed due to missing cases/responses

Table 4.16b: Percentage of girls under-weight (BMI<-2SD), Over weight (BMI >1 SD), and Obesity (BMI>2 SD) Timor-Leste 2022

	% of students normal	% of under weight <-2SD	% less weight, <-1 SD	% over weight (>1 SD)	% Obesity (>2SD)	N
Owner of the school						
Government	57.3	13.9	24.9	3.3	0.5	820
Private/ Catholic	45.9	17.8	34.9	0.7	0.7	190
Location of the school						
Rural	54.8	13.9	28.8	2.3	0.2	523
Urban	54.1	16.8	24.5	3.3	1.4	487
Class						
Grade 7	45.8	22.6	29.8	1.7	0.1	304
Grade 8	53.4	14.3	28.4	3.4	0.5	343
Grade 9	64.3	7.6	24.0	3.0	1.1	363
Wealth Quintile						
Lowest	53.8	14.8	28.7	2.6	0.0	168
Second	54.6	12.5	30.6	1.7	0.5	165
Middle	54.2	15.6	26.4	1.8	2.1	159
Fourth	56.3	19.6	20.6	3.6	0.0	163
Highest	55.1	9.2	30.7	4.2	0.8	159
District						
Aileu	65.8	11.2	22.1	0.0	0.9	69
Ainaro	58.3	19.3	22.0	0.5	0.0	70
Baucau	70.7	9.6	13.3	6.3	0.0	98
Bobonaro	64.5	14.5	20.2	0.9	0.0	64
Cova Lima	55.5	19.3	23.4	1.8	0.0	68
Dili	50.2	15.7	25.9	8.2	0.0	121
Ermera	46.8	19.8	32.6	0.8	0.0	122
Lautem	39.5	5.3	42.1	10.5	2.6	38
Liquica	53.6	8.0	38.4	0.0	0.0	57
Manatuto	42.9	28.9	23.3	3.0	1.9	61
Manufahi	60.4	13.4	21.7	4.0	0.4	86
Oecusse	54.1	18.8	27.1	0.0	0.0	72
Viqueque	42.3	22.9	29.0	2.3	3.4	84
Total	54.6	14.9	27.3	2.7	0.6	1010

Note: Weighted percentages and unweighted N are presented in the table
Subgroup total will not add up to total number of students interviewed due to missing cases/response

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