National Survey on NCDs & NCD Risk Factor Among Adults

& Availability & Readiness Of NCD Services in Health Facilities

Timor-Leste 2023

Ministério da Saúde

World Health Organization

Timor-Leste

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ABBREVIATIONS

BP	- Blood Pressure
BMI	- Body Mass Index
CHC	- Community Health Centre
CI	- Confidence Interval
COPD	- Chronic Obstructive Pulmonary Disease
CVD	- Cardio Vascular Disease
dl	- decilitre
DBP	- Diastolic Blood Pressure
EA	- Enumeration Areas
EPI	- Expanded Program of Immunization
ESP	- Essential Service Packages
HDL	- High Density Lipoproteins
Hg	- Mercury
HHFA	- Harmonized Health Facility Assessment
HP	- Health Post
HPV	– Human Papilloma Virus
mmol/L	- millimoles per litre
MoH	- Ministry of Health
NCD	- Non-Communicable Disease
OOPE	- Out-of-Pocket Expenditure
PEN	- Package of Essential Non-Communicable Disease
PI	- Principal Investigator
RH	- Referral Hospital
SBP	- Systolic Blood Pressure
STEP	- STEP wise approach to Surveillance
UNTL	- Universidade Nacional Timor-Lorosae
USD	- US Dollar
WHO	- World Health Organization

MESSAGE

Non-Communicable Diseases (NCDs) are chronic, progress slowly and are now the leading cause of death globally, accounting for about 74% of all deaths worldwide. NCDs significantly strain healthcare systems and economies, especially in countries with limited resources. In Timor-Leste, NCDs have emerged as one of the most pressing health concerns. Conditions such as heart disease, diabetes, cancers, chronic respiratory illnesses, and mental health disorders are now leading contributors to ill health and premature deaths.

The population faces a high prevalence of risk factors, including widespread tobacco use, harmful drinking patterns, poor diet, insufficient physical activity, elevated blood pressure, excess body weight, and excessive salt consumption. Coupled with the continued burden of infectious diseases, the rising tide of NCDs places enormous pressure on the health system.

This situation highlights the urgent need to intensify prevention, promote healthy lifestyles, expand early detection, and strengthen service readiness across all levels of care. It is therefore essential to continuously monitor NCD risk factors among the population. The first national survey on risks factors of NCDs in Timor-Leste was conducted in 2014.

In 2023, the Ministry of Health has successfully conducted the 'Second National Survey on NCDs and NCD Risk Factors Among Adults and Availability and Readiness of NCD Services in Health Facilities'. This STEPS survey aimed to determine the prevalence of NCDs, NCD risk factors, selected care-seeking practices for NCD-related conditions, out-of-pocket expenditures for NCDs among adults, and to assess the availability and readiness of services for NCDs and mental health in facilities across Timor-Leste.

I extend my sincere gratitude to all individuals and institutions who contributed to the successful completion of this survey. I would also like to appreciate WHO for their generous financial and technical support and UNTL team for their technical support. Finally, heartfelt thanks to the dedicated field workers, health professionals, and community members, as well as the study participants, whose cooperation and commitment made this survey possible.

I strongly urge all health professionals, program managers, policymakers, and stakeholders to utilize the insights from this survey to inform evidence-based decision-making. This data should serve as a foundation for designing effective strategies to prevent and control NCDs, enhance the quality and continuity of care, improve early detection and management, and ensure equitable access to essential services across Timor-Leste. By translating this evidence into action, we can build a stronger, more resilient health system and improve the health and well-being of our population.

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FOREWORD

The WHO STEPwise approach to surveillance (STEPS) provides a globally standardised framework for collecting, analysing, and disseminating data on key noncommunicable disease (NCD) risk factors. By enabling systematic surveillance, STEPS empowers countries to develop data-driven strategies for NCD prevention and control, while also facilitating comparisons at national and international levels. In Timor-Leste, this survey marks a critical milestone in understanding the burden of NCDs and identifying areas requiring urgent and sustained intervention.

Cardiovascular diseases, diabetes, cancer, and chronic respiratory conditions together account for a significant health burden in Timor-Leste. These conditions are largely driven by modifiable behavioural risk factors, including tobacco use, unhealthy diets, harmful use of alcohol, excessive salt intake and physical inactivity; as well as metabolic risk factors such as elevated blood pressure, raised blood glucose, and abnormal lipid levels.

The 2023 NCD risk factor survey, accompanied by an assessment of the availability and readiness of NCD services across health facilities, provides critical insights into the population's health and the system's capacity to respond.

The Ministry of Health has demonstrated commendable leadership in advancing NCD surveillance and promoting a multisectoral, integrated approach to disease prevention and control. I extend my sincere appreciation to the Universidade Nacional Timor Lorosa'e (UNTL) for its partnership and scientific leadership. The collaboration between UNTL, the MOH, and WHO exemplifies the power of intersectoral coordination in generating high-quality, population-level data.

I acknowledge the team, Principal Investigator, Prof. Dr Afonso de Almedia, PhD; Senior Co-Investigator, Prof. Dr João Soares Martins, MPH, PhD, Co-Investigator, Prof. Dr Hendriketa de Silva, MPH, PhD; Co-Investigator, Prof. Dr Lidia Gomes, SKM, M.Kes, supervisors, enumerators and National Hospital laboratory staff, for their tireless efforts in ensuring data integrity under challenging conditions, completing this important study within the planned timeline.

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EXECUTIVE SUMMARY

The first non-communicable disease (NCD) survey conducted in Timor-Leste using the World Health Organization (WHO) STEPS approach in 2014 revealed a high burden of NCDs and their risk factors in the country. Global health estimates for 2019 indicate that NCDs accounted for 53% of all deaths in Timor-Leste. In response, the Ministry of Health (MoH) of Timor-Leste and stakeholders implemented several key policy and programmatic interventions focused on evidence-based strategies aligned with WHO technical packages to combat the high burden of NCDs and their risk factors. The growing political recognition of the intensified efforts by the MoH and other national agencies to control NCDs and their risk factors necessitated updated, scientifically generated data on NCDs and their risk factors. In line with the commitment to expand health services, the MoH, Timor-Leste, designed and released the Essential Service Packages (ESP) in 2022 for primary, secondary, and tertiary health care services provided in government facilities across the country. The packages specify promotive, preventive, and curative services for NCDs and mental health that should be offered by the respective categories of hospitals. Following the launch of the ESPs, an assessment of the availability and readiness of NCD services at different levels of health facilities in Timor-Leste was deemed prudent to document the baseline situation, providing a reference for future evidence-based decision-making in planning and implementing the ESPs concerning NCD services in the country.

As a result, this National Survey on NCDs and NCD risk factors among adults, along with the availability and readiness of NCD services in health facilities, was conducted by the MoH and Universidade Nacional Timor-Lorosae (UNTL) with technical support from the WHO from October to December 2023. The survey aimed to determine the prevalence of NCDs, NCD risk factors, selected care-seeking practices for NCD-related conditions, out-of-pocket expenditures for NCDs among adults, and to assess the availability and readiness of services for NCDs and mental health in facilities across Timor-Leste. To achieve these objectives, a household survey was conducted concurrently with a facility survey.

In the household survey, a cross-sectional study was carried out using the WHO STEPS methodology. The survey included males and females aged 18–69 years, residing in Timor-Leste. The sample size was calculated considering an expected risk factor prevalence of 50%, an absolute precision of 5%, an alpha error of 5%, a design effect of 1.5, and a response rate of 80%. A multi-stage stratified cluster sampling design was used to produce representative data for that age range in Timor-Leste. The data collection

instruments consisted of three steps: Step one (interviews), Step two (physical measurements), and Step three (biochemical measurements). A total of 14 teams, each comprising three members—one supervisor (either a doctor or a nurse in the MoH) and two enumerators—collected and directly entered data into the eSTEPS application on Android tablets. The unique identifier QR code and household identification number provided at the time of the survey enabled the merging of Step 1, Step 2, and Step 3 datasets. The weighted analysis was conducted using Stata software, version 16 (StataCorp LLC., College Station, United States of America).

The facility survey adopted a cross-sectional design and included different levels of healthcare facilities in the country. A total of 45 Health Posts (HPs) with doctors, 78% of the Community Health Centres (CHCs) 3, 36% of the CHC 1 and 2 in the country located in the in the 28 sub-districts selected for the household survey, all five Referral Hospitals, and the tertiary care level National Hospital was surveyed. The assessment of service availability at different categories of health facilities covered promotive, preventive, and curative services for NCDs and mental health. The assessment tool was adapted from the WHO Harmonized Health Facility Assessment (HHFA) tool.

In the household survey, a total of 3,517 respondents participated in Step 1 and Step 2 (response rate 81.4%), while 3,317 participated in Step 3 (response rate 76.7%). Among them, 1,416 (40.3%) were male and 2,101 (59.7%) were female. Regarding education, 23.5% (n=826) had no formal education, and most respondents (n=2,541, 72.4%) were currently married. The estimated average household earnings in the year preceding the survey were USD 2,333.40.

The findings revealed that 60.0% of adults used some form of tobacco, with higher usage among males (77.5%) compared to females (44.6%). Of the respondents, 42.8% smoked, and 26.0% used smokeless tobacco, with more males (74.7%) smoking and more females (35.3%) using smokeless tobacco. Nearly 80.6% of adults were exposed to second-hand smoke at home, and over half (52.1%) at work. The mean age of starting smoking was 18.2 years.

The prevalence of current alcohol consumption (drinking in the past 30 days) was 28.6% (45.9% males and 13.4% females). Among respondents, 45.4% were lifetime abstainers and 9.8% were abstainers for the past 12 months. More males (5.0%) engaged in heavy episodic drinking than females (2.6%). Additionally, 20.1% of respondents reported both drinking and smoking.

Respondents consumed fruits on average 2.5 days per week, and vegetables 6.6 days per week. The daily per capita consumption was 1.1 servings of fruit and 4.2 servings of vegetables. Considering the minimum recommended intake, 46.7% of respondents did not meet the recommended amounts of fruits and vegetables. Moreover, 74.8% of respondents always or often added salt or salty sauces to their food. The mean daily salt intake was estimated from a sub-sample of respondents (n=498) using sodium and creatinine levels in spot urine samples and the estimated mean salt intake was 9.3 g/day.

The percentage of respondents with insufficient physical activity (defined as <150 minutes of moderate-intensity activity per week) was 35.7%, with a higher percentage among males (42.3%) than females (30.1%). The median time spent on physical activity per day was 102.9 minutes, and 65.2% (52.6% males and 76.2% females) were not engaging in vigorous physical activity.

Among women aged 30–49, only 0.6% had ever had a cervical cancer screening test.

The mean body mass index (BMI) among respondents was 21.8 kg/m² (21.8 kg/m² in males and 22.3 kg/m² in females). The overall prevalence of overweight and obesity was 18.1% and 3.4%, respectively, with higher percentages in females (23.4% and 4.9%) compared to males (12.4% and 1.7%).

Raised blood pressure (defined as SBP ≥140 mmHg and/or DBP ≥90 mmHg or currently on medication) was found in 22.3% of respondents (18.2% of males and 25.9% of females). Awareness of raised blood pressure was 49.1%, with males more aware (64.0%) than females (37.9%). Treatment for raised blood pressure was reported by 13.3% of respondents, with a higher percentage of females (14.6%) compared to males (11.5%). However, only 4.0% of respondents had controlled hypertension, with higher control rates among males (6.0%) than females (2.5%).

The overall mean fasting blood glucose level was 84.9 mg/dl, with little difference between males and females. The prevalence of raised blood glucose (fasting glucose level ≥6.1 mmol/L or on medication) was 5.3% (5.5% in males and 5.1% in females). Awareness of raised blood glucose was 20% (9.3% in males and 28.7% in females), and 12.3% of respondents were on treatment (2.1% in males and 20.7% in females).

Additionally, 1.7% of respondents had both raised blood pressure and raised blood sugar (2.6% males and 0.8% females). The percentage with raised total cholesterol (≥5.0 mmol/L or ≥190 mg/dl or on medication) was 13.8% (10.1% males and 17.1% females).

Among all respondents, only 8.2% had no common risk factors for NCDs, while 23.0% had three or more risk factors (30.2% males and 16.5% females). Additionally, 3.4% had a 10-year CVD risk ≥20% or existing CVD (4.7% males and 1.9% females).

The survey also found that 13.0% of respondents were involved in a road traffic accident in the past 12 months (15.7% males and 10.7% females). Furthermore, 14.6% of respondents always wore a seat belt, and 81.4% always wore a helmet as a passenger on a motorcycle or motor-scooter in the past 30 days.

Additionally, 12.0% of respondents had their vision checked and 17.8% their hearing checked by a healthcare professional. Furthermore, 1.8% of respondents had ever visited a dentist.

Regarding household-level analysis, 44.2% of households used clean fuels and technology primarily for cooking while 92.8% used salt with adequate iodine concentration (≥15 ppm).

A total of 388 respondents suffered from one or more major NCDs, with the mean out-of-pocket expenditure (OOPE) on hospitalisation due to NCDs in the past 12 months being USD 43.00. The mean OOPE on outpatient care due to NCDs in the past month was USD 22.10, and 1.9% experienced catastrophic OOPE due to NCDs.

The facility survey revealed gaps in the availability of essential services for NCDs and mental health across all facility levels. Primary and secondary level facilities showed gaps in the availability of services for integrated NCD screening and follow-up management of hypertension and diabetes, and were not 'fully ready' to offer these services due to shortages in trained staff, guidelines, registers, equipment, medicines, and commodities.

Based on the findings of the National Survey on NCDs and NCD risk factors among adults and the availability and readiness of NCD services in health facilities in Timor-Leste in 2023, the following key recommendations are made:

- To reduce high tobacco use, strengthen WHO MPOWER-based tobacco control policies, establish smoke-free environments, expand access to smoking cessation programmes, and integrate counselling and support services across all healthcare levels.

- To address high alcohol use, enhance SAFER interventions, including restrictions on alcohol availability, improved drink-driving countermeasures, access to screening, enforcement of advertising bans, and increased alcohol prices through excise taxes.
- To tackle nutrition-related issues, launch public education campaigns on healthy eating, including the benefits of fruits and vegetables and the risks of high salt and sugary drink consumption, and implement WHO SHAKE package measures such as reducing sodium in foods, improving labelling standards, protecting children from harmful food marketing, and promoting healthy eating environments.
- To combat high physical inactivity rates, enhance the settings approach for promoting physical activity in schools, workplaces, and communities, and strengthen multisectoral involvement to create supportive environments with pedestrian lanes, urban parks, and community walk trails.
- To address gaps in care cascades, effectively implement the government's programme on hypertension and diabetes prevention and control, with sufficient infrastructure, resources, diagnostic tools, and equipment across all healthcare levels.
- Use facility survey findings as a baseline to roll out and monitor the Essential Service Package (ESP) and identify service gaps and tracer items at various health facility levels to enhance hypertension and diabetes prevention and control efforts in Timor-Leste.

I. INTRODUCTION

Background

Noncommunicable diseases (NCDs), specifically cardiovascular diseases, cancer, diabetes mellitus and chronic respiratory diseases, impose a major and growing burden on health and development globally leading to 74% of all deaths globally.[1] Of all NCD deaths, 86% are premature deaths and 77% of them are in low- and middle-income countries. The WHO South East Asia Region, comprise of 11 countries (Bangladesh, Bhutan, Demographic Republic of Korea, India, Indonesia, Nepal, Maldives, Myanmar, Nepal, Sri Lanka, Thailand and Timor-Leste) and 62% of all deaths in the Region are due to NCDs.[1] Furthermore, there is a growing burden of premature mortality, with approximately half of the 9 million deaths among people aged 70 years or younger.

Most NCDs are associated with the four main preventable and modifiable behavioural risk factors: tobacco and alcohol use, unhealthy diets, and physical inactivity.[2] In this background, periodic surveillance of NCD risk factors and NCDs is essential to monitor and assess the effect of population-wide interventions and to estimate current as well as future caseloads of NCDs in countries. The WHO STEP wise approach to NCD risk factor surveillance titled "WHO-STEPS survey" is designed as a standard household survey protocol to facilitate national level surveillance of monitoring NCD risk factors and NCDs.[3] It provides guidance to countries in monitoring the prevalence of the major behavioural risk factors for NCDs (tobacco use, harmful alcohol consumption, unhealthy diet (low fruit and vegetable consumption, diet high in salt) and insufficient physical activity) as well as the major biological risk factors for NCDs (overweight and obesity, raised blood pressure, raised blood glucose and abnormal blood lipids, including raised cholesterol). Based on national priorities and availability of resources, the countries adapting WHO STEPS can opt to include modules related to other aspects of NCDs such as oral health, eye health, mental health. In addition to monitoring the changes in intervention brought out by the national-level NCD interventions, the data from STEPS surveys are also form the basis for countries to report on progress in meeting the global voluntary targets related to NCDs and NCD risk factors.

Burden of NCD in Timor-Leste

Timor-Leste is located in the eastern half of Indonesian archipelago and has a population of 1,341,737 persons according the Population and Housing Census 2022.[4] The age composition of the country's population indicates that majority of the population is still concentrated in the younger age groups.

Currently, 12% of the population is aged below 5 years, 35% below age 15 years and 65% of the population is below 30 years of age. According to the 2022 census, sex ratio of Timor-Leste was 103 men per 100 women.

Municipalities numbering 14 are the major administrative sub-divisions in the country. Dili, which is also the capital city, is the largest municipality with a population of 0.33 million. Dili, Ermera and Baucau municipalities account for approximately 45% of the total population of Timor-Leste. The smallest population size is in Atauro municipality, with a population around 10,000. Census data shows 29% of the population residing in urban areas and remaining in rural areas. Population density level was 90 persons per km^2, which is higher than the global average, but lower than countries in their neighbourhood. Municipality-wise population density ranges from 1,427 persons per km^2 in Dili municipality to 28 persons per km^2 in Manatuto municipality.

Global Health Estimates for 2019 indicates that NCDs accounted for 53% of all deaths in the country (50% in males and 57% in females)[5]. The first Timor-Leste NCD survey using WHO STEPS approach was jointly conducted by the Ministry of Health (MoH) and Universidade Nacional Timor-Lorosae (UNTL) with technical support from the World Health Organization in 2014. The survey revealed high burden of risk factors as well as NCDs among Timorese.[6] The current use of smoked and or smokeless tobacco in 18-69-year-old population was one of the highest in the world (overall 56%: male-71%; female-29%). Alcohol use is the other severe public health concern in Timor-Leste with approximately 43% of adult Timorese men classified as 'current drinkers'. Regarding healthy diet, the available national estimates are not encouraging as well. Nearly eight out of 10 Timorese were found to add salt or salty sauce to food before or during eating and the majority and not to consume the recommended five servings of fruits and vegetables per day.

The assessment of biological risk factors, revealed that 39% of the population aged 18-69 years in the country (males 45% and females 28%) were either having raised blood pressure (systolic blood pressure (SBP) >140 and/or diastolic blood pressure (DBP) > 90 mmHg) or currently on medication for raised blood pressure. The prevalence of raised blood glucose (plasma venous value >126mg/dl) or currently on medication for diabetes was 1.5%. This survey also showed around 21% of the respondents had raised total cholesterol or on medication for raised cholesterol (Total cholesterol > 6.2 mmol/L or > 240 mg/dl) or on medication for raised cholesterol.

Policy and programmatic interventions to combat the NCD burden in Timor-Leste

The MoH of Timor-Leste and stakeholders have implemented several key policy and programmatic interventions to combat the high burden of NCDs and its risk factors in the country. Combating NCD risk factors were based on evidence-based interventions aligned to the WHO technical packages. Policy and programmatic interventions towards NCDs also included making the NCDs services more available in the health facilities. MoH, with support from the WHO adapted the Package of Essential NCD interventions (PEN) in 2017 and implemented it through primary health facilities since 2020.[7]

Continuing the commitment to expand the health services, in 2022 the Ministry of Health, Timor-Leste designed and released the essential service package (ESP) protocol for primary, secondary and tertiary health care services provided in the government facilities in the country.[8,9] Almost all health services in Timor-Leste are provided by the Government health facilities. The National Hospital in Dili is the only provider of tertiary care services in the country. The five Referral Hospitals provide the secondary care level and are located at municipality level. There are nine level 3 Community Health Centres (CHC) and 63 Level 2 and 1 CHCs are located at the sub-district level and 342 Health Posts (HPs) with doctors located at the sucos/village level provide only ambulatory care services are considered the primary care settings. The few private providers in the country are two hospitals, 35 ambulatory, a few polyclinics and pharmacies. This strategic document specifies the promotive, preventive and curative services for NCDs and mental health to be provided in primary, secondary and tertiary care facilities and the details of human resources, medicines and equipment's that each type of facility is expected to have in order to provide the essential service package delivered by the respective facility in future years.

Need of evidence on the burden of NCDs, NCD risk factors and an assessment of NCD services in health facilities in Timor-Leste

In the backdrop of growing political recognition of the intensified efforts of MoH and other national agencies to control NCDs and their risk factors, the need for a new set of scientifically generated data on NCDs and their risk factor was felt. Furthermore, the country has identified gaps in data on some related conditions and issues. The out-of-pocket expenditure for NCDs and in-door air pollution doe to use of unclean fuel for cooking are growing concerns which has not been measured in any household survey. In the background of the recent initiatives on oral health and eye care the Government is keen to get information on main issues of concern among adults and care seeking behaviour. Thus, the present survey adapted from WHO STEPs survey and is designed to provide information related to

NCDs and NCD risk factors among adults as well as the other important country specific information related to adults as well as households.

Having launched the ESPs in 2022, an assessment of the availability and readiness of NCD services in different levels of health facilities in Timor-Leste, was also identified as prudent to document the baseline situation that can be referred in the future to support evidence-based decision-making in planning and rolling out the ESP in relation to the NCD services in the country

Thus, in 2023, upon the request of the MoH, UNTL with technical support from the WHO, designed a National Survey on NCDs and NCD risk factors among adults integrated with a National survey on availability and readiness of NCD services in health facilities was designed.

Objectives of the survey

General objective

To determine the prevalence of NCDs, NCD risk factors, selected care seeking practices among on NCD related conditions and out-of-pocket expenditures for NCDs among adults and to assess the availability and readiness of services for NCDs and mental health in the facilities in Timor-Leste

The specific objective of the survey were:

- To determine the prevalence of behavioural risk factors for NCDs (alcohol and tobacco use, unhealthy diets, physical inactivity)
- To determine the prevalence of key biological risks factors for NCDs (overweight and obesity, raised blood pressure, raised blood glucose and abnormal lipids)
- To describe the care cascade for hypertension and diabetes (the proportions aware; on treatment and controlled among those with raised blood pressure or blood sugar at the survey and those who were already diagnosis)
- To assess levels of implementation of national tobacco control legislations/policies
- To estimate population dietary salt intake and iodine intake and to estimate the iodine content in household salts
- To determine prevalence of involvement in road traffic accidents and adoption of precautionary measures adopted to avoid road accidents
- To describe issues and care seeking practices related to oral health, vision and hearing

- To estimate the out of pocket expenditure for NCDs among those diagnosed with NCDs
- To determine the proportion of households using clean fuels and technology as the primary source for cooking
- To describe the availability of essential promotive, preventive and curative services for NCDs and mental health in primary, secondary and tertiary care facilities
- To assess the readiness of the primary, secondary and tertiary care facilities to deliver selected NCD services

II. METHODS

The household survey and the facility survey were conducted concurrently with data being collected by the members of the same team. Methodological aspects of the two surveys are described separately.

Household Survey

The household survey was conducted to determine the prevalence of NCDs, NCD risk factors, selected care seeking practices among on NCD related conditions and out-of-pocket expenditures for NCDs among adults.

Study design

This survey followed a cross-sectional design.

Study population

This survey included men and women aged 18-69 years old who were usual residents of the sampled households defined as, 'a person who lived in the household for at least 6 months of the last 12 months' and the foreigners married to nationals and who have been living in the country for at least 6 months of the last 12 months were eligible to participate in the survey. Following individuals were excluded;

- Mentally unfit and physically too frail to participate in the study
- Timorese students studying outside the country
- Those residing in institutional housing e.g., communal or care homes, prisons etc.

Sample size

The sample was designed to provide national, sex (male/female) and age groups (18-29, 30-44 and 45-69 years) wise estimates of NCD risk factors. It involved the following three steps:

Step 1: **Determining the minimum sample size per sub-group of interest**

Considering the fact that this was a survey to estimate multiple risk factors for NCDs and other indicators a conservative estimate of prevalence of 50%, the sample size for each subgroup of interest was estimated using the below formula.

$$n = \frac{Z^2 * P(1-P)}{e^2}$$

where:

Z = level of confidence (= 1.96, for 95% confidence level)

P = Expected baseline indicator. As this survey aims to estimate multiple risk factors and other indicators 50% was used in the calculation of the sample size to arrive at the maximum sample size required

e = Margin of error. The expected half width of the confidence interval and taken 0.05 for this study

$$n = \frac{(1.96)^2 * 0.5(1-0.5)}{(0.05)^2}$$

= 384.16

Step 2: **Computing minimum sample size for country after adjusting for design effect**

Considering the scope to provide estimates by 3 age groups (18-29; 30-44; and 45-69-years old) and by sex (male and female) and a design effect of 1.5 to address issue of cluster sampling, the expected sample size for Timor-Leste was 3457 households (i.e. 384.16*1.5*6)

Step 3: **Adjusting sample size for non-response**

Considering a response rate of 80 %, The final sample size when adjusted for non-response was 4322 households. One adult aged 18-69 years was randomly selected from each of the sampled households.

Sampling strategy

A multi-stage sampling method was used to select administrative posts, enumeration areas, households, and eligible participants from each of the selected households. The sample design was based on the frame of households available from the Timor-Leste Population and Housing Census 2022.[4]

There were four stages in the sampling scheme for this household survey.

Stage 1: In the first stage selection, 28 administrative posts were randomly selected from a total of 67 administrative posts in the country. Here the criteria were to select two administrative posts from each municipality, except Dili and Atauro. Three administrative posts were selected from the Dili municipality, which has a large population and only one from sparsely populated Atauro municipality.

Stage 2: There are 2,384 delineated enumeration areas (EA) in Timor-Leste Census 2022 by the General Directorate of Statistics under the Ministry of Finance, Government of Timor-Leste. The list of EAs in

selected sub-districts with number of households from the General Directorate of Statistics, Ministry of Finance, Timor-Leste was used as the sampling frame. At the second stage, seven enumeration areas were selected from each of the 28 administrative post through probability proportion to size (PPS) method. Thus, a total of 196 enumeration areas spread across all municipalities were selected in this second stage of sampling.

Stage 3: In the third stage, 22 households were selected from each enumeration area using a systematic random sampling using the digitized maps of each census enumeration areas selected for the survey prepared by the Directorate of Statistics based on the Census 2022. All the households in the enumeration areas were marked in respective maps. The General Directorate of Statistics led the sampling of household for this survey and selected the 22 households to be included and provided the digital maps indicting location of households selected for the survey and name of the chief of the household. The survey enumerators were provided with these digitized maps as well as manual copy of list of selected households and household members, at the time of data collection.

Stage 4: This survey defined individuals from each household as the unit of analysis, and therefore, in fourth stage the task was to randomly select an eligible member aged between 18-69 years from each of the pre-selected household, at the time of the survey. The eSTEPS application installed in all the android devices used for data collection had in inbuilt option to randomly select such a survey respondent after listing all the members in the sample households. More details of the sampling are provided in the Annex 1. Table 2.1 shows the municipality-wise distribution of household sampled and surveyed.

Table 2. 1 Municipality-wise distribution of household selected and response rate

Municipality	Total number of households (2022)	Total population (2022)	Number of administrative divisions selected	Number of enumeration areas selected	Number of households sampled	Households surveyed
Aileu	9,400	54,324	2	14	308	238
Ainaro	12,368	73,115	2	14	308	246
Atauro	2,121	10,295	1	7	154	114
Baucau	24,707	134,878	2	14	308	249
Bobonaro	20,839	106,639	2	14	308	244
Covalima	15,778	73,933	2	14	308	251
Dili	57,289	324,738	3	21	462	394
Ermera	25,685	137,750	2	14	308	246
Lautem	13,380	70,022	2	14	308	257
Liquica	14,852	83,658	2	14	308	224
Manatuto	8,852	50,859	2	14	308	266
Manufahi	11,028	60,665	2	14	308	264
Oe-Cusse	17,910	80,685	2	14	308	264
Viqueque	16,567	80,176	2	14	308	260
Total	**250,776**	**1,341,737**	**28**	**196**	**4,312**	**3,517**

Survey instruments

The tool for the household survey (Annex 2) was by adopting WHO STEPS survey instrument. The survey was conducted in three steps and the Table 2.2 shows the tools used for each Step and the areas of information collected.

Table 2. 2 Summary of the data collection process planned for the household survey

STEP 1	Individual level information • Demographic information • Behavioural risk factors: Alcohol including local alcohol consumption patterns and tobacco use including betel nut consumption, unhealthy diets (salt intake, intake of sugar sweetened beverages), and physical inactivity • History of diagnosis of hypertension, diabetes and care seeking patterns • Practice and care seeking patterns for oral health, hearing and vision • Having undergone cervical cancer screening • History of road traffic injuries • Evidence of implementation of national tobacco control legislations/policies • Out of pocket expenditure for NCDs among those diagnosed with NCDs among those who reported as suffering from one or more of the major NCDs (Hypertension, Diabetes, Ischemic Heart Diseases, Chronic lung diseases, Chronic kidney diseases, Cancer, Stroke). Household level information • Household level ○ type of fuels and technology used as the primary source of cooking ○ use of iodized salt/ sample of salt for iodine content tested using a point of care test	Interviewer-administered questionnaire
STEP 2	Physical measurements: • Blood pressure, • Height and weight for Body Mass Index (BMI) • Waist and hip circumferences	Anthropometric/physical measurement
STEP 3	Biochemical testing • Point of care testing ○ Blood glucose ○ Total cholesterol • Laboratory testing ○ urinary sodium, creatinine and iodine concentration	Biochemical measurement

Pretesting and finalization of the STEP 1 questionnaire

The Step 1 questionnaires were translated into Tetum, the national local language and back translated to English just to ensure that the English version is the same as the original English version. Before the main survey, the adapted questionnaire was pretested in about 20 households in 2 sucos/ villages in outskirts of Dili in August 2023. Pretesting was done for the assessment of the questionnaires and to

detect any possible problems in the structure and flow of the questions. It was also aimed at measuring the time required for interviews. The English and Tetum version of the survey questionnaires were revised and finalized based on the inputs received from the pretesting exercise.

Electronic data collection instrument

Android tablets were used to enable electronic data collection and for uploading of data to the server maintained by WHO-HQ. The STEPS team based at WHO-Headquarters in Geneva configured/converted these finalized survey instrument using ODK software into an eSTEPS application. This eSTEPS survey application was installed in all android tablets used by supervisors and enumerators engaged for the survey.

Fieldwork and data collection

Data collection teams

A total of 14 teams were formed comprising 3 members (one supervisor, 2 enumerators, of which one was assigned as the Step 3 data collector). Supervisors were either doctors/nurses from the Ministry of Health. An equal mix of male and female members in each team was ensured. Language skills/abilities of the enumerators in local dialects of respective municipalities (wherever relevant) was one criterion for recruitment and their deployment. Each team was assigned a vehicle (with driver) to facilitate their mobility from one sample area to another. The team were strictly instructed to adhere to field interviewers and supervisor's guide when undertaking data collection work.

Data collector training

A 5-day training of enumerators and supervisors recruited for the STEPS survey for Timor-Leste was held at Dili from 25th to 29th September 2023. This training of enumerators and supervisors identified for the survey STEPS focused on following aspects of the household survey:

- Understanding the features of the questionnaire in terms of its organization, the meaning of each question and the type of responses it was intended to elicit, and how to record responses of the interviewees.
- Household listing and selection of ample households using systematic random sampling method in Sucos, and how to enter the study areas and households
- Successful interviewing techniques
- Random selection of survey respondent from all eligible household members using android tablets

- Research ethics
- Recording correct information from the interviews on android tablets
- Performing physical assessment in Step 2 and biochemical measurements in Step 3
- How to accurately keep records of interviews conducted
- Quality control of all field processes including questionnaires, other forms and specimens.

The three-step process to collect data

Each participant was identified by a unique QR code which allows all of their Step 1, 2 and 3 data to be grouped together.

Step 1: Questionnaire-based interviews

Step 1 is an interviewer-administered questionnaire installed in the android tablet. The questions include:

- Demographic information
- Behavioural risk factors:
- Alcohol including local alcohol consumption patterns and tobacco use including betel nut consumption, unhealthy diets (salt intake, SSB intake), and physical inactivity.
- History taking to gauge blood pressure, diabetes, total cholesterol, CVDs, and cervical cancer screening
- History of road traffic injuries
- Oral health practices
- Levels of implementation of national tobacco control legislations/policies
- Out of pocket expenditure for NCDs among those diagnosed with NCDs
- Household level
  - Use of fuels as the primary source of cooking [(percentage of households primarily cooking with clean fuels and technology: solar cooker, electric stove, piped natural gas stove, and biogas stove, liquified petroleum gas/cooking gas stove, and liquid fuel stove (ethanol, alcohol, kerosene)]
  - Use of iodized salt/ sample of salt for iodine content (spot test)

Show cards was developed based on the locally available fruits, vegetables, types of physical activity, tobacco, and alcohol products (Tau-*sa-bu*) for better understanding of the interviewee while the questionnaire is being administered. Responses from participants was recorded by the survey administrator using Android Tablet.

Step 2: Physical measurements

Physical assessment included blood pressure, heart rate, height, weight, waist and hip circumference measurements.

- Three blood pressure readings with 3 minutes apart were be taken for each participant using an automatic blood pressure device. During the analysis the average of the last two readings were taken.
- The waist circumference was measured using a Myotape tape-measure as per the standard operating procedures which will be provided to all the survey teams. Measurement will be made at the midpoint between the last palpable rib and the top of the iliac crest. Measurements was made to the nearest 0.5 cm.
- Weight and height were measured using a standard pre-calibrated electronic weighing and measuring. Both height and weight were measured with barefoot. For weight, measurement was recorded to the nearest 0.1 kg and height was measured to the nearest 0.1 cm.

Step 3: Biochemical assessment

After completion of the Step 1 and 2, participants will be asked to a predefined place for the Step 3 and following important information will be provided and emphasized in advance:
The following important information was provided and emphasized in advance for respondents eligible for Step 3 tests:

- Fasting: Not to consume any food or drinks after 10 pm at night, except water, until the morning of the following day
- To collect urine sample in the container provided which contains the QR code prior to starting the fast

Those who complied with the fasting advice were only eligible for Step 3 and undergo the following tests: Urine samples for sodium and iodine content were sent by the survey team to a National Laboratory in Dili, for analysis of sodium and creatinine to determine mean population salt intake.

The field level data collection was carried out between 16th October 2023 and 15th December 2023. Overall response rate was 82% for the survey. Municipality wise variation ranged from 73% in Liquica to 86 % in Manatuto.

Data management and analysis

The information provided the respondents to the enumerators were directly entered in the eSTEPS application on the android tablets. The data entered were uploaded by the enumerators to the designated ONA database server. The progress as well as quality of data that is being uploaded was monitored by the central team on a regular basis. These observations were instantly shared with the survey team operating field. Technical staff of WHO Country office also held periodic meetings with the enumerators/supervisors to ensure the data completeness and quality.

On completion of the survey, the data from ONS server was exported to CSV format for cleaning and analysis. The unique identifier QR code and household identification number provided at the time of survey enabled merging of Step 1, Step 2 and Step 3 data sets. Data was cleaned based on the guidance provided in WHO STEPS manual (WHO, 2017).

After cleaning the data, the sampling weights were computed and imputed into the dataset to make it representative of the target population. All tabulations were performed WHO STEPS guidelines for analysis. The analysis was conducted using Stata software, version 16 (StataCorp LLC., College Station, United States of America).

Confidentiality and Data Protection

Data confidentiality was strictly maintained throughout the survey, in line with WHO protocols and ethical standards. Individual identifiers were not included in the analysis or reporting.

Administrative permission and approval of the ethical clearance for the survey

The MoH, Timor-Leste provided administrative clearances. Approval was obtained from the ethics committee constituted by WHO-SEARO, New Delhi and by the Faculty of Medicine and Health Sciences, UNTL, Dili. Ethical approval letter reference no. - 38/INSPTL/UEPD/IX/2025, dt 25.09.2023.

Facility Survey

Study design

This study used a cross-sectional design and was conducted concurrently with the household survey on NCDs and NCD risk factors.

Study population

The survey included the following categories of health facilities to represent different levels of health care facilities in the country.

- Tertiary - National hospital (only one in the country)
- Secondary - All five Referral hospitals
- Primary - All the CHC 1, CHC 2 and CHC 3 and HPs with doctors (with a doctor) located in the in the 28 sub-districts selected for the concurrent household survey on the NCDs and NCD risk factors

Survey instrument

The assessment of availability of services at different categories of the health facilities covered promotive, preventive and curative services for NCDs and mental health that have been specified in the Essential Service Packages to be offered by the respective category of hospitals. The tool was adapted from the Harmonized Health Facility assessment (HHFA) tool of WHO and required facility visits to collect data through key informant interviews, observation and/or record reviews.

In keeping with the objectives, the tool was designed to assess:

- Facility characteristics
    - Departments
    - Staff categories
- Existence of basic infrastructure and systems
    - Communication
    - Power supply
    - Water and sanitation
    - Emergency transport
    - Basic laboratory services
- Availability of services- related to NCD
    - Health promotion services and prevention of NCD

    - Integrated screening and services for hypertension diabetes, cardiovascular disease, chronic respiratory diseases
    - Follow up and manage patients with NCDs
    - Manage acute or emergency NCD conditions
    - Rehabilitation services
    - Services to prevent rheumatic heart diseases
    - Cancer services
        - Cancer screening
        - Cancer treatment
    - Mental health services
        - Specified mental health services
    - Oral health services
        - Specified mental health services
    - Eye health services
        - Specified mental health services
- Maintenance of registers of patients screened for NCDs
- Availability and use of guidelines related to NCD services
- Training of staff in NCD services
- Availability of key medicines related to NCD services
- Availability of key commodities (medical devices and other items) related to NCD services

The tools were customized for each of the five types of health facilities are enclosed (Annex 3). The tool for at the levels of CHC and HPs with doctors were translated to Tetum language and were back translated to English just to ensure that the English version is the same as the original English version. The other tools were used in English language. Tools were pre-tested prior to the survey. The pretesting was carried out in 4 health facilities (2 CHCs and 2 HPs) in Dili in August 2023. Survey questionnaires were revised and finalized based on the inputs received from the pretesting exercise. Corresponding changes were also incorporated in the questionnaires configured in the handheld devices.

An electronic data collection instrument was created by adapting the existing CSPro data collection app developed by the WHO's Harmonized Health Facility Assessment (HHFA) team.

Data collection

As indicated, the facility survey was integrated with the household survey for NCDs and risk factors and a total of 14 teams comprising 3 members (one supervisor, 2 enumerators) collected data. A data collector training was conducted in September 2023 focusing on administering each question, performing observations and on recording information in the android devices. The supervisor of the team, administered the tool to the facilities of the sub-district assigned to him/her by visiting the facilities by prior appointment.

The Head of the health facility or the staff in charge of the respective facility on the date of survey were the respondent and the survey investigators visited the service points of the facility and observed, verified and recorded the responses. The data collection was carried out between 17th October 2023 and 10th December 2023.

The enumerator on completion of survey used to upload data to the designated dropbox created for this purpose. The progress as well as quality of data that is being uploaded was monitored on a regular basis. These observations were instantly shared with the survey team operating field. WHO-TLS also held periodic meetings with the enumerators/supervisors to ensure the data completeness and quality. The data was exported from CSPro tool to a CSV format was cleaned for analysis. The analysis was conducted using Stata software, version 16.

Data management and analysis

Facility characteristics, existence of basic infrastructure and systems, availability of services- related to NCD, maintenance of registers of patients screened for NCDs, availability and use of guidelines related to NCD services, training of staff in NCD services, availability of key medicines related to NCD services and availability of key medical devices related to NCD services were be presented using frequency distributions for the facilities in general and also disaggregated for the National Hospital, Referral Hospitals and CHC-3, CHC-2 and CHC-1 and Health Posts.

Readiness of the health facilities for providing the following selected NCD services was evaluated.

- Integrated Screening for NCDs
- Screening for Chronic respiratory disease
- Follow-up and management of hypertension
- Follow-up and management of diabetes
- Follow-up and management of chronic respiratory disease

Based on the WHO guidance (WHO, 2022), readiness scores were based on the availability of the selected tracer items of specified domains of 1) trained staffs, guidelines and registers, 2) equipment, 3) diagnostics and 4) medicines and commodities.

Tracer items that best represent the domains relevant to the services were defined in advance in consultation with the technical working group. The services to be scored and the tracer items were then mapped into the different levels of health facilities based on whether the facility is expected to offer the service and if so possess the item on or not, based on the essential service packages of Timor-Leste which also contain information related to equipment, diagnostic services and medicines and commodities that are expected in each level of facility. Computation of the readiness scores within each level was facility was limited for the facilities which responded as designated service is 'available' in the facility. In computing the service readiness score, presence of each tracer items that are expected to be present in the facility within each domain was given a score of '1' and its absence was given a score of '0'. The readiness is presented for the selected NCD services aggregated for each level of health facility in Timor-Leste and disaggregated by municipalities. Table 2.3 shows the indicators and the details of computations.

Table 2. 3 Indicators and the details of computations of readiness scores

Readiness scores of each level of health facilities for each domain	Mean readiness score was computed by adding up the scores for the presence of tracer items divided by the total number of tracer items that are supposed to be present in the specific type of facility.
Overall readiness score of each level of health facilities	Mean overall readiness score was computed by adding up the scores for the domains divided by the total number of domains that was considered in the specific type of facility.
Percentage of each level of health facilities with all tracer items for each domain	Percentage of each level of health facilities with all tracer items for each domain was computed by using the number of health facilities with all tracer items of the domain as the numerator and the total number of facilities included in the analysis from each level of health facility as the denominator presented as a percentage
Percentage of each level of health facilities with all tracer items of all domains	Percentage of each level of health facilities with all tracer items for all domain was computed by using the number of health facilities with all tracer items of all the domains as the numerator and the total number of facilities included in the analysis from each level of health facility as the denominator presented as a percentage

Administrative permission and ethical approval for the survey

The MoH, Timor-Leste provided administrative clearances. Approval was obtained from the ethics committee (Ethical approval letter reference no. - 38/INSPTL/UEPD/IX/2025, dt 25.09.2023.) constituted by WHO-SEARO, New Delhi and by the Faculty of Medicine and Health Sciences, UNTL, Dili.

III. RESULTS

Household Survey

Below is a summary presentation of the results of the household survey to determine the prevalence of NCDs, NCD risk factors, selected care seeking practices among on NCD related conditions and out-of-pocket expenditures for NCDs among adults. Annex 4 provides a detailed result for all the variables included in the study disaggregated by age category and sex.

Background Characteristics

A total of 3517 respondents participated in the Step 1 and Step 2 of the survey with a response rate of 81.4%. The respondents participated in the Step 3 was 3317 with a response rate of 76.7%.

As shown in Table 3.1 of the total 3517 respondents, 1416 (40.3%) were males and 2101 (59.7%) were females. Of the 18-69-year age category that was included in the survey, 63.7% (n=2240) of the respondents were in the 18-44 years age group. According to the education level, 23.5% (n=826) of respondents had no formal education. The mean years of education among the respondents was 8.4 years (SD=5.3 years). The mean years of schooling was higher among males (8.8 years) than females (8.1 years). People who were in the age group of 18-44 years had 9.7 years of education whereas among the individuals aged 45-69 years it was 5.8 years of schooling.

Most of the respondents (n=2541, 72.4%) were currently married with approximately similar percentages in males (71.6%) and females (73.0%). However, the percentage of widowers was higher in females (8.3%) than in males (2.5%).

Males were more employed than females irrespective of the age group. Among males, 56.6% were self-employed whereas in females, it was 30.9%. Unpaid workers and other category constitute 46.3% (n=1625). Among the unpaid workers, 58.2% percent were engaged as home maker.

The estimated average earnings of the households in the year preceding the survey was 2,333.4 USD (SD=4,854.1 USD). (Table 3.1)

Table 3. 1: Characteristics of the study respondents

Variables	Males		Females		Both sexes	
	N	%	n	%	n	%
Age group (n=3517)	**n=1416**		**n=2101**		**n=3517**	
18-44 years	830	58.6	1410	67.1	2240	63.7
45-69 years	586	41.4	691	32.9	1277	36.3
Highest level of education (n=3517)	n=1416		n=2101		n=3517	
No primary education	278	19.6	548	26.1	826	23.5
Less than primary school	230	16.2	270	12.9	500	14.2
Primary school completed	124	8.8	175	8.3	299	8.5
Secondary school completed	163	11.5	281	13.4	444	12.6
High school	448	31.6	644	30.7	1092	31.1
College/university completed	158	11.2	169	8.0	327	9.3
Postgraduate degree	15	1.1	14	0.7	29	0.8
Marital status (n=3510)	n=1410		n=2100		n=3510	
Never married	334	23.7	314	15.0	648	18.5
Currently married	1009	71.6	1532	73.0	2541	72.4
Separated	8	0.6	25	1.2	33	0.9
Divorced	9	0.6	33	1.6	42	1.2
Widowed	35	2.5	174	8.3	209	6.0
Cohabiting	15	1.1	22	1.1	37	1.1
Employment status (n=3513)	n=1414		n=2099		n=3513	
Government employee	219	15.5	155	7.4	374	10.7
Non-government employee	42	3.0	25	1.2	67	1.9
Self employed	799	56.5	648	30.9	1447	41.2
Unpaid workers and other categories	354	25.0	1271	60.6	1625	46.3
Nationality (n=3517)	n=1416		n=2101		n=3517	
Timorese	1412	99.7	2096	99.8	3508	99.7
Non-Timorese	4	0.3	5	0.2	9	0.3

Note: unweighted percentage and n are presented in the table

Tobacco Use

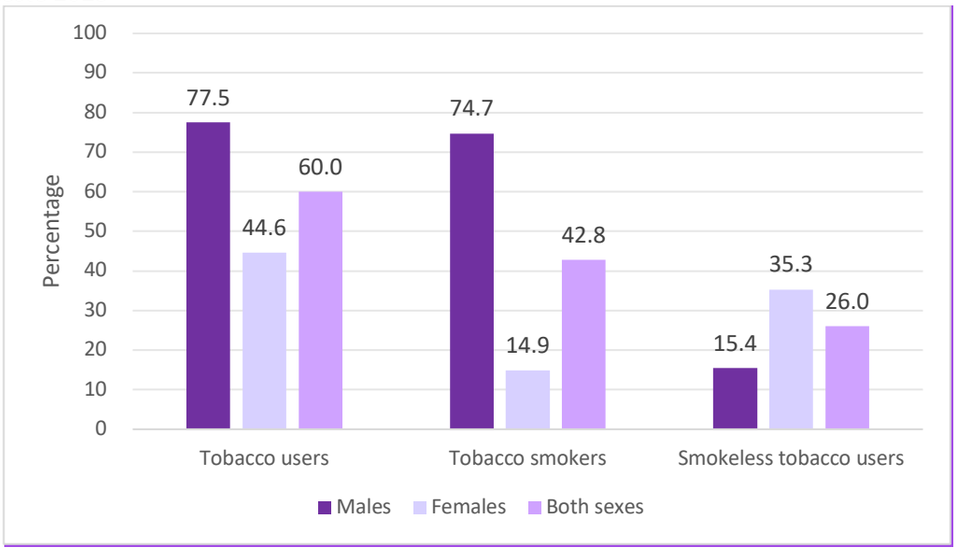
Information regarding tobacco use was gathered by asking respondents about their smoking habits and use of smokeless tobacco. The respondents were grouped into three categories: current users, ever users and never users of smoked and smokeless tobacco.

Among users, current smokers are those who smoked any tobacco products (e.g., cigarettes, cigars or hand-rolled tobacco) or used any type of smokeless tobacco product in the past 30 days. Further, current smokers or users of smokeless tobacco were categorized as daily and non-daily smokers/users based on they smoke/use tobacco products every day, or not. never smokers/users include those who had never smoked in their lives, and ever smokers /users are those who have smoked but are not currently smoking or have used smokeless tobacco but are not currently using.

Current tobacco users

Sixty percent of the respondents reported tobacco use. The proportion of smokers was 42.8% while the proportion of smoke-less tobacco users was 26.0%. Tobacco smokers were higher among males (74.5%) compared to females (14.9%), while the smokeless tobacco use was higher among females (35.3%) than males (15.4%) (Figure 3.1).

Figure 3. 1 Percentage of current tobacco users among respondents, by sex and type of tobacco, Timor-Leste 2023

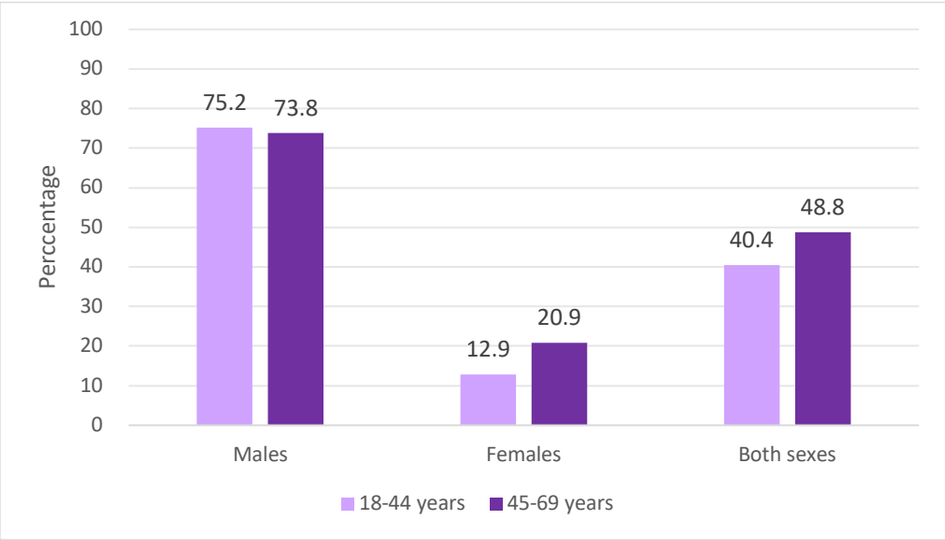


Tobacco smokers

Current tobacco smokers

As shown in the Figure 3.2, overall, the percentage of current smokers was higher in the older age group (45-69 years) (48.8%) than the younger age group (40.4%) (18-44 years). Even though the same trend was observed among females, among males the current smoker percentage was slightly higher in the younger age group.

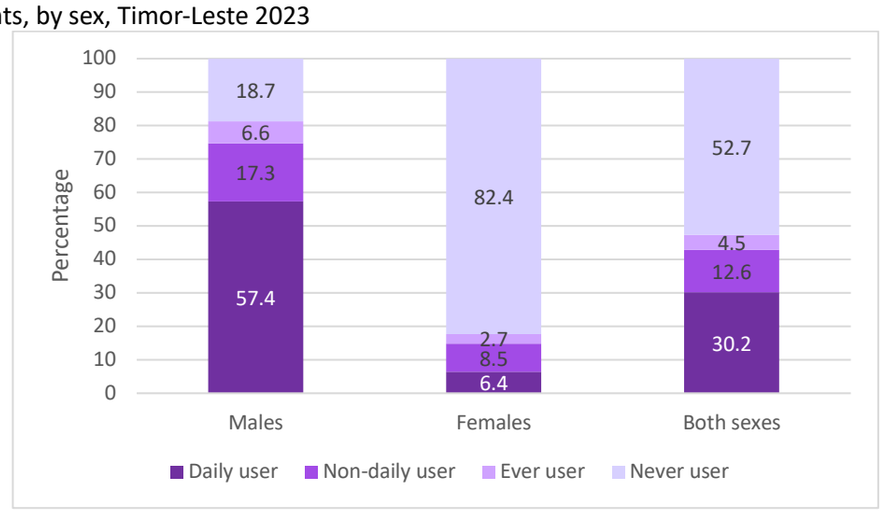
Figure 3. 2 Percentage of current tobacco smokers among respondents, by sex and age group, Timor-Leste 2023



Daily and non-daily smokers, ever smokers, never smokers

Approximately half of the current male smokers were daily smokers (49.6%) while the corresponding proportion among females was small (7.8%). A great majority (89.4%) female respondents were never smokers while the approximately one fourth of male respondents also were never smokers (26.9%) (Figure 3.3).

Figure 3. 3 Proportion of never smokers, ever smokers, non-daily and daily smokers among respondents, by sex, Timor-Leste 2023



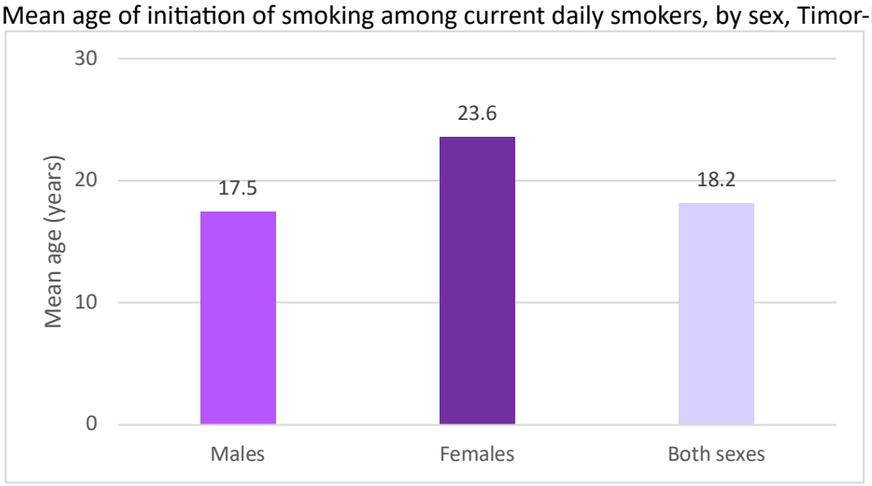
Types of smoked tobacco products used

The percentage of daily smokers smoking manufactured cigarettes was 87.8% and the corresponding percentages among male and female respondents were 86.9% and 94.5% respectively.

Age of initiation and duration of smoking

The mean age at initiation of smoking among current daily users was 18.2 years and the mean age among males was approximately 6 years younger (17.5 years) compared to females (23.6 years) (Figure 3.4)

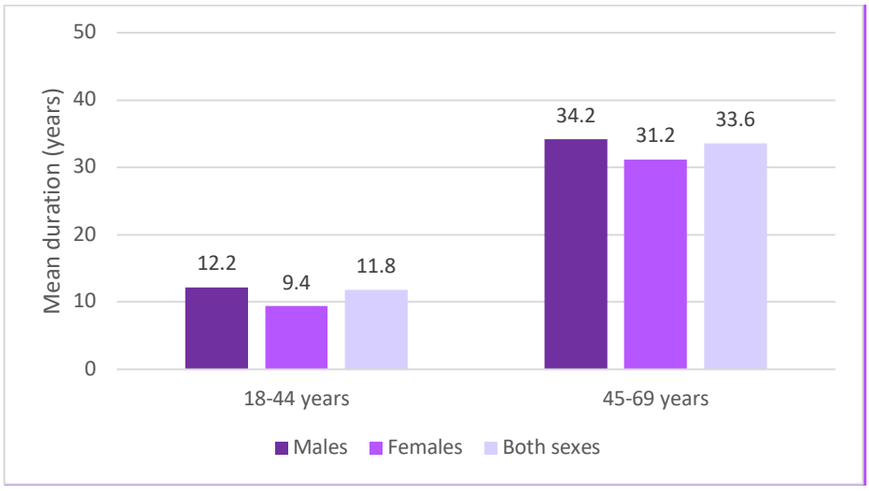
Figure 3. 4 Mean age of initiation of smoking among current daily smokers, by sex, Timor-Leste 2023



Duration of smoking

The mean duration of smoking by age category among the female and male current daily smokers showed a similar pattern (Figure 3.5).

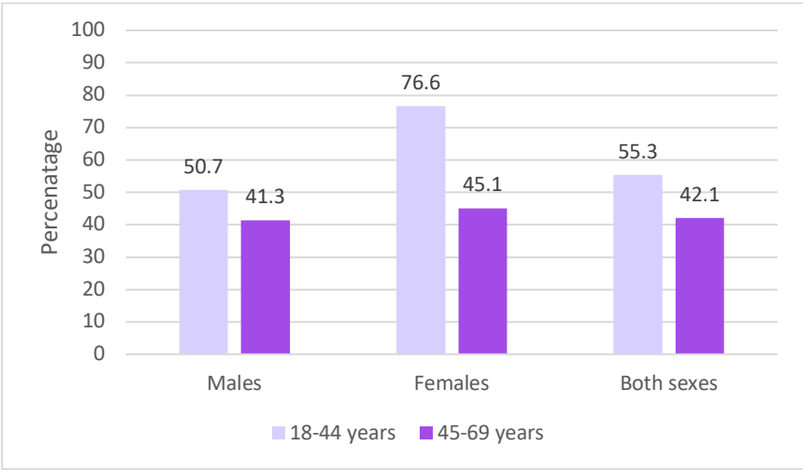
Figure 3. 5 Mean duration of smoking among current daily smokers, by sex and age group, Timor-Leste 2023



Smoking cessation

Among the current smokers, higher proportion in the age category of 18-44 years (55.3%) had tried to stop smoking compared to older age group (42.1%). Higher percentage of females in both age groups had higher percentages than their male counterparts had tried to stop smoking and the percentage is substantially higher in the younger age group (Figure 3.6).

Figure 3. 6 Percentage of current smokers who have tried to stop smoking, by sex and age group, Timor-Leste 2023

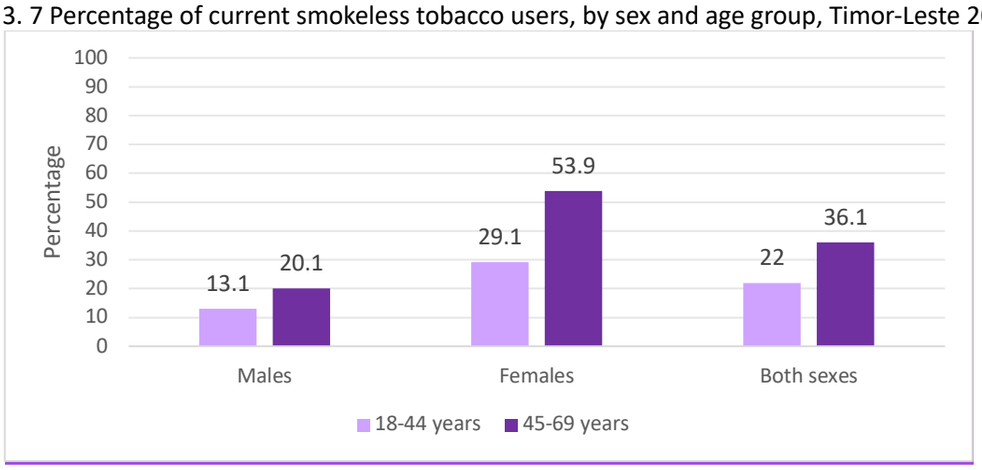


Smokeless tobacco users

Current smokeless tobacco users

As shown in Figure 3.7, Overall, higher percentage of older age group (36.1%) compared younger age group (22.0%) currently used smokeless tobacco. irrespective of the age category, females had higher percentages of current smokeless tobacco users compared to males.

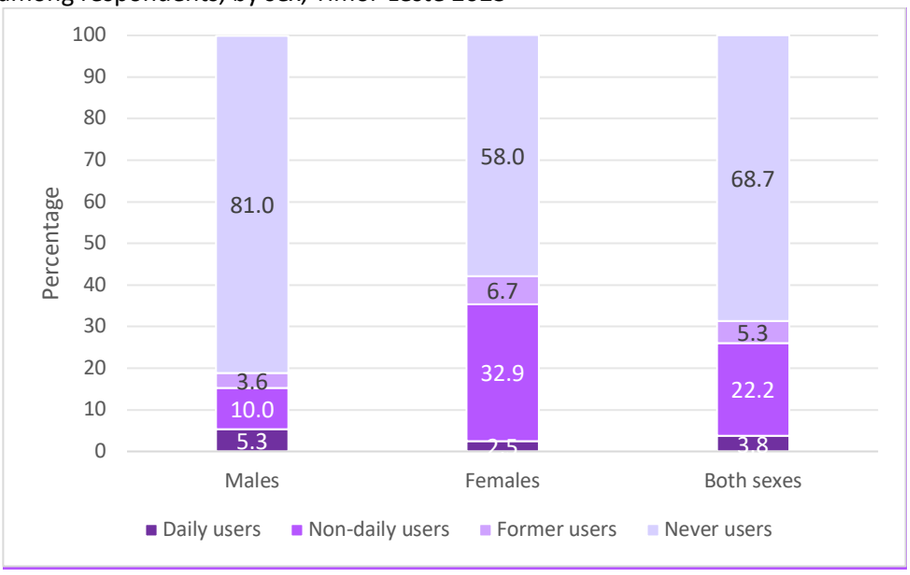
Figure 3. 7 Percentage of current smokeless tobacco users, by sex and age group, Timor-Leste 2023



Daily and non-daily smokeless tobacco users, ever users, never users

Although the proportion of current users of smokeless tobacco was higher in females, the proportion of current daily users of smokeless tobacco was approximately twice among males (5.3%) compared to females (2.5%). A great majority male respondent (81%) were never users of smokeless tobacco while the 58% of female respondents also were never users (Figure 3.8).

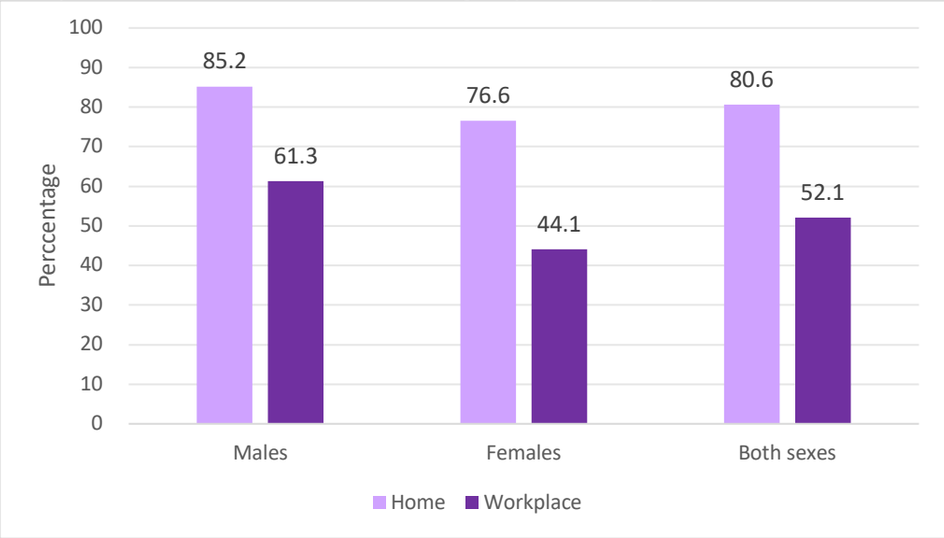
Figure 3. 8 Proportion of never users, former users, non-daily and daily users of smokeless tobacco products among respondents, by sex, Timor-Leste 2023



Exposure to second-hand smoke

Overall, the most frequent exposure of second-hand smoking during the past 30 days was observed in home setting (80.6%). Second hand smoke was higher in males in both home as well as workplaces compared to females (Figure 3.9).

Figure 3. 9 Exposure to second hand smoke among respondents, by sex, Timor-Leste 2023



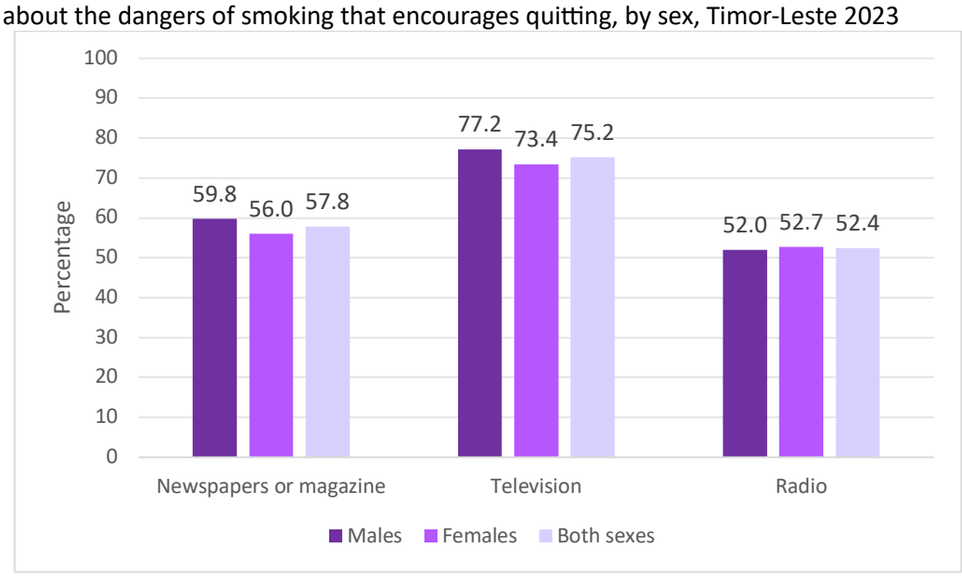
Evidence of implementation of national tobacco control legislations/policies

The survey collected information on selected tobacco policy measures being implemented in the country to control tobacco.

Exposure to media messages about the danger of smoking that encouraged quitting

The inquiries were on whether they noticed information in the newspapers, and on television and radio, about the danger of smoking that encouraged quitting during the past 30 days. In both sexes, television was cited as the commonest information source (75.2%), followed by newspaper or magazine (57.8%). A similar pattern observed among males and females (Figure 3.10).

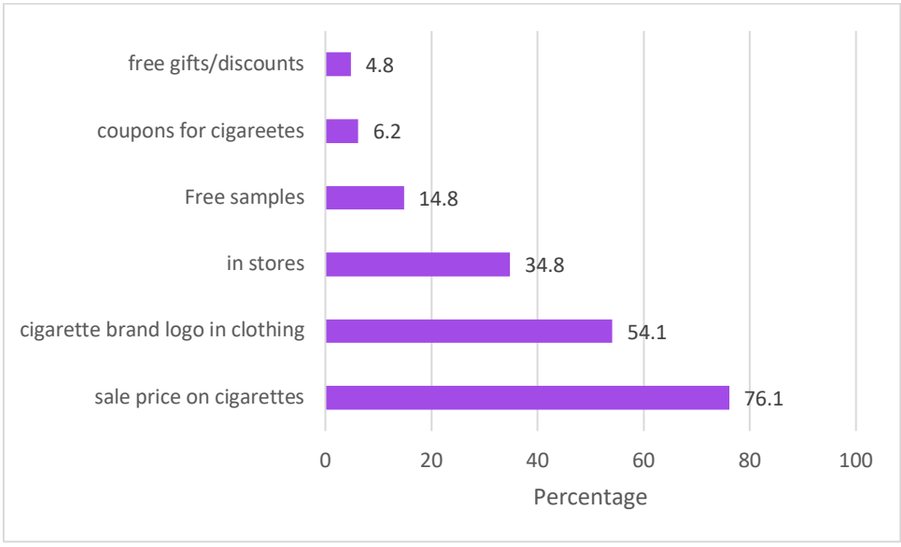
Figure 3. 10 Percentage of respondents who noticed information during the past 30 days on the media about the dangers of smoking that encourages quitting, by sex, Timor-Leste 2023



Noticing cigarette promotions

On the other hand, with regard to noticing cigarette promotion during the past 30 days, 76.1% respondents had noticed cigarettes at sale prices, while 54.1% noticed cigarette brand logo in clothing (Figure 3.11).

Figure 3. 11 Percentage of respondents who noticed cigarette promotions during the past 30 days, Timor-Leste 2023



Noticing health warnings on cigarette packages

Among those who currently smoke tobacco, the percentage of respondents who noticed health warnings on cigarette packages during the past 30 days was 27.2% and the corresponding percentage was lower in males (26.2%) in comparison to females (31.5%). Furthermore, 33.4% who saw health warnings on cigarette packages during the past 30 days had thought of quitting. The corresponding percentage was lower in males (26.2%) than females (35.2%).

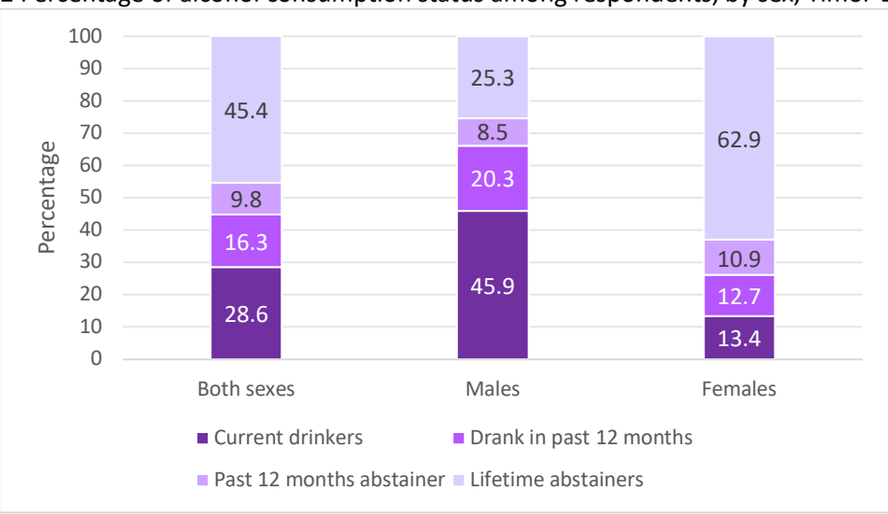
Alcohol Consumption

Alcohol consumption among the respondents were assessed through self-reported information and the respondents were classified into four categories. Respondents who consumed alcohol in the past 30 days were classified as current drinkers and those who had consumed alcohol in the past 12 months were classified as 'past 12-month drinkers'. Those who have never consumed alcohol were classified as lifetime abstainers and those not consumed during last twelve months were classified as past 12-month abstainers. consumed in past twelve months and.

Alcohol drinkers and abstainers

Among the respondents, 28.6% were current drinkers who had consumed alcohol in the past 30 days. Approximately half of the males (45.9%) were current drinkers compared to females (13.4%). Among respondents, approximately half (45.4%) were lifetime abstainers and this percentage was much higher among females (62.9%) than males (25.3%) (Figure 3.12).

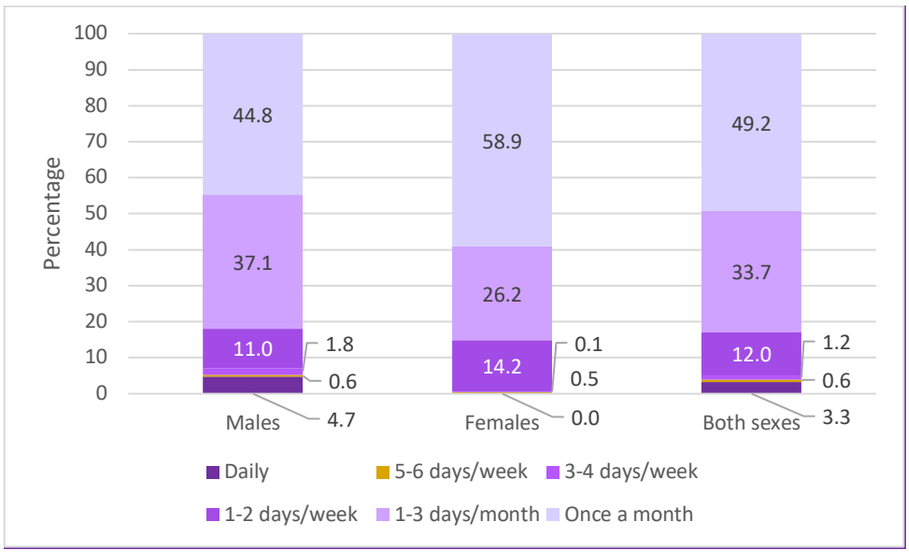
Figure 3. 12 Percentage of alcohol consumption status among respondents, by sex, Timor-Leste 2023



Frequency of alcohol consumption

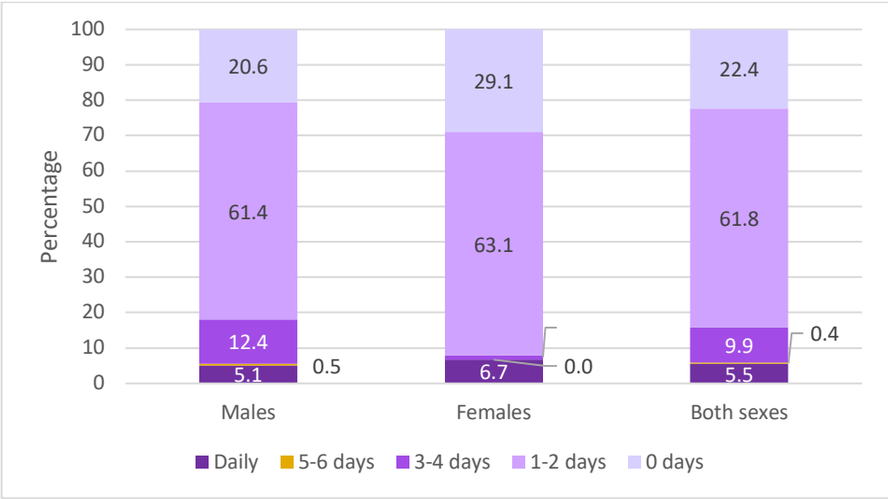
Considering the alcohol consumption frequency during last twelve months, approximately half (49.2%) had consumed alcohol once a month while another one third (33.3%) had drunk 1-3 days a month The proportion of reported daily consumption of alcohol was small (3.3%) with 4.7% males and none of the females reporting daily alcohol consumption (Figure 3.13).

Figure 3. 13 Frequency of alcohol consumption in the past 12 months among current drinkers, by sex, Timor-Leste 2023



Assessing the frequency of alcohol consumption in the past 7 days among current drinkers suggested that the majority (61.8%) consumed alcohol 1-2 days and the pattern among males and females was similar. Further, it was noted that 5.5% of current drinkers consumed alcohol daily and the percentage among female current drinkers who drank daily (6.7%) was higher than males (5.1%) (Figure 3.14).

Figure 3. 14 Frequency of alcohol consumption in the past 7 days among current drinkers, by sex, Timor-Leste 2023

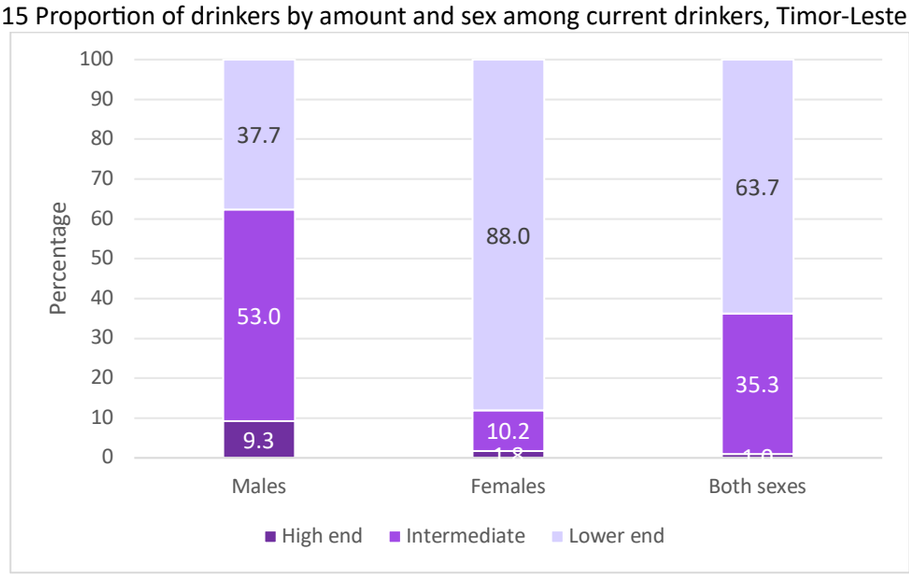


Quantum of alcohol drunk

Besides the frequency of alcohol consumption, its quantum was assessed among current drinkers in three categories: high end, intermediate and lower end. The classification was based on the among of alcohol drunk according the sex specific limitations as lower end (men <40 g, women <20g); intermediate (men 40-59.9 g, women 20-39g), high end (men >=60g, women >=40g).

There were 37.7% lower end consumers and 9.3% high end consumers. However, this pattern was different between males and females with the majority (88.0%) of males were lower end users and 35.3% of females were categorized as intermediate (Figure 3.15).

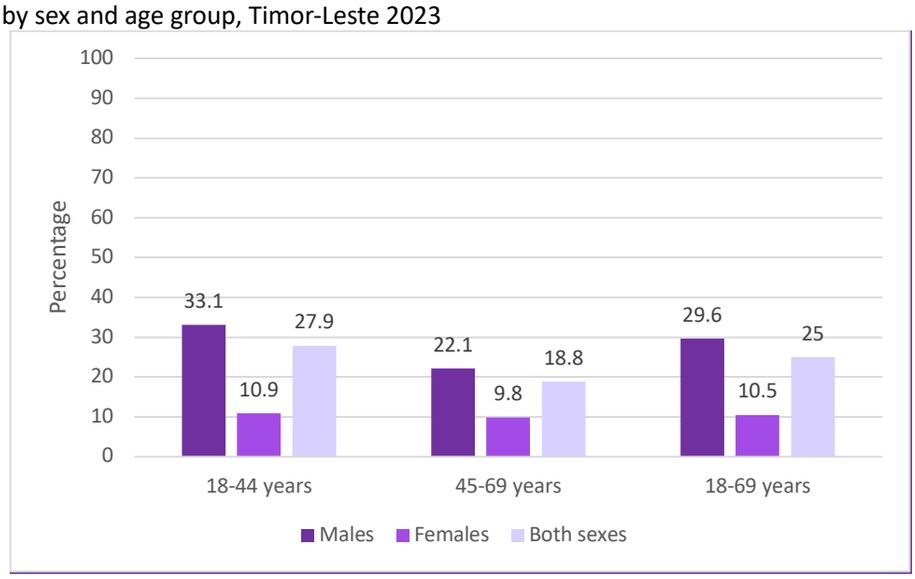
Figure 3. 15 Proportion of drinkers by amount and sex among current drinkers, Timor-Leste 2023



Consumption of unrecorded alcohol

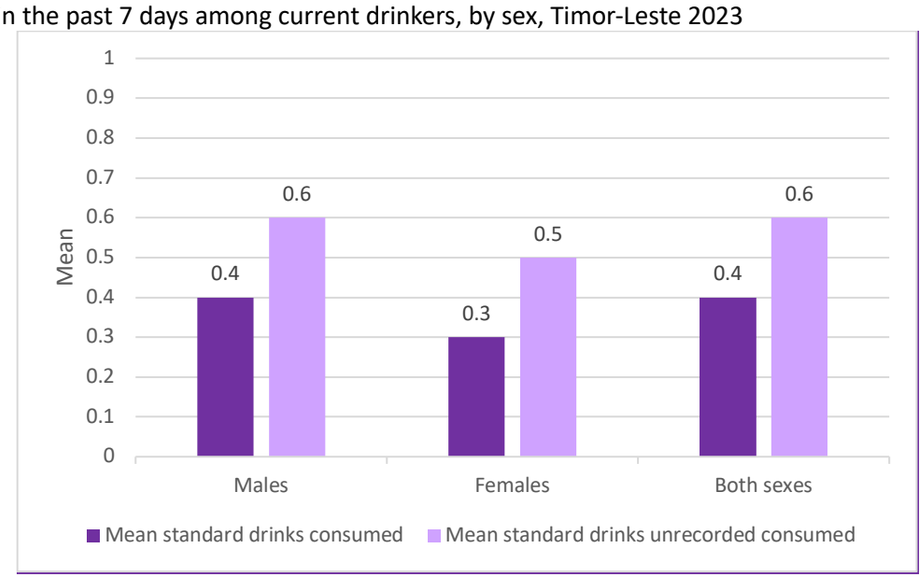
As shown in Figure 3.16, the percentage of respondents that reported consuming unrecorded alcohol (homebrewed alcohol, alcohol brought over the border, not intended for drinking or other untaxed alcohol) during the past 7 days among current drinkers was 25.0%. The corresponding percentages for males and females were 29.6% and 10.5% respectively

Figure 3. 16 Percentage of consumption of unrecorded alcohol during the past 7 days among current drinkers, by sex and age group, Timor-Leste 2023



Assessing the mean number of standard drinks per day in the past 7 days and the standard mean number of unrecorded drinks among current drinkers showed that the mean number of standard drinks consumed per day to be 0.4 and the mean standard drinks of unrecorded alcohol to be higher (0.6). Among males and females, a similar trend was observed (Figure 3.17).

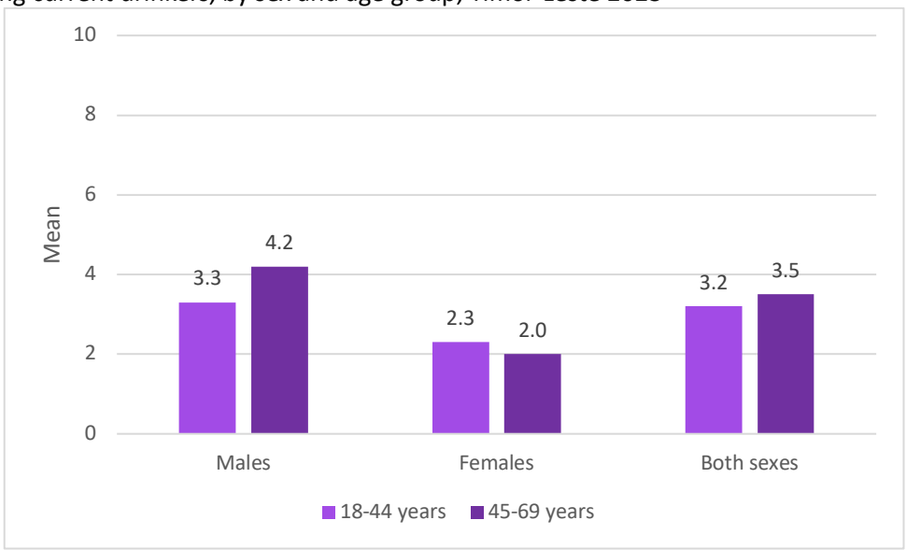
Figure 3. 17 Mean number of standard drinks and standard drinks of unrecorded alcohol on average per day in the past 7 days among current drinkers, by sex, Timor-Leste 2023



Drinking occasions and drinks per occasion

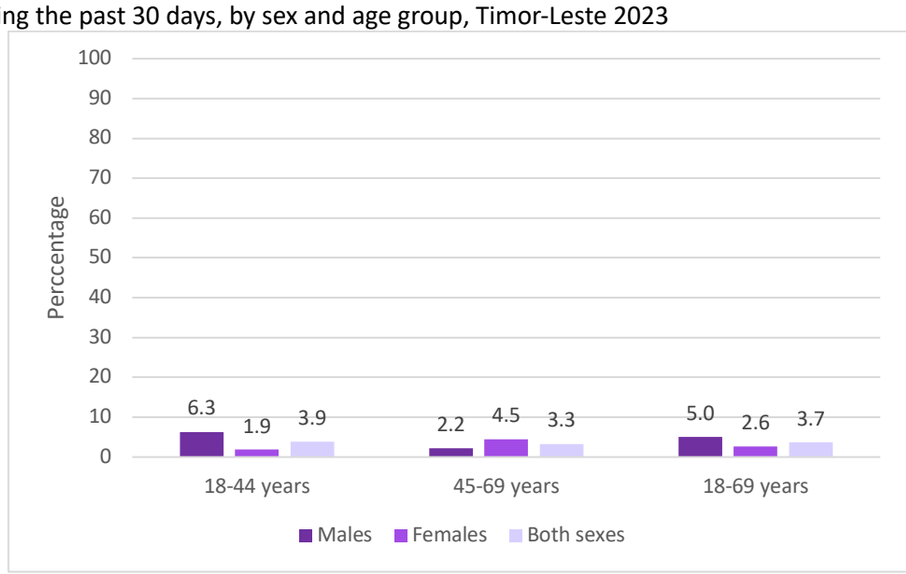
As shown in the Figure 3.18, the mean maximum number of standard drinks consumed on one occasion in the past 30 days among current drinkers with regard to age groups revealed that the corresponding values for the younger and older age groups were more or less similar (3.2 and 3.5 respectively). Further, it was noted that among the males the mean maximum number of standard drinks consumed on one occasion was higher in the older age group in males, whereas in females the value was slightly higher among the younger age group.

Figure 3. 18 Mean maximum number of standard drinks consumed on one occasion in the past 30 days among current drinkers, by sex and age group, Timor-Leste 2023



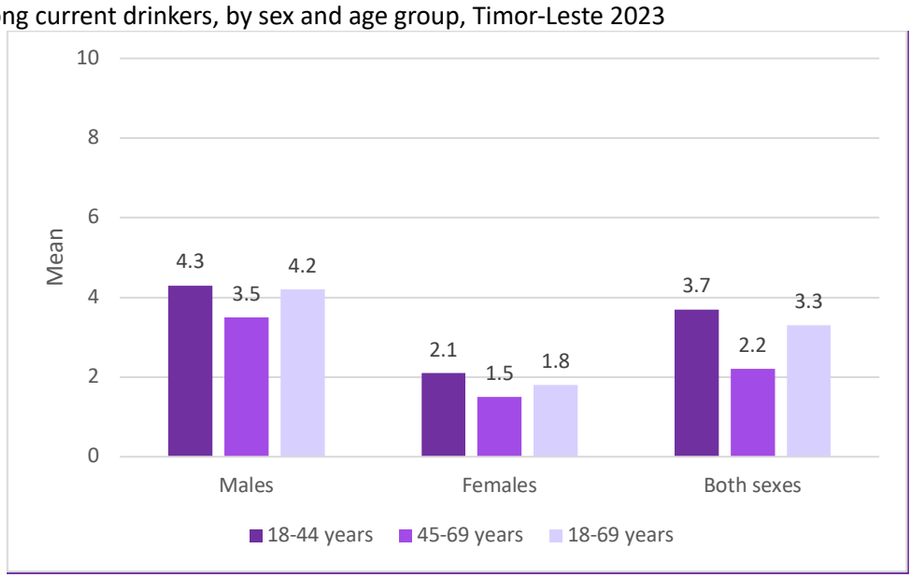
The percentage of respondents consuming six or more drinks on a single occasion at least once during the past 30 days was 3.7% and the corresponding percentages in males and females were low (5.0% and 2.6% respectively). It was noted that among younger age group the percentage was higher in males and in the older age group the percentage was higher among females than their counterparts (Figure 3.19).

Figure 3. 19 Percentage of respondents consuming six or more drinks on a single occasion at least once during the past 30 days, by sex and age group, Timor-Leste 2023



The mean number of times with six or more drinks during a single occasion in the past 30 days among current drinkers was also low with 3.3 and the corresponding values in males and females were 4.2 and 1.8 respectively. The mean numbers were higher in both males and females in the younger age group compared to the older age group (Figure 3.20).

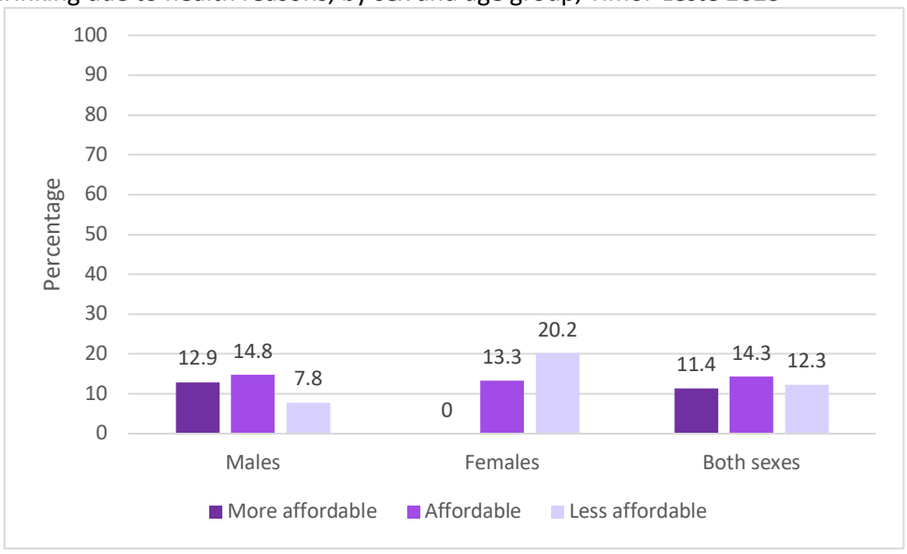
Figure 3. 20 Mean number of times with six or more drinks during a single occasion in the past 30 days among current drinkers, by sex and age group, Timor-Leste 2023



Stopped alcohol due to health reasons

The percentage of those who did not drink during the past 12 months (12 moth abstainers) who stopped drinking due to health reasons was 12.3% and the corresponding percentages in males and females were 7.8% and 20.2% respectively. Further, it was noted that this percentage was higher in older age group than younger age group among males, while the corresponding percentage was higher in younger age group than older age group among females (Figure 3.21).

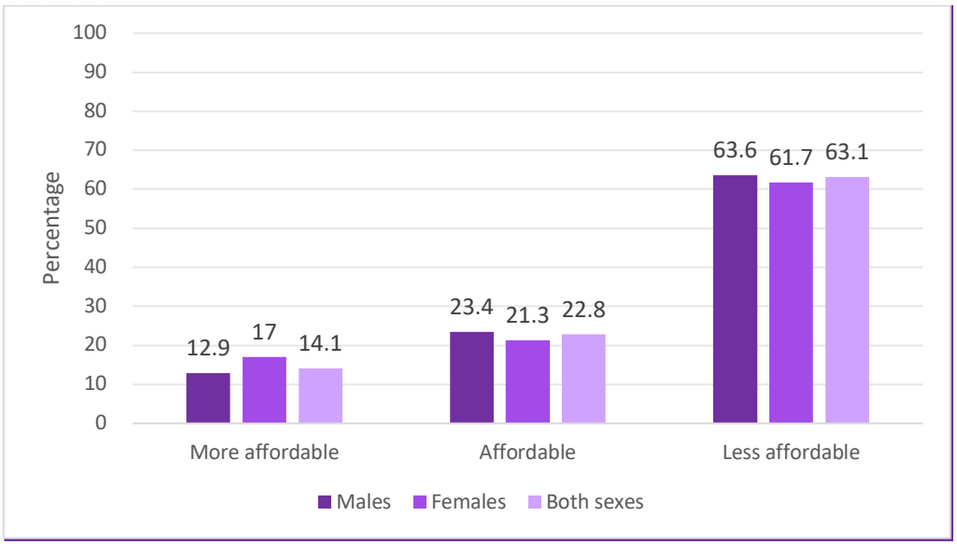
Figure 3. 21 Percentage of former drinkers (those who did not drink during the past 12 months) who stopped drinking due to health reasons, by sex and age group, Timor-Leste 2023



Affordability to buy alcohol within one year

The percentage of respondents reported the affordability of buying the same quantity of alcohol now compared to past year among those who used alcohol in the past 12 months was low (22.8%). It was noted that 63.1% claimed less affordability. A similar trend was observed both in males and females (Figure 3.22).

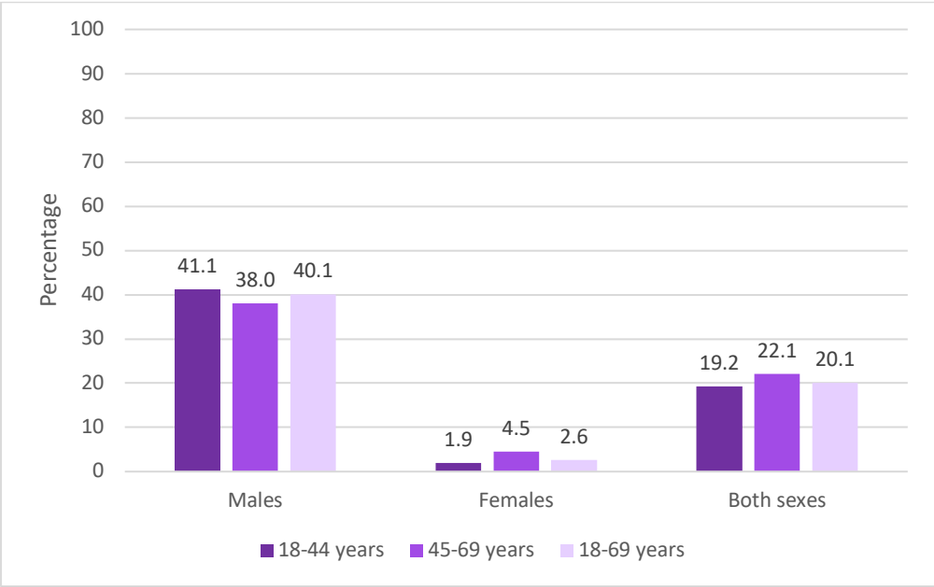
Figure 3. 22 Percentage of respondents reporting the affordability of buying the same quantity of alcohol now compared to the past year among those who used alcohol in the past 12 months, by sex, Timor-Leste 2023



Current drinkers and current smokers

Among the respondents, 20.1% currently smokers also consumed alcohol currently. The percentage was higher in the older age group (22.1%) compared to the younger age group (19.2%). A substantial difference was observed between males and females, with 40.1% of males being current smokers and drinkers, compared to just 2.6% of females (Figure 3.23).

Figure 3. 23 Percentage of respondents who currently smoke and drink, by sex and age group, Timor-Leste 2023



Dietary Habits

Fruits and vegetable consumption

The fruit and vegetable consumption patterns of the respondents were assessed by asking about the frequency and quantity of fruit and vegetables consumed.

Frequency of fruit and vegetables consumption

The mean number of days in which the respondents consumed fruits and consumed vegetables in a typical week were 2.5 days and 6.6 days respectively with frequency of consumption of vegetables being much less than fruits. There was no difference in the consumption pattern between male and female respondents.

Quantity of fruit and vegetables consumed

As shown in Figure 3.24 The mean daily fruit intake was also low in both men (1.1 serving per day) and women (1.2 servings per day). The mean daily vegetable intake was higher than the fruit intake in both sexes (4.2 servings per day). When fruit and vegetable consumption was combined, the mean consumption was 5.3 servings of fruit and/or vegetables on a typical day.

Figure 3. 24 Mean number of fruit, vegetables and combined fruit and/or vegetables servings on average per day among respondents, by sex, Timor-Leste 2023

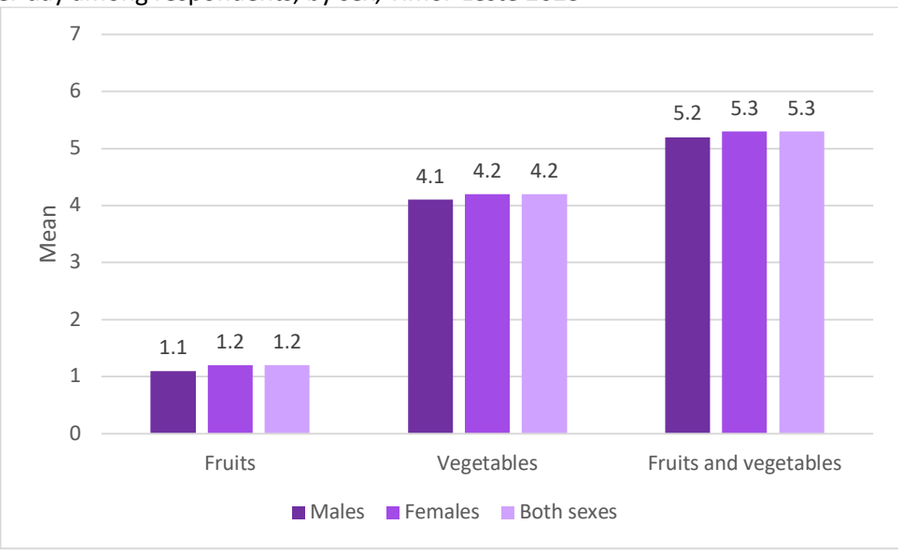
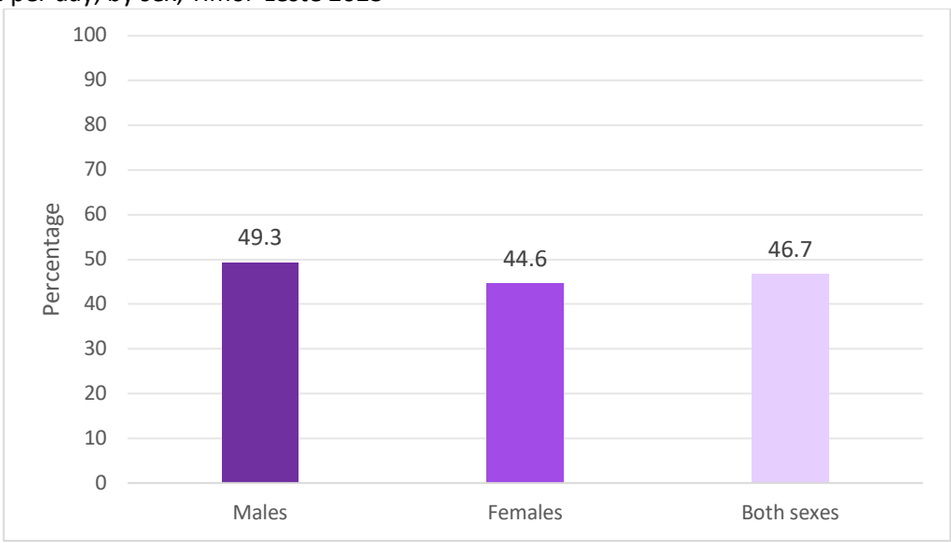


Figure 3.25 shows the percentage of respondents who ate less than 5 servings of fruit and/or vegetables on average per day was 46.7% and it was noted that consumption pattern was higher among male respondents (49.3%) in comparison to female respondents (44.6%).

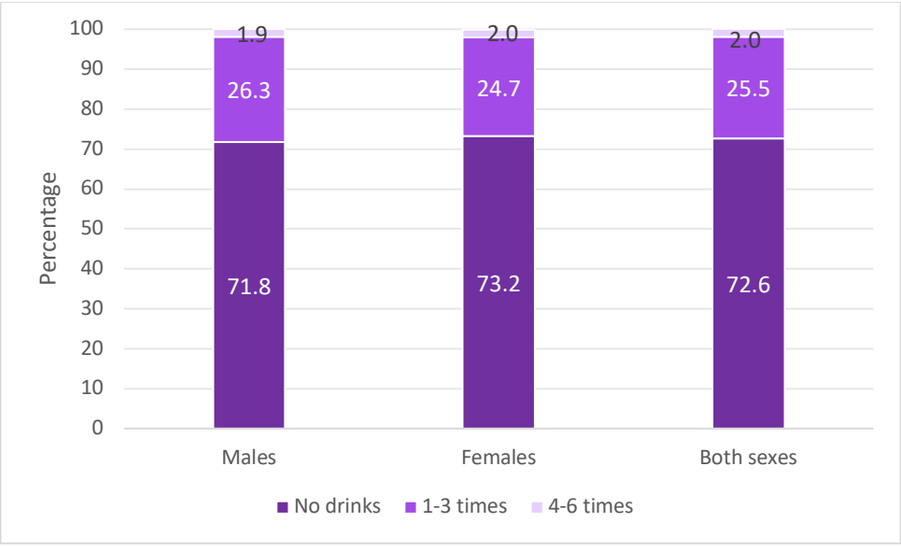
Figure 3. 25 Percentage of respondents who ate less than 5 servings of fruit and/or vegetables on average per day, by sex, Timor-Leste 2023



Frequency of consuming carbonated drinks

Among the respondents, approximately one fourth (25.5%) reported that they consumed carbonated soft drinks 1 to 3 times during the past 7 days and the percentage among males (26.3%) was slightly higher than females (24.7%) (Figure 3.26).

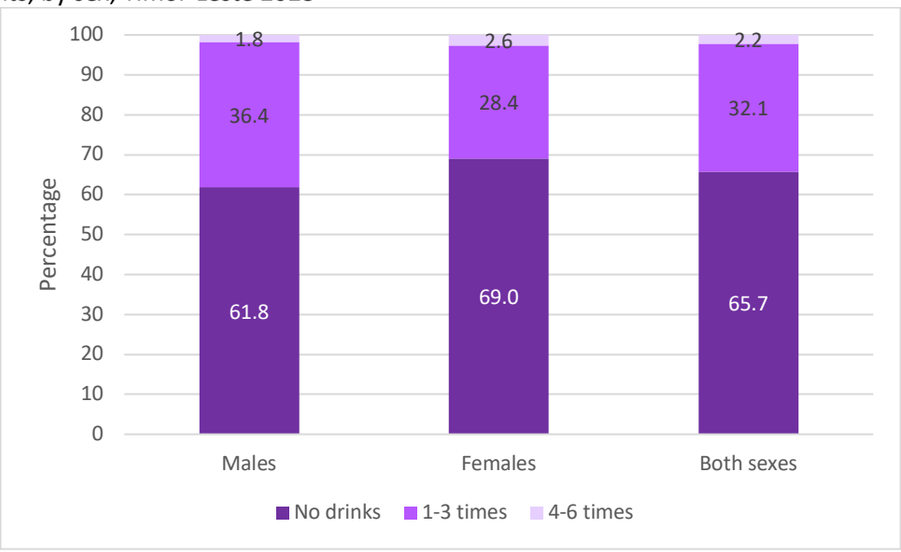
Figure 3. 26 Frequency of consumption of carbonated soft drinks during the past 7 days among the respondents, by sex, Timor-Leste 2023



Frequency of consuming sugar sweetened beverages

A higher percentage of male respondents (36.4%) consumed sugar sweetened drinks 1 to 3 times during the past 7 days than female respondents (28.4%) (Figure 3.27).

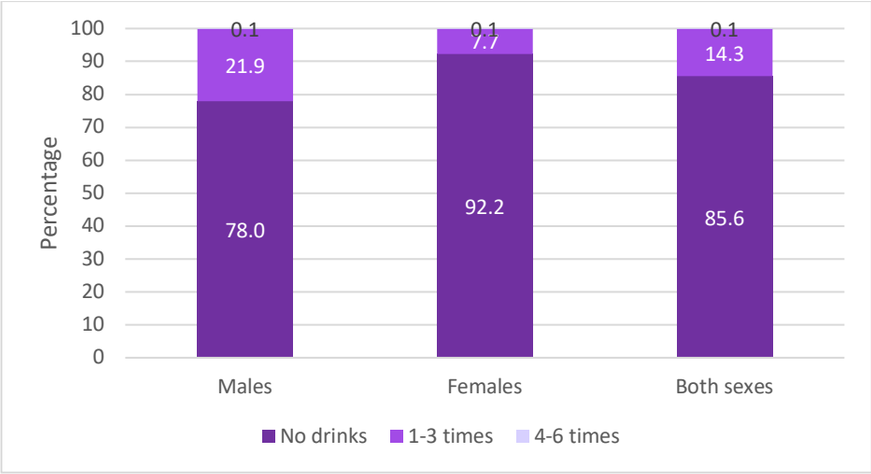
Figure 3. 27 Frequency of consumption of sugar sweetened drinks during the past 7 days among respondents, by sex, Timor-Leste 2023



Frequency of consuming energy drinks

Consumption pattern of energy drinks during the past 7 days among respondents showed the proportion of male respondents consumed energy drinks 1-3 times was three times higher (21.9%) compared to the corresponding percentage among female respondents (7.7%) (Figure 3.28).

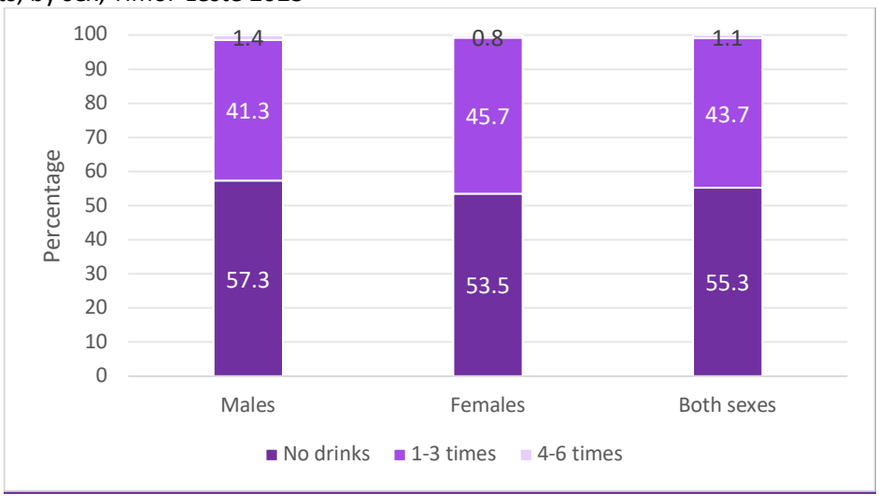
Figure 3. 28 Frequency of consumption of energy drinks during the past 7 days among respondents, by sex, Timor-Leste 2023



Frequency of consuming fruit juice

Among the respondents, the percentage of consumption of 100% fruit juices 1 to 3 times during the past 7 days among females (45.7%) was slightly higher than males (41.3%). (Figure 3.29)

Figure 3. 29 Frequency of consumption of 100% fruit juices during the past 7 days among respondents, by sex, Timor-Leste 2023



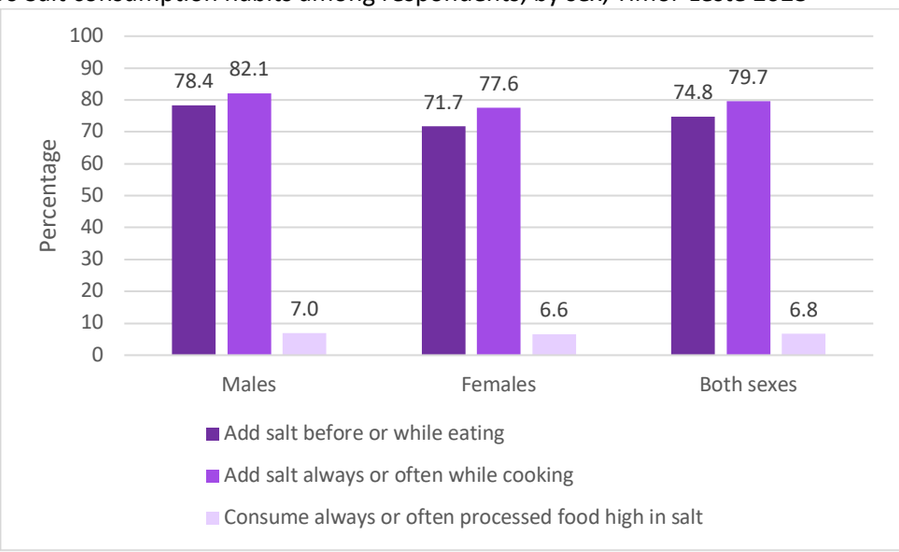
Dietary Salt

The knowledge, attitudes and behaviour of the study population towards dietary salt were assessed using structured questions. Salt consumption habits were categorized in terms of adding while eating, using it while cooking and consuming processed food high in salt content.

Salt consumption habits

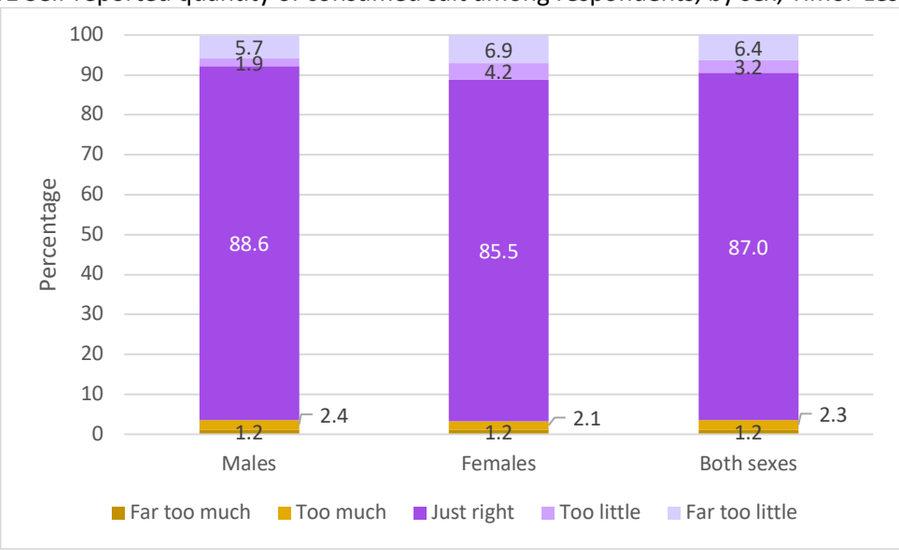
Among the respondents, 79.7% reported adding salt always or often while cooking and similarly, 74.8% reported adding salt before or while eating. On the other hand, only 6.8% respondents reported consuming processed food high in salt always or often. Similar trends were observed in both male and female respondents, while the corresponding percentages were slightly higher in male respondents (Figure 3.30).

Figure 3. 30 Salt consumption habits among respondents, by sex, Timor-Leste 2023



With regard to the self-reported quantity of consumed salt, a great majority (87.0%) of respondents thought that they were consuming just the right amount of salt. The corresponding percentage among male respondents (88.6%) was higher than that among female respondents (85.5%) (Figure 3.31).

Figure 3. 31 Self-reported quantity of consumed salt among respondents, by sex, Timor-Leste 2023



Aware of the recommended maximum intake of salt

As shown in Figure 3.32, awareness of the recommended maximum intake of salt was very low. It was noted that only 0.7% of respondents knew the WHO recommendation of maximum intake of salt and the corresponding percentage was higher among female respondents (1.1%) than male respondents (0.4%).

Figure 3. 32 Percentage of respondents who knew the WHO recommendation of maximum intake of salt, by sex and age group, Timor-Leste 2023

Household use of iodized salt

As part of the survey, a sample of salt used for cooking was requested from the respondent and it was tested for iodine content using a point of care test.

The percentage of households in Timor-Leste using salt with adequate concentration of iodine (=>15ppm) was as high as 92.8%.

Estimated mean intake of salt per day

Mean intake of salt per day (in grams) was estimated in a sub-sample of respondents (n=498 females=312, 62.7%; males=186, 37.3%) using the levels of sodium and creatinine in spot urine samples to estimate population 24-hour salt intake, using the INTERSALT equation.

The estimated mean intake of salt per day was 9.3 g/day with males recording a higher intake (10.4g/day) compared to females (8.6 g/day) (Table3.2).

Table 3. 2 Estimated mean intake of salt per day (in grams)

Mean intake of salt per day (in grams)	Both sexes	Male	Female
	9.3	10.4	8.6
	(9.0-9.5)	(10.1-10.7)	(8.3-8.9)

Physical Activity

The intensity and duration of activities undertaken doing different types of physical activity in a typical week, considering the activities done at work, as part of house and yard work, to get from place to place, and in spare time for recreation, exercise or sport. were assessed to calculate total physical activity. The Metabolic Equivalents (MET-minutes per week), which is the ratio of a person's working metabolic rate relative to the resting metabolic rate, was used as the indicator. One MET is defined as the energy cost of sitting quietly, and is equivalent to a caloric consumption of 1 kcal/kg/hour. It is estimated that, compared to sitting quietly, a person's caloric consumption is four times as high when being moderately active, and eight times as high when being vigorously active.

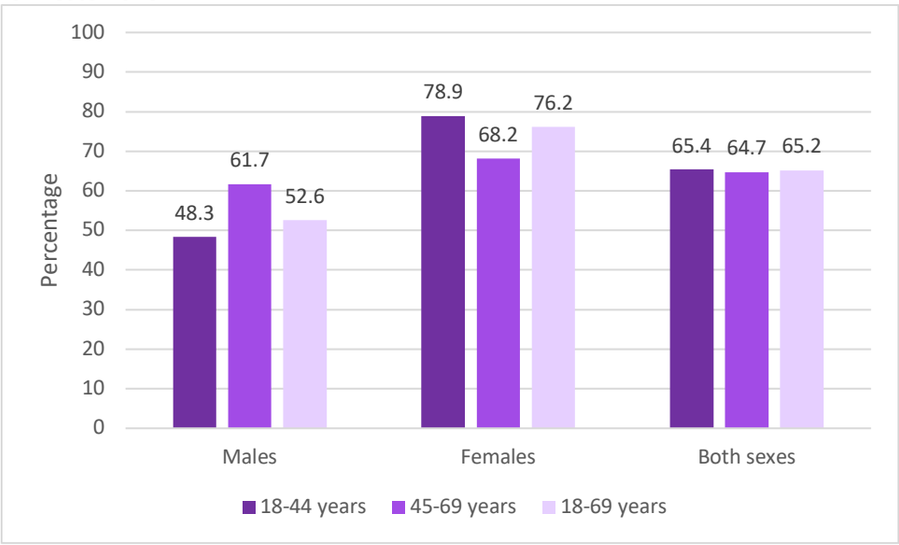
Insufficient physical activity

The percentage with insufficient physical activity (defined as <150 minutes of moderate-intensity activity per week, or equivalent) among respondents was 35.7% and a higher percentage was noted among male respondents (42.3%) than female respondents (30.1%).

Engagement in vigorous physical activity

As shown in Figure 3.33, among respondents, 65.2% did not engage in vigorous physical activity and the percentages were similar in both younger and older age groups. Of the female respondents approximately three fourths did not engage in vigorous physical activity (76.2%) while approximately half male respondents (52.6%) also not engaging in vigorous physical activity Even though older respondents had a higher percentage than younger respondents among males, among females younger respondents had a higher percentage than older respondents.

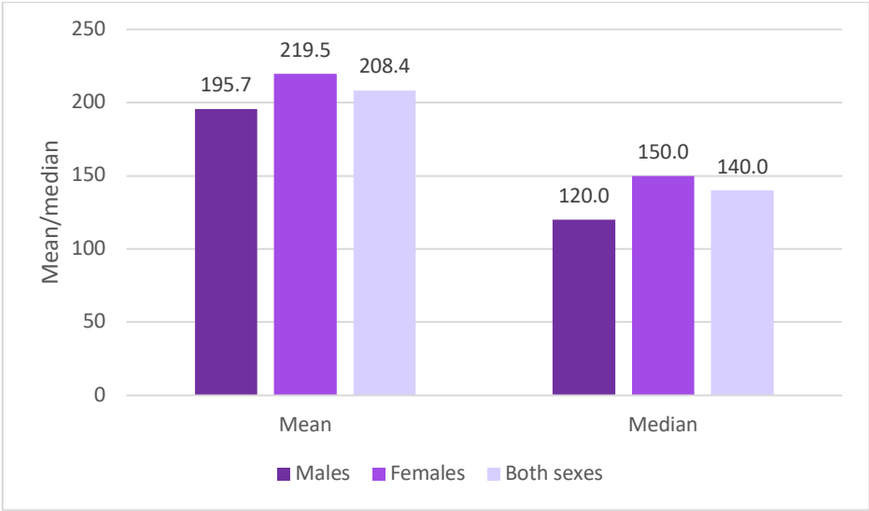
Figure 3. 33 Percentage of respondents not engaged in vigorous physical activity, by sex and age group, Timor-Leste 2023



Time spent in sedentary activity

It was noted that the mean and median time spent in sedentary activity on a typical day by respondents were 208.4 min and 140 min respectively. The time was higher among female respondents than males (Figure 3.34).

Figure 3. 34 Mean and median minutes spent in sedentary activity on a typical day by respondents, by sex, Timor-Leste 2023



Overweight and Obesity

Body mass index

In assessing the body mass index (BMI) of the respondents, the following cut-off values were used.

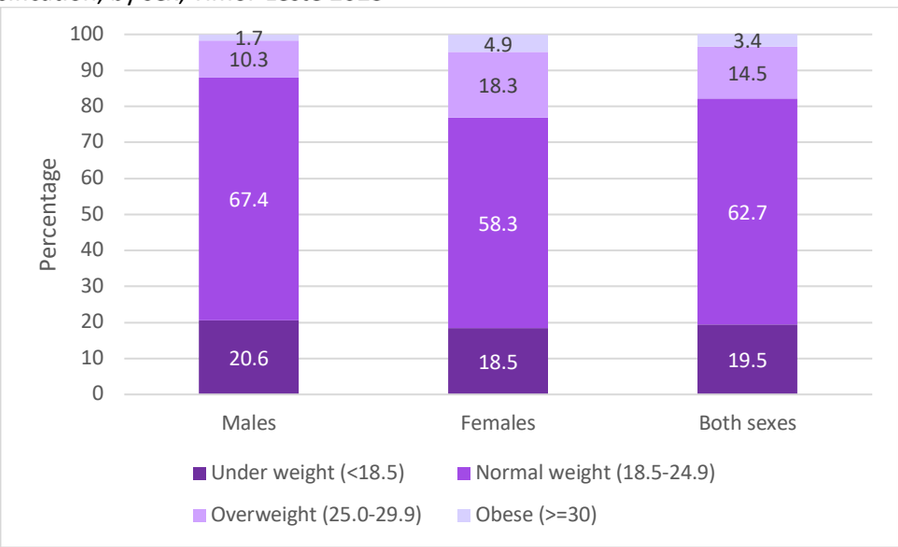
25.0-29.9 kg/m^2 - overweight

>30.0 kg/m^2 - obese

The mean BMI of the respondents was 21.8 kg/m^2 and the mean BMI among female respondents (22.3 kg/m^2) was higher than the male respondents (21.3 kg/m^2).

Among the respondents, 14.5% and 3.4% were in the overweight and obese categories, respectively. Both overweight and obese percentages in female respondents were (18.3% and 4.9%) higher in comparison to male respondents (10.3% and 1.7%) (Figure 3.35).

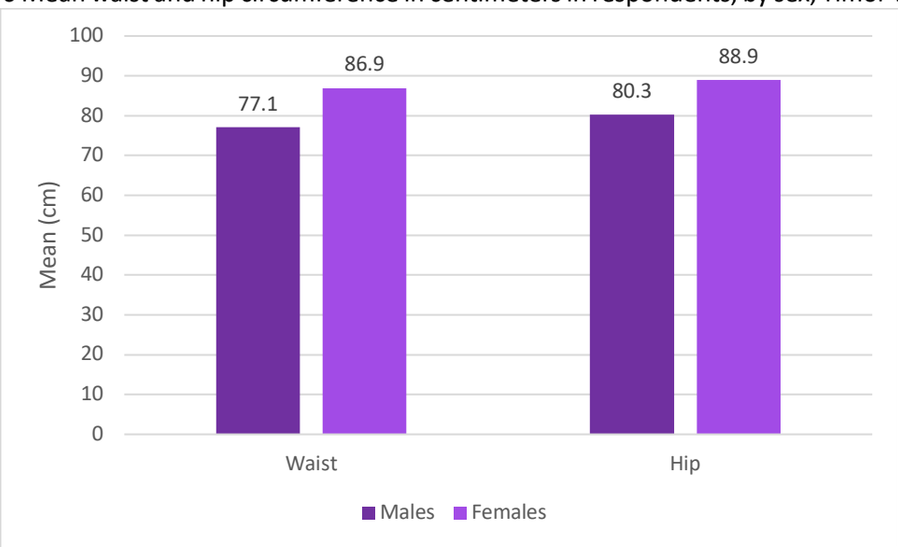
Figure 3. 35 Percentage of respondents (excluding pregnant women) according to the body mass index classification, by sex, Timor-Leste 2023



Waist–hip ratio

Waist and hip circumferences were also measured in the survey to assess the truncal obesity. As shown in Fig 3.36, the mean waist circumference for men was 77.1 cm and for women 86.9 cm. The mean hip circumference (88.9 cm) among female respondents was also higher than that of male respondents (80.3 cm).

Figure 3. 36 Mean waist and hip circumference in centimeters in respondents, by sex, Timor-Leste 2023



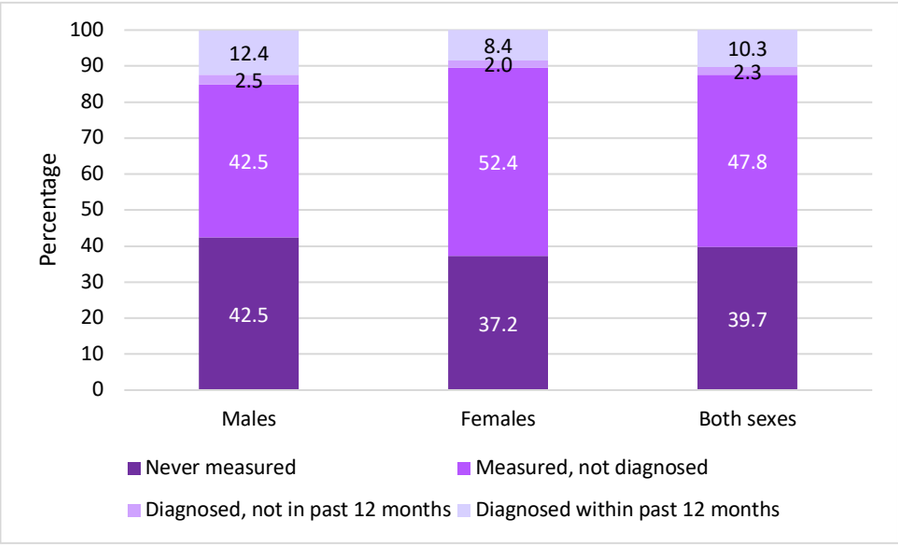
Raised Blood Pressure

The current health status and health-seeking behaviour of the respondents related to high blood pressure were assessed by asking respondents about history of blood pressure and their treatment history. Furthermore, the blood pressure of the respondents was also measured by trained health care workers.

History of raised blood pressure

It was noted that 39.7% of respondents had never had their blood pressure measured by a health care worker and this percentage was higher among male respondents than females. Among the respondents, 12.6% had diagnosed hypertension and the percentage was higher among male respondents (14.9%) than female respondents (10.4%) (Figure 3.37).

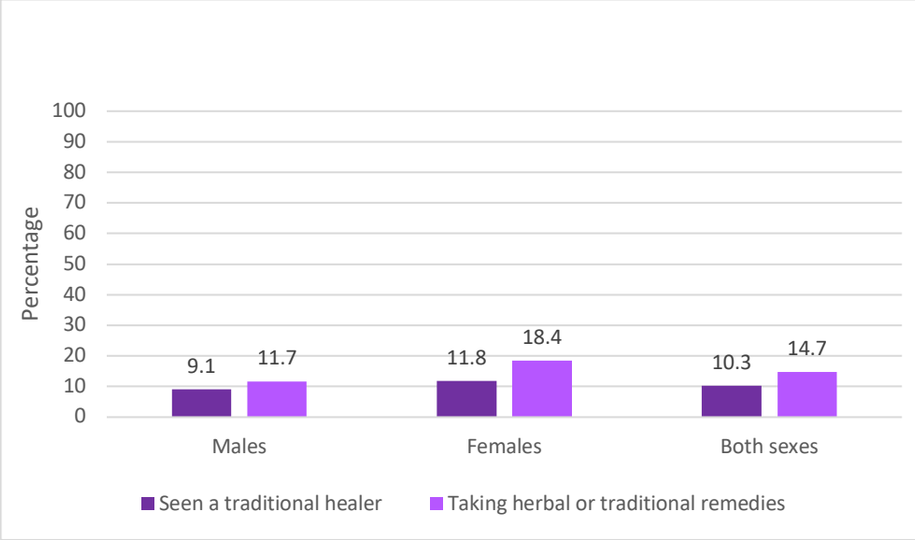
Figure 3. 37 Percentage of blood pressure measurement and diagnosis among respondents, by sex, Timor-Leste 2023



Medication for high blood pressure

Among the respondents, 14.7% reported taking any drugs (medication) for raised blood pressure prescribed by a doctor or other health worker. The proportion on medication for females (18.4%) was higher than the corresponding proportion of males (11.7%) (Figure 3.38).

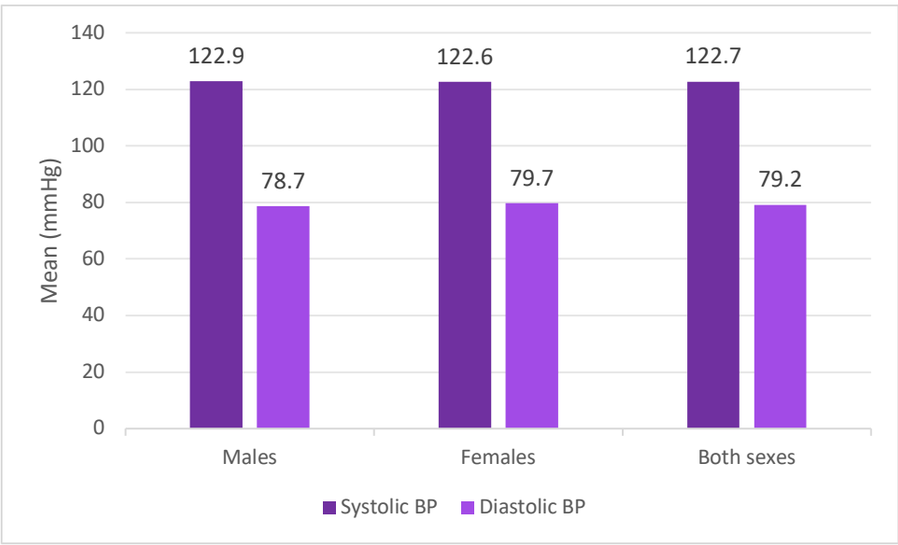
Figure 3. 38 Percentage of previously diagnosed hypertensive respondents who reported to be on medication for raised blood pressure prescribed by a doctor/other health worker, by sex, Timor-Leste 2023



Blood pressure measurement

The mean systolic and diastolic blood pressure values among the respondents were 122.7 mmHg and 79.2 mmHg respectively. As shown in Figure 3.39 The mean blood pressure values among male and female respondents were more or less similar.

Figure 3. 39 Mean systolic and diastolic blood pressure (mmHg) among respondents, Timor-Leste 2023



The prevalence of raised blood pressure was using the criteria of,

- having SBP≥140 and or DBP≥90 when measured at the survey
    - and/or
- currently on medication for high blood pressure

The prevalence of raised blood pressure was 22.3%. The percentage among males was 18.2% and among females it was 25.9% (Figure 3.40).

Figure 3. 40 Percentage of respondents with raised blood pressure, by sex, Timor-Leste 2023

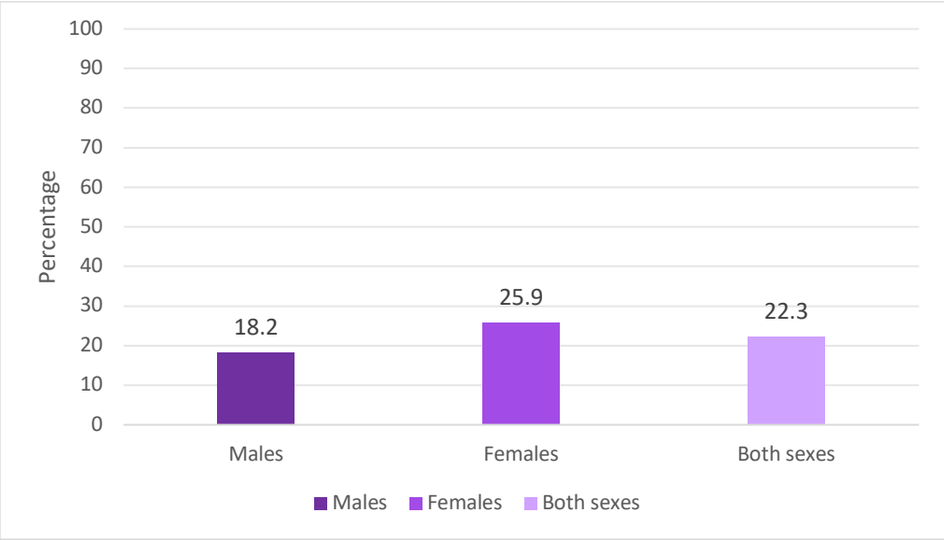
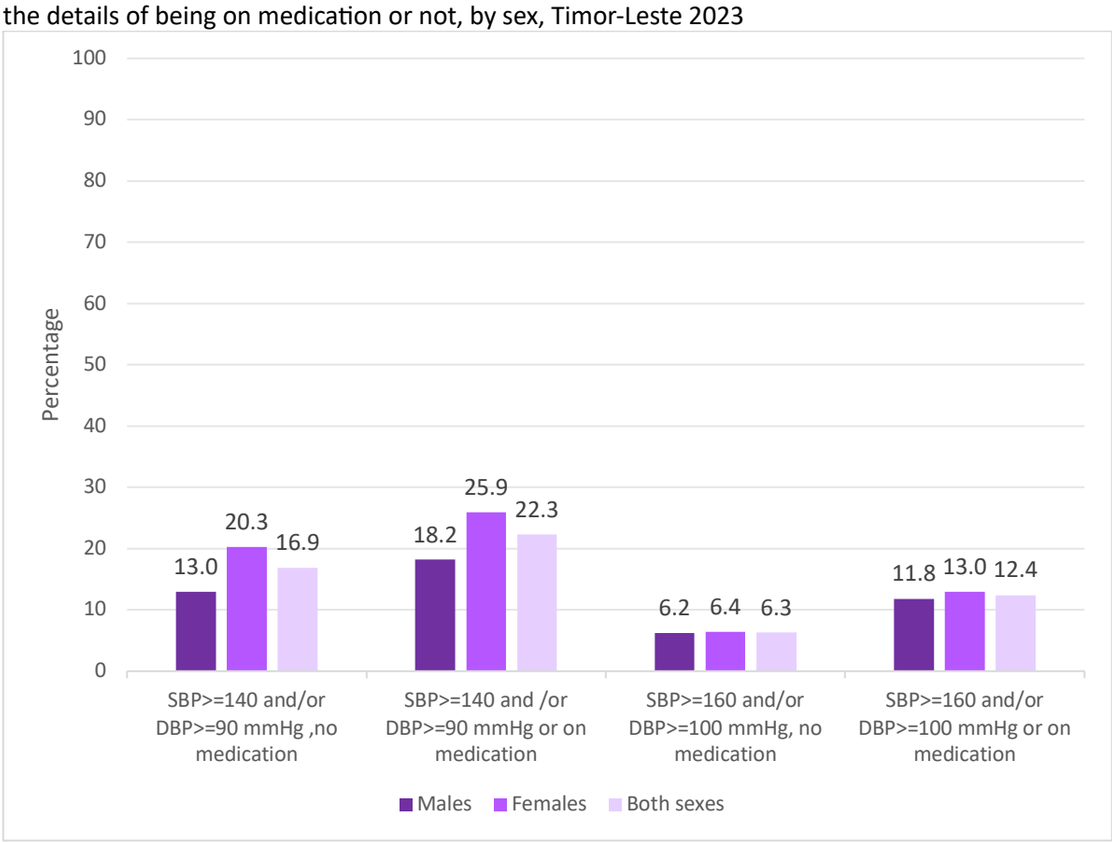


Figure 3.39 shows the percentage of those with raised blood pressure by the details of levels of the blood pressure and the status of being on medication or not. Among the respondents, who had raised blood pressure measurements (systolic =>140 mmHg and/or diastolic =>90 mmHg), 16.9% were not on medication. This non-medication was higher among female respondents (20.3%) than male respondents (13.0%). It was also noted that 22.3% of respondents with raised blood pressure were on medication.

Among the respondents, who had very high blood pressure measurements (systolic =>160 mmHg and/or diastolic =>100 mmHg), 6.3% were not on medication and similar percentages were noted in both male and female respondents. In addition, 12.4% of respondents with very high blood pressure were on medication.

Figure 3. 41 Percentage of respondents with raised blood pressure by the level of blood pressure and the details of being on medication or not, by sex, Timor-Leste 2023



Hypertension care cascade

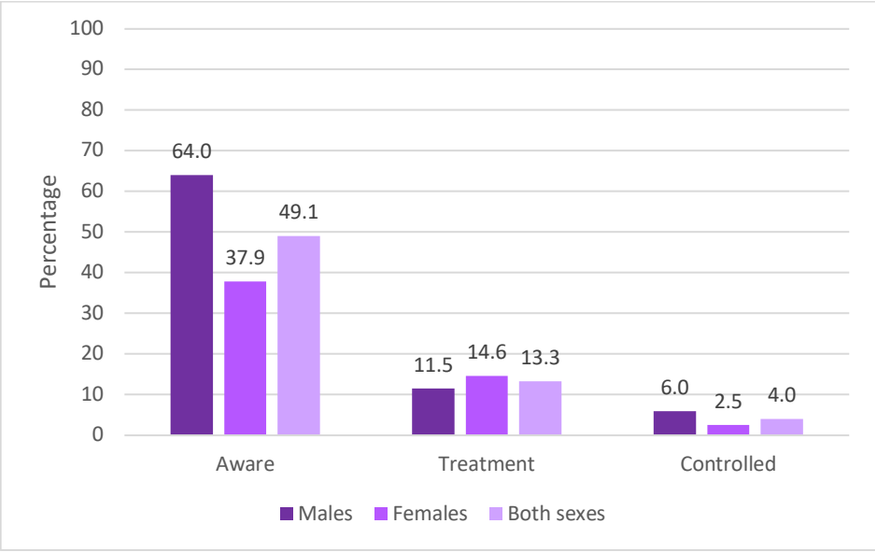
among those who were classified as having raised blood pressure (with raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP) following percentages were estimated to evaluate the progress on hypertension care cascade

- Aware - Percentage who were aware of having hypertension among those with raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP)
- Treatment - Percentage who were on treatment for hypertension among those with raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP)
- Controlled - Percentage with controlled BP (SBP <140 and/or DBP< 90 mmHg) among those with raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP)

The percentage who were 'aware' was 49.1% with the males being more aware (64.0%) than females (37.9%). With regard to treatment, 13.3% of respondents were on treatment with the percentage of females on treatment higher (14.6%) than males (11.5%). However, only 4.0% of respondents were

found to have controlled hypertension and the percentage was higher among male respondents (6.0%) than female respondents (2.5%) (Figure 3.42).

Figure 3. 42 Hypertension care cascade among respondents with raised blood pressure, by sex, Timor-Leste 2023



Raised Blood Glucose

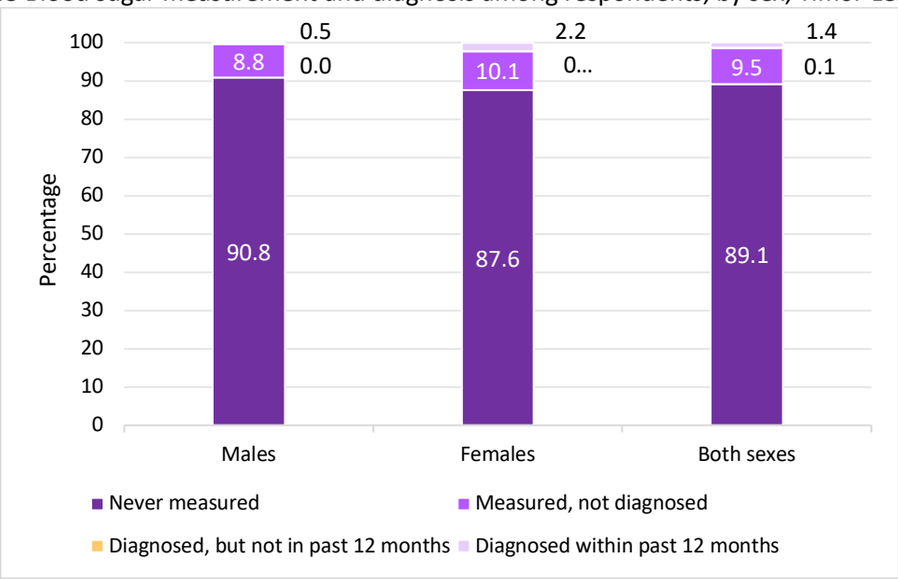
History of raised blood sugar

The current health status and health-seeking behaviour of the respondents related to high blood glucose were assessed by asking respondents about the history of blood glucose and their treatment history. In addition, fasting blood glucose of the respondents (who consented) was measured by trained health care workers following the standard Steps 3 protocol.

History of raised blood glucose (diabetes mellitus)

It was noted that 89% of respondents had never had their blood glucose measured. Among the respondents, 0.4% had diagnosed diabetes (Figure 3.43).

Figure 3. 43 Blood sugar measurement and diagnosis among respondents, by sex, Timor-Leste 2023

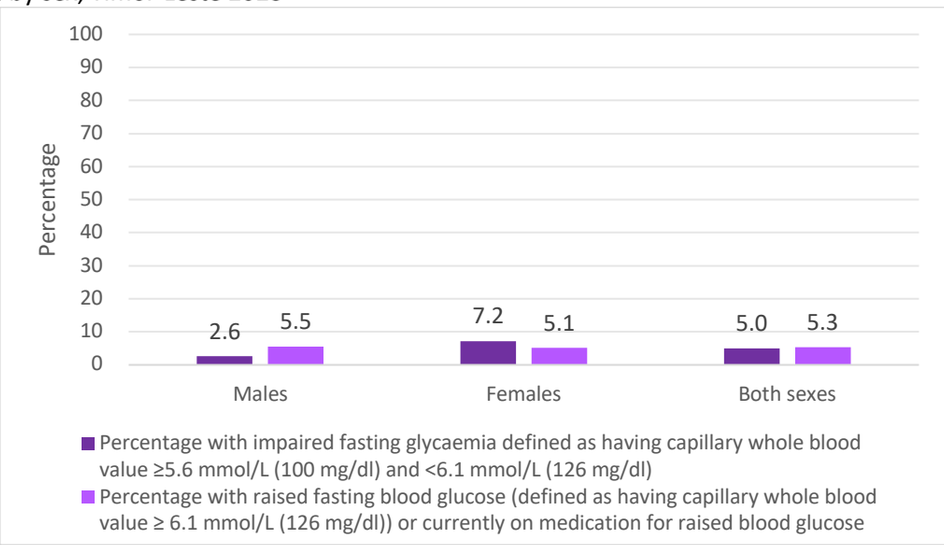


Raised blood glucose

The mean fasting blood glucose, including those currently on medication for raised blood glucose was 84.9 mg/dl. The mean fasting blood glucose value was slightly higher among males (85.4 mg/dl) than females (84.4 mg/dl).

Impaired fasting glycaemia was defined as having capillary whole blood value ≥5.6 mmol/L (100 mg/dl) and <6.1 mmol/L (126 mg/dl) and the raised fasting blood glucose was defined as having capillary whole blood value ≥ 6.1 mmol/L (126 mg/dl) or currently on medication for raised blood glucose. The percentages of respondents with impaired fasting glycaemia and raised fasting blood glucose were 5.0% and 5.3%, respectively (Figure 3.44)

Figure 3. 44 Percentage of respondents with impaired fasting glycaemia and raised fasting blood glucose, by sex, Timor-Leste 2023



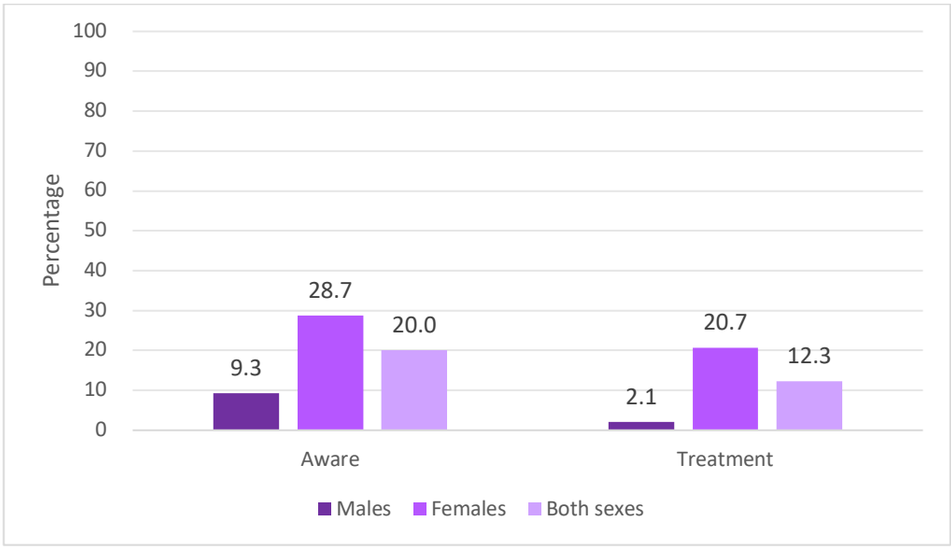
Diabetes care cascade

Among those who were classified as having raised fasting blood sugar (126 mg/dl) or currently on medication for raised blood sugar) following percentages were estimated to evaluate the progress diabetes care cascade.

- Aware -Percentage who were aware of having diabetes among those with raised blood sugar (126 mg/dl) or currently on medication for raised blood sugar
- Treatment - Percentage who were on treatment for diabetes among those with raised blood sugar (126 mg/dl) or currently on medication for raised blood sugar

The percentage who were ‘aware’ was 20.0%, the awareness among male respondents (9.3%) was lower than female respondents (28.7%). With regard to treatment, 12.3% of respondents were on treatment. Further, the corresponding percentage in male respondents (2.1%) was substantially lower than the female respondents (20.7%) (Figure 3.45).

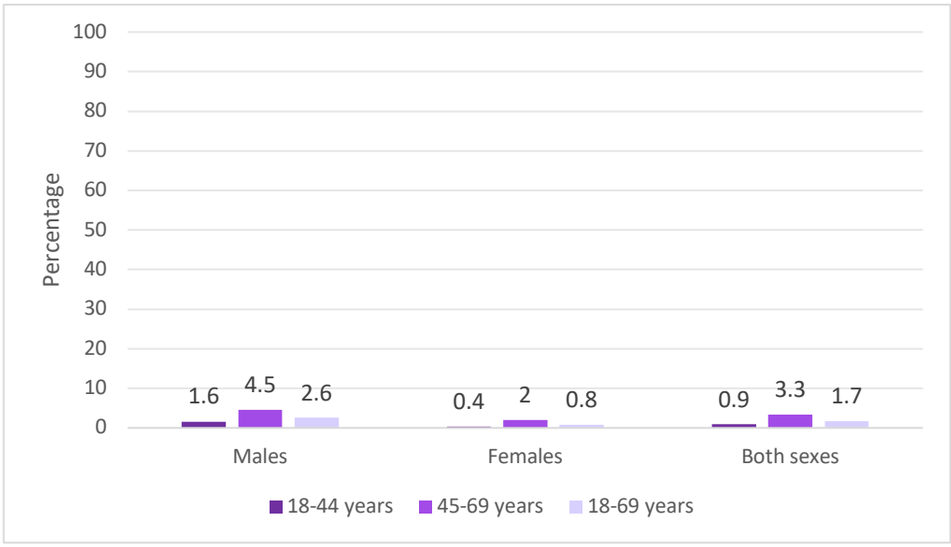
Figure 3. 45 Diabetes care cascade among respondents with raised blood sugar (by sex, Timor-Leste 2023



Both raised blood pressure and blood sugar

As shown in Figure 3.46, among respondents, 1.7% had both raised blood pressure and raised blood sugar. The percentage was higher in male respondents (2.6%) than female respondents (0.8%). Among both male and female respondents, the percentages were higher in older age group than the younger age group.

Figure 3. 46 Percentage with raised blood pressure and with raised blood sugar, by sex and age group, Timor-Leste 2023



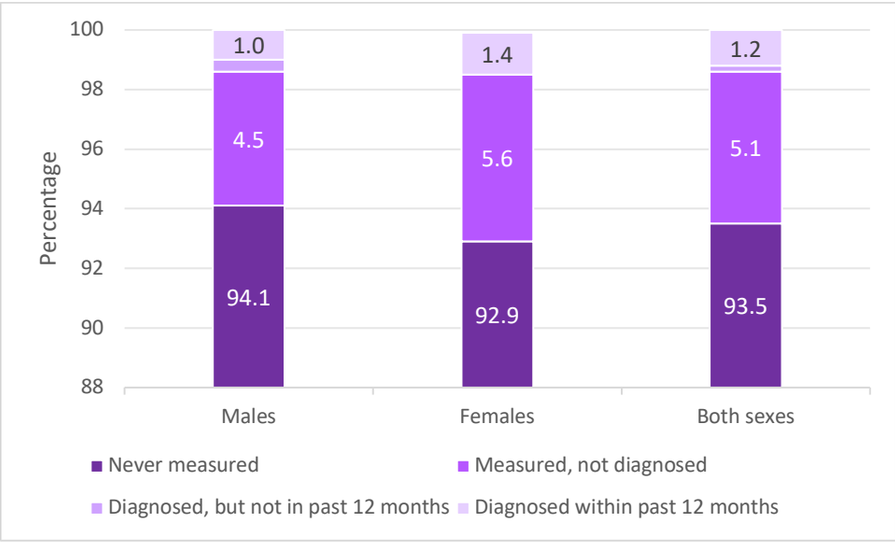
Abnormal Lipids

The current health status and health-seeking behaviour of the respondents related to high blood cholesterol were assessed by asking respondents about the history of blood cholesterol and their treatment history. Similar to blood glucose assessment, serum total cholesterol was measured by trained health care workers following the standard Steps 3 protocol.

History of raised total cholesterol

Among respondents, 93.5% had never measured total cholesterol level. Only 1.2% of respondents were diagnosed with high total cholesterol level within the past twelve months (Figure 3.47).

Figure 3. 47 Total cholesterol measurement and diagnosis among respondents, by sex, Timor-Leste 2023



Raised total blood cholesterol

The mean total blood cholesterol was 141.3 mg/dl. It was noted that the mean total blood cholesterol value was lower in males (132.1 mg/dl) than female respondents (149.6 mg/dl).

The percentage with raised total cholesterol (≥5.0 mmol/L or ≥190 mg/dl or currently on medication for raised cholesterol) among respondents was 13.8%. This percentage was lower in males (10.1%) than female respondents (17.1%).

Cardiovascular Disease Risk Prediction

Combined risk factors for NCDs

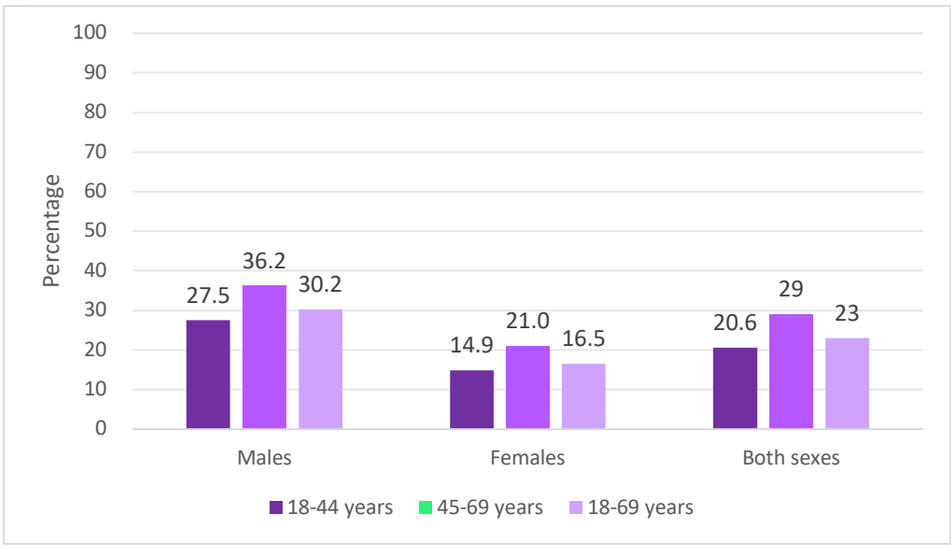
For the purpose of exploring combined risk factors, the following five risk factors were considered.

- Current daily smokers
- Less than 5 servings of fruits and vegetables per day
- Insufficient physical activity
- Overweight (BMI ≥ 25 kg/m2)
- Raised BP (SBP≥140 and/or DBP≥90 mmHg) or currently on medication for raised BP

It was noted that the percentage with none of the above risk factors among respondents was 8.2%. The corresponding percentages among male and female respondents were 3.7% and 12.2% respectively.

Among those with risk factors, 23.0% of respondents were having three or more risk factors and the percentage was almost double among male respondents (30.2%) compared to females (16.5%) (Figure 3.48).

Figure 3. 48 Percentage of respondents with three or more risk factors, by sex and age group, Timor-Leste 2023

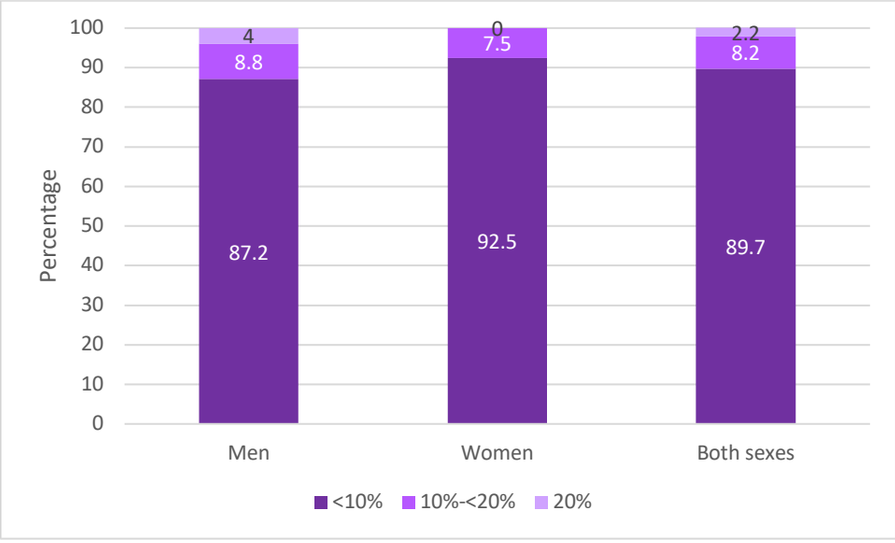


Cardiovascular disease risk prediction

A 10-year risk of having a fatal or a non-fatal cardiovascular event was calculated using the variables; namely, age, sex smoking status, history of diabetes, systolic blood pressure (mmHg), total cholesterol (mmol/L) and body mass index (kg/m^2).

As shown in Figure 3.49, 89.7% had a 10-year CVD risk of less than 10%. Among the rest, 8.2% had 10%-<20% risk, while 2.2% had ≥20% risk. Between male and female respondents, the main difference was that while 4.0% of male respondents had ≥20% risk, none of the female respondents were categorized as having 20% risk.

Figure 3. 49 Percentage of respondents according to the level of 10-year CVD risk, by sex, Timor-Leste 2023



History of CVD

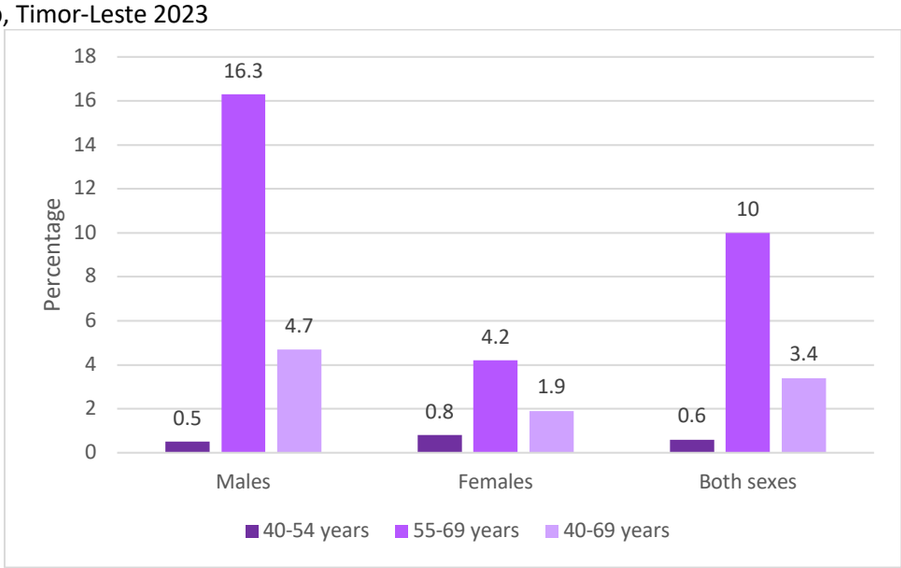
In addition to inquiring on CVD risk factors, the respondents were asked regarding the history of CVD including heart attack or chest pain from heart disease (angina) or stroke. Among the respondents, 1.8% had a history of CVD and the corresponding percentages in male and female respondents were 0.6% and 2.8% respectively. It was also noted that 0.7% of the respondents currently use aspirin.

10-year CVD risk ≥20% or with history of CVD

As shown in Figure 3.50 the percentage of respondents with a 10-year CVD risk ≥20% or with history of CVD was 3.4%; however, this percentage was higher in the older age category (10.0%) in comparison to the younger age group (0.6%). Further, it was noted that the percentage was higher in male

respondents (4.7%) in male respondents than female respondents (1.9%). A similar trend was observed across the age categories in both male and female respondents.

Figure 3. 50 Percentage of respondents with a 10-year CVD risk ≥20% or with existing CVD, by sex and age group, Timor-Leste 2023



Cervical cancer screening

Cervical cancer screening

The percentage of female respondents aged 30-69 years who have ever had a screening test for cervical cancer was 0.6%. The mean age at screening was 31 years and the median age at screening was 32 years.

Road traffic accidents and precautionary measures adopted to avoid road accidents

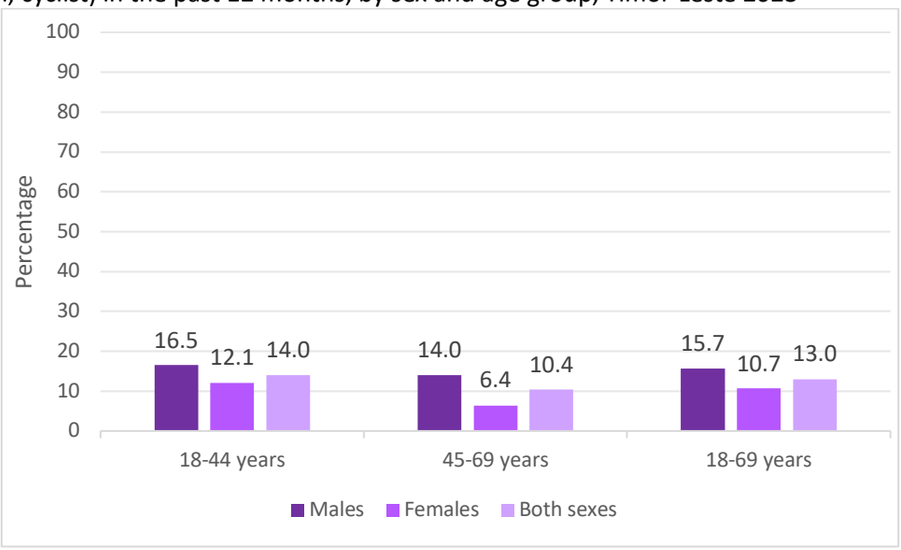
The survey assessed the details in relation to violence and injury. Thus, data were collected on road traffic accidents and precautionary measures adopted to avoid them.

Involvement in road traffic accidents

It was noted that 13% of respondents were involved in a road traffic accident (as a driver, passenger, pedestrian, cyclist) in the past 12 months. The percentage in male respondents (15.7%) was higher

than in female respondents (10.7%). Furthermore, the percentage was higher in younger age category (14.0%) than the older age category (10.4%) (Figure 3.51).

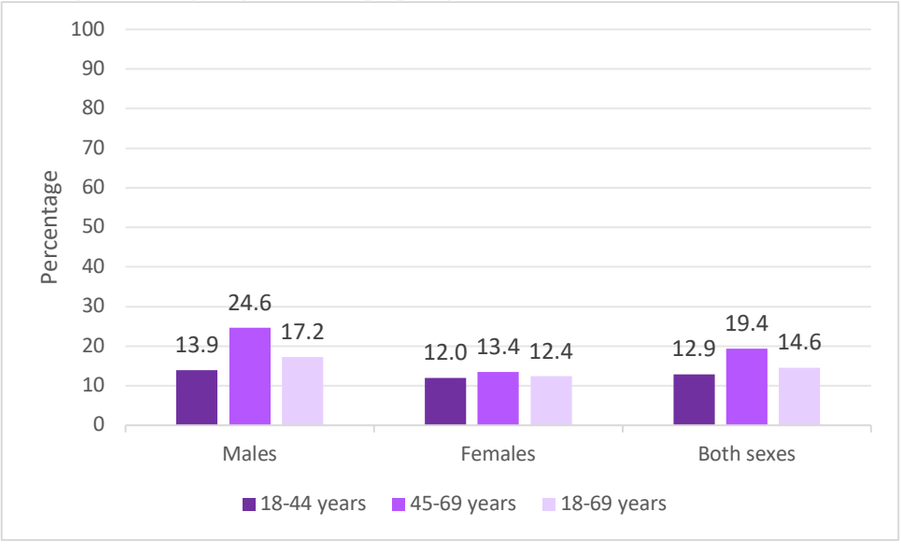
Figure 3. 51 Percentage of respondents involved in a road traffic accident (as a driver, passenger, pedestrian, cyclist) in the past 12 months, by sex and age group, Timor-Leste 2023



Use of seat-belt or helmet while driving or being a passenger

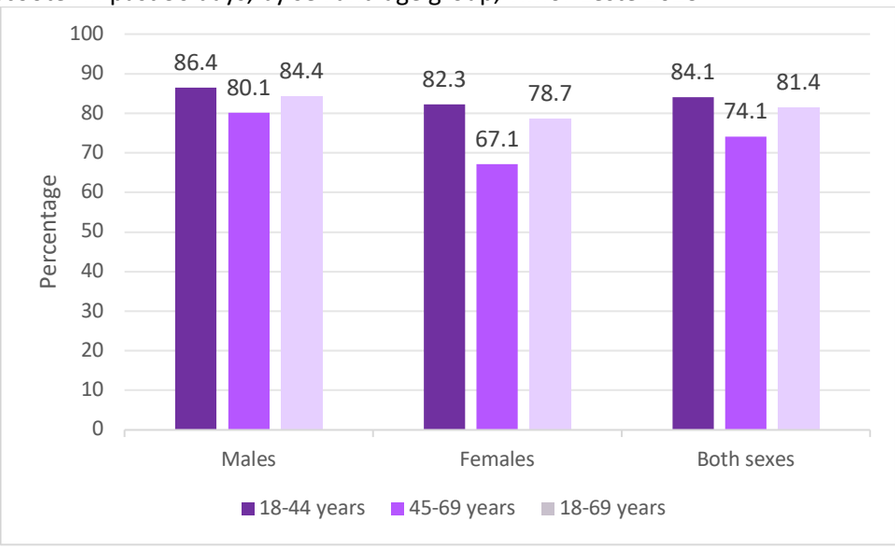
As shown in Figure 3.52, the percentage of respondents who always wore a seat belt as a driver or passenger of a motor vehicle in past 30 days was 14.6% and this safety behaviour was reported in higher percentages by male respondents and by older age category in comparison to their counterparts.

Figure 3. 52 Percentage of respondents who always wore a seat belt as a driver or passenger of a motor vehicle in past 30 days, by sex and age group, Timor-Leste 2023



The percentage of respondents who always wore a helmet as a passenger on a motorcycle or motor scooter in past 30 days was high (81.4%) and this safety behaviour was reported in higher percentages by male respondents and by younger age category in comparison to their counterparts (Figure 3.53).

Figure 3. 53 Percentage of respondents who always wore a helmet as a passenger on a motorcycle or motor scooter in past 30 days, by sex and age group, Timor-Leste 2023



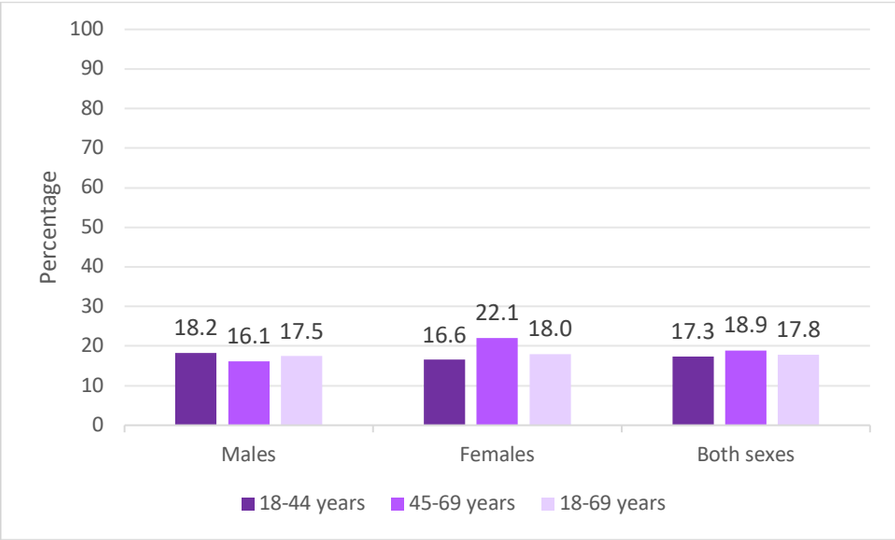
Oral Health, Vision and Hearing

In this survey, explored issues and care seeking practices related to oral health, vision and hearing.

Oral health

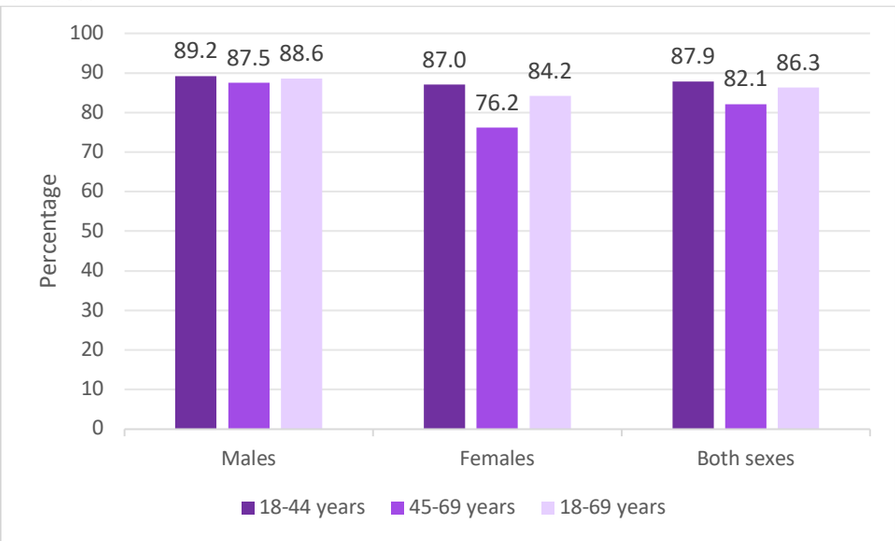
The percentage of respondents who ever visited a dentist was 17.8%. The corresponding percentage in male respondents (17.5%) was similar to that in female respondents (18.0%), A higher percentage was reported in the older age category (18.9%) than the younger age category (17.3%) (Figure 3.54).

Figure 3. 54 Percentage of respondents who ever visited a dentist, by sex and age group, Timor-Leste 2023



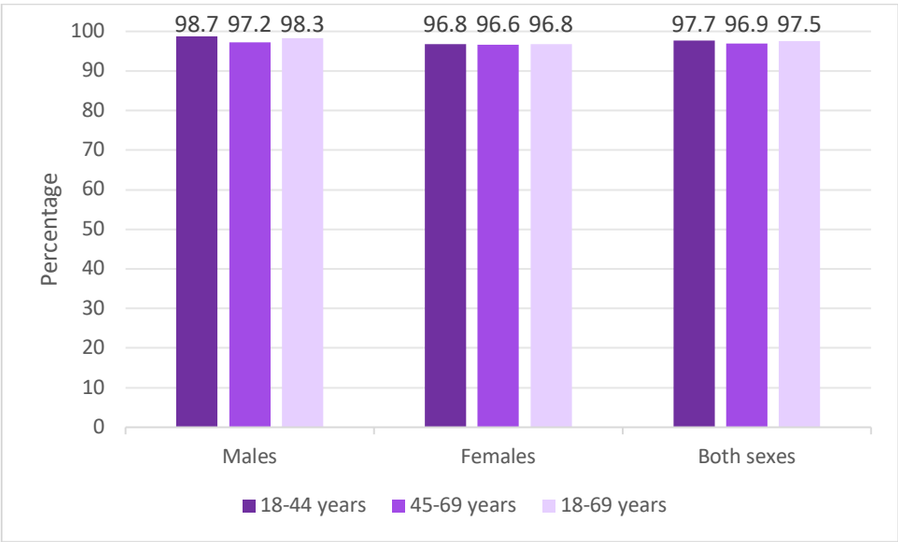
As shown in Figure 3.54, a great majority (86.3%) responded that they cleaned their teeth daily. This behaviour was commoner in males (88.6%) than females (84.2%) as well as in younger age category (87.9%) than in older age category (87.9%).

Figure 3. 55 Percentage of respondents who cleaned teeth daily cleaning of teeth, by sex and age group, Timor-Leste



The percentage of respondents reporting that they used tooth paste containing fluoride was very high 97.5% among males and females and across age sub-groups (Figure 3.56).

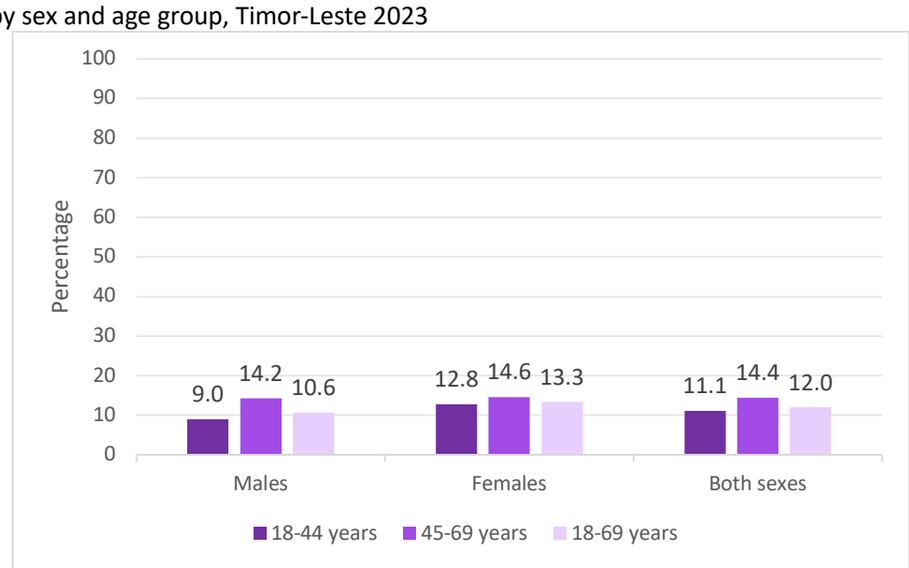
Figure 3. 56 Percentage of respondents using tooth paste containing fluoride, by sex and age group, Timor-Leste 2024



Vision

The percentage of respondents whoever had vision/eyes checked by a doctor or other health worker was only 12.0%. The corresponding percentage in male respondents (10.6%) was lower than that in female respondents (13.3%). Further, a higher percentage was reported in the older age category (14.4%) than the younger age category (11.1%) (Figure 3.57).

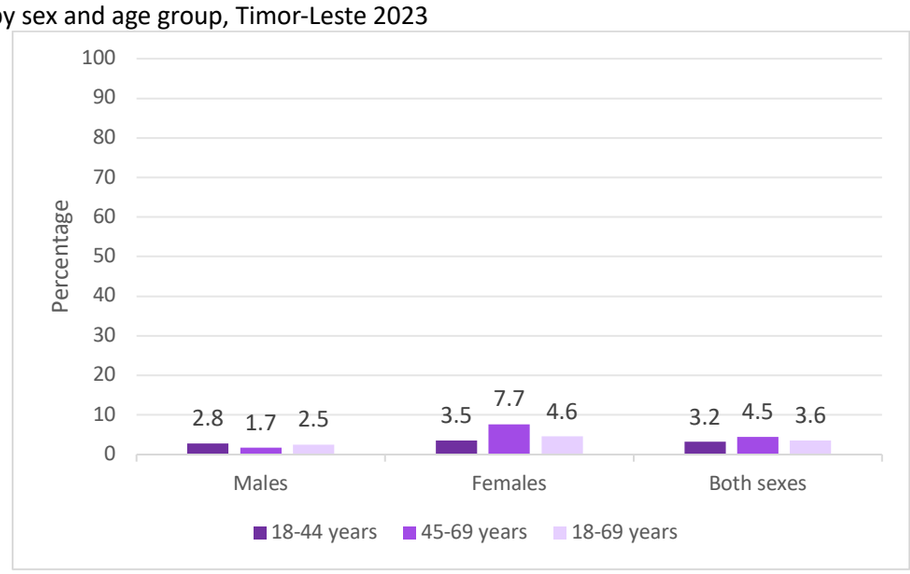
Figure 3. 57 Percentage of respondents whoever had vision/eyes checked by a doctor or other health worker, by sex and age group, Timor-Leste 2023



Hearing

As shown in Figure 3.58, The percentage of respondents whoever had hearing checked by a doctor or other health worker was very small (3.6%). Similar to the vision check-up, the corresponding percentage in male respondents (2.5%) was lower than that in female respondents (4.6%). Further, a higher percentage was reported in the older age category (4.5%) than the younger age category (3.2%).

Figure 3. 58 Percentage of respondents whoever had hearing checked by a doctor or other health worker, by sex and age group, Timor-Leste 2023



Households primarily cooking with clean fuels and technology

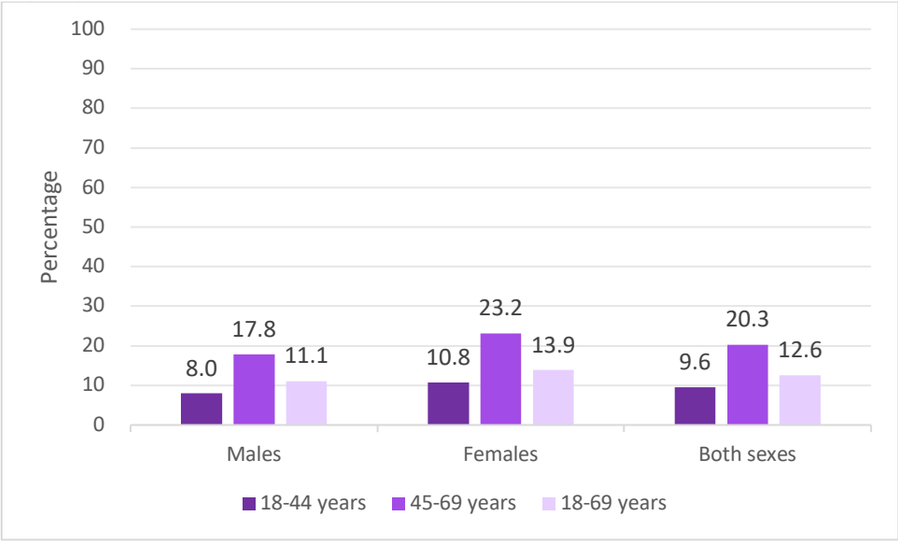
In this survey, the percentage of households primarily cooking with clean fuels and technology was assessed. In this regard, solar cooker, electric stove, piped natural gas stove, and biogas stove, liquified petroleum gas/cooking gas stove, and liquid fuel stove (ethanol, alcohol, kerosene) were considered as clean fuels and technology. Less than half of the households in Timor-Leste were primarily cooking with clean fuels and technology (44.2%).

Estimate of the out of pocket expenditure for NCDs among those diagnosed with NCDs

The details related to NCD costs were collected from the respondents in this survey. A total of 388 respondents reported as suffering from one or more of the major NCDs specified, namely, hypertension, diabetes mellitus, ischemic heart diseases, stroke, chronic lung diseases, chronic kidney diseases, and cancer. Based on the self-reported direct (medical and non-medical) and indirect costs incurred, information related to out of pocket expenditure (OOPE) were analyzed.

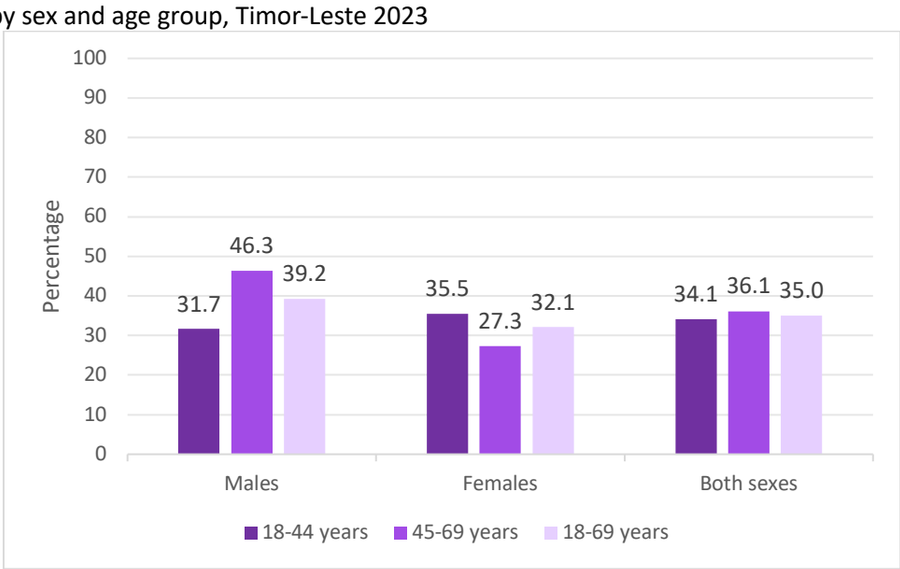
Among the respondents, 12.6% reported as suffering from one or more of the major NCDs. It was noted that the percentage of female respondents (13.9%) was higher than male respondents (11.1%). Moreover, the percentage was higher among the older age category (20.3%) than the younger age category (9.6%) and a similar trend was observed among both male and female respondents (Figure 3.59).

Figure 3. 59 Percentage of respondents who reported as suffering from one or more major NCDs, by sex and age group, Timor-Leste 2023



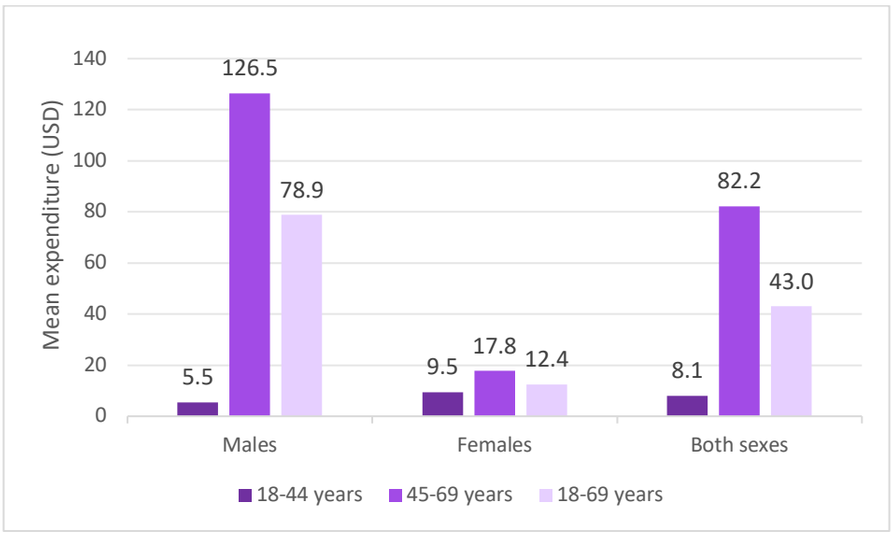
As shown in Figure 3.60. Among the respondents who were having NCDs, 35.0% were hospitalized due to NCDs in the last 12 months. he corresponding percentage was higher in older age category (46.3%) than the younger age category (31.7%) in male respondents, an inverse trend was observed in female respondents.

Figure 3. 60 Percentage of respondents with NCDs who were hospitalized due to NCDs in last 12 months, by sex and age group, Timor-Leste 2023



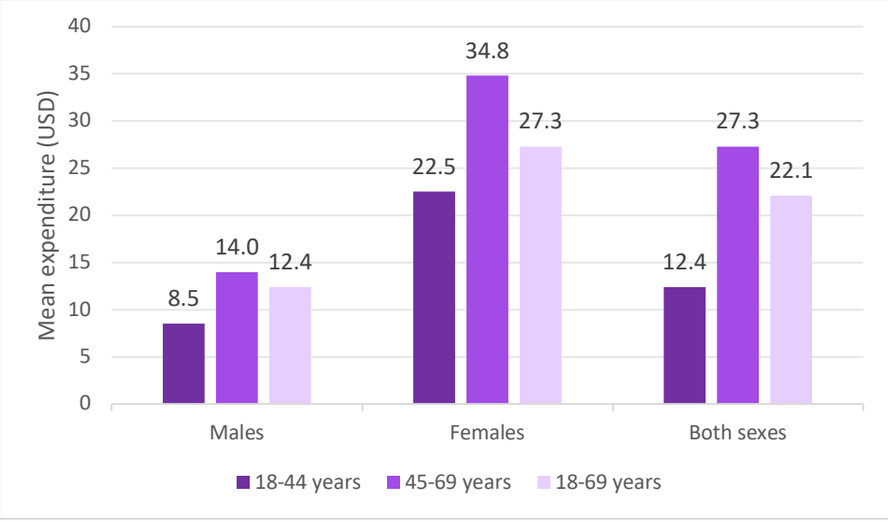
The mean OOPE [direct (medical and non-medical) and indirect] on hospitalization due to NCD in the past 12 months among respondents with NCDs was USD 43.0. The mean OOPE among the younger age category and the older age category were USD 8.1 and USD 82.2 respectively. A higher mean OOPE was noted among the male respondents (USD 78.9) than female respondents (USD 12.4) (Figure 3.61).

Figure 3. 61 Mean out of pocket expenditure [direct (medical and non-medical) and indirect] on hospitalization due to NCD in the past 12 months (in USD) among respondents with NCDs, by sex and age group, Timor-Leste 2023



As shown in Figure 3.62, The mean OOPE on outpatient care due to NCDs in the past one month among respondents with NCDs was USD 22.1. The mean OOPE among the younger age category and the older age category were USD 12.4 and USD 27.3 respectively. Unlike the OOPE on hospitalization, A higher mean OOPE was noted among the female respondents (USD 27.3) than male respondents (USD 12.4).

Figure 3. 62 Mean out of pocket total expenditure [direct (medical and non-medical) and indirect] on outpatient care due to NCDs in the past one month among respondents with NCDs, by sex and age group, Timor-Leste 2023



The percentage of respondents with NCDs having catastrophic OOPE due to NCDs (whose annual OOPE on NCDs greater than 10% of their annual household income) was found to be low with it being 1.9%.

Facility Survey

Below is a summary presentation of the results of the facility survey To describe the availability of essential promotive, preventive and curative services for NCDs and mental health in primary, secondary and tertiary care facilities ad to assess the readiness of the primary, secondary and tertiary care facilities to deliver selected NCD services. Annex 5 provides detailed results for all the variables included in the study disaggregated by health facilities surveyed and Municipality.

The number of government health facilities in Timor-Leste, number of health facilities planned to be included and the number of health facilities surveyed is shown in Table 3.3.

Table 3. 3 Number of facilities included in the survey by type, Timor-Leste 2023

Type of health facility	Total number of health facilities	Health Facilities surveyed
National Hospital	1	1
Regional Hospital	5	5
CHC-3	9	7 (78% of the CHC 3 in the country)
CHC-1&2	61	22 (36% of the CHC1 and 2 in the country)
HPs with doctors with doctors		45

The number of CHC-3, CHC-1&2 and HPs with doctors included by Municipality is shown the Annex 5. Following is a description of the main results by the type of health facilities by the following themes. The detailed results for each of the type of health facility and by Municipality is shown in the Annex 5.

  - Departments
  - Staff categories
- Existence of basic infrastructure and systems
  - Communication
  - Power supply
  - Water and sanitation
  - Emergency transport
  - Basic laboratory services
- Availability of services - related to NCD
  - Health promotion services and prevention of NCD
  - Integrated screening and services for hypertension diabetes, cardiovascular disease, chronic respiratory diseases
  - Follow up and manage patients with NCDs
  - Manage acute or emergency NCD conditions
  - Rehabilitation services
  - Services to prevent rheumatic heart diseases
  - Cancer services
    - Cancer screening
    - Cancer treatment
  - Mental health services
    - Specified mental health services
  - Oral health services
    - Specified mental health services

    - Eye health services
        - Specified mental health services
- Maintenance of registers of patients screened for NCDs
- Availability and use of guidelines related to NCD services
- Training of staff in NCD services
- Availability of key medicines related to NCD services
- Availability of key commodities (medical devices and other items) related to NCD services

Facility characteristics

Departments

Only the National Hospital and Referral Hospitals have departmental structure and the results of existence of the Departments that are designated at each level of health facility is shown in Table 3.4.

Table 3. 4 Availability and functionality status of the different departments in the National Hospital and Referral Hospitals, Timor-Leste 2023

Departments	National Hospital	Referral Hospitals (N=5)
	Availability and functionality status	Availability and functionality status
Internal medicine and pediatrics	Available and functional	Available and functional 5/5
Surgery and operating block	Available and functional	Available and functional 5/5
Obstetrics and Gynecology	Available and functional	Available and functional 5/5
Accident and Emergency section	Available and functional	Available and functional 4/5
Physiotherapy unit	Available and functional	Available and functional 3/5
Blood bank	Available and functional	Available and functional 3/5
Intensive care unit	Available and functional	NR
High dependency unit	Available and functional	Available and functional 4/5
Stroke unit	Available and functional	NR

NR: these Departments are not expected in RH

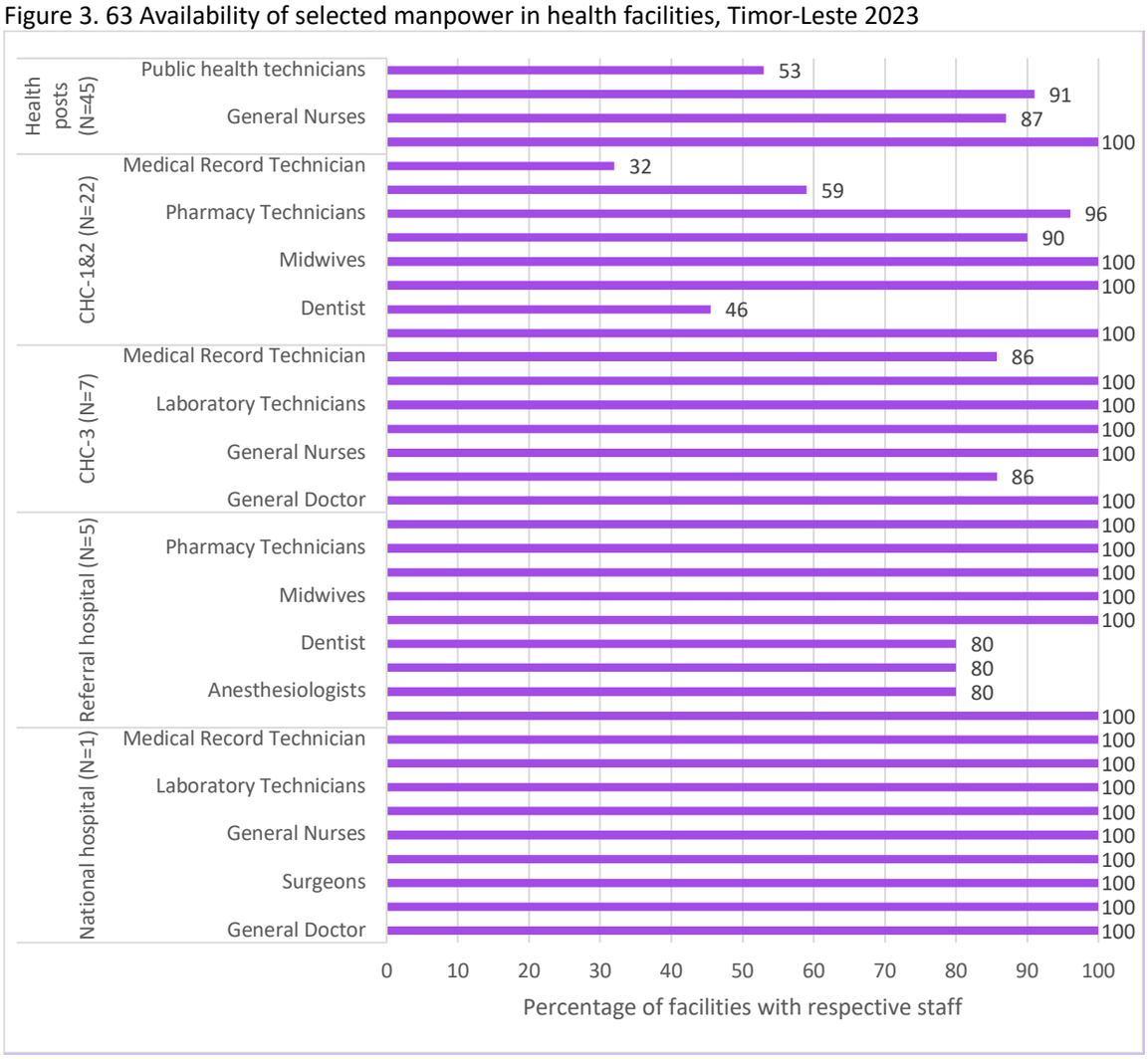
All the designated departments were available and functional in the National Hospital while the three of the seven designated departments were available and functional in RHs.

Staff categories

The Figure 3.63 gives data on availability of medical and paramedical staff categories who deliver NCD services among categories who are expected to be available in the health facilities.

All the staff categories that are expected to were available in the national hospital. One of the RHs were short of categories of surgeons, anesthetist and dentists.one of the seven CHC-3 lacked the category of dentist and a medical records technician. In CHC-1and 2, only 46% were having dentists, 32% were having medical records technicians and 59% were having public health technicians. Only half of the HPs with doctors were having public health technicians.

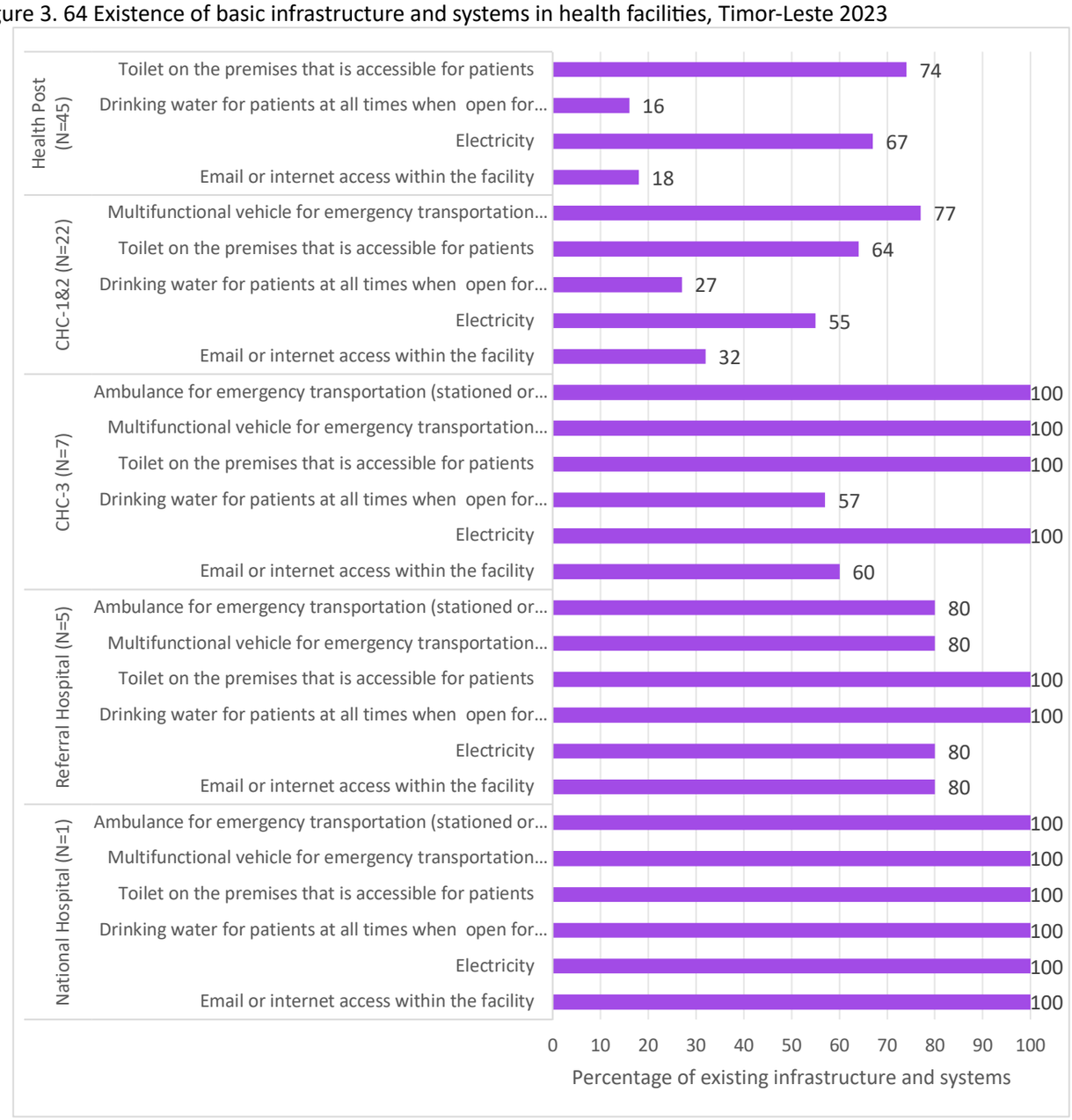
Figure 3. 63 Availability of selected manpower in health facilities, Timor-Leste 2023



Existence of basic infrastructure and systems

Figure 3.64 shows the existence of basic infrastructure and systems related to communication, power supply, water and sanitation and emergency transport at each level of health facility. Only CHC-3, RH and the National Hospitals are expected to possess basic laboratory services and the availability is shown in Table 3.4.

Figure 3. 64 Existence of basic infrastructure and systems in health facilities, Timor-Leste 2023



Communication: The proportion of health facilities with email or internet access within the facility declined from 80%% in RH, to 60 %% in CHC-3, 32%% in CHC-1 and2 and 18%%in HPs with doctors.

Power supply: Availability of electricity all the times when the health facility is open for services was was shown in the National Hospital, four of the five RH in the country and in 100% of CHC 3, Only 55 % of CHC-1 and 2 and 67 % of HPs with doctors reported having uninterrupted electricity all the times when the health facility is open for services.

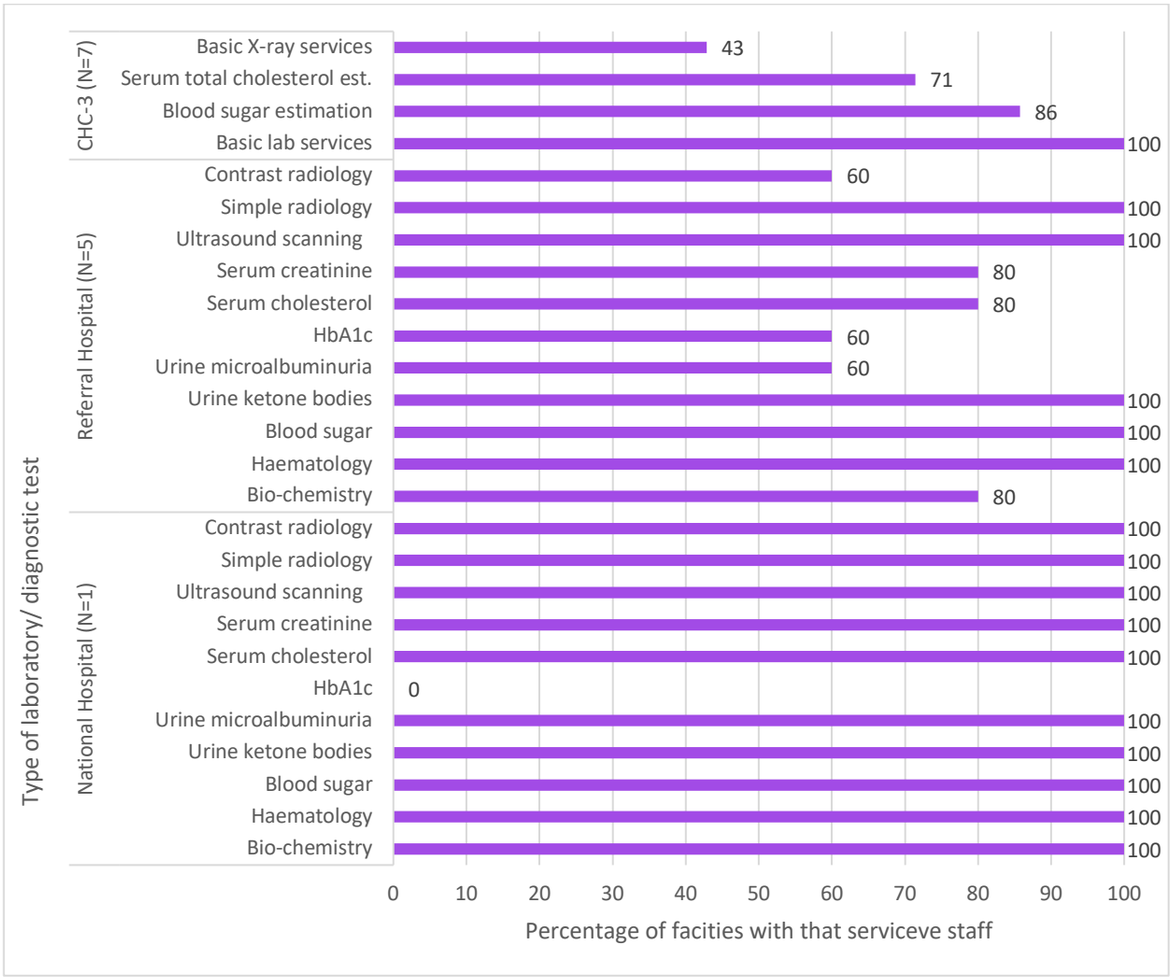
Water and sanitation: Uninterrupted availability of drinking water for patients at all times in the facility which is open for services was reported by NATIONAL Hospital, all RH and CHC 3. though the same was only available in 27 % and 16 % of CHC-1 and 2and HPs with doctors, respectively. During survey the enumerators physically examined the availability of functional toilet/ latrine with running water that is accessible to patients. The National Hospital, all the RH and CHC3 were equipped with this facility while only 64 % of CHC-1 and 2 and 74 % of health posts with doctors were observed to have this.

Emergency transport: According to essential service package, all facilities other than HPs with doctors are expected to have multifunctional vehicle for emergency transportation for patients that is either stationed at respective facility or that the facility can call for. Similarly, national hospital, referral hospital and CHC-3's are expected to have ambulance, for emergency transportation for patients that is either stationed at the facility or that the facility can call for. In addition to having multifunctional vehicle and/or ambulance the respective facility should also have access to a driver and fuel available for 24 hours in a day to operate the vehicle. The National Hospital, all CHC3 were having multifunctional vehicle and ambulance with driver and fuel throughout the day. The observation showed that one out of the five referral hospitals was not having this emergency transportation services. Only 77% of the CHC-1 and 2 were equipped with a multifunctional vehicle for emergency transportation of patients.

Basic laboratory services

NCD related basic laboratory and diagnostic services are designated to be available in national hospital, RH and CHC-3. All the key tests other than the HbA1c testing service were available in the national hospital. One to two RH lacked the facilities to provide bio-chemistry analysis, contrast radiology and for testing; urine micro albuminuria, serum cholesterol and serum creatinine. Though all the 7 CHC-3s were equipped with laboratory facilities assigned for that level, one of them was not having provision for carrying out blood sugar estimation while another 2 were not having provision to Serum total cholesterol estimation. Only 3 out 7 CHC-3 was having basic x-ray services that was functional (Figure 3.65).

Figure 3. 65 Existence of NCD related basic laboratory and diagnostic services across facilities, Timor-Leste 2023

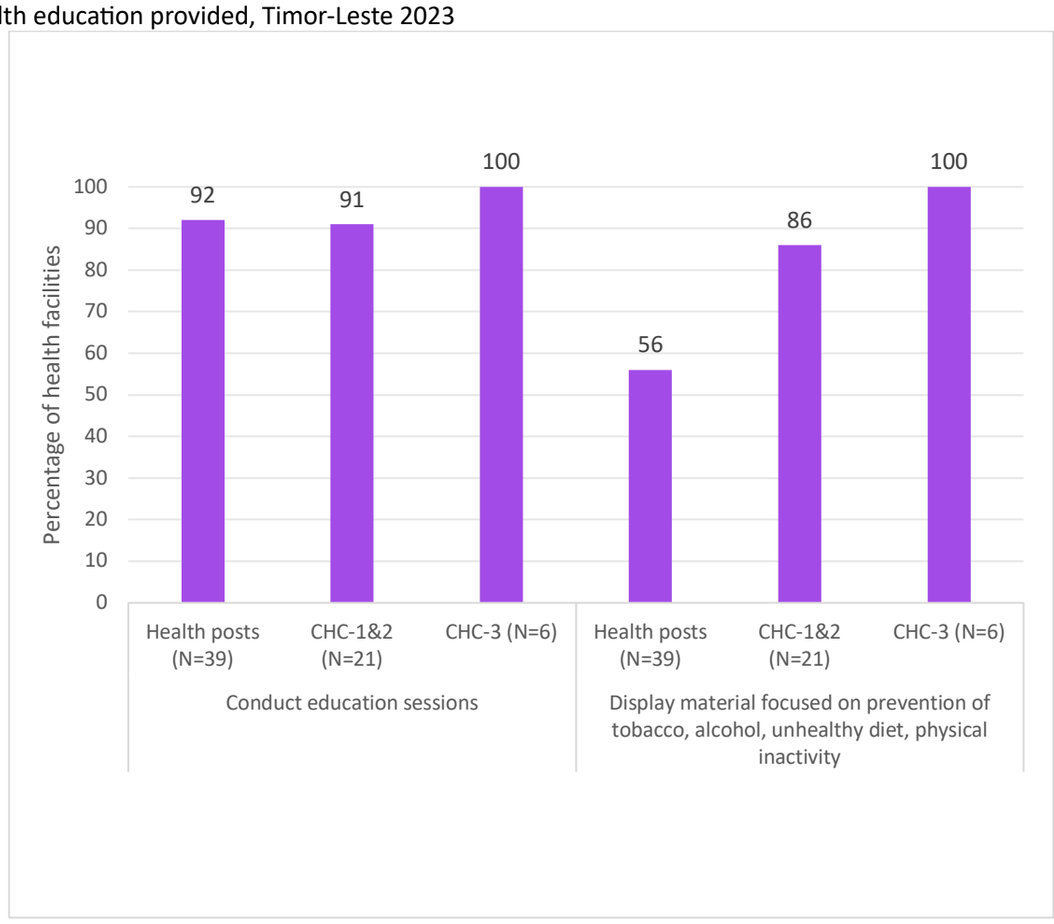


Availability of services related to NCD

Health promotion services and prevention of NCD

The ESP specifies that all levels of health facilities should provide education services for prevention of NCDs and promotion of healthy lifestyle within the facilities and in within their areas. The CHC-3, CHC-1&2 and health posts are expected to provide education services for prevention of NCDs and promotion of healthy lifestyle in their areas. The survey assessed the provision of education services for prevention of NCDs and promotion of healthy lifestyle in their areas for CHCs and health posts with doctors. Most of the CHC-3 (86 %), CHC-1and 2 (96 %) and health posts with doctors (87 %) reported that they engage in NCD education services the details related to the services are shown in Figure 3.66.

Figure 3. 66 Percentage of facilities providing education services for prevention of NCDs and type of health education provided, Timor-Leste 2023



.

Those health facilities that were engaged in provision of education services for prevention of NCDs and promotion of healthy lifestyle in their areas where further enquired about: (1) Conducting education sessions and (2) Display of material focused on prevention of tobacco, alcohol, unhealthy diet, physical inactivity. All the CHC-3 reported positively, while all CHC-1and 2 and health posts with doctors were not.

Integrated screening and services for hypertension diabetes, cardiovascular disease, chronic respiratory diseases

As specified in the ESP to be available, the survey examined the availability of integrated screening services for four of the most common NCD's i.e. diabetes, hypertension, cardio vascular diseases (CVD) and chronic respiratory disease (CRD) to all adults aged 40 years and over in all levels of health facilities. Integrated screening for these conditions was only available in 56% of health post and 68% of CHC-1 and 2 and in 2 of the 5 of RHs. All CHC 3 and National hospital reported this service to be available.

Among those facilities reported to have integrated screening for these conditions, additional inquiry was made about the availability of other steps they are designated to perform as per ESP (Figure 3.67).

Figure 3. 67 Availability of integrated screening services for diabetes, hypertension, CVD and CRD and screening of all adults aged above 40 years across facilities, Timor-Leste 2023

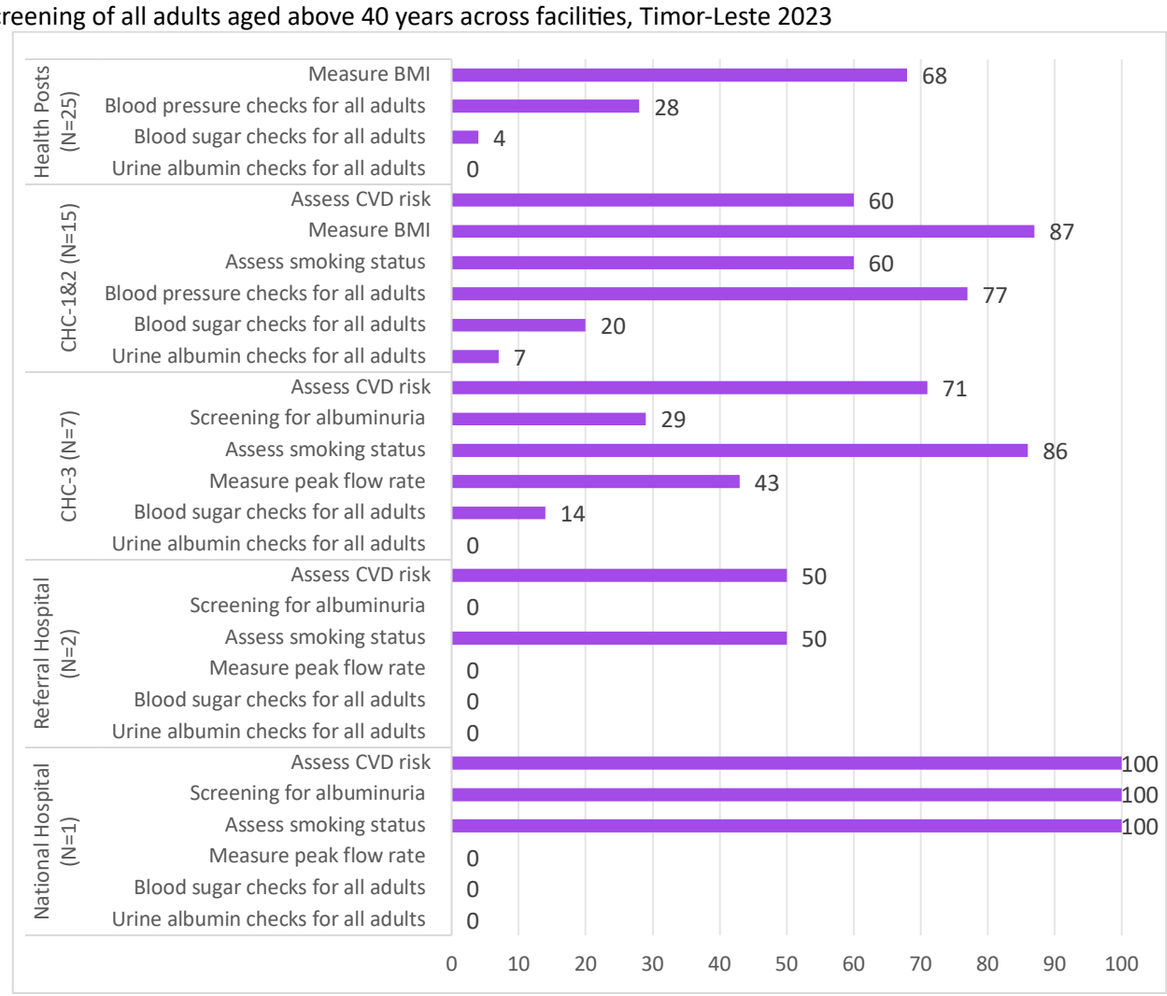


Figure 3.67 shows wide gaps in availability of key steps of integrated screening across all types of facilities. Only a minor proportion of CH3-3 (14 %), CHC-1 and 2(20 %), and HPs with doctors (4 %) were carrying out blood sugar screening for all adults. Facilities performing urine albumin checks were either unavailable or the availability was negligible.

Assessment of smoking assessment status as part of the integrated screening was reported in national hospital, and in a majority of CHCs (87 %). Measurement of mean peak flow rate was mostly unavailable across all levels of facilities. Only 68 % of health post reported to be making assessment of body mass index. The use of CVD risk assessment was poor across all the levels of facilities in the integrated screening.

The facilities which provided integrated NCD screenings services were inquired into the next step of referring the positive patients to higher level facilities or follow up the patient for confirmation of diagnosis based on the WHO-PEN protocol g (Figure 3.68).

Figure 3. 68 Next step if patients are screened positive for NCDs, Timor-Leste 2023

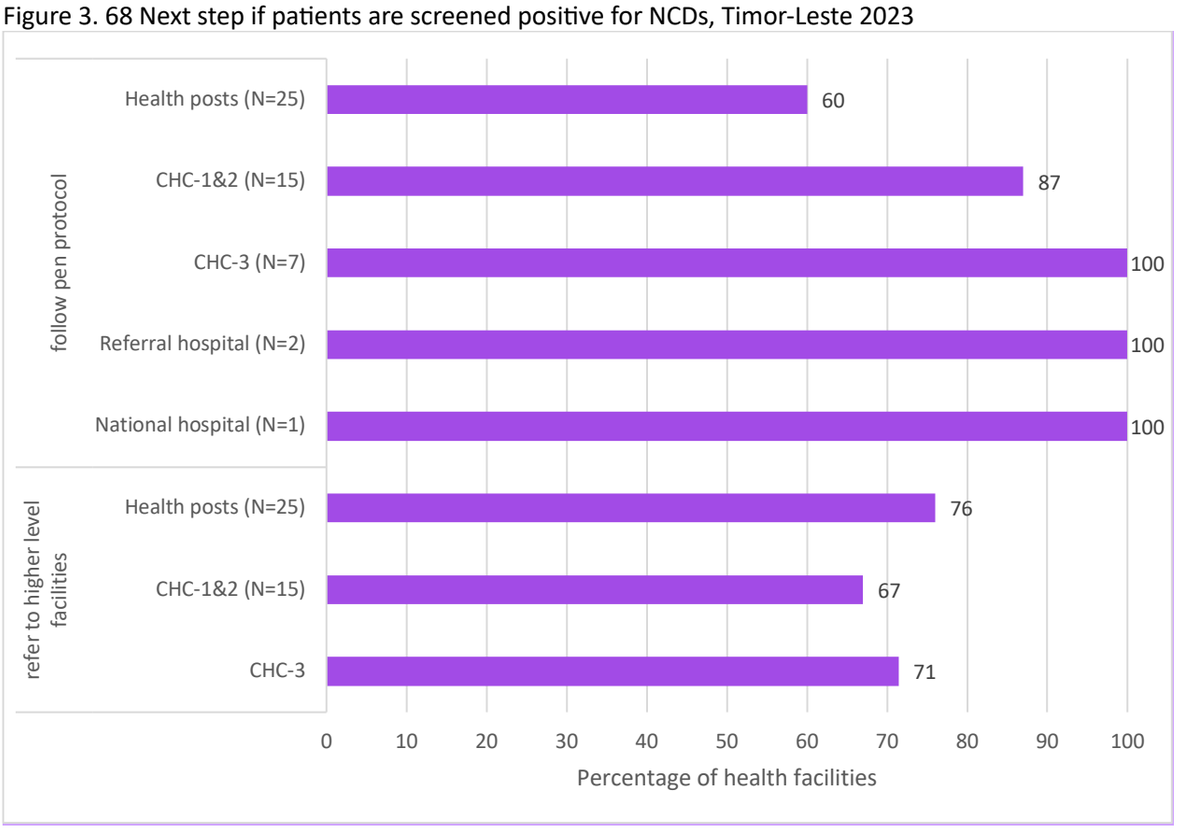


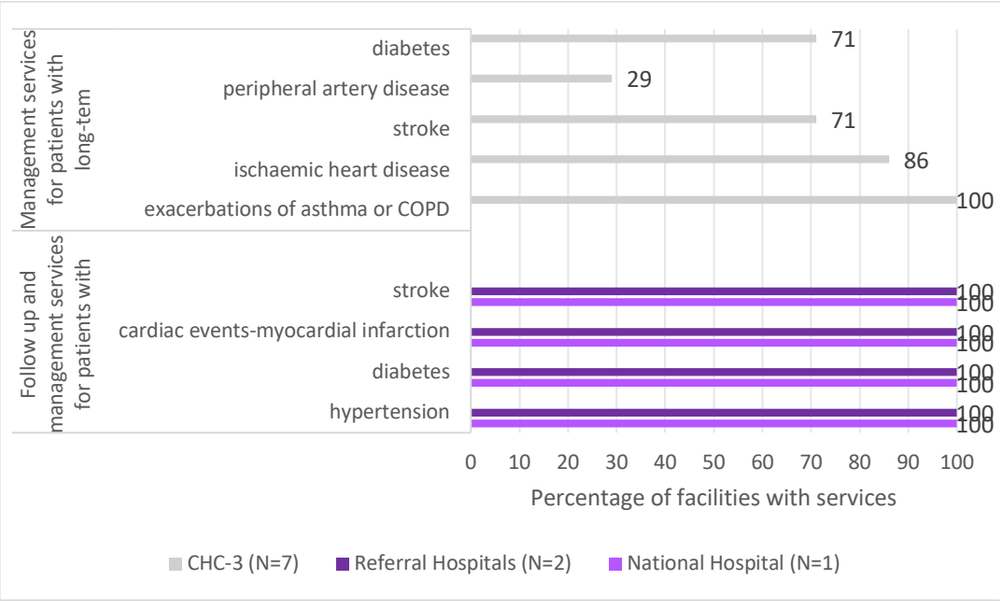
Figure 3.68 indicates that the 71 % of CHC-3's, 67 % of CHC-1&2 and 76 % of HPs with doctors reported referring screened positive patients to higher level facilities for confirmation of diagnosis. The use of WHO-PEN protocol for counseling and referring newly screened patients was universal in national hospital, referral hospitals and CHC-3. Use of WHO-PEN protocol for the same was only reported in 60 % of the HPs with doctors and in 87 % of the CHC-1and 2.

Follow up and manage patients with NCDs

The ESP specifies CHC 3, RH and the National Hospital to provide services to follow up and manage patients with hypertension, patients with diabetes, patients who have had cardiac events- myocardial infarction and patients who have had a stroke. All 7 CHC 3 and National Hospital responded as this service is available while the service was available only in 2 RHs. The facilities which reported as

providing the service was inquired into the availability of specific services designated in the ESP and the results are shown in Figure 3.69.

Figure 3. 69 Availability of services to follow up and manage patients with long term NCDs across facilities, Timor-Leste 2023

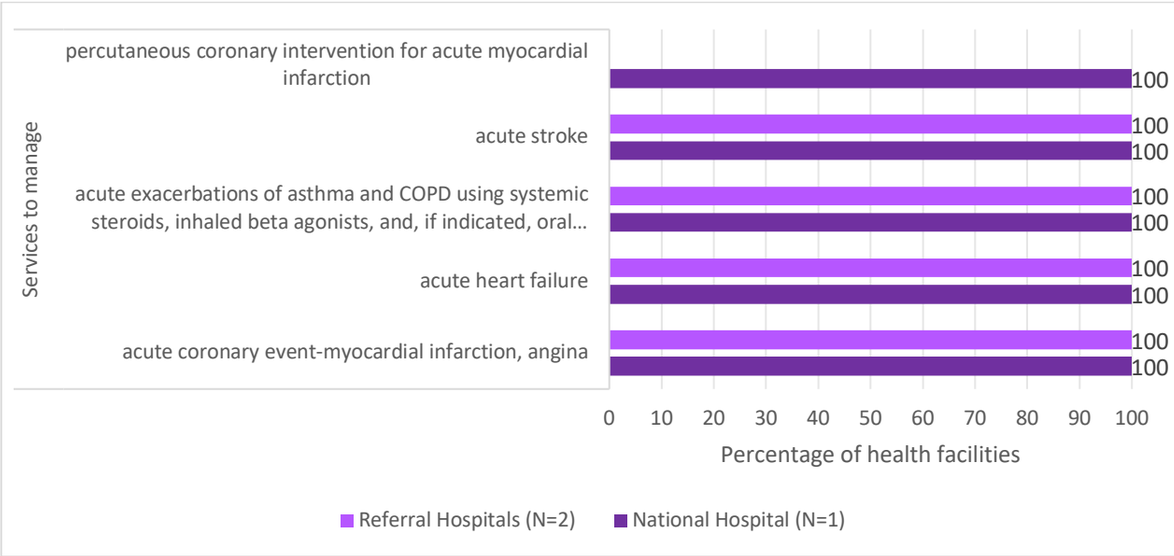


In the national hospital and the selected two RHs, follow up and management services were available for patients with stroke, cardiac events-myocardial infarction, diabetes and hypertension. In all seven selected CHC-3, services to manage exacerbations of asthma or COPD were available. However, services to manage long term patients with stroke as well as diabetes were available in 5 (71%) CHC-3 and services for managing long term patients with peripheral artery disease were available only in 2 (29%) CHC-3.

Manage acute or emergency NCD conditions

The ESP specifies CHc-3, RH and the National Hospital to provide services to manage acute or emergency NCD conditions. All 7 CHC 3 and National Hospital responded as this service is available while the service was available only in 2 RHs. The facilities which reported as providing the service was inquired into the availability of specific services designated in the ESP and the results are shown in Figure 3.70.

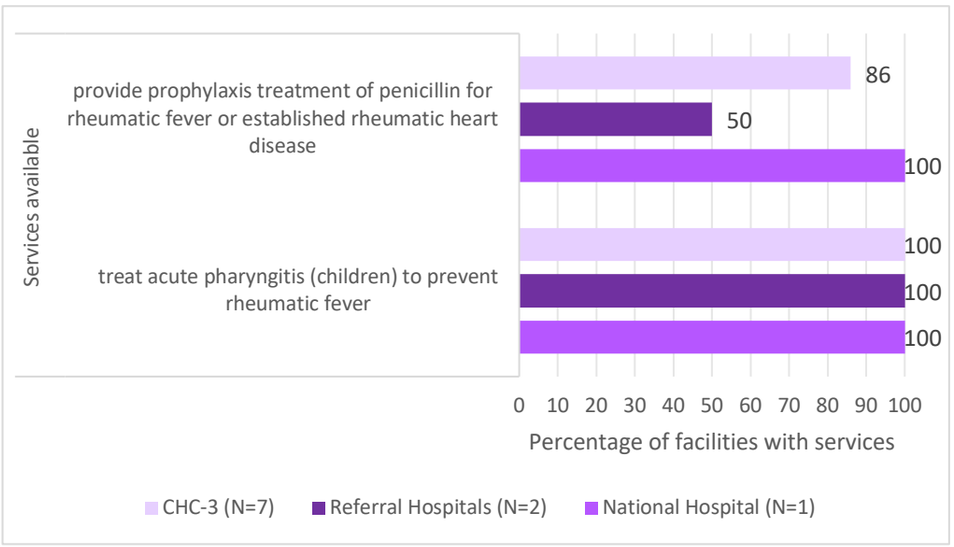
Figure 3. 70 Availability of services to manage patients with acute NCDs across facilities, Timor-Leste 2023



Services to prevent rheumatic heart diseases

CHC3, RH and National Hospitals are designated to provide specified services of treating acute pharyngitis (children) to prevent rheumatic fever and to provide prophylaxis treatment of penicillin for rheumatic fever or established rheumatic heart disease. The availability of these services are shown in Figure 3.71.

Figure 3. 71 Availability of services to prevent rheumatic heart diseases across facilities, Timor-Leste 2023



Services were available to treat acute pharyngitis (children) to prevent rheumatic fever in the National Hospital, both RHs and all 7 CHC-3. However, services to provide prophylaxis treatment of penicillin for rheumatic fever or established rheumatic heart disease were available in the National Hospital, only one (50%) of the RHs and six (86%) of CHC-3.

Rehabilitation services

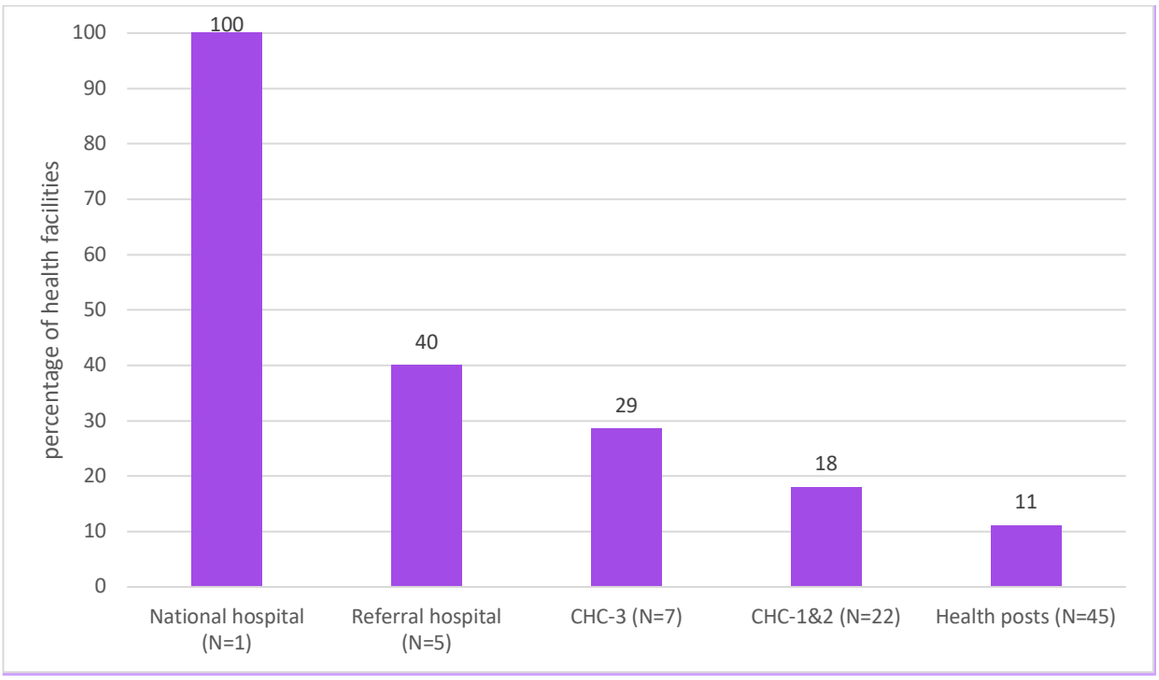
Physiotherapy services for rehabilitation purposes have been designated to be available in RH and National Hospital. Two of the 5 RH and the National Hospital reported as the service being available.

Cancer services

Cancer screening

The ESP specifies the screening or related services for breast, oral and cervical cancers to be available at different levels of health care facilities or to be delivered through home visits. The proportion of health facilities availing the specified cancer screening or related services in the country is shown in Figure 3.72.

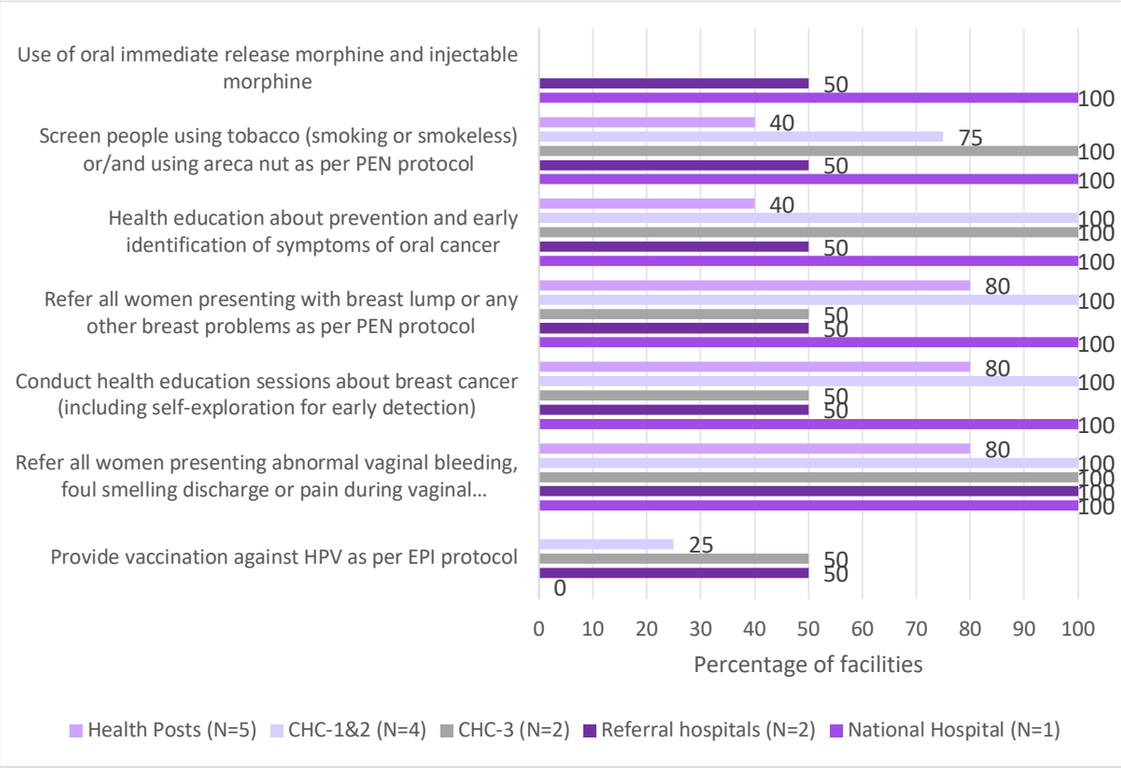
Figure 3. 72 Availability of cancer screening across facilities, Timor-Leste 2023



Cancer screening services were reported as available in the national hospital, and in two RH, 29 % in CHC-3, 18 % in CHC-1and 2, and in 11 % of health posts.

The facilities which reported as providing the service was inquired into the availability of detailed cancer screening services designated for each type of facility are shown below in Figure 3.73.

Figure 3. 73 Availability of detailed cancer screening services across facilities, Timor-Leste 2023



In the National Hospital, except for providing vaccination against HPV as per EPI protocol, all other services were available. In the two RHs, while referral of all women presenting abnormal vaginal bleeding, foul smelling discharge or pain during vaginal intercourse as per PEN protocol to the National Hospital were done in both hospitals, other services were available in only one (50%) RH. Only a few services were available in both of the two CHC-3. Except for providing vaccination against HPV as per EPI protocol and screen people using tobacco (smoking or smokeless) or/and using areca nut as per PEN protocol (which were available in 3 facilities), all other services were available in all 4 CHC-1&2. Health education about prevention and early identification of symptoms of oral cancer and screening people using tobacco (smoking or smokeless) or/and using areca nut as per PEN protocol were available in only 2 (40%) HPs, while other services were available in 4 (80%) of HPs.

Cancer treatment

Only National Hospital is designated in the ESP to provide cancer treatment services and the details are shown below (Table 3.5).

Table 3. 5 Cancer treatment services availability in the National Hospital, Timor-Leste 2023

Details of surgical treatment services for cancers	Availability status
Provide surgical treatment services for oral cancer	No
Provide surgical treatment services for cervical cancer	No
Provide surgical treatment services for eye cancer	Yes
Details of chemotherapy service for cancers	
Provide surgical treatment services for oral cancer	No
Provide surgical treatment services for cervical cancer	No
Provide surgical treatment services for eye cancer	No

Of the surgical treatment only, services for eye cancer was available while none of the chemotherapy services were available in the National Hospital.

Mental health services

All levels of health facilities have been designated to provide mental health services in the ESP. Availability of the essential mental health services specified in the ESP to be available in the National Hospital is shown below (Table 3.6).

Table 3. 6 Mental health services availability in the National Hospital, Timor-Leste 2023

Details of mental health services	Availability status
Mental health promotion in the community	Yes
Screening and proactive case finding of psychosis, depression, and anxiety disorders	Yes
Screening for detection of dementia	Yes
Diagnosis of childhood attention deficit hyperactivity disorder	Yes
Diagnosis of childhood autism	Yes
Diagnosis and management of schizophrenia	Yes
Diagnosis and management depression	Yes
Diagnosis and management of affective bipolar disease	Yes
Diagnosis and management of anxiety	Yes
Diagnosis and management of epilepsy	Yes
Counselling to patient with mental problem and family	Yes
Management of prolonged seizures or status epileptics	Yes
Diagnostic and management of illicit drug abuse	Yes
Management of refractory psychosis with clozapine	No
Surgery for refractory epilepsy	No
Follow up of patients diagnosed with mental illnesses to check on continuation of treatment	Yes

All essential mental health services specified in the ESP to be available, were available in the national hospital other than management of refractory psychosis with clozapine and surgery for refractory epilepsy.

Of the other types of health facilities, 47% of Health Posts, 77% of CHC 1 and 2s, and 20 % of RHs responded as they are providing mental health services while all CHC 3 responded as providing mental health services.

The facilities which responded as proving mental health services were inquired into the availability of specific designated services and the results are shown in Figure 3.74.

Figure 3. 74 Availability of selected mental health services across facilities, Timor-Leste 2023

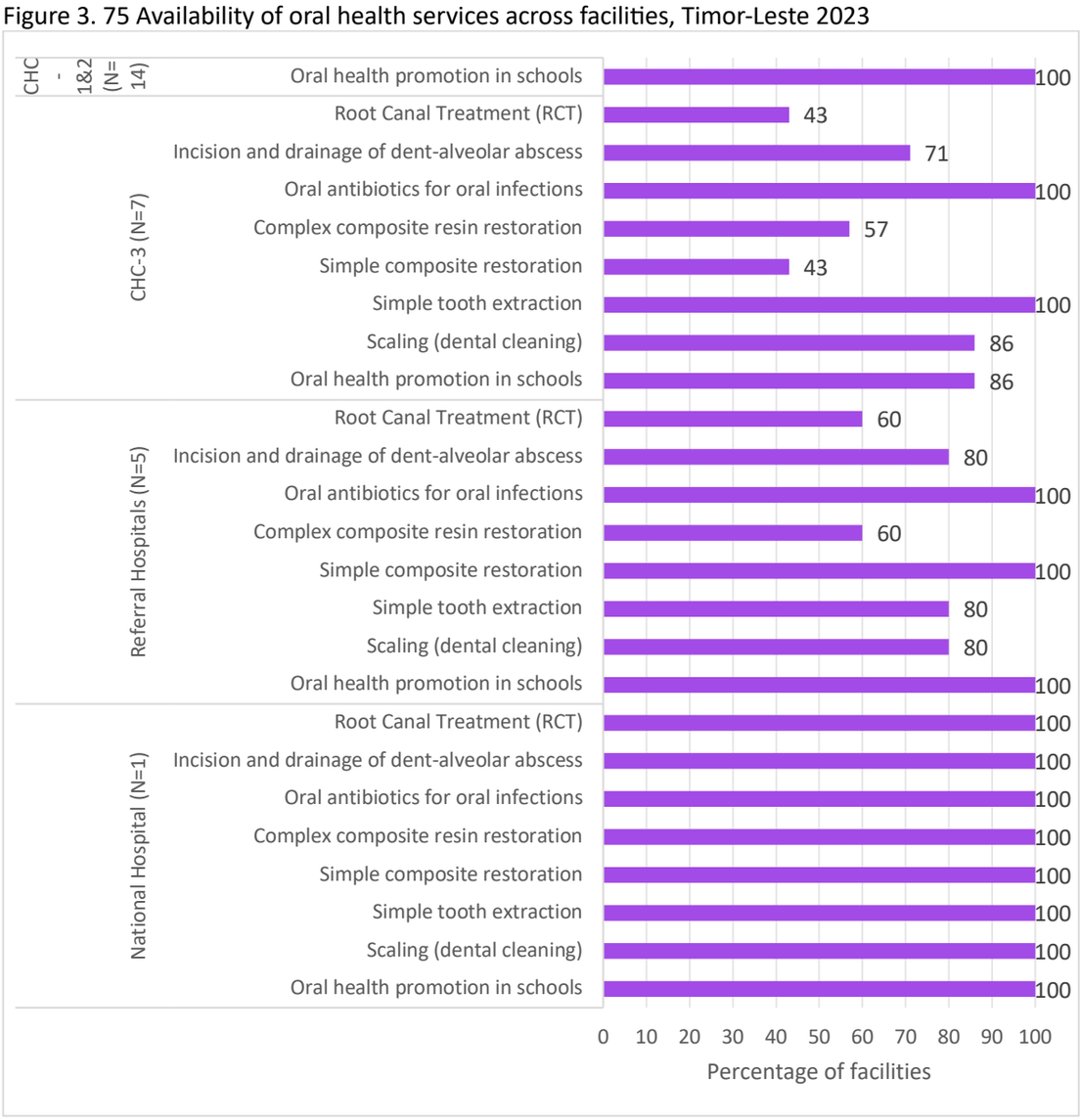
Mental health services were available only in about half of the health posts. Among such facilities all were providing counselling to patient with mental problem and family and follow up of patients diagnosed with mental illnesses to check on continuation of treatment. In HPs with doctors with mental health services more than two third were engaged in referring acute mental health episodes (e.g. psychotic attack, epilepsy, etc. for diagnostic and treatment, and in Identification and referral of suspected mental illnesses. As compared to HPs with doctors, availability of mental health services were relatively higher in CHC-1 and 2 (77%). Mental health services were available in all the CHC-3's surveyed, while availability of same was reported from only one of the 5 referral hospitals. The additional spectrum of health services available in CHC-3 includes screening and proactive case finding of psychosis, depression, and anxiety disorders (77%), management of anxiety (29%), depression (57 %), epilepticus (77 %), maternal mental disorders (71 %) etc. The data clearly indicate the need to improve the availability of mental health services in referral hospitals.

Oral health services

Whether the facilities are offering services of identifying and refer any oral/dental problems (within the facility or through home visits) was inquired into. Oral health services are not part of health post and CHC-1&2, but these facilities were expected to screen and refer patients with dental problems to higher level facilities where such services are provided. However, only 33% of HPs with doctors and 64 % of CHC-1&2 were reported to make such referrals of patients with dental problem. However, all the CHC3, RH and National Hospital responded as offering oral health services.

Other than the Health Posts other levels of facilities are also designated to offer other oral health services and the results of their availability among those facilities which were offering services are shown in Figure 3.75.

Figure 3. 75 Availability of oral health services across facilities, Timor-Leste 2023

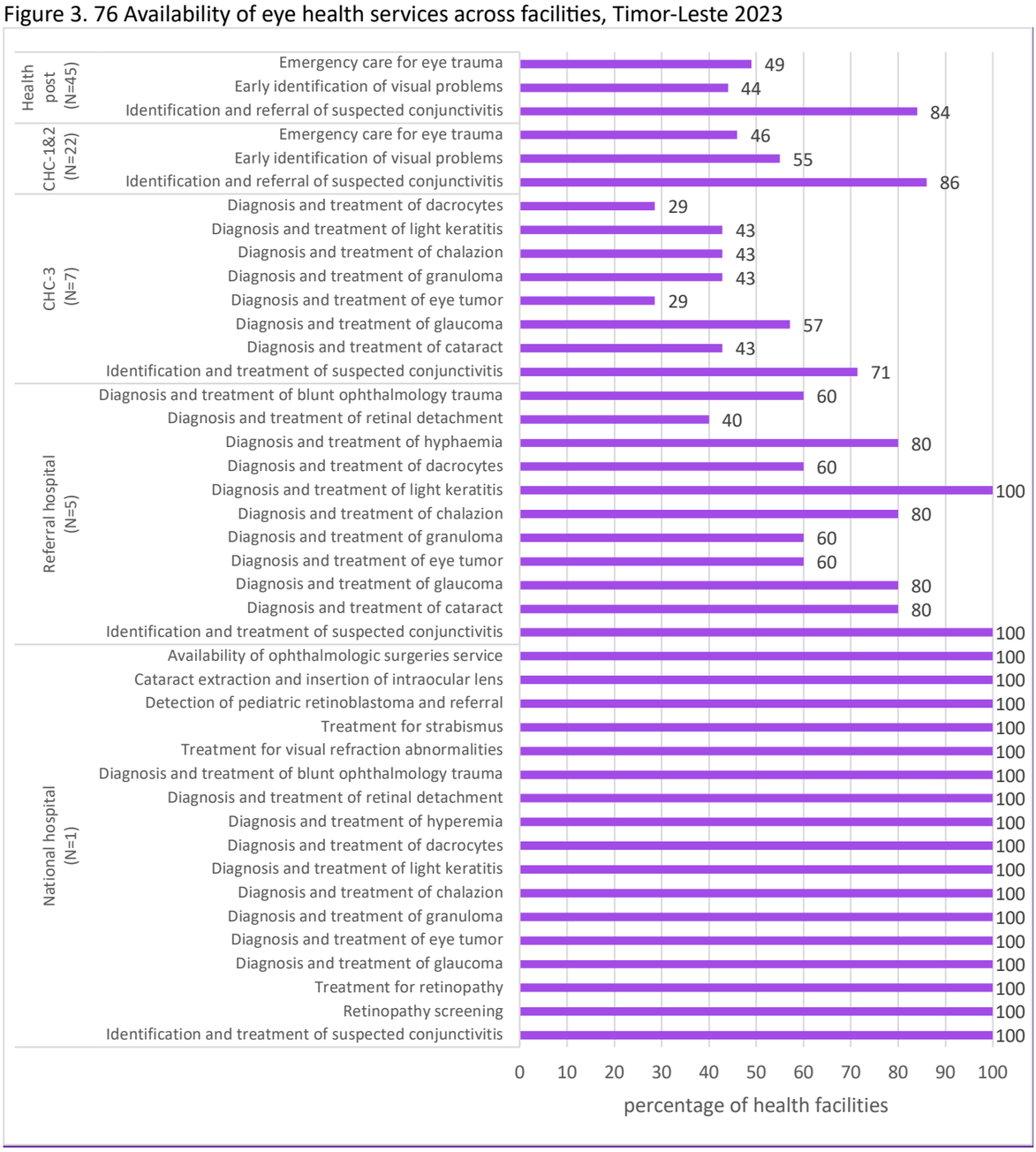


The CHC-3's, referral hospitals and the national hospital were providing dental care services, but the availability of all types of designated dental procedures was noted only in the national Hospital. Root canal treatment was only available in 3 out 5 referral hospitals and in 3 out of 7 CHC-3's. Availability of dental services CHC-3's was lowest among these three facilities with only 3 out of 7 facilities able to provide Simple composite restoration and composite resin restoration in 4 out of 7 facilities. The national hospital and 5 referral hospitals were reported to be engaged in oral health promotion in schools, while the same is only reported in 64 % of CHC-1 and 2and 6 out of 7 CHC-3's.

Eye health services

Identification and referral of visual problems, conjunctivitis and emergency care for eye trauma are the only eye health related services that are expected to be provided by the HPs with doctors and CHC-1&2. Higher levels of facilities are designated to provide other eye care services and the results of the availability is shown in Figure 3.76.

Figure 3. 76 Availability of eye health services across facilities, Timor-Leste 2023



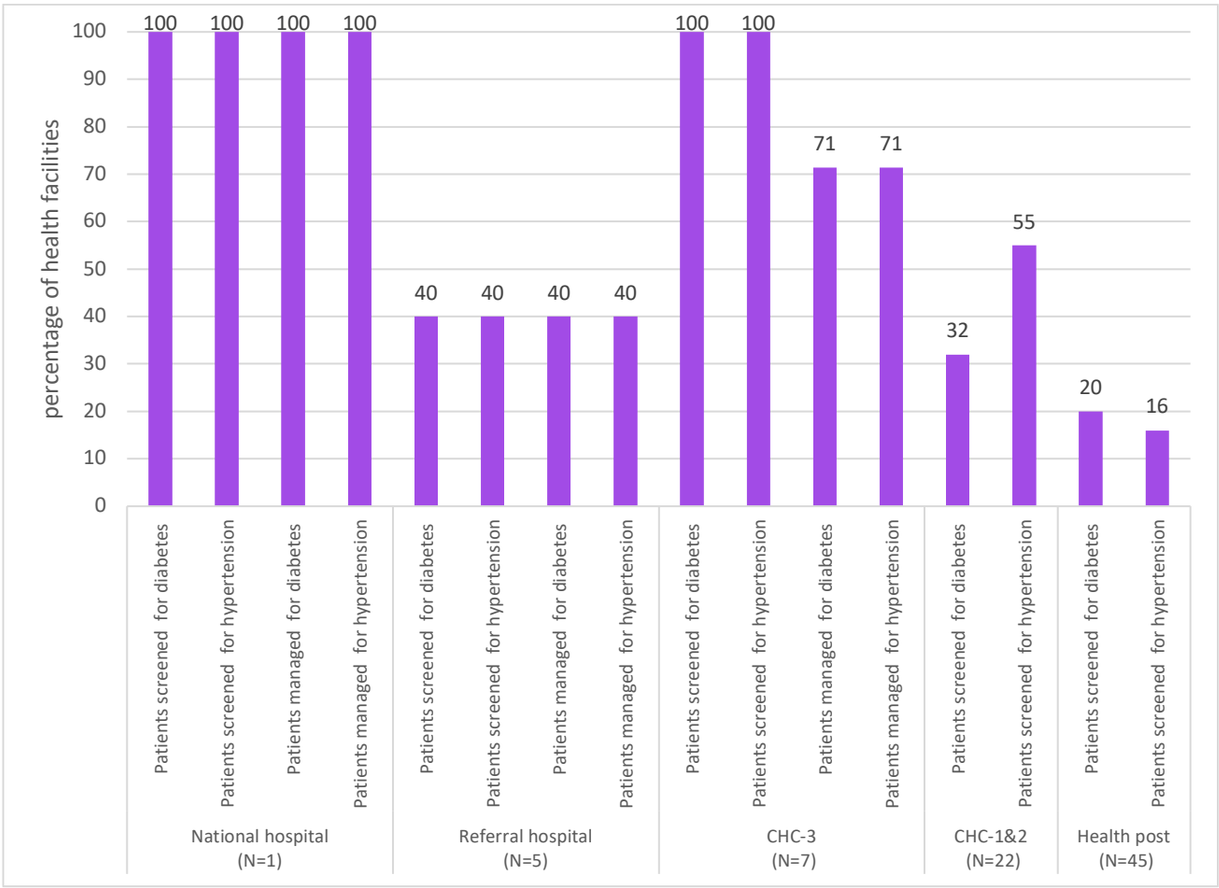
All the services related treatment and management of eye related health problems were available in the national hospital. Diagnosis and treatment of eye health condition was not available in more than

half of the CHC-3's. Though the situation in referral hospitals were better than in the CHC-3's, some of essential services were not available. Survey reported that emergency care for eye trauma was available in less and half of the HPs with doctors and CHC-1 and 2.

Maintenance of NCD patient registers

As part of record keeping the health facilities are needed to maintain registers for patients screened/treated for NCDs. Figure 3.77 shows the availability of patient registers which were observed and verified at the survey.

Figure 3. 77 Availability of registers for patients screened/managed for diabetes and hypertension, Timor-Leste 2023

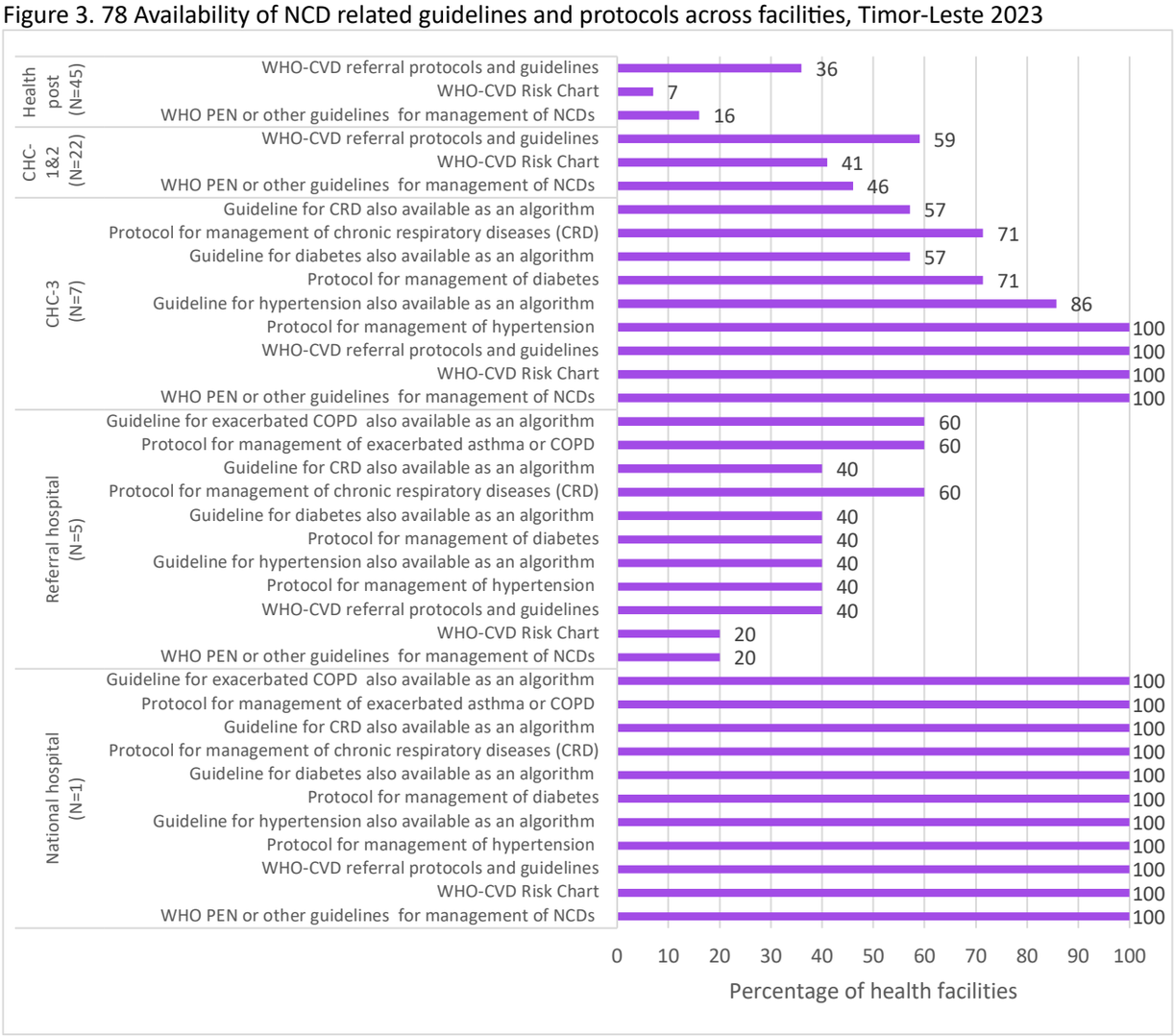


The registers for patients that were screened and/or treated for diabetes as well as hypertension was available in the national hospitals. However only 2 of the 5 referral hospitals were maintaining such registers. Screening registers were available in all CHC3 all facilities and patient management register in 5 out of 7 facilities. The facilities below CHC-3 which were only expected to screen the patients and the availability of the relevant registers was low. .

Availability of NCD related guidelines and protocols

All health facilities are required to possess the WHO PEN or other guidelines for management of NCDs, WHO-CVD Risk Chart and WHO-CVD referral protocols and guidelines. In addition, higher level health facilities need to have the guidelines and protocols for management of hypertension and diabetes, chronic respiratory diseases and exacerbated asthma or chronic obstructive pulmonary disease (COPD). The proportion of facilities where the guidelines were observed by the survey team and corresponding algorithm forms were observed to be displayed for easy reference are presented in Figure 3.78.

Figure 3. 78 Availability of NCD related guidelines and protocols across facilities, Timor-Leste 2023



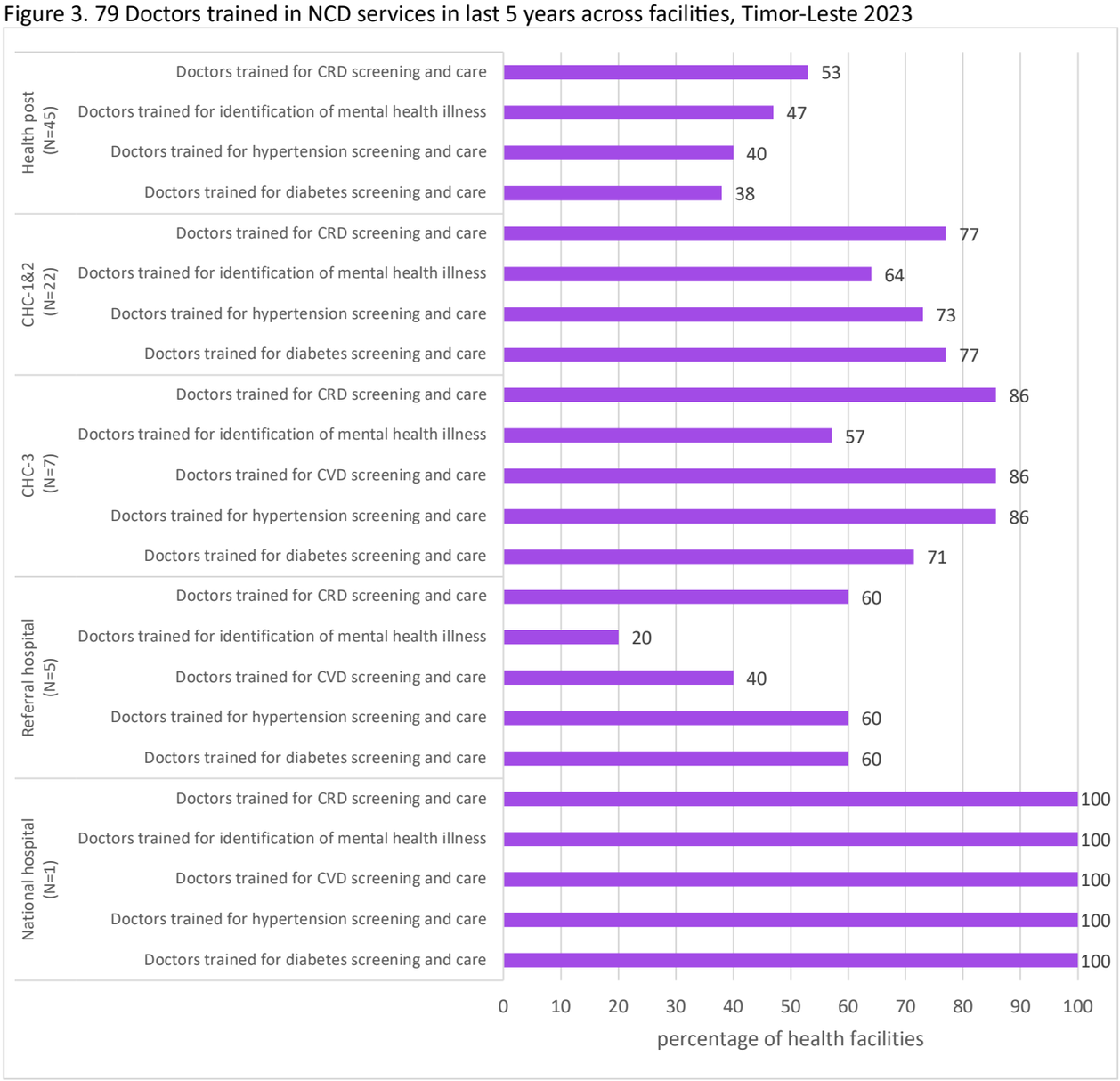
All the NCD related guidelines and corresponding algorithms related to the checklist of NCD diseases were observed to be available in the national Hospital. Availability of guidelines and algorithms were

lower in RH and CHC 3. Less than half of the HPs with doctors and CHC-1 and 2 did not possess WHO-PEN or other guidelines for management of NCDs and WHO-CVD risk charts.

Training of staff in NCD services in last 5 years

This survey gathered information on whether the medical staff engaged in providing NCD services, had received any training in last 5 years. The details of results are shown in Figure 3.78 and Figure 3.79.

Figure 3. 79 Doctors trained in NCD services in last 5 years across facilities, Timor-Leste 2023



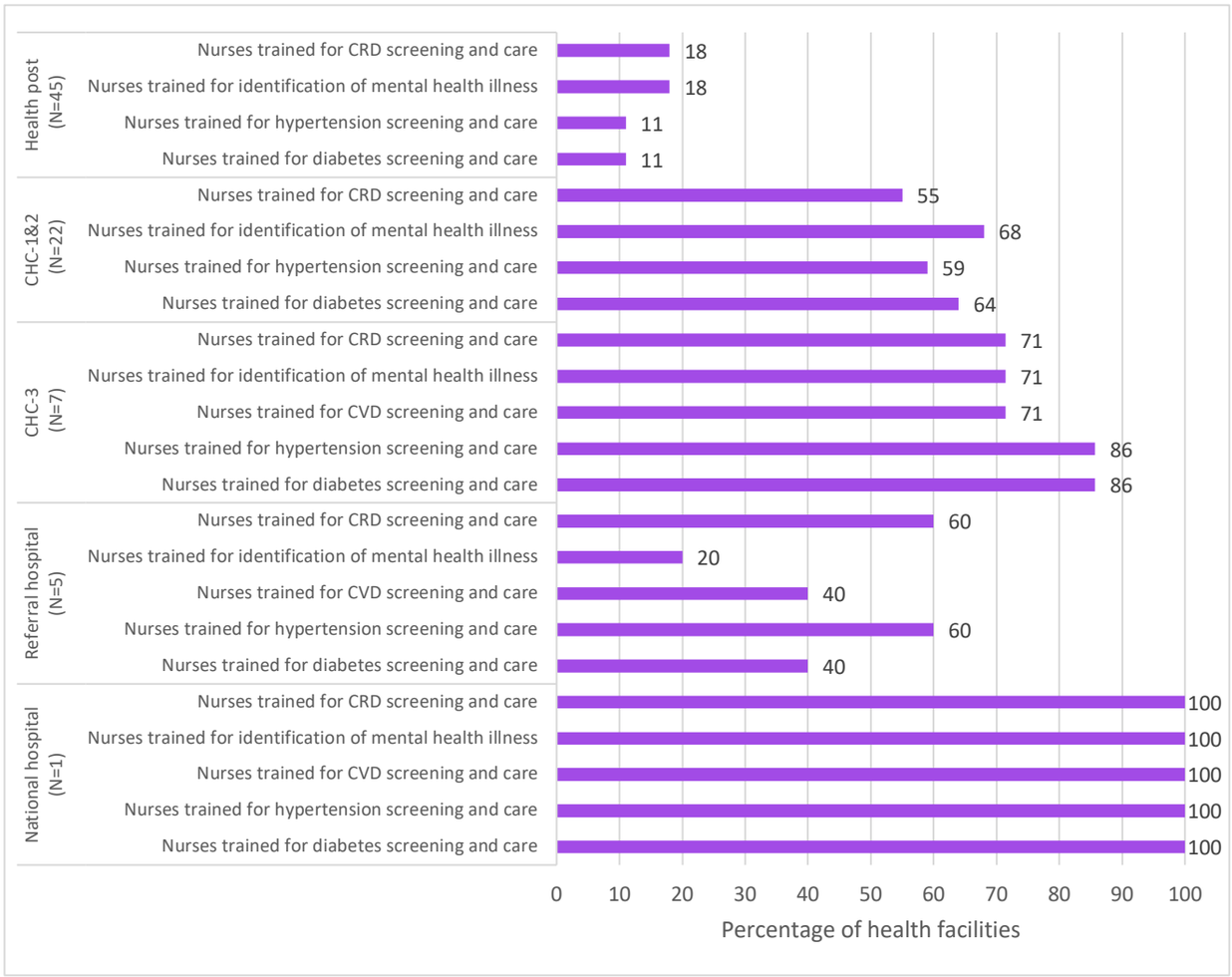


Figure 3. 80 Nurses trained in NCD services in last 5 years across facilities, Timor-Leste 2023

Training of doctors: All the doctors in the National Hospital had received in-service training related to NCD screening and care for the following diseases; diabetes, hypertension, CVD, mental health, and CRD . The trained doctor availability was lowest in health post and in the referral hospitals. Less than half of the doctors in health post had received training in hypertension/diabetes screening and in identification of mental health illness. Out of the 5 referral hospitals, only one had a doctor trained in identification of mental illness and only 2 had doctors trained for CVD screening and care.

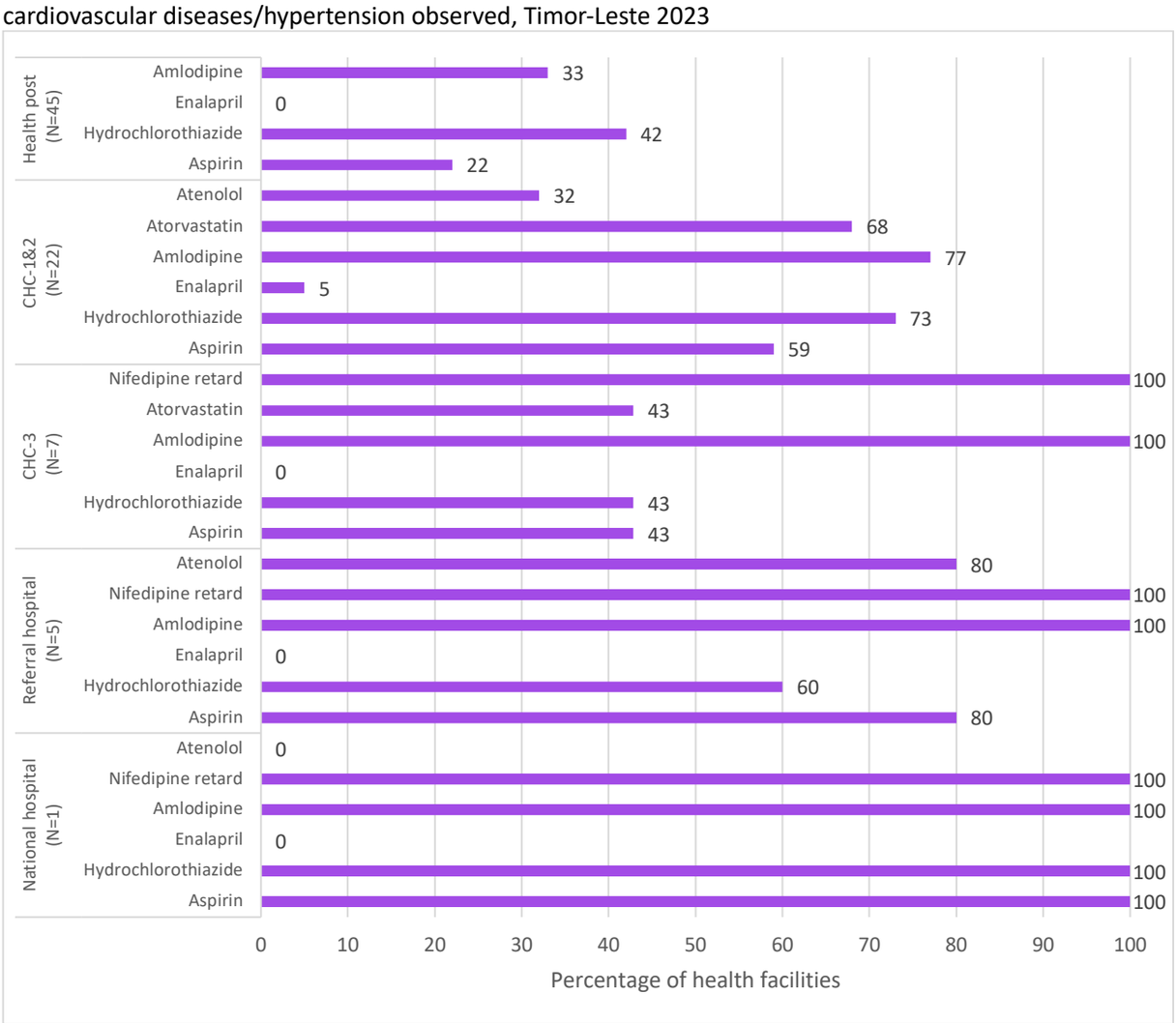
Training of nurses: National hospital was reported to be having nurses who received training in delivering NCD services in the last 5 years. Only 11 % of Health posts with doctors had nurses who had received training in screening and care of diabetes and hypertension. Further only 18 % of HPs with doctors had nurses trained in identification of mental health illness and in screening and care for CRD.

Availability of the key medicines related to NCD

This section summarizes the availability of at least one unexpired dose of key medicines to treat different types of NCDs as observed by the survey enumerator. Only the availability of key medicines are illustrated in Figure 3.79 and the details of availability of all medicines is given in Annex 5. For each of the medicines the information related to any stock-out in past 3 months was also enquired into and the results are presented in Annex 5.

Cardio-vascular diseases: Availability of at least one unexpired dose of key medicines to treat cardiovascular diseases or hypertension is presented in Figure 3.81.

Figure 3. 81 Percentage of facilities with at least one unexpired dose of key medicines to treat cardiovascular diseases/hypertension observed, Timor-Leste 2023

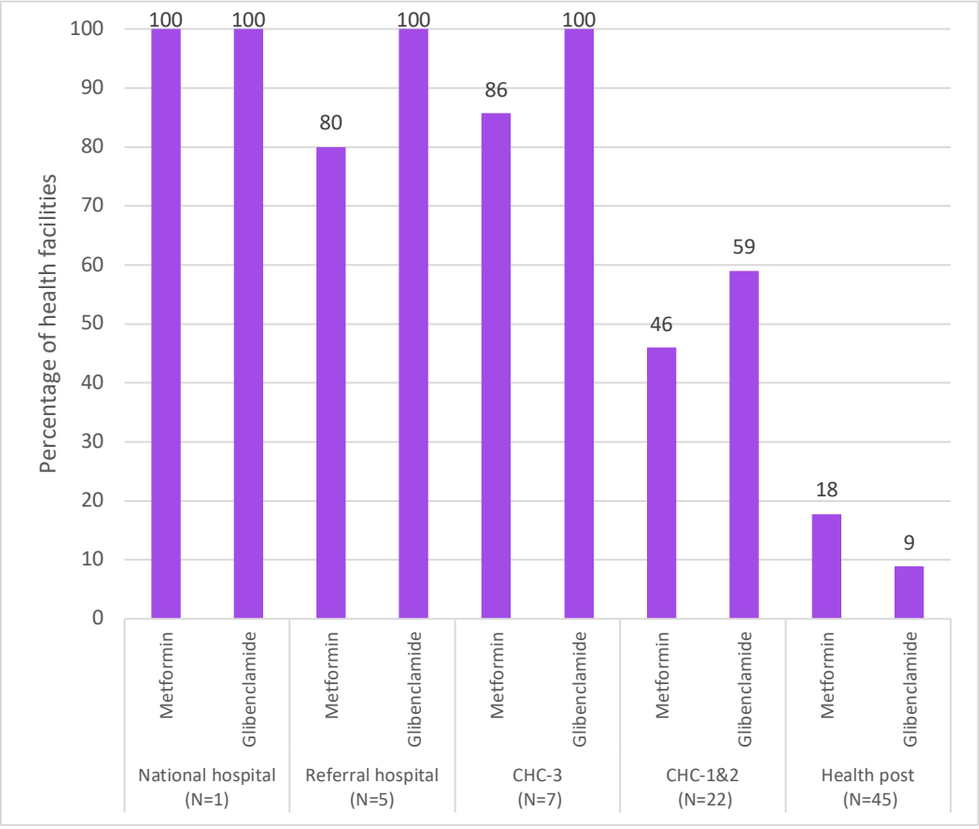


A majority of the HPs with doctors were not having the key medicines for CVD. Other than enalapril (5 %) and atenolol (32 %), the other 3 CVD related medicines were observed to be available in majority

of CHC-1&2's. While Nifedipine retard and Amlodipine was available in all CHC-3's Only 2 out of 7 CHC's were having aspirin, hydrochlorothiazide and atorvastatin.

Diabetes: The availability of at least one unexpired dose of metformin and glibenclamide, is presented in Figure 3.82.

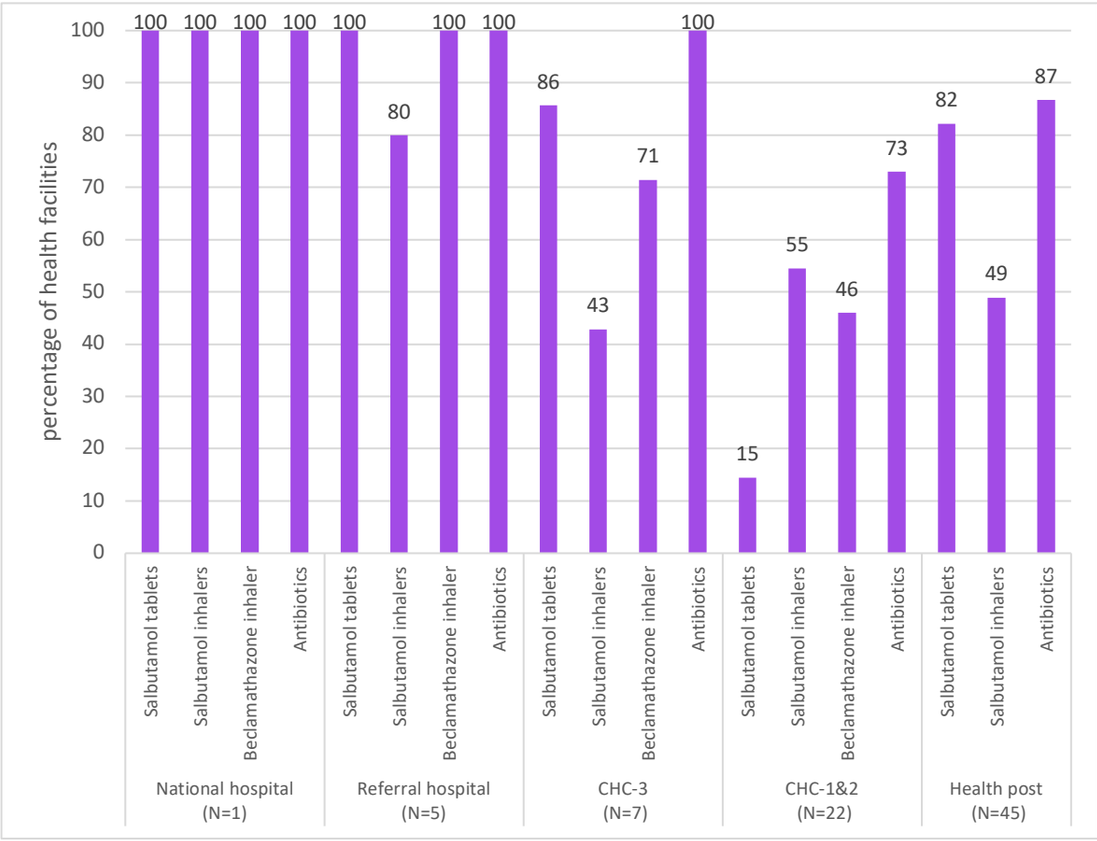
Figure 3. 82 Percentage of facilities with at least one unexpired dose of key medicines to treat diabetes observed, Timor-Leste 2023



The enumerators observed the availability of these two medicines in the National Hospital, RHs and CHC-3's. Metformin was only available in 46 % of CHC-1&2's, while 59 % had glipalamide. Medicines to treat diabetes was only observed in a minor proportion of health posts.

Asthma/Chronic respiratory disease: Availability of salbutamol tablets, salbutamol inhalers, beclamathazone inhaler and antibiotics were observed as relevant to the level of the health facility (Figure 3.83).

Figure 3. 83 Percentage of facilities with at least one unexpired dose of key medicines to treat asthma/CRD observed, Timor-Leste 2023

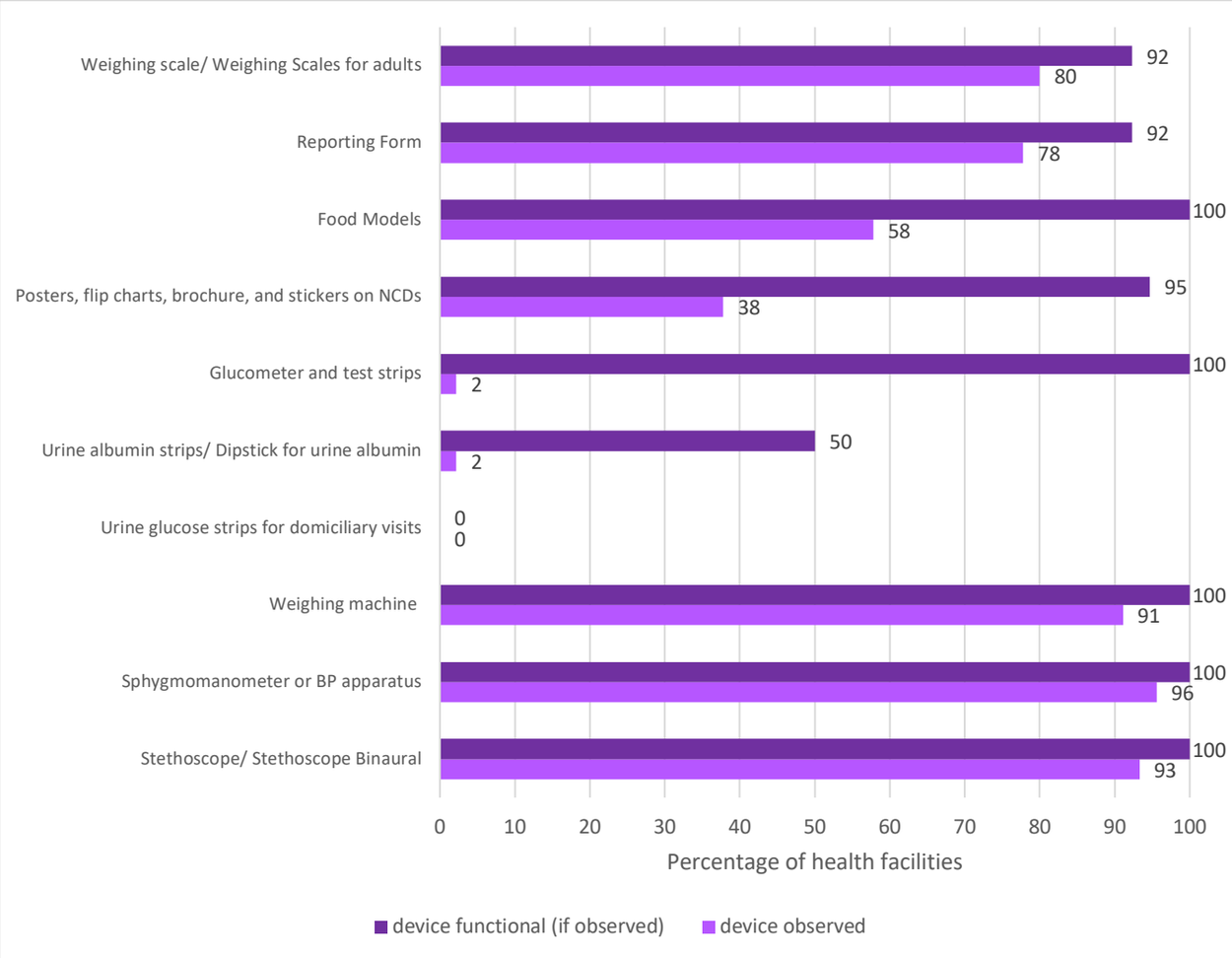


These medicines were observed on survey date in the national hospital. Availability was good in the referral hospitals except for the salbutamol inhaler. Other than antibiotics, the remaining 3 medicines were not available in a few of the CHC-'3. Unavailability of medicines for treating CRD was observed in a majority of HPs with doctors and in CHC-1&2.

Availability of commodities (medical devices and other items)

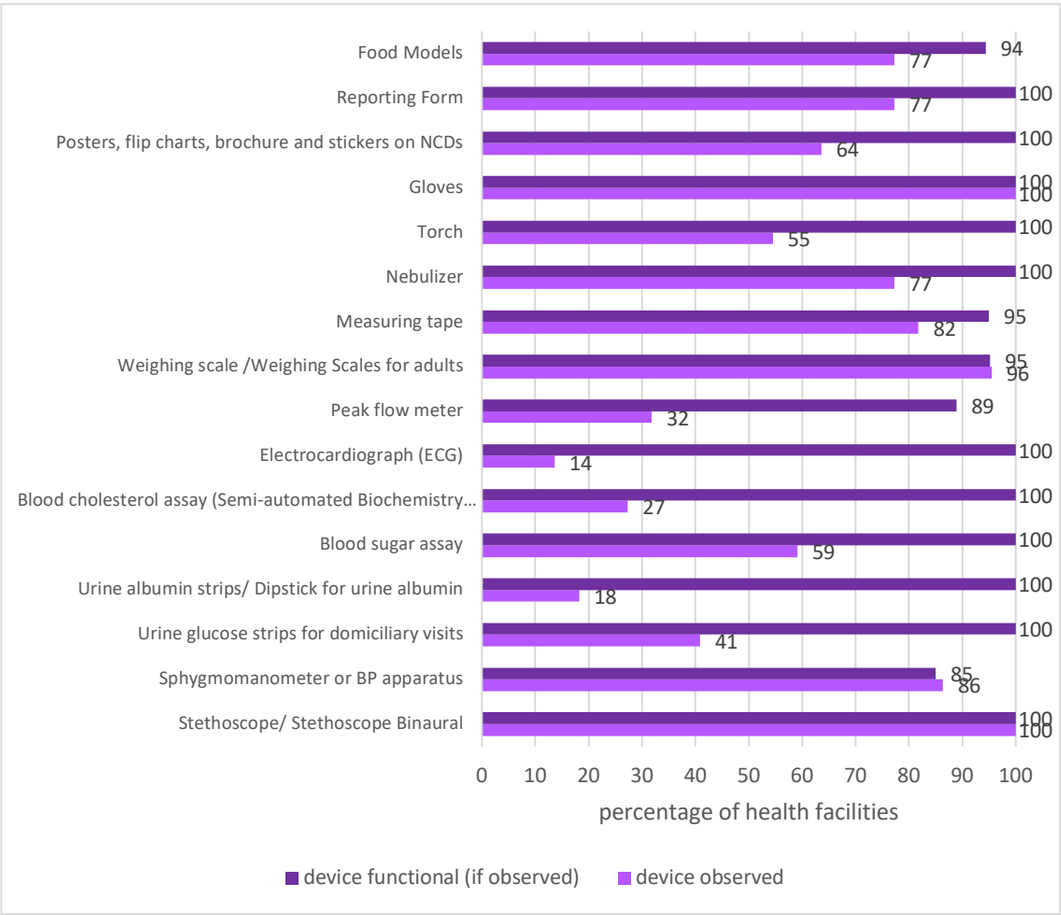
Health facility survey captured the availability of NCD related medical diagnostics devices that were available onsite at any location in the facility and was observed by the survey enumerator. The enumerators also verified the functional status if the particular device was observed in the facility. Share of facilities where these devices were observed to be present is presented in Figure 3.84 to Figure 3.87.

Figure 3. 84 Percentage of HPs with doctors where the diagnostic devices/equipments (N=45), Timor-Leste 2023



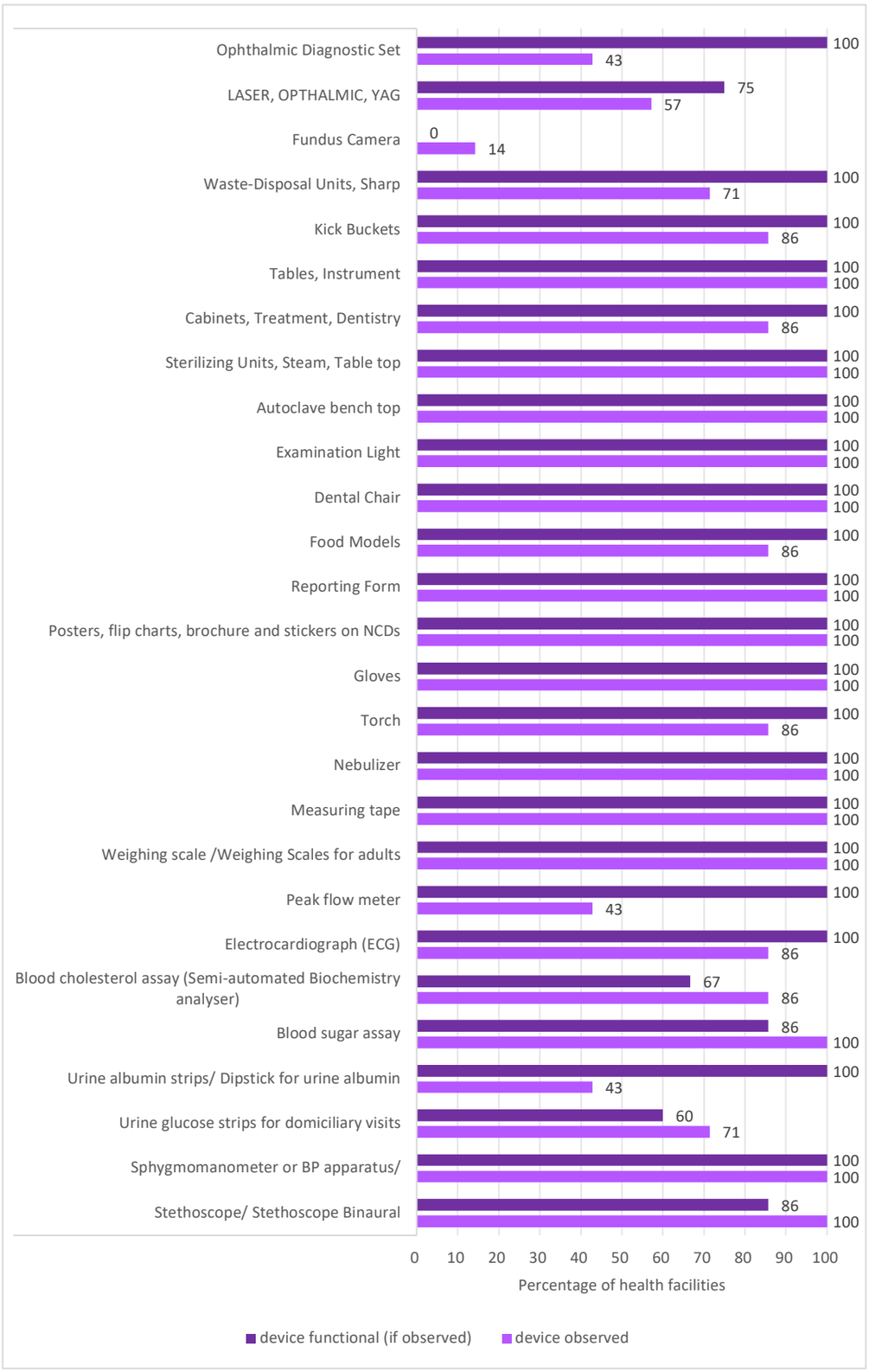
Health posts: Though stethoscope, BP apparatus and weighing machine was observed to be available in vast majority of HPs with doctors. Extreme shortage of glucometer and test strips dipstick for urine albumin and urine glucose strips were noted in the health posts. Only 38 % of HPs with doctors had displayed posters, flip charts, brochure, and stickers on NCDs. Need for strengthening the availability of food models, reporting forms and adult weighing scale was also observed.

Figure 3. 85 Percentage of CHC-1 & 2s with doctors where the diagnostic devices/equipments (N=22), Timor-Leste 2023



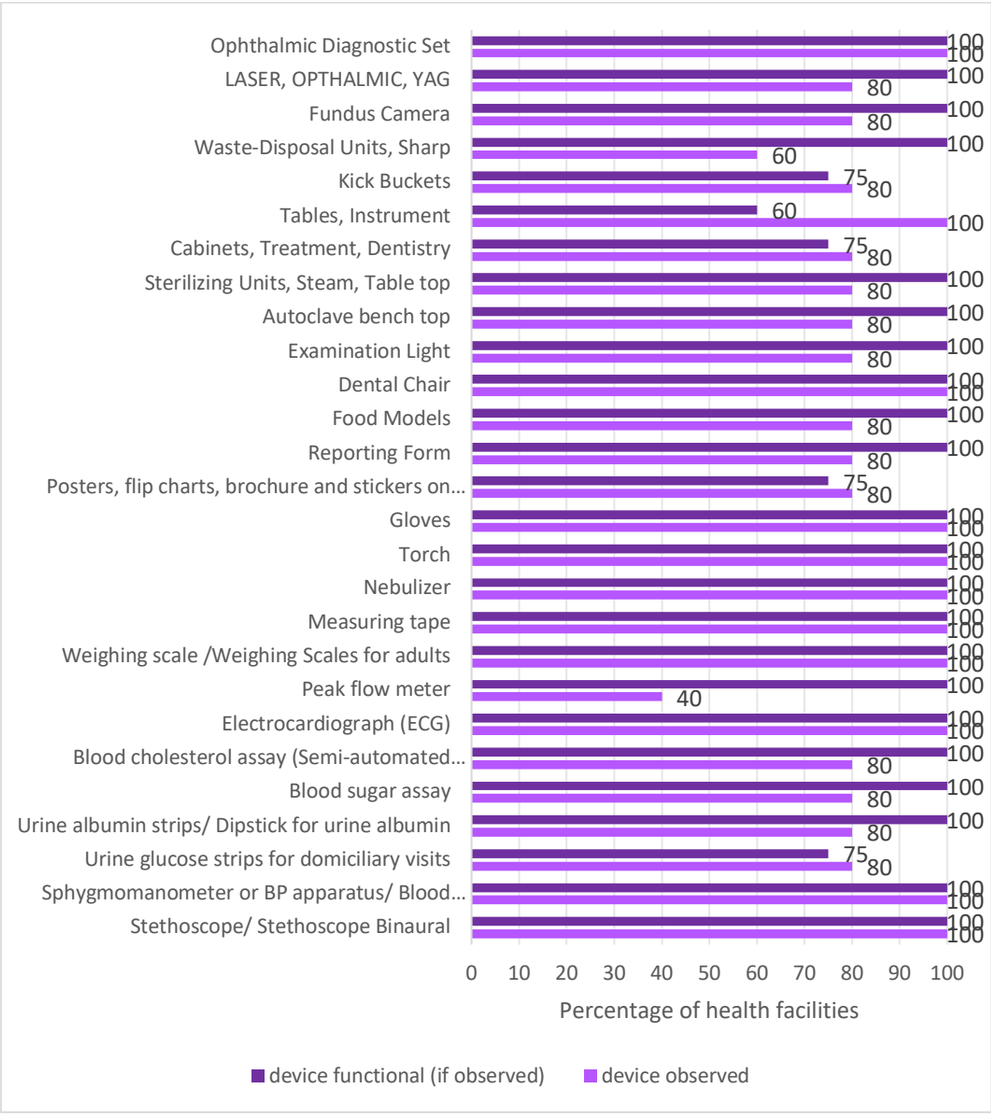
CHC-1&2: Only gloves and stethoscope/ stethoscope binaural were the only devices that were available in all the CHC-1 and 2. Majority of CHC-1 and 2 were not equipped with urine albumin strips/ dipstick for urine albumin, blood cholesterol assay (Semi-automated Biochemistry analyser), electrocardiograph (ECG) machine, and peak flow meter. Posters, flip charts, brochure and stickers on NCDs were only available in 68 % of CHC'1&2, while nearly one fourth of them were not having reporting forms and food models.

Figure 3. 86 Percentage of CHC-3's with doctors where the diagnostic devices/equipments (N=7), Timor-Leste 2023



CHC-3: Availability of urine glucose strips for domiciliary visits and that of urine albumin strips/ dipstick for urine albumin was low in 3 out of 7 CHC-3's. Though blood cholesterol assay was available in 6 out of 7 CHC-3's, it was only functional only in 4 facilities. Oral services devices like dental chair, examination light, autoclave bench top, sterilizing units, instruments etc. were available in all the CHC-3's. The devices related to eye health services like fundus camera was only available in 1 facility, ophthalmic diagnostic set in 3 facilities and laser ophthalmic yag in one of the facilities.

Figure 3. 87 Percentage of RHs with doctors where the diagnostic devices/equipments (N=5), Timor-Leste 2023



Referral hospital: The RH's were better equipped than CHC-3's, with all facilities having sphygmomanometer, electrocardiograph machine and peak flow meter. However, one of the RH was

short of semi-automated biochemistry analyser, urine glucose strips, and urine glucose strips. Though dental chair was available in all RH's, the other equipment's related to delivering dental services as not observed/ functional in a few of the RH's. One of the five RH's was having shortage of devices to provide eye care services.

Table 3. 7 Availability of medical devices In the National Hospital, Timor-Leste 2023

Medical Devices	Availability reported	Functionality status of the devices
Stethoscope/ Stethoscope Binaural	Yes	Yes, functional
Sphygmomanometer or BP apparatus/ Blood pressure Machine/Mobile/Blood Pressure manual	Yes	Yes, functional
Urine glucose strips for domiciliary visits	Yes	Yes, functional
Urine albumin strips/ Dipstick for urine albumin	Yes	Yes, functional
Blood sugar assay	Yes	Yes, functional
Blood cholesterol assay (Semi-automated Biochemistry analyser)	Yes	Yes, functional
Electrocardiograph (ECG)	Yes	Yes, functional
Peak flow meter	Yes	Yes, functional
Weighing scale /Weighing Scales for adults	Yes	Yes, functional
Measuring tape	Yes	Yes, functional
Nebulizer	Yes	Yes, functional
Torch	Yes	Yes, functional
Gloves	Yes	Yes, functional
Posters, flip charts, brochure and stickers on NCDs	Yes	Yes, functional
Reporting orm	Yes	Yes, functional
Food models	Yes	Yes, functional
Dental chair	Yes	Yes, functional
Examination light	Yes	Yes, functional
Autoclave bench top	Yes	No, not functional
Sterilizing Units, Steam, Table top	Yes	Yes, functional
Cabinets, Treatment, Dentistry	Yes	Yes, functional
Tables, Instrument	Yes	Yes, functional
Kick Buckets	Yes	Yes, functional
Waste-Disposal Units, Sharp	Yes	Yes, functional
Fundus camera	Yes	Yes, functional
LASER, OPTHALMIC, YAG	Yes	Yes, functional
Ophthalmic diagnostic set	Yes	Yes, functional

National Hospital: The national hospital is well equipped in terms of medical equipment and devices. The only exception was that the autoclave bench top related to oral health services.

Readiness

Readiness of the health facilities for providing the following selected NCD services was evaluated.

- Integrated Screening for NCDs
- Screening for Chronic respiratory disease
- Follow-up and management of hypertension
- Follow-up and management of diabetes
- Follow-up and management of chronic respiratory disease

Table 3.8 shows the domains and selected tracer items for each level of health facilities for each of the NCD services evaluated for readiness.

Table 3. 8 Domains and selected tracer items for each level of health facilities for each of the NCD services evaluated for readiness, Timor-Leste 2023

	Trained staff, guidelines and registers			Tracer equipment	Tracer diagnostics	Tracer medicines and commodities
	Trained staff	Tracer guidelines	Tracer Registers			
	• Availability of doctor in the facility received any training on Diabetes screening and care • Availability of nurse in the facility received any training on Diabetes screening and care • Availability of doctor in the facility received any training on hypertension screening and care • Availability of nurse in the facility received any training on Hypertension screening and care • Availability of doctor in the	• Availability of PEN or other Guideline for screening of NCDs at the day of survey • Availability of the guideline as algorithm for easy reference at the day of survey • Availability of WHO-CVD Risk Chart at the day of survey • Availability of referral protocols and guidelines • at the day of survey	• Maintain of registers of patients screened for diabetes • Maintain of registers of patients screened for hypertension	• Sphygmomanometer or BP apparatus/ Blood pressure Machine/Mobile/Blood Pressure manual • Weighing scale /Weighing Scales for adults • Measuring tape • Stethoscope/ Stethoscope Binaural • ECG • Urine glucose strips for domiciliary visits • Blood sugar assay	• Checking of seated blood pressure in all adults > 40 years twice with 10 minutes interval. • Checking of urine albumin • Checking of blood sugar – capillary sample (Multiple answers possible). • Measure BMI status • Screening For Albuminaria • Does the facility provide following laboratory services? • Bio-chemistry • Can the estimation of following be done in the lab: • Serum cholesterol	None

	Trained staff, guidelines and registers			Tracer equipment	Tracer diagnostics	Tracer medicines and commodities
	Trained staff	Tracer guidelines	Tracer Registers			
	facility received any training on CVD screening and care • Availability of nurse in the facility received any training on CVD screening and care					
Screening of Chronic Respiratory Disease	• Training of doctors in NCD services in last 5 years for diagnosis of Chronic Respiratory Disease • Training of nurses in NCD services in last 5 years for diagnosis of Chronic Respiratory Disease	• Availability of PEN or other Guideline for screening of NCDs at the day of survey • Availability of the guideline as algorithm for easy reference at the day of survey	None	• Stethoscope/ Stethoscope Binaural • Peak flow meter	• Simple radiology • Contrast radiology	None
Follow-up and Management of Hypertension	• Training of doctors in NCD services in last 5 years for hypertension screening and care • Training of nurses in NCD services in last 5 years for hypertension screening and care	• Availability of protocol for management of hypertension at the day of survey • Availability of guideline as algorithm for easy reference at the day of survey	• Availability of registers of patients managed for hypertension	• Sphygmomanometer or BP apparatus/ Blood pressure Machine/Mobile/Blood Pressure manual • Weighing scale /Weighing Scales for adults • Measuring tape • Stethoscope/ Stethoscope • Binaural • ECG	• Does the facility have basic laboratory services? • Does the facility provide following laboratory services? • Bio-chemistry • Can the estimation of following be done in the lab? • Serum cholesterol	• Hydrochlorothiazide • Enalapril • Atorvastatin / Simvastatin • Amlodipine
Follow-up and Management of Diabetes	• Training of doctors in NCD services in last 5 years for diabetes screening and care • Training of nurses in	• Availability of protocol for management of diabetes at the day of survey • Availability of guideline as algorithm for	• Availability of registers of patients managed for diabetes	• Sphygmomanometer or BP apparatus/ Blood pressure Machine/Mobile/Blood Pressure manual	• Availability of basic laboratory services • Availability of basic laboratory services: • Bio-chemistry • Availability of blood sugar	• Glibenclamide • Metformin • Insulin

	Trained staff, guidelines and registers			Tracer equipment	Tracer diagnostics	Tracer medicines and commodities
	Trained staff	Tracer guidelines	Tracer Registers			
	NCD services in last 5 years for diabetes screening and care	easy reference at the day of survey		• Weighing scale /Weighing Scales for adults • Measuring tape • Stethoscope/ Stethoscope • Binaural • Urine glucose strips for domiciliary visits • Blood sugar assay	estimation services • Availability of HbA1c estimation services • Availability of Urine ketone bodies estimation services • Availability of Serum cholesterol estimation services	
follow up and management of chronic respiratory disease	• Training of doctors in NCD services in last 5 years for diagnosis of CRD • Training of nurses in NCD services in last 5 years for diagnosis of CRD	• Availability of protocol for management of CRD at the day of survey • Availability of guideline as algorithm for easy reference at the day of survey • Availability of any protocol for management of exacerbated asthma or COPD • Availability of the guideline for management of exacerbated asthma or COPD as algorithm for easy reference at the day of survey	None	• Weighing scale /Weighing Scales for adults • Stethoscope/ Stethoscope • Binaural Peak flow meter • Nebulizer	• Percentage of facilities with availability of basic laboratory services • Percentage of facilities with availability of simple radiology service	• Salbutamol tablets • Salbutamol inhalers • Beclamatha zone inhaler • Oxygen • Antibiotic

Readiness for integrated screening of NCDs

Table 3. 9 Availability of services for integrated screening services of Non-Communicable Diseases, Timor-Leste 2023

Type of facilities	Number of facilities surveyed	Percentage of facilities with trained staff						Percentage of facilities with tracer guidelines				Tracer registers		Readiness score for the trained staffs and guidelines for the integrated screening services of NCD
		Availability of doctor in the facility received any training on Diabetes screening and care	Availability of nurse in the facility received any training on Diabetes screening and care	Availability of doctor in the facility received any training on hypertension screening and care	Availability of nurse in the facility received any training on Hypertension screening and care	Availability of doctor in the facility received any training on CVD screening and care	Availability of nurse in the facility received any training on CVD screening and care	Availability of PEN or other Guideline for screening of ncds at the day of survey	Availability of the guideline as algorithm for easy reference at the day of survey	Availability of WHO-CVD Risk Chart at the day of survey	Availability of referral protocols and guidelines at the day of survey	Maintain of registers of patients screened for diabetes	Maintain of registers of patients screened for hypertension	
NH	**1**	100	100	100	100	100	100	100	100	100	100	100	100	100
RHs	**5**	60.0	40.0	60.0	60.0	40.0	40.0	20.0	20.0	20.0	40.0	40.0	40.0	40
CHC-3	**7**	85.7	71.4	85.7	85.7	85.7	71.4	85.7	100.0	100.0	100.0	100.0	100.0	89
CHC 1&2	**22**	77.3	63.6	72.7	59.1	-	-	45.5	59.1	40.9	59.1	31.8	54.5	56
HP	45	37.8	11.1	40.0	11.1	-	-	15.6	15.6	6.7	35.6	20.0	42.2	24

NH: National Hospital; **RH**: Referral Hospital; **CHC**: Community Health Centre; **HP**: Health Post

The ESP specifies that integrated screening services for diabetes, hypertension, and cardiovascular diseases are to be delivered through health posts, CHC-1&2's, CHC-3's, referral hospitals and national hospital. Readiness scores for integrated screening of NCDs by the domains of trained staff, guidelines and registers for screening (Table 3.9), equipment (Table 3.10) and diagnostics (Table 3.11) are shown below. As integrated screening of NCDs does not require

medicines and commodities, the domain of medicines and commodities was not considered for the estimation of readiness of this service. Overall readiness scores for integrated screening of NCDs are shown in Table 3.12 and Figure 3.8

Table 3. 10 Readiness scores for the availability of equipment for integrated screening services of Non-Communicable Diseases, Timor-Leste 2023

Type of facilities	Number of facilities surveyed	Percentage of facilities with the tracer equipment							
		Sphygmomanometer or BP apparatus/ Blood pressure Machine/Mobile/Blood Pressure manual	Weighing scale /Weighing Scales for adults	Measuring tape	Stethoscope/ Stethoscope Binaural	ECG	Urine glucose strips for domiciliary visits	Blood sugar assay	Readiness score
NH	1	100.0	100.0	100	100.0	100.0	100.0	100.0	100
RH	5	100.0	40.0	100	100.0	100.0	60.0	80.0	83
CHC-3	7	85.7	42.9	100	100	85.7	42.9	100.0	80
CHC-1&2	22	77.3	90.9	77.3	100	13.6	40.9	59.1	66
HP	45	97.7	93.2	97.7	95.5	–	0.0	–	77

NH: National Hospital; **RH**: Referral Hospital; **CHC**: Community Health Centre; **HP**: Health Post

Table 3. 11 Readiness scores for the availability diagnostics for integrated screening services of Non-Communicable Diseases, Timor-Leste 2023

Type of facilities	Number of facilities surveyed	Check seated blood pressure in all adults > 18 years twice with 10 minutes interval.	Check urine albumin	Check blood sugar – capillary sample	Measure BMI status	Screening for Albuminuria	Does the facility provide following laboratory services: Bio-chemistry	Can the estimation of following be done in the lab: Serum cholesterol	Readiness score
NH	1	–	100	100	–	100	100	100	100
RH	5	–	40.0	40.0	–	0.0	80	80	48
CHC-3	7	–	57.1		–	28.6	–	71.4	71
CHC-1 & 2	22	63.6	18.2	40.9	59.1	–	–	–	45
HP	45	51.1	6.7	8.9	31.1	–	–	–	24

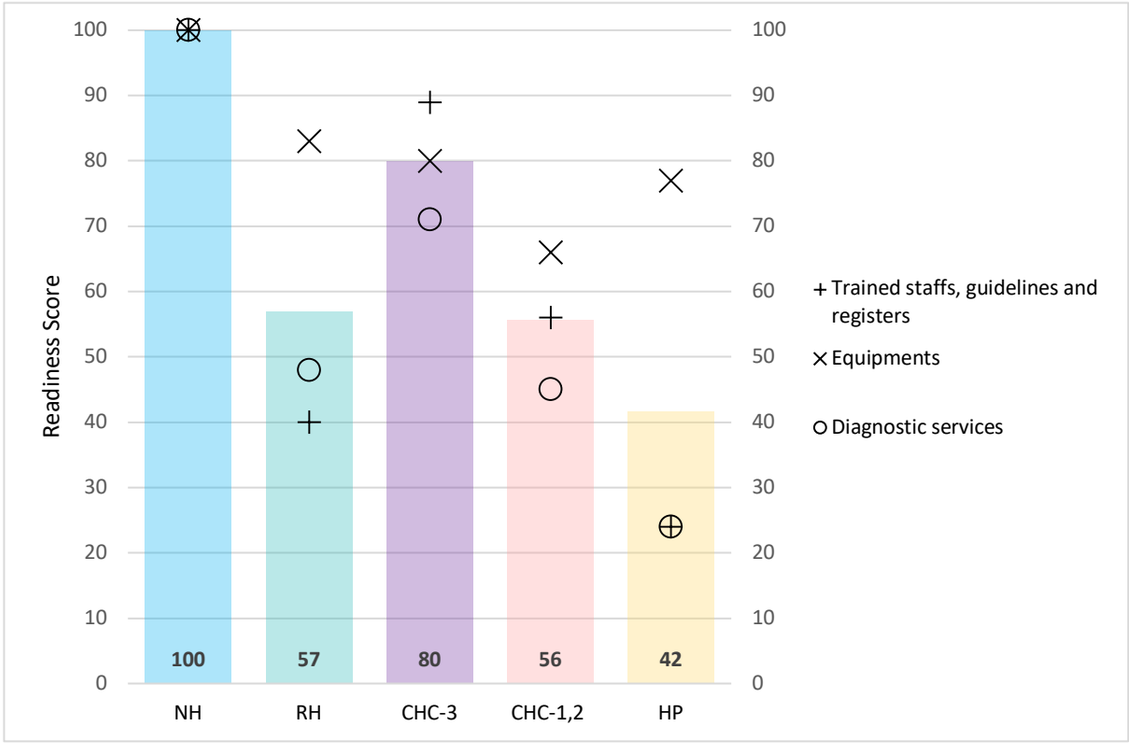
NH: National Hospital; **RH**: Referral Hospital; **CHC**: Community Health Centre; **HP**: Health Post

Table 3. 12 Overall Readiness Scores for integrated screening services of Non-Communicable Diseases, Timor-Leste 2023

Type of facilities	Total number of facilities	Readiness score for availability of trained staffs, guidelines and registers for integrated screening of Non communicable diseases	Readiness score for availability of equipment or screening of integrated NCD services	Readiness score for the availability of diagnostic services for the or screening of integrated NCD services	Overall readiness score for integrated screening of Non-Communicable disease
NH	1	100	100	100	**100**
RH	5	40	83	48	**57**
CHC-3	7	89	80	71	**80**
CHC-1&2	22	56	66.0	45	**56**
HP	45	24	77.0	24	**42**

NH: National Hospital; **RH**: Referral Hospital; **CHC**: Community Health Centre; **HP**: Health Post

Figure 3. 88 Readiness score for integrated screening services of NCDs, by type of health facility, Timor-Leste 2023



Note: Figure inside each bar indicates overall readiness score while symbols denote the level of readiness score for respective domain

Readiness scores for availability of trained staffs and guidelines: The National Hospital scored 100% for readiness in the domain of availability of trained staff, guidelines and registers for integrated screening for NCDs (Table 3.9). This score was least in HPs with doctors.

Readiness scores for the availability of equipment: CHCs 1,2 showed low readiness scores for the domain of for the availability of equipment for integrated screening of NCDs.

*Readiness scores for the availability diagnostics: T*he ESP protocol for primary, secondary and tertiary health care services specified National Hospital and RHs to possess the facilities to perform simple laboratory testing which are required to confirm the diagnosis of NCDs among screened positive. National Hospital showed a readiness score of 100% but all other categories of health facilities scored low in this domain.

Overall readiness score for integrated screening of NCDs: National Hospital scored an overall readiness score of 100% to perform integrated NCD services (Figure 3.87) while other categories of facilities showed that they were not fully ready to perform CRD screening. Low Readiness score for availability of trained staffs, guidelines and registers and for the availability of diagnostics RH, CHC 1and 2 ad HP with doctors.

Readiness for screening of chronic respiratory disease

Readiness scores for screening of CRD by the domains of trained staffs and guidelines for screening (Table 3.13), equipment (Table 3.14) and diagnostics (Table 3.15) are shown below. As screening for CRD does not require medicines and commodities, the domain of medicines and commodities was not considered for the estimation of readiness of this service. Overall readiness scores for screening of CRD are shown in Table 3.16 and Figure 3.88.

Table 3. 13 Readiness Scores for availability of trained staff and guidelines for screening of Chronic Respiratory Disease, Timor-Leste 2023

Type of facilities	Number of facilities surveyed	Percentage facilities with trained staff		Percentage facilities with tracer guidelines		Readiness score for the trained staffs and guidelines for the screening services for of Chronic Respiratory Disease
		Training of doctors in NCD services in last 5 years for diagnosis of Chronic Respiratory Disease	Training of nurses in NCD services in last 5 years for diagnosis of Chronic Respiratory Disease	Availability of PEN or other Guideline for screening of NCDs at the day of survey	Availability of the guideline as algorithm for easy reference at the day of survey	
NH	1	100	100	100	100	100
RH	5	60.0	60.0	20.0	20.0	40
CHC-3	7	85.7	71.4	85.7	100.0	86
CHC-1&2	22	77.3	54.5	45.5	53.8	58
HP	45	53.3	17.8	15.6	15.6	25.6

NH: National Hospital; **RH**: Referral Hospital; **CHC**: Community Health Centre; **HP**: Health Post

Table 3. 14 Readiness scores for the availability of equipment for screening of Chronic Respiratory Disease, Timor-Leste 2023

Type of facilities	Number of facilities surveyed	Percentage facilities with the tracer equipment		Readiness score for equipment
		Stethoscope/ Stethoscope Binaural	Peak flow meter	
NH	1	100.0	100.0	100
RH	5	100.0	40.0	70
CHC-3	7	85.7	42.9	64
CHC-1&2	22	100	31.8	65.9
HP	45	93.3	_	93.3

NH: National Hospital; **RH**: Referral Hospital; **CHC**: Community Health Centre; **HP**: Health Post

Table 3. 15 Readiness scores for the availability of diagnostics for screening of Chronic Respiratory Disease, Timor-Leste 2023

Type of facilities	Number of facilities surveyed	Percentage facilities with simple radiology	Percentage facilities with contrast radiology	Readiness score for diagnostic services for screening of Chronic Respiratory Disease
NH	1	100.0	100.0	100
RH	5	100.0	40.0	70

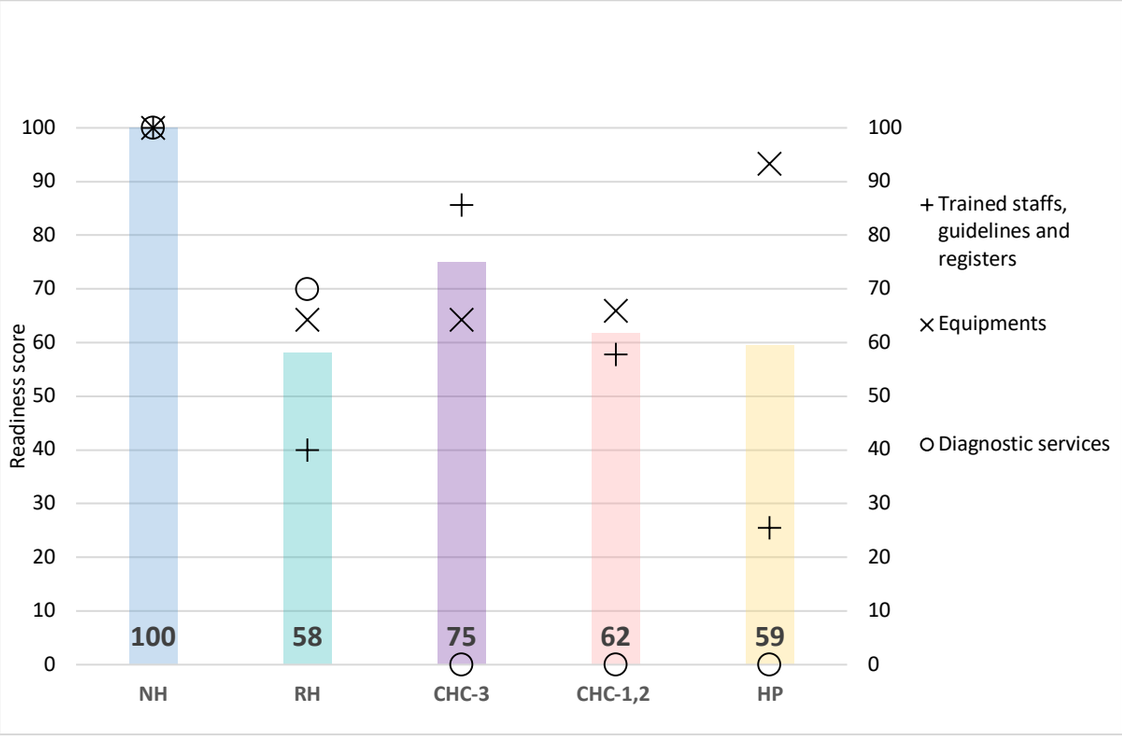
NH: National Hospital; **RH**: Referral Hospital

Table 3. 16 Overall readiness scores for screening of Chronic Respiratory Disease, Timor-Leste 2023

Facilities	Total number of facilities	Readiness score for availability of trained staffs, and guidelines for screening of Chronic Respiratory Disease	Readiness score for availability of equipment for screening of Chronic Respiratory Disease	Readiness score for availability of diagnostics for screening of Chronic Respiratory Disease	Overall readiness score for screening of Chronic Respiratory Disease
NH	1	100	100	100	100
RH	5	40	70	70	60
CHC -3	7	86	64	_	75
CHC-1&2	22	58	65.9	_	62
HP	45	26	93.3	_	59

NH: National Hospital; **RH**: Referral Hospital; **CHC**: Community Health Centre; **HP**: Health Post

Figure 3. 89 Readiness score for screening services of CRD, by type of health facility, Timor-Leste 2023



Note: Figure inside each bar indicates overall readiness score while symbols denotes the level of readiness score for respective domain

Readiness Scores for availability of trained staffs and guidelines: The national hospital scored 100% for readiness in the domain of availability of trained staffs and guidelines for screening of chronic respiratory disease (Table 3.13). This score was least in HPs with doctors.

Readiness scores for the availability of equipment: CHCs 1,2 and 3) showed low readiness scores for the domain of for the availability of equipment for screening of Chronic Respiratory Disease.

Readiness scores for the availability diagnostics: The ESP protocol for primary, secondary and tertiary health care services specified National Hospital and RHs to possess the facilities to perform simple radiology and contrast radiology which are required to confirm the diagnosis of CRD among screened positive. The readiness score for RH was 70%.

Overall readiness score for screening of CRD services: National Hospital scored an overall readiness score of 100% to perform CRD screening (Figure 3.88) while other categories of facilities showed that they were not fully ready to perform CRD screening. Low Readiness score for availability of trained staffs, and guidelines for screening of CRD was responsible for low scores in RH, CHC 1and 2 ad HP with doctors while low readiness score for availability of equipment for screening of CRD was the responsible for the low readiness in CHC 3.

Percentage of facilities with availability of all tracers by domains for screening of CRD by health facility is shown in Table 3.17.

Table 3. 17 Percentage of facilities with availability of all tracers by domains for screening of Chronic Respiratory Disease by health facility, Timor-Leste 2023

Type of facilities	Percentage of facilities with all tracer items for availability of trained staffs and guidelines for screening of Chronic Respiratory Disease	Percentage of facilities with all tracer equipment for screening of Chronic Respiratory Disease	Percentage of facilities with all tracer diagnostic services for screening of Chronic Respiratory Disease
National Hospital (NH)	100	100	100
Referral hospitals (RH)	0.0	40.0	60.0
Community health centres (level3) (CHC-3)	57.1	42.9	_
Community health centres (level 1 and 2) (CHC-1 and 2)	31.8	36.4	_
Health Post (HP)	6.7	93.3	_

Only the National Hospital had all the tracer items of all domains. None of the RH had all tracer items related to availability of trained staffs and guidelines for screening of CRD. Approximately half the CHC 3 and approximately one third of CHC 3 had all the tracer items for the domains of availability of trained staffs and guidelines and tracer equipment for screening of CRD.

Readiness for follow-up and management of diabetes

The ESP of Timor-Leste assigns the National Hospital, RH and CHC 3 to provide the service of follow-up and management of diabetes and the readiness score were computed accordingly. Readiness scores for follow-up and management of diabetes by the domains of trained staffs. guidelines and registers (Table 3.18), equipment (Table 3.19), diagnostics (Table 3.20) and medicines and commodities (Table 3.21) are shown below. Overall readiness scores for screening of follow-up and management of diabetes are shown in Table 3.22 and Figure 3.89.

Table 3. 18 Readiness scores for availability of trained staff, guidelines and registers for follow up and management of Diabetes, Timor-Leste 2023

Type of facilities	Number of facilities surveyed	Percentage of facilities with trained staff		Percentage of facilities with tracer guidelines		Percentage of facilities with tracer registers	Readiness score for the trained staffs, guidelines and registers for follow up and management for diabetes
		Training of doctors in NCD services in last 5 years for diabetes screening and care	Training of nurses in NCD services in last 5 years for diabetes screening and care	Availability of protocol for management of diabetes at the day of survey	Availability of guideline as algorithm for easy reference at the day of survey	Availability of registers of patients managed for diabetes	
NH	1	100	100	100	100	100	**100**
RH	5	60.0	40	40.0	60.0	40.0	**48**
CHC-3	7	71.4	85.7	71.4	71.4	71.4	**74**

NH: National Hospital; **RH**: Referral Hospital; **CHC**: Community Health Centre

Table 3. 19 Readiness scores for the availability of equipment for follow up and management of Diabetes, Timor-Leste 2023

Type of facilities	Number of facilities surveyed	Percentage of facilities with the tracer equipment						
		Sphygmomanometer or BP apparatus/ Blood pressure Machine/Mobile/Blood Pressure manual	Weighing scale /Weighing Scales for adults	Measuring tape	Stethoscope/ Stethoscope Binaural	Urine glucose strips for domiciliary visits	Blood sugar assay	Readiness score for equipment
NH	1	100.0	100.0	100.0	100.0	100.0	100.0	**100**
RH	5	100.0	100.0	100.0	100.0	60.0	80.0	**90**
CHC-3	7	100.0	100.0	100.0	100.0	42.9	100.0	**90**

NH: National Hospital; **RH**: Referral Hospital; **CHC**: Community Health Centre

Table 3. 20 Readiness scores for the availability of diagnostics for follow up and management of Diabetes, Timor-Leste 2023

Type of facilities	Number of facilities surveyed	Availability of basic laboratory services	Availability of basic laboratory services: Bio-chemistry	Availability of blood sugar estimation services	Availability of HbA1c estimation services	Availability of Urine ketone bodies estimation services	Availability of Serum cholesterol estimation services	Readiness score for diagnostics related to follow up and management of Diabetes
NH	1	100	100	100	100	100	100	**100**
RH	5	100	80	100	60	100	80	**87**
CHC-3	7	100	–	**85.7**	–	–	**71.4**	**86**

NH: National Hospital; **RH**: Referral Hospital; **CHC**: Community Health Centre

Table 3. 21 Readiness scores for the availability of medicines and commodities for follow up and management of Diabetes, Timor-Leste 2023

Type of facilities	Number of facilities surveyed	Percentage of facilities with tracer medicines and commodities			Readiness score for medicines and commodities
		Glibenclamide	Metformin	Insulin	
NH	1	100	100	100	**100**
RH	5	40.0	20.0	20.0	**27**
CHC-3	7	71.4	57.1	0.0	**43**

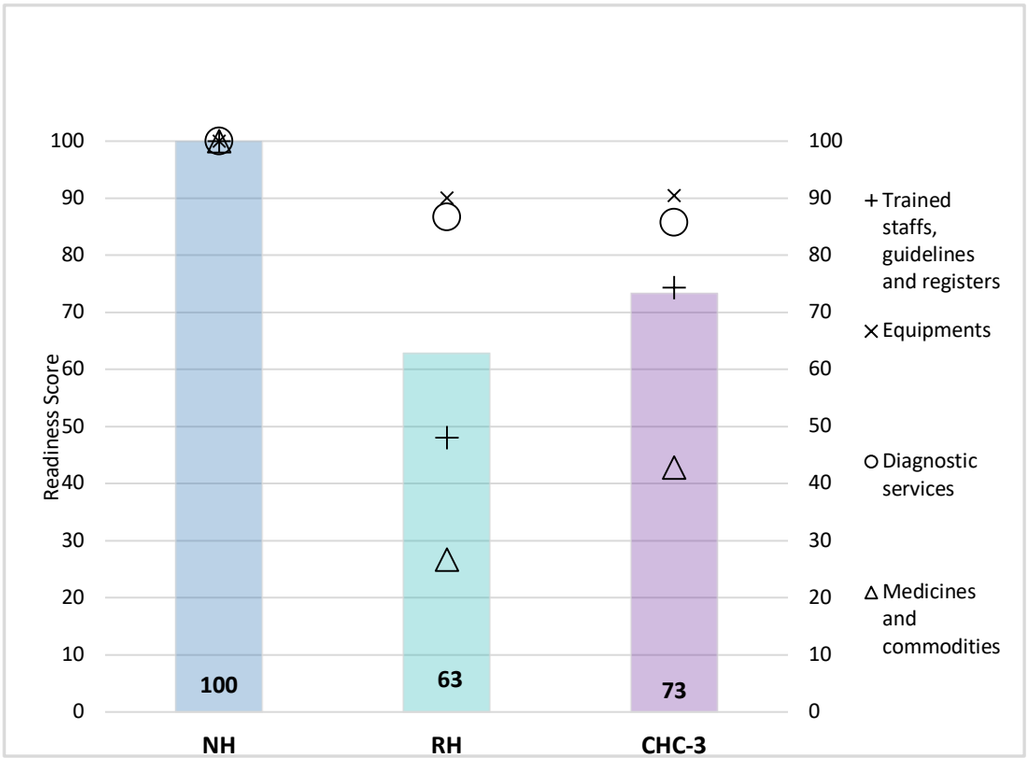
NH: National Hospital; **RH**: Referral Hospital; **CHC**: Community Health Centre

Table 3. 22 Overall Readiness Scores for follow up and management of Diabetes, Timor-Leste 2023

Facilities	Total number of facilities	Readiness score for availability of trained staffs, guidelines and registers for the follow up and management of Diabetes	Readiness score for availability of equipment for the follow up and management of Diabetes	Readiness score for the availability of diagnostic services for the follow up and management of Diabetes	Readiness score for the availability of medicines and commodities for the follow up and management of Diabetes	Overall readiness score for follow up and management for Diabetes
NH	1	100	100	100	100	**100**
RH	5	48	90	87	27	**63**
CHC-3	7	74	90	86	43	**73**

NH: National Hospital; **RH**: Referral Hospital; **CHC**: Community Health Centre

Figure 3. 90 Readiness score for screening services of diabetes, by type of health facility, Timor-Leste 2023



Note: Figure inside each bar indicates overall readiness score while symbols denotes the level of readiness score for respective domain

Readiness Scores for availability of trained staffs, guidelines and registers: The national hospital scored 100% for readiness in the domain of availability of trained staffs, guidelines and registers for services of follow-up and management of diabetes. This score was least (48%) in RHs.

Readiness scores for the availability of equipment: All three categories of facilities scored well in the domain of availability of tracer equipment for follow up and management of diabetes.
Readiness scores for the availability diagnostics: All three categories of facilities scored well in the domain of availability of tracer equipment for follow up and management of diabetes.

Readiness scores for the availability of medicines and commodities: The national hospital scored 100% for readiness in the domain of availability of tracer medicines and commodities for services of Follow-up and Management of Diabetes. This score was least (27%) in RHs.

Overall readiness score for follow up and management of diabetes: National Hospital scored an overall readiness score of 100% to perform follow up and management of Diabetes, (Figure 3.89) while other

categories of facilities showed that they were not fully ready to perform follow up and management of diabetes. Low Readiness score for availability of trained staffs, and guidelines was responsible for low scores in RH, CHC3 was due to low readiness score for availability of medicines and commodities for follow up and management of diabetes.

Percentage of facilities with availability of all tracers by domains for screening of diabetes by health facility is shown in Table 3.23.

Table 3. 23 Percentage of facilities with availability of all tracers by domains for follow up and management of Diabetes, Timor-Leste 2023

Type of facility	Percentage of facilities with all tracer items for availability of trained staff and guidelines, registers for the follow up and management of Diabetes	Percentage of facilities with all tracer equipment for the follow up and management of Diabetes	Percentage of facilities with all tracer diagnostics for the follow up and management of Diabetes	Percentage of facilities with all tracer medicines and commodities for the follow up and management of Diabetes
NH	100	100	100	100
RH	0.0	40	60.0	0.0
CHC-3	42.9	42.9	71.4	0.0

NH: National Hospital; **RH**: Referral Hospital; **CHC**: Community Health Centre

Only the National Hospital had all the tracer items of all domains. None of the RH had all tracer items related to the domains of availability of trained staffs and guidelines and registers and the domain of medicines and commodities for the follow up and management of diabetes. None of the CHC 3 had all tracer items in the domain of medicines and commodities for the follow up and management of diabetes.

Readiness for follow-up and management of hypertension

The ESP assigns the National Hospital, RH and CHC 3 to provide this service and the readiness scores were computed accordingly. Readiness scores by the domains of trained staffs, guidelines and registers (Table 3.24), equipment (Table 3.25), diagnostics (Table 3.26) and medicines and commodities (Table 3.27) are shown below. Overall readiness scores for follow-up and management of hypertension are shown in Table. 3.28 and Figure 3.90.

Table 3. 24 Readiness Scores for availability of trained staffs, guidelines and registers for follow up and management of hypertension, Timor-Leste 2023

Type of facilities	Number of facilities surveyed	Percentage of facilities with trained staff		Percentage of facilities with tracer guidelines		Percentage of facilities with tracer registers	Readiness score for the trained staffs, guidelines and registers for follow up and management for hypertension
		Training of doctors in NCD services in last 5 years for hypertension screening and care	Training of nurses in NCD services in last 5 years for hypertension screening and care	Availability of protocol for management of hypertension at the day of survey	Availability of guideline as algorithm for easy reference at the day of survey	Availability of registers of patients managed for hypertension	
NH	1	100	100	100	100	100	**100**
RH	5	60.0	60.0	60.0	60.0	40.0	**56**
CHC-3	7	85.7	85.7	100.0	100.0	71.4	**89**

NH: National Hospital; **RH**: Referral Hospital; **CHC**: Community Health Centre

Table 3. 25 Readiness scores for the availability of equipment for follow up and management of Hypertension, Timor-Leste 2023

Type of facilities	Number of facilities surveyed	Percentage of facilities with the tracer equipment					
		Sphygmomanometer or BP apparatus/ Blood pressure Machine/Mobile/Blood Pressure manual	Weighing scale /Weighing Scales for adults	Measuring tape	Stethoscope/ Stethoscope Binaural	ECG	Readiness score for equipment
NH	1	100.0	100.0	100.0	100.0	100.0	**100**
RH	5	100.0	100.0	100.0	100.0	100.0	**100**
CHC-3	7	100.0	100.0	100.0	100.0	85.7	**97**

NH: National Hospital; **RH**: Referral Hospital; **CHC**: Community Health Centre

Table 3. 26 Readiness scores for the availability diagnostics for follow up and management of Hypertension, Timor-Leste 2023

Type of facilities	Number of facilities surveyed	Does the facility have basic laboratory services?	Does the facility provide following laboratory services: Bio-chemistry	Can the estimation of following be done in the lab: Serum cholesterol	Readiness score for diagnostics related to follow up and management for hypertension
NH	1	100	100	100	**100**
RH	5	100	80	80	**87**
CHC-3	7	100	_	**71.4**	**86**

NH: National Hospital; **RH**: Referral Hospital; **CHC**: Community Health Centre

Table 3. 27 Readiness scores for the availability of medicines and commodities for follow up and management of hypertension, Timor-Leste 2023

Type of facilities	Number of facilities surveyed	Percentage of facilities with tracer medicines and commodities				Readiness score for medicines and commodities
		Hydrochlorothiazide	Enalapril	Atorvastatin and Simvastatin	Amlodipine	
NH	1	0.0	0.0	0.0	100.0	**25**
RH	5	40.0	0.0	0.0	80.0	**30**
CHC-3	7	28.6	0.0	57.1	71.4	**39**

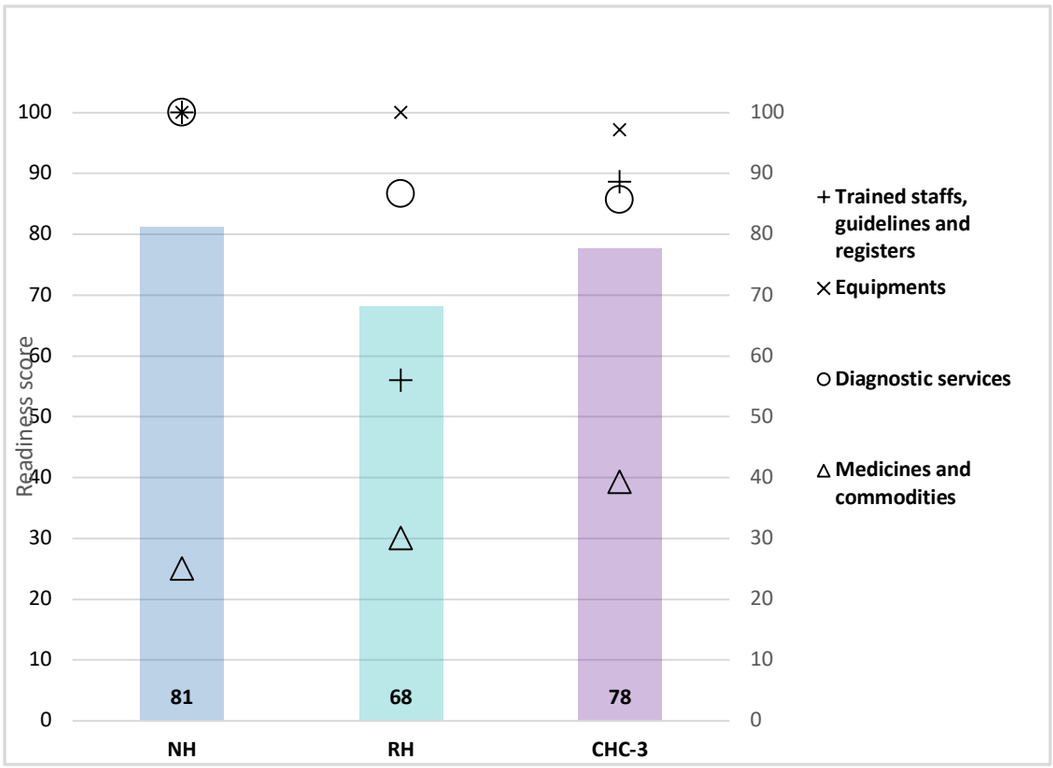
NH: National Hospital; **RH**: Referral Hospital; **CHC**: Community Health Centre

Table 3. 28 Overall Readiness Scores for follow up and management of hypertension, Timor-Leste 2023

Facilities	Total number of facilities	Readiness score for availability of trained staff, guidelines and registers for the follow up and management for hypertension	Readiness score for availability of equipment for the follow up and management for hypertension	Readiness score for the availability of diagnostics for the follow up and management for hypertension	Readiness score for the availability of medicines and commodities for the follow up and management for hypertension	Overall readiness score for follow up and management for hypertension
NH	1	100	100	100	25	**81**
RH	5	56	100	87	30	**68**
CHC-3	7	89	97	86	39	**78**

NH: National Hospital; **RH**: Referral Hospital; **CHC**: Community Health Centre

Figure 3. 91 Readiness score for follow up and management of hypertension, by type of health facility, Timor-Leste 2023



Note: Figure inside each bar indicates overall readiness score while symbols denotes the level of readiness score for respective domain

Readiness Scores for availability of trained staffs, guidelines and registers: The national hospital scored 100% for readiness in the domain of availability of trained staffs, guidelines and registers for services of Follow-up and Management of hypertension. This score was least (56%) in RHs.

Readiness scores for the availability of equipment: All three categories of facilities scored well in the domain of availability of equipment for follow up and management of hypertension**.**

Readiness scores for the availability diagnostics: All three categories of facilities scored well in the domain of availability of equipment for follow up and management of hypertension.

*Readiness scores for the availability of medicines and commodities***:** All three categories of facilities scored low in the domain of availability of equipment for follow up and management of hypertension.

Overall readiness score for follow up and management of hypertension: None of the facilities scored 100% to offer the service of follow up and management of hypertension. Low readiness score for availability of medicines and commodities for follow up and management of hypertension was responsible for lower readiness in all categories of facilities.

Percentage of facilities with availability of all tracers by domains for follow up and management of hypertension by health facility is shown in Table 3.29

Table 3. 29 Percentage of facilities with availability of all tracers by domains for follow up and management of Hypertension, Timor-Leste 2023

Type of facility	Percentage of facilities with all tracer items for availability of trained staff and guidelines for the follow up and management of Hypertension	Percentage of facilities with all tracer equipment for the follow up and management of Hypertension	Percentage of facilities with all tracer diagnostics for the follow up and management of Hypertension	Percentage of facilities with all tracer medicines and commodities for the follow up and management of Hypertension
NH	100	100	100	0.0
RH	40.0	100.0	80.0	0.0
CHC-3	57.1	71.4	71.4	0.0

NH: National Hospital; **RH**: Referral Hospital; **CHC**: Community Health Centre

The National Hospital had all the tracer items of all domains expect in the domain of tracer medicines and commodities for the follow up and management of Hypertension. None of the of the categories of facilities had any facility with all the tracer medicines and commodities for the follow up and management of hypertension.

Readiness for Follow-up and Management of chronic respiratory disease

The ESP assigns the National Hospital, RH and CHC 3 to provide this service and the readiness scores were computed accordingly. Readiness scores by the domains of trained staffs and guidelines (Table 3.30) equipment (Table 3.31). diagnostics (Table 3.32) and medicines and commodities (Table 3.33) are shown below. Overall readiness scores for follow-up and management of CRD are shown in Table 3.34 and Figure 3.91

Table 3. 30 Readiness Scores for availability of trained staffs and guidelines for follow up and management of chronic respiratory disease, Timor-Leste 2023

Type of facilities	Number of facilities surveyed	Percentage of facilities with trained staff		Percentage of facilities with tracer guidelines				Readiness score for the trained staff and guidelines related to follow up and management for CRD
		Training of doctors in NCD services in last 5 years for diagnosis of CRD	Training of nurses in NCD services in last 5 years for diagnosis of CRD	Availability of protocol for management of CRD at the day of survey	Availability of guideline as algorithm for easy reference at the day of survey	Availability of any protocol for management of exacerbated asthma or COPD	Availability of the guideline for management of exacerbated asthma or COPD as algorithm for easy reference at the day of survey	
NH	1	100	100	100	100			**100**
RH	5	60	60	60.0	40.0	60.0	60.0	**57**
CHC-3	7	85.7	71.4	71.4	57.1	-	-	**71**

NH: National Hospital; **RH**: Referral Hospital; **CHC**: Community Health Centre

Table 3. 31 Readiness scores for the availability of equipment for follow up and management of chronic respiratory disease, Timor-Leste 2023

Type of facilities	Number of facilities surveyed	Percentage of facilities with the tracer equipment				Readiness score for equipment
		Weighing scale /Weighing Scales for adults	Stethoscope/ Stethoscope Binaural	Peak flow meter	Nebulizer	
NH	1	100.0	100.0	100.0	100.0	**100**
RH	5	100.0	100.0	40.0	100.0	**85**
CHC-3	7	100.0	85.7	42.9	100.0	**82**

NH: National Hospital; **RH**: Referral Hospital; **CHC**: Community Health Centre

Table 3. 32 Readiness scores for the availability diagnostics for follow up and management of chronic respiratory disease, Timor-Leste 2023

Type of facilities	Number of facilities surveyed	Percentage of facilities with availability of basic laboratory services	Percentage of facilities with availability of simple radiology service	Readiness score for diagnostic services related to follow up and management of CRD
NH	1	100.0	100.0	**100**
RH	5	100.0	100.0	**100**
CHC-3	7	100.0	-	**100**

NH: National Hospital; **RH**: Referral Hospital; **CHC**: Community Health Centre

Table 3. 33 Readiness scores for the availability of medicines and commodities for follow up and management of chronic respiratory disease, Timor-Leste 2023

Type of facilities	Number of facilities surveyed	Percentage of facilities with tracer medicines and commodities					Readiness score for medicines and commodities
		Salbutamol tablets	Salbutamol inhalers	Beclamathazone inhaler	Oxygen	Antibiotic	
NH	1	100	100	100	100	100	**100**
RH	5	60.0	40.0	60.0	40.0	40.0	**48**
CHC-3	7	71.4	28.6	57.1	_	42.9	**50**

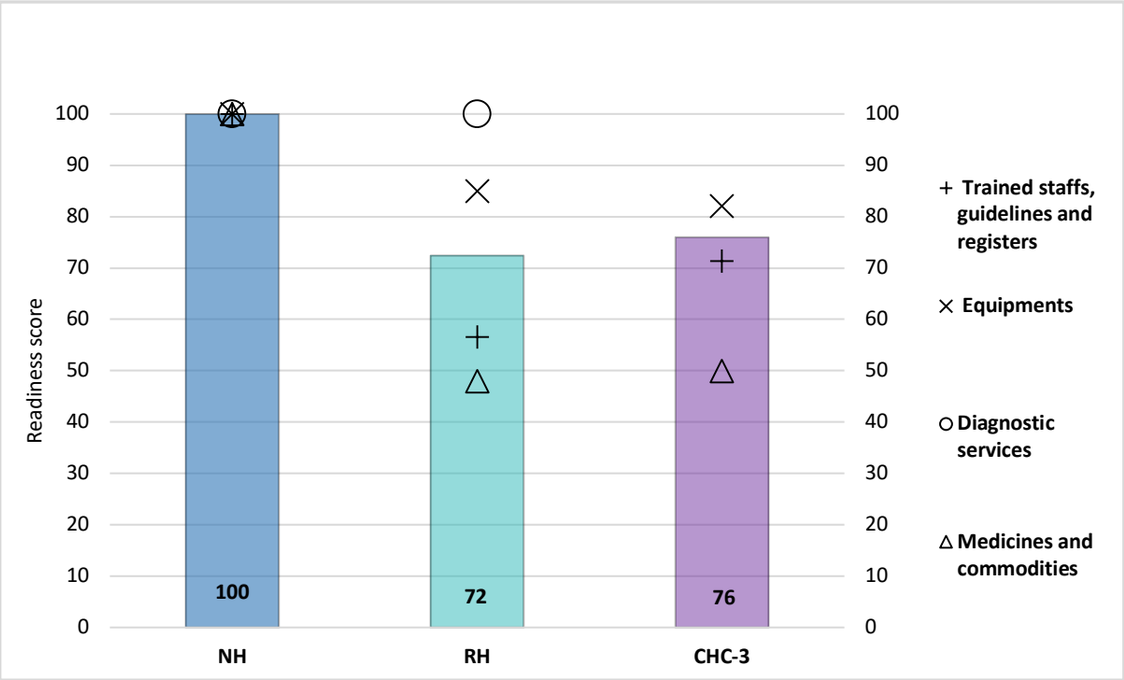
NH: National Hospital; **RH**: Referral Hospital; **CHC**: Community Health Centre

Table 3. 34 Overall Readiness Scores for follow up and management of chronic respiratory disease, Timor-Leste 2023

Type of facilities	Readiness score for availability of trained staffs, guidelines and registers for the follow up and management of CRD	Readiness score for availability of equipment for the follow up and management of CRD	Readiness score for the availability of diagnostics for the follow up and management of CRD	Readiness score for the availability of medicines and commodities for the follow up and management of CRD	Overall readiness score for follow up and management for CRD
NH	100	100	100	100	**100**
RH	57	85	100	48	**72**
CHC-3	71	82	100	50	**76**

NH: National Hospital; **RH**: Referral Hospital; **CHC**: Community Health Centre

Figure 3. 92 Readiness score for follow up and management of chronic respiratory disease, by type of health facility, Timor-Leste 2023



Note: Figure inside each bar indicates overall readiness score while symbols denotes the level of readiness score for respective domain

Readiness Scores for availability of trained staffs, guidelines and registers: The national hospital scored 100% for readiness in the domain of availability of trained staffs, guidelines and registers for services of follow-up and management of CRD. This score was least (57%) in RHs.

Readiness scores for the availability of equipment: All three categories of facilities scored well in the domain of availability of equipment for follow up and management of CRD.

Readiness scores for the availability diagnostics: All three categories of facilities scored 100% in the domain of availability of equipment for follow up and management of CRD.

Readiness scores for the availability of medicines and commodities: The national hospital scored 100% for readiness in the domain of availability of medicines and commodities for services of Follow-up and Management of CRD. This score was least (48%) in RHs.

Overall readiness score for follow up and management of CRD: National Hospital scored an overall readiness score of 100% to perform follow up and management of CRDs, (Figure 3.90) while other categories of facilities showed that they were not fully ready to perform follow up and management of CRD. Low Readiness score for availability of trained staffs, and guidelines and availability of medicines and commodities was responsible for low scores in RH, while low readiness score for availability of medicines and commodities in CHC3 for follow up and management of CRD.

Percentage of facilities with availability of all tracers by domains for follow up and management of CRD by health facility is shown in Table 3.35.

Table 3. 35 Percentage of facilities with availability of all tracers by domains for follow up and management of chronic respiratory disease, Timor-Leste 2023

Type of facility	Percentage of facilities with all 6 tracer items for availability of trained staffs and guidelines for the follow up and management of CRD	Percentage of facilities with all 4 tracer items for availability of equipment for the follow up and management of CRD	Percentage of facilities with all 2 tracer items for availability of diagnostics for the follow up and management of CRD	Percentage of facilities with all 5 tracer items for availability of medicines and commodities for the follow up and management of CRD
NH	100	100	100	100
RH	20	40	100	20
CHC-3	42.9	42.9	100	14.3

NH: National Hospital; **RH**: Referral Hospital; **CHC**: Community Health Centre

Only the National Hospital had all the tracer items of all domains. All RH and all CHC3 had all tracer items related to the domains of for availability of diagnostic services for the follow up and management of CRD. RH and CHC3 with all tracer items was lowest in the domain of medicines and commodities for the follow up and management of CRD.

IV. DISCUSSION

The first ever National survey for NCD risk factors and injuries using WHO STEPS approach in Timor-Leste conducted in 2014 highlighted the high burden of NCDs and its risk factors. Over the past decade, the government of Timor-Leste designed and implemented several evidence-based policy and programmatic interventions based on WHO technical packages to control NCD risk factors and to manage the NCD burden. The evidence of the second National Survey on NCDs and NCD risk factors among adults in 2023, after a decade, can be considered to provide a valuable opportunity to understand the trajectory of the NCDs and NCD burden in the country with insights into strengthening the policy and programmatic responses.

Tobacco use, physical inactivity, unhealthy diet, and the harmful use of alcohol, are the most important common modifiable risk behaviours for NCDs. The present survey in 2023 reveals a continued high prevalence of all of these risk factors highlighting the urgent need for further strengthening of evidence-based interventions based on the WHO technical packages to reach highest levels of achievements.

The current tobacco use in Timor-Leste continues to be alarmingly high, with 60% of the population reported as current smokers and/or smokeless tobacco users in 2023 compared to 56.1% in 2014. The proportion of female users also showed a marked increase with 44.6% in 2023 compared to 28.9% in 2014, while the corresponding proportion of male users was 77.5% in 2023 and 70.6% in 2014. In relation to the type of tobacco use, it is seen that the increase in the current tobacco use in 2023 is a reflection of the increase use of smokeless tobacco (26% in 2023; 19.8% in 2014) with the current smokers showing a decline over the decade (42.8% in 2023; 48.6% in 2014). The age at smoking initiation is inversely associated with nicotine dependence with people who start smoking earlier in life suffer more difficultly in quitting smoking than those who start later in life.[10] The present survey revealed that in Timor-Leste, the mean age of initiation of smoking among current daily users has increased by approximately two years compared to the 2014 survey. This pattern of increase in the age of initiation was more pronounced among females, with the increase in the mean age of initiation by nearly six years.

Second-hand smoke exposure is also found to be alarmingly high in 2023. Approximately 80% adults were exposed to second-hand smoke at home with another 50% in workplaces. This proportion of

second-hand exposure at workplaces has slightly decreased from almost 90% reported in the 2014 survey.

In light of these findings, further strengthening of tobacco control policies based on the WHO MPOWER technical package is crucial. Specific attention should be paid on applying the relevant measures targeting smokeless tobacco. As of June 2024, the country is certified to have implemented the MPOWER measure on 'Warn about the dangers of tobacco' at its highest level. However, the proportion of current smokers who noticed information about the dangers of smoking in the media during the past 30 days, and thought of quitting was 33.3% in 2023 indicating room for improvement. A particular focus should be on the MPOWER measures of protecting people from tobacco smoke by establishing smoke-free environments in public and workspaces and offering help to quit tobacco use through the expansion of access to context-specific smoking cessation programmes and resources. integrated screening services for NCDs with screening for tobacco use and tobacco cessation support is specified as part of the Essential Services Packages of Timor-Leste.[8,9] Thus, integrating tobacco cessation counseling and support services to all levels of health care facilities should be considered as a priority measure to reduce the burden of smoked and smokeless tobacco use in the country.

Regarding alcohol consumption, approximately one in four adults (28.6%) is reported as a current drinker in the present survey with the proportion of current drinkers among males (45.9%) being much higher compared to females (13.4%). Though the proportion of current drinkers have remained same (28.6%) as in 2014, the current drinking in females have substantially increased (current female drinkers in 2014 2.0%) Those who engaged in heavy episodic drinking (6 or more drinks at a given episode) had decreased to 3.7% in 2023 compared to 14.5% in 2014.

While policy and programmatic interventions implemented by the Government has shown positive outcomes in the country, the results indicate the need for continued and strengthened focus on the efforts, specifically also targeting the females. Regional Action plan to reduce harmful use of alcohol (2014-2025)[11] outlines the regionally relevant SAFER interventions[12] related to strengthening restrictions on alcohol availability, advancing and enforcing drink driving counter measures, facilitating access to screening, brief interventions and treatment, enforcing bans or comprehensive restrictions on alcohol advertising, sponsorship, and promotion, ad raising prices on alcohol through excise taxes and pricing policies.

The WHO recommends a minimum of five daily servings of fruits and/or vegetables. Despite an improvement from the previous survey, where three-fourths (77.5%) of the population did not meet this recommendation, the current survey still revealed a significant consumption gap with nearly half (46.7%) not meeting the criteria. A substantial body of evidence support, dietary salt reduction in hypertensives and a salt reduction in the general population to reduce risk of hypertension and cardiovascular disease.[13] The results of the present survey showed that salt consumption is high in the country. Mean intake of salt per day assessed among a sub sample of individuals indicated it as 9.26 g against the upper limit of 5 g per day as per WHO guidance. Further, the proxy indicator of the percentage of individuals who always or often add salt or salty sauce to their food before or during eating is high, with three-quarters (74.8%) of the respondents practicing this habit. There has been no change in this behaviour since the last survey in 2014 (78%).

Considering the multifactorial nature of nutrition-related issues, it is important to have diverse strategies to address the aforementioned nutritional challenges. Campaigns to educate the public on the need for optimum consumption of fruits and vegetables and health risks associated with high salt intake and excessive consumption of sugary drinks, it is crucial. WHO SHAKE package[14] outlines five evidence-based measures namely, promote reformulation of foods and meals to contain less sodium, adopt standards for labelling - implement standards for effective and accurate labelling, adopt policies to protect children from the harmful impact of food marketing, educate/ communicate to empower individuals to eat less salt (and other foods) and support settings to promote healthy eating. As of 2024, the global report on sodium intake reduction indicates[15] that Timor-Leste is yet to implement the SHAKE measures and this should now be given due priority.

It was noted that approximately one-third of individuals had insufficient physical activity (35.7%) compared to the recommended levels and that the situation has much deteriorated since 2014 where the corresponding proportion was much lower (16.5%). The Global Action Plan on Physical Activity 2018–2030,[16] outlines evidence-based policies applicable and adaptable to all country contexts to increase levels of physical activity and provides countries with a roadmap for implementing a national response to increase health and wellbeing. Of the proposed policy and programmatic interventions, Timor-Leste was shown to have implemented the settings approach to promote physical activity in schools, workplaces and community with room for improvement in other measures.[17]

The present survey in 2023 revealed that the problem of overweight and obesity had worsened over the past decade. The proportion of overweight has increased from 11.2% to 18.1 % while the

proportion of obesity had increased from 0.9% to 3.4%. As in 2014, the issue of overweight and obesity was higher in women. In this context, the need for nutritional programming addressing is the nutritional problems it is of paramount importance to implement gender-sensitive to interventions addresses the specific needs of the female population.

Care cascades are robust, well-established indicators that could be more widely applied to monitor health service delivery for NCDs.[18] It quantifies the engagement of patients through the continua of chronic care services of for chronic NCD. The present survey revealed that approximately one-quarter of the adults (22.3%) had raised blood pressure and 5.3% had raised fasting blood glucose. Estimates of the care cascade for hypertension revealed that of those with raised BP, only 49.1% were aware of the condition, only 13,3% were on treatment and only 4% had controlled BP. Estimates of the care cascade for diabetes revealed that, of those with raised blood sugar, only 20% were aware of the condition and only 12% of were on treatment. These findings indicate major gaps in the health system capacity to provide care to people with hypertension and diabetes in Timor-Leste. The substantial drop-off at each step of the care cascades shows the need for interventions for increasing awareness, engagement in care, and retention in treatment. The WHO South East Asia Region's SEAHEARTS[19] initiative emphasizes the accelerated implementation of WHO technical package HEARTS for CVD management in primary health care with a regional target of 100 million people with hypertension and/or diabetes to be placed on protocol-based management by 2025. Commitment of the Government of Timor-Leste to place 50,000 Timorese on protocol-based management for hypertension and or diabetes by 2025 and the launch of the programme on 'Accelerating the Prevention and Control of Hypertension and Diabetes in Primary Health Care in Timor-Leste' in August 2024 indicate that the country has prioritized and is working on the improvements to the health systems towards improvements in continuum of care of chronic NCDs.

The present study also attempted to estimate the approximate costs associated with accessing NCDs services among 292 who reported as suffering from one or more of the major NCDs (hypertension, diabetes, ischemic heart diseases, chronic lung diseases, chronic kidney diseases, cancer, stroke). It was noted that the mean OOPE on hospitalization due to NCDs in the past 12 months among 107 respondents was USD 43, which is almost double the amount for outpatient care for one month (22.1 USD) due to NCDs. Of the mean OOPE expenditure of 43 USD, over two thirds was on direct medical costs. Moreover, almost 2% of the population aged 18-69 years was found to have catastrophic OOPE due to NCDs defined as whose annual OOPE on NCDs greater than 10% of their annual household income. Acknowledging the methodological limitation of a small number of respondents who were

eligible to participate in the module on NCD costs, the findings of high OOPE for hospitalizations warrants attention for measures to reduce direct medical costs and further exploration of direct costs in specifically designed surveys.

The concurrent facility survey on availability and readiness of the NCD services in health facilities of Timor-Leste, 2023 revealed gaps in the availability of the selected promotive, preventive and curative services for NCDs and mental health in different levels of facilities. Tertiary level facility, National hospital showed that all the specified services were available with the availability of specified NCD services in the secondary level facilities of CHC3 was also fairly good. Approximately 50-60% of the primary care facilities of HPs with doctors and CHC 1 and 2 were offering the assigned NCD services related to Integrated screening for diabetes, hypertension, CVD and chronic respiratory disease was less than optimal in primary care facilities (HP 55.6%, CHC 1 and 2 68.2%). And following up of patients diagnosed with mental illnesses to check on continuation of treatment (HP 46.7% CHC 1 and 2 77.3%). Availability of the specified NCD services of Referral Hospitals was also not optimum with only 2- or 3 of the 5 RHS offering the specified services.

Other than the National hospital, all other levels showed that they are not yet fully ready to offer the services. The results related to the availability or not of tracer items that need to make the facilities to be 'fully ready' provide an insight into the gaps to be fulfilled when rolling out the ESPs. The results of the facility survey, 2023 was utilised in 2024, in the planning of the first stage of the 'Accelerating the Prevention and Control of Hypertension and Diabetes in Primary Health Care in Aileu and Dili Municipalities. Results will serve as a baseline in scaling up the programme to other municipalities in the near future and for future monitoring efforts.

V. CONCLUSION AND RECOMENDATIONS

Conclusions

This second National Survey on NCDs and NCD risk factors among adults aged 18-69 years in Timor-Leste in 2023 reveals a continued high prevalence of risk factors including tobacco and alcohol use, inadequate physical activity, unhealthy dietary behaviours, and risky road safety behaviours despite evidence-based policy and programmatic interventions implemented by the Government of Timor-Leste over the past decade. Care seeking patterns for oral care, vision and hearing was very low.

Furthermore, the care cascades for hypertension and diabetes suggest substantial drop-off at each step of the care cascade indicating gaps in the health system capacity to provide care to people with hypertension and diabetes in Timor-Leste.

All levels of facilities showed gaps in the availability of the essential service package assigned services for NCDs and mental health. The primary and secondary level services were also not 'fully ready' to offer the services with gaps in the tracer items in terms of availability of trained staff, guidelines and registers, equipment, medicines and commodities.

Recommendations

Considering the high rates of tobacco use, it is recommended to further strengthen tobacco control policies based on the WHO MPOWER technical package. Establishing smoke-free environments in public and workspaces and offering help to quit tobacco use through the expansion of access to context-specific smoking cessation programmes and resources are areas that need further strengthening. Integrating tobacco cessation counseling and support services at all levels of healthcare facilities should be considered a priority measure to reduce the burden of smoked and smokeless tobacco use in the country.

Considering the high alcohol use, regionally relevant SAFER interventions are recommended to be further strengthened, which include strengthening restrictions on alcohol availability, advancing and

enforcing drink-driving countermeasures, facilitating access to screening, enforcing bans or comprehensive restrictions on alcohol advertising, sponsorship, and promotion, and raising prices on alcohol through excise taxes and pricing policies.

Considering the multifactorial nature of nutrition-related issues, campaigns to educate the public on the need for optimum consumption of fruits and vegetables and the health risks associated with high salt intake and excessive consumption of sugary drinks are recommended. Furthermore, the measures highlighted in the WHO SHAKE package such as to promote the reformulation of foods and meals to contain less sodium, adopt standards for effective and accurate labelling, adopt policies to protect children from the harmful impact of food marketing, and support settings to promote healthy eating are also recommended.

Considering the high rates of physical inactivity, in line with the Global Action Plan on Physical Activity 2018–2030 (WHO, 2018), further strengthening of the settings approach adopted by the Government of Timor-Leste to promote physical activity in schools, workplaces, and the community is recommended. Furthermore, multisectoral involvement including health, education, urban planning, and transport accommodating the 'health in all policies approach' needs to be further strengthened to ensure promoting a conductive health environment with pedestrian lanes, urban parks, community walk trails to increase physical activity in the population.

Considering the substantial gaps in the care cascades, the recently launched government programme on 'Accelerating the Prevention and Control of Hypertension and Diabetes in Primary Health Care in Timor-Leste' needs to be properly implemented. Health systems should be adequately equipped with adequate infrastructure, human resources, diagnostic tools, drugs and equipment to address NCD problems at all levels of health-care facilities.

The findings of the facility survey should be used as a baseline to guide the efforts to roll out the ESP and to monitor the efforts. The results should be used to identify the specific gaps in the services and tracer items in different levels of health facilities in expanding the 'Accelerating the Prevention and Control of Hypertension and Diabetes in Primary Health Care' in the country

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VII. ANNEX

Annex I:

Sampling methodology

Sample design and selection

The multistage sample design for NCD survey 2023 is based on the latest information from the Timor-Leste Population and Housing Census 2022. Total population of 1.34 million population is Timor-Leste population is spread across 14 municipalities with 67 administrative posts. (Table A3.1).

Table A3.1 Population distribution by municipalities and administrative posts and number of Sucos in each administrative post, Timor-Leste 2022

Sl.no	Municipality/ District (N=14)	Population (N= 1,341,737)	Administrative Post (N=67)	Population	No. of Sucos in each of the administrative posts (N=452)
1	Aileu	54324	Aileu Vila	26208	12
			Laulara	7022	6
			Lequidoe	7800	7
			Remexio	13294	8
2	Ainaro	73115	Ainaro	17786	7
			Halo-Udo	11618	2
			Hato-Buiico	15134	3
			Maubisse	28577	9
3	Atauro	10295	Atauro	10295	5
4	Baucau	134878	Baguia	11718	10
			Baucau	54964	11
			Laga	19781	8
			Quelicai	18444	15
			Vemasse	11206	7
			Ven ilale	18765	8
5	Bobonaro	106639	Atabae	12938	4
			Baliho	17619	6
			Bobonaro	25374	18
			Cailaco	10328	8
			Lolotoe	7691	7
			Maliana	32689	7
6	Covalima	73933	Fatululic	2178	2
			Falumean	3648	3
			Fohorem	4583	4

			Maucalar	10793	4
			Suai	26644	5
			Tilomar	9977	4
			Zumalai	16110	8
7	Dili	324738	Cristo Rei	76369	8
			Dom Aleixo	165799	7
			Metinaro	7169	3
			Nain Feto	33528	6
			Vera Cruz	41873	7
8	Ennera	137750	Atsabe	19826	12
			Ennera	40294	10
			Hatulia A	20285	8
			Hatulia B	21479	5
			Letefoho	22064	8
			Railaco	13802	9
9	Lautern	70022	Iliomar	6569	6
			Lautem	17677	10
			Lospalos	30044	8
			Luro	8381	6
			Lore	3692	2
			Tutu la	3659	2
10	Liquica	83658	Bazartete	33442	9
			Liquica	26418	7
			Maubara	23798	7
11	Manatuto	50859	Barique	6164	6
			Lacio	9856	5
			Laclubar	12173	6
			Laleia	4192	3
			Manaluto	15197	6
			Soibada	3277	5
12	Manufahi	60665	Alas	9532	5
			Fatuberlio	8490	5
			Same	34843	8
			Turiscai	7800	11
13	Oecusse	80685	Nitibe	13496	5
			Oesilo	12637	3
			Pante Macassar	45415	8
			Passabe	9137	2
14	Viqueque	80176	Lacluta	6695	4
			Ossu	18787	10
			Uato-Lari	18459	6
			Uatucaruau	7879	6
			Viqueque	28356	10

The country is further divided into enumeration areas for census and statistical purposes. Enumeration areas (EA) created as part of census are the lowest geographical units in Timor-Leste. The EAs consists of an estimated number of 100-150 housing units in urban areas and 70-120 housing units in rural areas. The EA list available from the census 2022 will be used as sampling frame for the STEPS.

Sample implementation and list of FSU's selected

The target sample size after accounting for 20 percent non response rate was 4322 households. A multistage sampling procedure was used for identifying households for the survey with administrative posts as the first stage sampling units (FSUs), census enumeration areas as the second stage sampling units, households as the third stage unit and respondents in these households as the final unit.

Table A3.2: List of administrative posts (FSUs) selected for survey from each municipality and their population distribution, Timor-Leste 2022

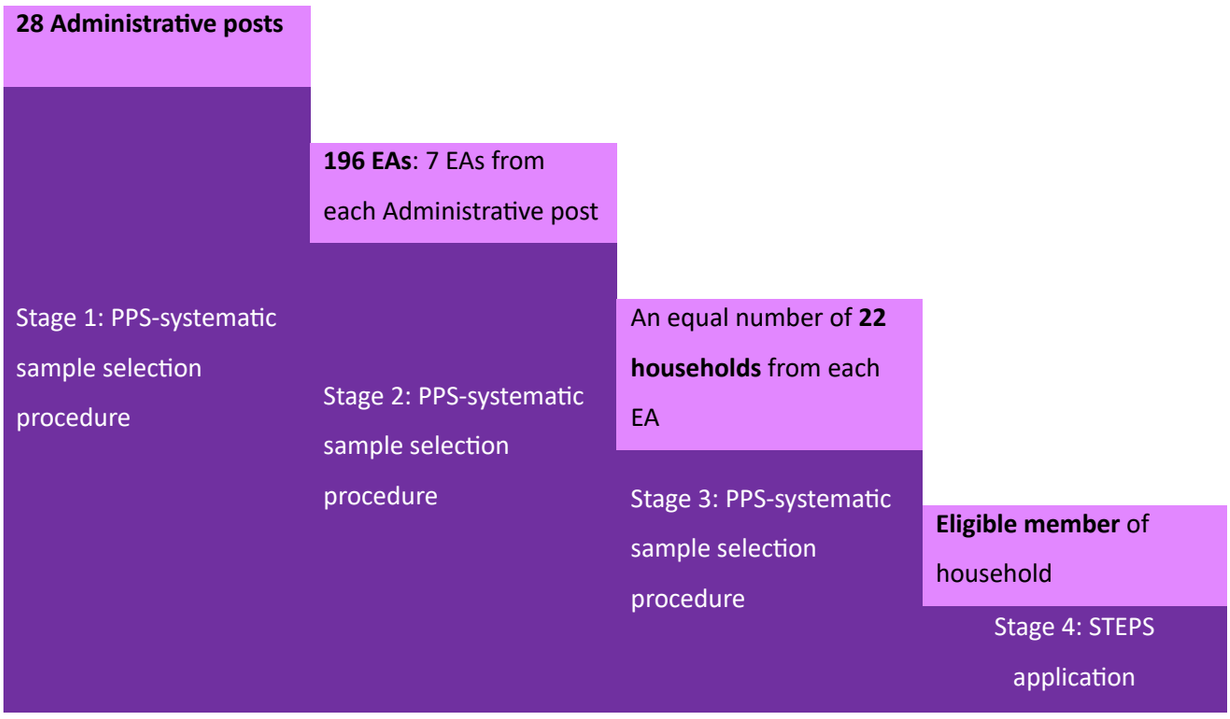
Srl.no	Municipality/District	Administrative Post (FSU)	Population
1	Ai leu	Aileu Vila	26,208
2	Ainaro	Halo-Udo	11,618
3	Ainaro	Hato-Buiico	15,134
4	Ainaro	Maubisse	28,577
5	Baucau	Baguia	11,718
6	Baucau	Baucau	54,964
7	Baucau	Laga	19,781
8	Baucau	Quelicai	18,444
9	Baucau	Ven ilale	18,765
10	Bobonaro	Atabae	12,938
11	Bobonaro	Baliho	17,619
12	Bobonaro	Bobonaro	25,374
13	Bobonaro	Cailaco	10,328
14	Covalima	Suai	26,644
15	Dili	Dom Aleixo	1,65,799
16	Dili	Nain Feto	33,528
17	Dili	Vera Cruz	41,873
18	Ennera	Ennera	40,294
19	Ennera	Railaco	13,802
20	Lautern	Lospalos	30,044
21	Liquica	Bazartete	33,442
22	Liquica	Liquica	26,418
23	Liquica	Maubara	23,798

24	Manatuto	Laclubar	12,173
25	Oecusse	Nitibe	13,496
26	Oecusse	Pante Macassar	45,415
27	V iqueque	Ossu	18,787
28	V iqueque	Viqueque	28,356

In the first stage selection, 28 administrative post were randomly selected from a total of 67 administrative posts in the country. Here the criteria were to select two select two administrative post from each municipality, except Dili and Atauro (Table A3.2). Three administrative posts were selected from the Dili municipality which has a large population and only one from sparsely populated Atauro municipality.

Probability proportional to size sampling was then be used to select 7 enumeration areas from each of the above 28 administrative posts. Systematic random sampling procedure was used to select 22 households from each of the selected enumeration areas. One eligible individual was randomly selected from each household using the STEPS application installed in the android tablets used in the survey.
This a nationally representative sample of persons aged 18-69 years old were to be interviewed from a total of 4,312 households at the national level.

This sampling scheme can also be illustrated in the following diagram.



Sample allocation

The primary, secondary, and ultimate sampling units were allocated accordingly following the power allocation method. Power allocation often known as the compromise allocation between equal and proportional allocation. This allocation, in this case, tries to minimize the variance between units in the same cluster which in turn offer an efficient estimate at the smaller domain possible. Many studies, including the post enumeration survey of the Census 2022 in Timor-Leste, uses this allocation method to allocate sample of households across the whole territory of the country.

Table A 3.3. Allocation of Sub-districts in each Municipality

TLSLS Region	District Code	District Name	Postu in Census frame	sampled postu	Power value (a)					Equal-size	Postu sample size by power value (a)			Proportional	HHs in the frame
					0	0.25	0.54	**0.75**	1	0	0.25	**0.54**	**0.75**	1	
3	01	Aileu	**4**	**2.0**	1.0	9.8	139.8	**954.7**	4.0	1	2	**2**	**1**	2	9400
2	02	Ainaru	**4**	**2.0**	1.0	10.5	162.1	**1172.8**	4.0	1	2	**2**	**2**	2	12368
1	04	Baucau	**6**	**2.0**	1.0	12.5	235.6	**1970.7**	6.0	1	2	**3**	**3**	3	24707
4	05	Bobonaro	**6**	**2.0**	1.0	12.0	214.9	**1734.4**	6.0	1	2	**2**	**2**	3	20839
4	06	Cova Lima	**7**	**2.0**	1.0	11.2	184.9	**1407.8**	7.0	1	2	**2**	**2**	3	15778
3	07	Dili	**5**	**3.0**	1.0	15.5	371.0	**3703.0**	5.0	1	3	**4**	**5**	2	57289
3	08	Ermera	**6**	**2.0**	1.0	12.7	240.6	**2028.9**	6.0	1	2	**3**	**3**	3	25685
4	10	Liquiçá	**3**	**2.0**	1.0	11.0	179.0	**1345.4**	3.0	1	2	**2**	**2**	1	14852
1	09	Lautem	**6**	**2.0**	1.0	10.8	169.2	**1244.1**	6.0	1	2	**2**	**2**	3	13380
2	12	Manufahi	**4**	**2.0**	1.0	10.2	152.4	**1076.1**	4.0	1	2	**2**	**1**	2	11028
2	11	Manatuto	**6**	**2.0**	1.0	9.7	135.3	**912.6**	6.0	1	2	**1**	**1**	3	8852
5	13	Oecussi	**4**	**2.0**	1.0	11.6	198.0	**1548.2**	4.0	1	2	**2**	**2**	2	17910
1	14	Viqueque	**5**	**2.0**	1.0	11.3	189.8	**1460.3**	5.0	1	2	**2**	**2**	2	16567
3	03	Atauro	**1**	**1.0**	1.0	6.8	62.6	**312.5**	1.0	1	1	**1**	**0**	0	2121
				$\sum_{h=1}^{H} D_h^a$	27	156	2635	**20871**	**67**	14	28	**30**	**28**	31	
			67	**28**											

Table A3.4. Allocation of EAs in each administrative post

Postu Code	Postu Name	Suco in Census frame	Sampled EA	Power value (a)					Equal-size	Suco sample size by power value (a)			Proportional	HHs in the frame
				0	0.48	0.44	**0.975**	1	0	**0.54**	0.75	0.975	1	
101	Aileu Vila	**12**	7	1.0	57.6	41.1	**3761**	4645.0	7	**7**	**7**	6	6	4645
103	Lequidoe	**7**	7	1.0	32.4	24.2	**1171**	1403.0	7	**4**	**4**	2	2	1403
201	Ainaro	**7**	7	1.0	47.7	34.6	**2567**	3140.0	7	**6**	**6**	4	4	3140
204	Maubisse	**9**	7	1.0	57.5	41.0	**3752**	4633.0	7	**7**	**7**	6	6	4633
301	Atauro	**5**	7	1.0	39.5	29.1	**1751**	2121.0	7	**5**	**5**	3	3	2121
406	Venilale	**8**	7	1.0	49.6	35.8	**2779**	3405.0	7	**6**	**6**	4	4	3405
401	Baguia	**10**	7	1.0	40.1	29.5	**1802**	2184.0	7	**5**	**5**	3	3	2184
503	Bobonaro	**18**	7	1.0	57.3	40.9	**3729**	4605.0	7	**7**	**7**	6	6	4605
506	Maliana	**7**	7	1.0	65.5	46.2	**4890**	6080.0	7	**8**	**8**	8	8	6080
605	Suai	**5**	7	1.0	62.3	44.1	**4410**	5469.0	7	**8**	**8**	7	7	5469
604	Maucatar	**4**	7	1.0	39.5	29.1	**1754**	2124.0	7	**5**	**5**	3	3	2124
701	Cristo Rei	**8**	7	1.0	93.8	64.3	**10150**	12859.0	7	**11**	**11**	16	17	12859
702	Dom Aleixo	**7**	7	1.0	140.9	93.3	**23166**	29976.0	7	**17**	**16**	37	39	29976
705	Vera Cruz	**7**	7	1.0	71.0	49.8	**5767**	7201.0	7	**9**	**9**	9	9	7201
802	Ermera	**10**	7	1.0	70.4	49.4	**5662**	7066.0	7	**9**	**8**	9	9	7066
804	Hatulia B	**5**	7	1.0	50.4	36.3	**2870**	3520.0	7	**6**	**6**	5	5	3520
901	Iliomar	**6**	7	1.0	34.9	25.9	**1357**	1633.0	7	**4**	**4**	2	2	1633
903	Lospalos	**8**	7	1.0	63.2	44.7	**4544**	5639.0	7	**8**	**8**	7	7	5639
1001	Bazartete	**9**	7	1.0	63.0	44.6	**4519**	5608.0	7	**8**	**8**	7	7	5608
1002	Liquica	**7**	7	1.0	58.8	41.9	**3923**	4850.0	7	**7**	**7**	6	6	4850
1105	Manatuto	**6**	7	1.0	44.5	32.4	**2231**	2719.0	7	**5**	**6**	4	3	2719
1103	Laclubar	**6**	7	1.0	38.0	28.0	**1614**	1950.0	7	**5**	**5**	3	3	1950
1204	Turiscai	**11**	7	1.0	32.0	24.0	**1143**	1369.0	7	**4**	**4**	2	2	1369
1203	Same	**8**	7	1.0	67.9	47.8	**5255**	6546.0	7	**8**	**8**	8	8	6546
1303	Pante Macass	**8**	7	1.0	83.6	57.8	**8018**	10097.0	7	**10**	**10**	13	13	10097
1304	Passabe	**2**	7	1.0	38.3	28.3	**1643**	1987.0	7	**5**	**5**	3	3	1987
1405	Viqueque	**10**	7	1.0	63.2	44.8	**4554**	5652.0	7	**8**	**8**	7	7	5652
1403	Uato-Lari	**6**	7	1.0	54.2	38.9	**3326**	4095.0	7	**7**	**7**	5	5	4095
		216	**196**	28.0	1617.0	1147.7	**122109**	152576.0	196.0	**199.0**	198.0	195.0	197.0	

Weight calculation and calibration

Sampling weight for this study will accommodate up to four probabilities estimated at each stage of the sample selection namely π_1, π_2, π_3, π_4. Hence, the calculation of the sampling weights to obtain the extrapolation of the sample results to population total was based on the following formula.

$$Extrapolation\ Weight = \frac{Basic\ Weight}{Response\ Rate}$$

where the basic weight in the numerator and the response rate in the denominator are given respectively by

Probability of selection = [Probability of selection of sample sub-districts] **x** [Probability of selection of enumeration area in each preselected sub-districts] **x** [Probability of selection of households in each preselected enumeration area] **x** [Probability of randomly selected eligible individual from each preselected household]

$$Basic\ Weight = \frac{1}{Probability\ of\ selection}$$

where the probability of selection is given by the sample design of the survey and

$$Response\ Rate = \frac{Completed + Partially\ Completed}{Number\ Sample\ Households\ Selected}$$

Annex II:

Survey instrument used in household survey

Survey Information			
Location and Date	**Response**		**Code**
Suco ID	⌊_⌋⌊_⌋⌊_⌋⌊_⌋⌊_⌋⌊_⌋⌊_⌋		I1
Name of the suco			I2
Interviewer ID (ID must be a positive number)	⌊_⌋⌊_⌋⌊_⌋		I3
Date of completion of the instrument	⌊_⌋⌊_⌋ ⌊_⌋⌊_⌋ ⌊_⌋⌊_⌋⌊_⌋⌊_⌋ dd mm year		I4
Consent, Interview Language and Name	**Response**		**Code**
Consent has been read and obtained	Yes	1	I5
	No	2 If No, End	
Interview Language [Insert Language]	English	1	I6
	Tetun	2	
Time of interview (24 hour clock)	⌊_⌋⌊_⌋ : ⌊_⌋⌊_⌋ hrs mins		I7
Family Surname			I8

First Name		I9
Additional Information that may be helpful		
Contact phone number where possible		**I10**

Step 1 Demographic Information			
CORE: Demographic Information			
Question	Response		Code
Sex (Record Male / Female as observed) (Observe only, do not ask.)	Male	1	C1
	Female	2	
What is your date of birth? Don't Know 77 77 7777 (Select "Don't know" in all fields if complete date of birth is not known.) (You cannot enter a partial date of birth.)	└┴┘ └┴┘ └┴┴┴┘ If Known, Go to C4 dd mm year		C2
How old are you? (Age must be within the age range of the survey.)	Years └┴┘		C3
In total, how many years have you spent at school and in full-time study (excluding pre-school)? (Please enter a number between 0 and 30.)	Years	└┴┘	C4

(Enter '77' if not known.)			
EXPANDED: Demographic Information			
What is the highest level of education you have completed? [INSERT COUNTRY-SPECIFIC CATEGORIES	No formal schooling	1	C5
	Less than primary school	2	
	Primary school completed	3	
	Secondary school completed	4	
	High school completed	5	
	College/University completed	6	
	Post graduate degree	7	
	Refused	88	
What is your nationality?	[Timorese]	1	C6
	Non-Timorese (foreigner)	2	
	Refused	88	

What is your marital status?	Never married	1	C7
	Currently married	2	
	Separated	3	
	Divorced	4	
	Widowed	5	
	Cohabitating	6	
	Refused Rejeitadu	88	
Which of the following best describes your main work status over the past 12 months? [INSERT COUNTRY-SPECIFIC CATEGORIES] (USE SHOWCARD)	Government employee	1	C8
	Non-government employee	2	
	Self-employed	3	
	Non-paid	4	
	Student	5	
	Homemaker	6	
	Retired	7	

	Unemployed (able to work)	8	
	Unemployed (unable to work)	9	
	Refused	88	
Taking the past year, can you tell me what the average earnings of the household have been? (Pl. note that this should include the usual monthly income of all members who are residents in the house AND any other income through businesses/ property etc. For daily wage earners add the amount earned in a usual month) (Please select whether average earnings are by week, month, or year, or whether respondent refused to answer or doesn't know.) (Cannot enter a negative number!) (Leave blank and select “Refused” below if refused or "Don't know" if respondent doesn't know.)	per month	⌊_⌋⌊_⌋⌊_⌋⌊_⌋⌊_⌋⌊_⌋⌊_⌋ Go to T1	C10
	Refused	88	

Step 1 Behavioural Measurements				
CORE: Tobacco Use				
Now I am going to ask you some questions about tobacco use.				
Question	Response			Code
Do you currently smoke any tobacco products, such as cigarettes, cigars? (USE SHOWCARD)	Yes	1		T1
	No	2 If No, go to T8		
Do you currently smoke tobacco products daily?	Yes	1		T2
	No	2		
How old were you when you first started smoking? (Age must be at least 8 and no more than the upper age limit of the survey.) (Enter '77' if not known.)	Age (years)	└┴┘ If Known, go to T5a/T5aw		T3
	Don't know 77			
Do you remember how long ago it was? (RECORD ONLY 1, NOT ALL 3) Don't know 77 (Leave blank if not known; otherwise, answer must be between 1 and respondent's age (-4 years) for Years, 1 to 11 for Months, or 1 to 30 for Weeks.)	In Years	└┴┘ If Known, go to T5a/T5aw		T4
	OR in Months	└┴┘ If Known, go to T5a/T5aw		
	OR in Weeks	└┴┘		
		DAILY ↓ (Number must	WEEKLY ↓	

		be between 0 and 50)	(Number must be between 0 and 350.)	
On average, how many Manufactured cigarettes do you smoke each day/week? (IF LESS THAN DAILY, RECORD WEEKLY) (RECORD FOR EACH TYPE, USE SHOWCARD) (Enter '77' if not known OR enter '0' if respondent does not smoke manufactured cigarettes daily/weekly)		⌊_⌊_⌊_⌊_⌋	⌊_⌊_⌊_⌊_⌋	T5a/T5aw
On average, how many Hand-rolled cigarettes do you smoke each day/week? (IF LESS THAN DAILY, RECORD WEEKLY) (RECORD FOR EACH TYPE, USE SHOWCARD) (Enter '77' if not known OR enter '0' if respondent does not smoke H and-rolled cigarettes daily/weekly)		⌊_⌊_⌊_⌊_⌋	⌊_⌊_⌊_⌊_⌋	T5b/T5bw
On average, how many Cigars, cheroots or cigarillos do you smoke each day/week? (IF LESS THAN DAILY, RECORD WEEKLY)		⌊_⌊_⌊_⌊_⌋	⌊_⌊_⌊_⌊_⌋	T5d/T5dw

(RECORD FOR EACH TYPE, USE SHOWCARD) (Enter '77' if not known OR enter '0' if respondent does not smoke Cigars, cheroots or cigarillos daily/weekly)			
During the past 12 months, have you tried to stop smoking?			
	Yes	1	T6
	No	2	
During any visit to a doctor or other health worker in the past 12 months, were you advised to quit smoking tobacco?	Yes	1 If T2=Yes, go to EC1; if T2=No, go to T9	T7
	No	2 If T2=Yes, go to EC1; if T2=No, go to T9 se	
	No visit during the past 12 months	3 If T2=Yes, go to EC1; if T2=No, go to T9	
In the past, did you ever smoke any tobacco products? (USE SHOWCARD)	Yes	1	T8
	No	2 If No, go to EC1	
In the past, did you ever smoke daily?	Yes sim	1 If T1=Yes, go to EC1, else go to T10	T9
	No lae	2 If T1=Yes, go to EC1, else go to T10	

Do you currently use electronic cigarettes?		Yes 1 No 2 If No, go to T12	EC1
Do you currently use electronic cigarettes daily?		Yes 1 No 2	EC2
On average, how many electronic cigarette sessions do you use each day/weekly?	⌊_⌋⌊_⌋⌊_⌋	⌊_⌋⌊_⌋⌊_⌋	EC3a/EC3aw
How old were you when you stopped smoking? Age must be at least 8 and no more than the upper age limit of the survey. Enter '77' if not known.	⌊_⌋⌊_⌋⌊_⌋		T10
How long ago did you stop smoking? Please select whether answer is in years, months, or weeks, or whether respondent doesn't know. Leave blank if not known; otherwise, answer must be between 1 and 61 for Years, 1 to 11 for Months, or 1 to 30 for Weeks.	In Years OR in Months OR in Weeks	⌊_⌋⌊_⌋ ⌊_⌋⌊_⌋ ⌊_⌋⌊_⌋	T11

EXPANDED: Tobacco Use				
Question	Response			Code
Do you currently use any smokeless tobacco products such as [chewing tobacco, betel]?	Yes	1		T12
	No	2 If No, go to T14		
Do you currently use smokeless tobacco products daily?	Yes	1		T13
	No	2		
Initiation age How old were you when you first started using smokeless tobacco products? (Age must be at least 8 and no more than the upper age limit of the survey.) (Enter '77' if not known.)	Age (years) Don't know 77	⌊_⌋⌊_⌋		X1
		DAILY↓ (Number must be between 0 and 50.)	WEEKLY ↓ (Number must be between 0 and 350.)	
				T14c/

On average, how many times do you use chewing tobacco daily or weekly? (IF LESS THAN DAILY, RECORD WEEKLY) (RECORD FOR EACH TYPE, USE SHOWCARD) (Enter '77' if not known OR enter '0' if respondent does not use chewing tobacco daily/weekly.)		⌊_⌋⌊_⌋⌊_⌋⌊_⌋ ⌊_⌋⌊_⌋⌊_⌋⌊_⌋	T14cw
			T14d/
On average, how many times do you use betel or quid daily or weekly? (IF LESS THAN DAILY, RECORD WEEKLY) (RECORD FOR EACH TYPE, USE SHOWCARD) (Enter '77' if not known OR enter '0' if respondent does not use betel or quid daily/weekly.)		⌊_⌋⌊_⌋⌊_⌋⌊_⌋ ⌊_⌋⌊_⌋⌊_⌋⌊_⌋	T14dw
			T14e/
On average, how many times you use any other smokeless tobacco product daily or weekly? (IF LESS THAN DAILY, RECORD WEEKLY) (RECORD FOR EACH TYPE, USE SHOWCARD) (Enter '77' if not known OR enter '0' if respondent		⌊_⌋⌊_⌋⌊_⌋⌊_⌋ ⌊_⌋⌊_⌋⌊_⌋⌊_⌋ If Other, go to T13other, if T11=No, go to T15, else go to T16	T14ew

does not use other type of tobacco daily/weekly.)			
		└_┴_┴_┴_┴_┴_┴_┘ if T11=No, go to T15, else go to T16	T14other/
Please specify other type of tobacco used			T14otherw
In the past, did you ever use smokeless tobacco products such as [chewing tobacco, or betel]?	Yes	1	T15
	No	2 If No, go to T16	
In the past, did you ever use smokeless tobacco products such as [, chewing tobacco, or betel] daily?	Yes	1	T16
	No	2	
During the past 30 days, did someone smoke in your home?	Yes	1	T17
	No	2	
During the past 30 days, did someone smoke in closed areas in your workplace (in the building, in a work area or a specific office)?	Yes	1	T18
	No	2	
	Don't work in a closed area	3	

Tobacco Policy			
You have been asked questions on tobacco consumption before. The next questions ask about tobacco control policies. They include questions on your exposure to the media and advertisement, on cigarette promotions, health warnings and cigarette purchases.			
Question	Response		Code
During the past 30 days, have you noticed information about the dangers of smoking cigarettes or that encourages quitting through the following media? (RECORD FOR EACH) Please enter a response for all questions on the screen.			
Newspapers or magazines .	Yes	1	TP1a
	No	2	
	Don't know	77	
Television	Yes	1	TP1b
	No	2	
	Don't know	77	
Radio	Yes	1	TP1c
	No	2	
	Don’t know	77	
During the past 30 days, have you noticed any advertisements or signs promoting cigarettes in stores where cigarettes are sold?	Yes	1	TP2
	No	2	
	Don't know	77	
During the past 30 days, have you noticed any of the following types of cigarette promotions? (RECORD FOR EACH)			
Free samples of cigarettes	Yes	1	TP3a
	No	2	

	Don't know	77	
Cigarettes at sale prices	Yes	1	TP3b
	No	2	
	Don’t know	77	
Coupons for cigarettes	Yes	1	TP3c
	No	2	
	Don't know	77	
Free gifts or special discount offers on other products when buying cigarettes	Yes	1	TP3d
	No	2	
	Don't know	77	
Clothing or other items with a cigarette brand name or logo	Yes	1	TP3e
	No	2	
	Don't know	77	
The next questions TP4 – TP7 are administered to current smokers only. If T11 is Yes, else skip to D6			
During the past 30 days, did you notice any health warnings on cigarette packages?	Yes	1	TP4
	No	2 If no, go to TP6	
	Did not see any cigarette packages	3 If "did not see any cigarette packages", go to TP6	
	Don't know	77 If Don't know, go to TP6	
	Yes	1	TP5

During the past 30 days, have warning labels on cigarette packages led you to think about quitting?	No	2	
	Don't know	77	
The last time you bought manufactured cigarettes for yourself, how many cigarettes did you buy in total? (Enter '7777' if not known or don't purchase manufactured cigarettes.)	Number of cigarettes	⌊_⌋⌊_⌋⌊_⌋⌊_⌋⌊_⌋	TP6
	Don't know or Don't smoke or purchase manuf. cigarettes 7777	If “Don’t know or don’t smoke or purchase manuf. Cig.”, end section	
In total, how much money did you pay for this purchase? (DIGITS TO BE ADAPTED TO COUNTRY NEEDS (Enter '7777' if not known or '8888' if refused.)	Amount		TP7
	Don't know 7777		
	Refused 8888		

CORE: Alcohol Consumption			
The next questions ask about the consumption of alcohol.			
Question	Response		Code
Have you ever consumed any alcohol such as beer, wine, spirits or [add other local examples]?	Yes	1	A1
(USE SHOWCARD OR SHOW EXAMPLES)	No	2 If No, go to D1	
Have you consumed any alcohol within the past 12 months?	Yes	1 If Yes, go to A4	A2
	No	2	
Have you stopped drinking due to health reasons, such as a negative impact on your health or on the advice of your doctor or other health worker?	Yes	1 If Yes, go to D1	A3
	No	2 If No, go to D1	
During the past 12 months, how frequently have you had at least one standard alcoholic drink? (READ RESPONSES, USE SHOWCARD)	Daily	1	A4
	5-6 days per week	2	
	3-4 days per week	3	
	1-2 days per week	4	
	1-3 days per month	5	
	Less than once a month	6	

	Never	7	
Compared to one year ago, how affordable is it for you to buy the same quantity of alcohol now (Read out options) (Read out options.)	More affordable Less affordable Affordability is the same No response Don't know 77 Refused 88		X2
Have you consumed any alcohol within the past 30 days?	Yes	1	A5
	No	2 If No, go to D1	
During the past 30 days, on how many occasions did you have at least one standard alcoholic drink? (Number must be between 1 and 50.) (Enter '77' if not known.)	Number	└┴┘ If Zero, go to D1	A6
	Don't know 77		
During the past 30 days, when you drank alcohol, how many standard drinks on average did you have during one drinking occasion?	Number	└┴┘	A7
	Don't know 77		

(USE SHOWCARD) (Number must be between 1 and 50.) (Enter '77' if not known.)			
During the past 30 days, what was the largest number of standard drinks you had on a single occasion, counting all types of alcoholic drinks together? (Number must be between 1 and 50.) (Enter '77' if not known.)	Largest number Don't Know 77	⌊_⌋⌊_⌋	A8
During the past 30 days, how many times did you have six or more standard drinks in a single drinking occasion? (Number must be between 0 and 50.) (Enter '77' if not known.)	Number of times Don't Know 77	⌊_⌋⌊_⌋	A9
During each of the past 7 days, how many standard drinks did you have each day?	Monday	⌊_⌋⌊_⌋	A10a

(USE SHOWCARD	Tuesday	└┴┘	A10b
(Number must be between 0 and 50.)	Wednesday	└┴┘	A10c
(Enter '0' if participant did not drink on a specific day.)	Thursday	└┴┘	A10d
(Enter '77' if not known.)	Friday	└┴┘	A10e
(Please enter a response for all days of the week.)	Saturday	└┴┘	A10f
	Sunday	└┴┘	A10g

I have just asked you about your consumption of alcohol. The questions were about alcohol in general, while the next questions refer to your consumption of homebrewed alcohol, alcohol brought over the border/from another country, any alcohol not intended for drinking or other untaxed alcohol. Please only think about these types of alcohol when answering the next questions.

Question	Response		Code
During the past 7 days, did you consume any homebrewed alcohol, any alcohol brought over the border/from another country, any alcohol not intended for drinking or other untaxed alcohol? [AMEND	Yes	1	A11
	No	2 If No, go to D1	

ACCORDING TO LOCAL CONTEXT (USE SHOWCARD			
On average, how many standard drinks of the following did you consume during the past 7 days? [INSERT COUNTRY-SPECIFIC EXAMPLES (USE SHOWCARD Uza showcard) (Number must be between 0 and 50.) Don't Know 77 (Please enter a response for each type of alcohol.)	Homebrewed spirits, e.g. moonshine	⌊_⌊_⌋	A12a
	Homebrewed beer or wine, e.g. beer, palm or fruit wine	⌊_⌊_⌋	A12b
	Alcohol brought over the border/from another country	⌊_⌊_⌋	A12c
	Alcohol not intended for drinking, e.g. alcohol-based medicines, perfumes, after shaves	⌊_⌊_⌋	A12d
	Other untaxed alcohol in the country .	⌊_⌊_⌋	A12e

CORE: Diet			
The next questions ask about the fruits and vegetables that you usually eat. I have a nutrition card here that shows you some examples of local fruits and vegetables. Each picture represents the size of a serving. As you answer these questions please think of a typical week in the last year.			
Question	Response		Code
In a typical week, on how many days do you eat fruit? (Days of the week must be between 0 and 7.) (Enter '77' if not known.) (USE SHOWCARD Uza showcard)	Number of days	⌊_⌋⌊_⌋ If Zero days, go to D3	D1
	Don't Know 77		
How many servings of fruit do you eat on one of those days? (Number of servings must be between 1 and 20.) (Enter '77' if not known.)	Number of servings	⌊_⌋⌊_⌋	D2
	Don't Know 77		

(USE SHOWCARD Uza showcard)			
In a typical week, on how many days do you eat vegetables? (Days of the week must be between 0 and 7.) (Enter '77' if not known.) (USE SHOWCARD)	Number of days Don't Know 77	└┴┘ If Zero days, go to X3	D3
How many servings of vegetables do you eat on one of those days? (Number of servings must be between 1 and 20.) (Enter '77' if not known.)	Number of servings Don't Know 77	└┴┘	D4

(USE SHOWCARD)			
During the past 7 days, how many times did you drink a can, bottle, or glass of a carbonated soft drink, such as Fanta, Coca Cola, Sprite, Pepsi, 7up, ……?	I did not drink carbonated soft drinks during the past 7 days	1	X3
	1 to 3 times during the past 7 days	2	
	4 to 6 times during the past 7 days	3	
For this question, DO NOT COUNT carbonated soft drinks measured in the previous question or diet or no calorie drinks. During the past 7 days, how many times did you drink a can, bottle, or glass of any of the below sugar-sweetened drinks?			
Sugar-sweetened drinks include sports drinks	I did not drink sugar-sweetened drinks during the past 7 days	1	X4
	1 to 3 times during the past 7 days .	2	
	4 to 6 times during the past 7 days	3	
Energy drinks	I did not drink Energy drinks during the past 7 days	1	X5
	1 to 3 times during the past 7 days	2	

	4 to 6 times during the past 7 days	3	
100% fruit juices	I did not drink 100% fruit juice drinks during the past 7 days	1	X6
	1 to 3 times during the past 7 days	2	
	4 to 6 times during the past 7 days	3	
Fruit drinks that are not 100% juice	I did not drink fruit drink that are not 100% juice drinks during the past 7 days	1	X7
	1 to 3 times during the past 7 days	2	
	4 to 6 times during the past 7 days	3	
Sugar-sweetened flavoured milks	I did not drink sugar-sweetened milk drinks during the past 7 days	1	X8
	1 to 3 times during the past 7 days	2	
	4 to 6 times during the past 7 days	3	

Dietary salt			
With the next questions, we would like to learn more about salt in your diet. Dietary salt includes ordinary table salt, unrefined salt such as sea salt, iodized salt, salty stock cubes and powders, and salty sauces such as soy sauce or fish sauce (see showcard). The following questions are on adding salt to the food right before you eat it, on how food is prepared in your home, on eating processed foods that are high in salt such as [insert country specific examples], and questions on controlling your salt intake. Please answer the questions even if you consider yourself to eat a diet low in salt.			
How often do you add salt or a salty sauce such as soy sauce to your food right before you eat it or as you are eating it? (SELECT ONLY ONE) (USE SHOWCARD)	Always	1	D5
	Often	2	
	Sometimes	3	
	Rarely	4	
	Never	5	
	Don't know	77	
How often is salt, salty seasoning or a salty sauce added in cooking or preparing foods in your household?	Always	1	D6
	Often	2	
	Sometimes	3	
	Rarely	4	
	Never	5	
	Don't know	77	
How often do you eat processed food high in salt? By processed food high in salt, I mean foods that have been altered from their natural state, such as packaged salty snacks, canned salty food including pickles and preserves, salty food prepared at a fast food	Always	1	D7
	Often	2	
	Sometimes	3	
	Rarely	4	

restaurant, cheese, bacon and processed meat [add country specific examples]. [INSERT EXAMPLES] (USE SHOWCARD)	Never	5	
	Don't know	77	
How much salt or salty sauce do you think you consume?	Far too much	1	D8
	Too much	2	
	Just the right amount	3	
	Too little	4	
	Far too little	5	
	Don't know	77	
What is the maximum amount of salt do you think a person should take in a day from all sources? [show a tea spoonful]	……..Teaspoon		X9
Does your household use iodized salt for cooking?	Yes	1	X10
	No	2	
	Don't know	77	
A sample of ...g of cooking salt collected	Yes	1	X11
	No	2	

CORE: Physical Activity		
, Next, I am going to ask you about the time you spend doing different types of physical activity in a typical week. Please answer these questions even if you do not consider yourself to be a physically active person. Please think about the activities you do at work, as part of your house and yard work, to get from place to place, and in your spare time for recreation, exercise or sport.		
Question	Response	Code
Does any of the physical activity you perform by way of occupation/ as part of your house and yard work/ to get from place to place, and in your spare time for recreation, exercise or sport. involve vigorous-intensity activity that causes large increases in breathing or heart rate]? [INSERT EXAMPLES] (USE SHOWCARD)	Yes 1 No 2 If No, go to P 4	PX1
In a typical week, on how many days do you do vigorous-intensity activities? (Number of days must be between 1 and 7.)	Number of days ⌊_⌋⌊_⌋ If 77, go to PX3	PX2
How much time do you spend doing vigorous-intensity activities on a typical day? (Enter values in both fields) (Time must be no more than 16 hours.) (Enter '77' in both fields if not known.)	Hours : minutes ⌊_⌋⌊_⌋ : ⌊_⌋⌊_⌋ hrs mins don't know/Not sure 77	PX3
Does any of the physical activity you perform by way of occupation/ as part of your house and yard work/ to get from place to place, and in your spare time for recreation, exercise or sport involve moderate-intensity activity, that causes small increases in breathing or heart rate]?	Yes 1 No 2 If No, go to P16	PX4

[INSERT EXAMPLES] (USE SHOWCARD)		
In a typical week, on how many days do you do moderate-intensity activities? Number of days must be between 1 and 7.	Number of days ⌊_⌋⌊_⌋	PX5
How much time do you spend doing moderate-intensity activities on a typical day? "Enter values in both fields Time must be no more than 16 hours. Enter '77' in both fields if not known."	Hours : minutes ⌊_⌋⌊_⌋ : ⌊_⌋⌊_⌋ hrs mins don't know/Not sure 77	PX6
EXPANDED: Physical Activity		
Sedentary behaviour attitude		
The following question is about sitting or reclining at work, at home, getting to and from places, or with friends including time spent sitting at a desk, sitting with friends, traveling in car, bus, train, reading, playing cards or watching television, but do not include time spent sleeping. [INSERT EXAMPLES] (USE SHOWCARD)		
How much time do you usually spend sitting or reclining on a typical day? "Enter values in both fields. Time must be no more than 16 hours. Enter '77' in both fields if not known."	Hours : minutes ⌊_⌋⌊_⌋ : ⌊_⌋⌊_⌋ hrs mins don't know/Not sure 77	P16(a-b)

CORE: History of Raised Blood Pressure			
Question	Response		Code
Have you ever had your blood pressure measured by a doctor or other health worker?	Yes	1	H1
	No	2 If No, go to H6	
Have you ever been told by a doctor or other health worker that you have raised blood pressure or hypertension?	Yes	1	H2a
	No	2 If No, go to H6	
Were you first told in the past 12 months?	Yes	1	H2b
	No	2	
In the past two weeks, have you taken any drugs (medication) for raised blood pressure prescribed by a doctor or other health worker?	Yes	1	H3
	No	2	
Have you ever seen a traditional healer for raised blood pressure or hypertension?	Yes	1	H4
	No	2	
Are you currently taking any herbal or traditional remedy for your raised blood pressure?	Yes	1	H5
	No	2	
CORE: History of Diabetes			
Have you ever had your blood sugar measured by a doctor or other health worker?	Yes	1	H6
	No	2 If No, go to H12	
Have you ever been told by a doctor or other health worker that you	Yes	1	H7a
	No	2 If No, go to H12	

have raised blood sugar or diabetes?			
Were you first told in the past 12 months?	Yes	1	H7b
	No	2	
In the past two weeks, have you taken any drugs (medication) for diabetes prescribed by a doctor or other health worker?	Yes	1	H8
	No	2	
Are you currently taking insulin for diabetes prescribed by a doctor or other health worker?	Yes	1	H9
	No	2	
Have you ever seen a traditional healer for diabetes or raised blood sugar?	Yes	1	H10
	No	2	
Are you currently taking any herbal or traditional remedy for your diabetes?	Yes	1	H11
	No	2	

CORE: History of Raised Total			
Question	Response		Code
Have you ever had your cholesterol (fat levels in your blood) measured by a doctor or other health worker?	Yes	1	H12
	No	2 If No, go to H17	
Have you ever been told by a doctor or other health worker that you have raised cholesterol?	Yes	1	H13a
	No	2 If No, go to H17	
Were you first told in the past 12 months?	Yes	1	H13b
	No	2	
	Yes	1	H14

In the past two weeks, have you taken any oral treatment (medication) for raised total cholesterol prescribed by a doctor or other health worker?	No	2	
Have you ever seen a traditional healer for raised cholesterol?	Yes	1	H15
	No	2	
Are you currently taking any herbal or traditional remedy for your raised cholesterol?	Yes	1	H16
	No	2	
CORE: History of Cardiovascular Diseases			
Have you ever had a heart attack or chest pain from heart disease (angina) or a stroke (cerebrovascular accident or incident)?	Yes	1	H17
	No	2	
Are you currently taking aspirin regularly to prevent or treat heart disease?	Yes	1	H18
	No	2	
Are you currently taking statins (Lovastatin/Simvastatin/Atorvastatin or any other statin) regularly to prevent or treat heart disease?	Yes	1	H19
	No	2	
CORE (for women only): Cervical Cancer Screening			
The next question asks about cervical cancer prevention. Screening tests for cervical cancer prevention can be done in different ways, including Visual Inspection with Acetic Acid/vinegar (VIA), pap smear and Human Papillomavirus (HPV) test. VIA is an inspection of the surface of the uterine cervix after acetic acid (or vinegar) has been applied to it. For both pap smear and HPV test, a doctor or nurse uses a swab to wipe from inside your vagina, take a sample and send it to a laboratory. It is even possible that you were given the swab yourself and asked to swab the inside of your vagina. The laboratory checks for abnormal cell changes if a pap smear is done, and for the HP virus if an HPV test is done.			
	Yes	1	CX1

Have you ever had a screening test for cervical cancer, using any of these methods described above?	No	2	
	Don't know	77	
The next questions CX2 – CX10 are administered only to those that ever had a screening test for cervical cancer (CX1=1). If CX1=2, go to CX11. .			
At what age were you first tested for cervical cancer? Enter '77' if not known and '88' for refused.	Age	⌊_⌋⌊_⌋	CX2
	Don't k'ow 77		
	Refused 88		
When was your last (most recent) test for cervical cancer?	Less than 1 year ago	1	CX3
	1-2 years ago	2	
	3-5 years ago	3	
	More than 5 years ago	4	
	Don't know	77	
	Refused	88	

Violence and Injury			
CORE: Injury			
The next questions ask about different experiences and behaviours that are related to road traffic injuries.			
Question	Response		Code
In the past 30 days, how often did you use a seat belt	All of the time	1	V1

when you were the driver or passenger of a motor vehicle?	Sometimes	2	
	Never	3	
	Have not been in a vehicle in past 30 days.	4	
	No seat belt in the car I usually am in	5	
	Don't Know	77	
	Refused	88	
In the past 30 days, how often did you wear a helmet when you drove or rode as a passenger on a motorcycle or motor-scooter?	All of the time	1	V2
	Sometimes	2	
	Never	3	
	Have not been on a motorcycle or motor-scooter in past 30 days	4	
	Do not have a helmet	5	
	Don't Know	77	
	Refused		
In the past 12 months, have you been involved in a road traffic crash as a driver, passenger, pedestrian, or cyclist?	Yes (as driver)	1	V3
	Yes (as passenger)	2	
	Yes (as pedestrian)	3	
	Yes (as a cyclist)	4	
	No	5 If No, go to O1	

	Don’t know	77 If don’t know, go to O1	
	Refused	88 If Refused, go to O1	
Did you have any injuries in this road traffic crash which required medical attention?	Yes	1	V4
	No	2	
	Don't know	77	
	Refused	88	

Oral Health			
Oral Health			
The next questions ask about your oral health status and related behaviours.			
Quyestion	Response		Code
How many natural teeth do you have?	No natural teeth	1	O1
	1 to 9 teeth	2	
	10 to 19 teeth	3	
	20 teeth or more	4	
	Don't know	77	
During the past 12 months, did your teeth, gums or mouth cause any pain or discomfort?	Yes	1	O7
	No	2	
How long has it been since you last saw a dentist?	Less than 6 months	1	O8
	6-12 months	2	

	More than 1 year but less than 2 years	3	
	2 or more years but less than 5 years	4	
	5 or more years Tinan 5 ka liu	5	
	Never received dental care	6 If Never, go to O10	
What was the main reason for your last visit to the dentist?	Consultation / advice .	1	O9
	Pain or trouble with teeth, gums or mouth	2	
	Treatment / Follow-up treatment	3	
	Routine check-up treatment	4	
	Other	5 If Other, go to O9 other	
	Other (please specify)	⌊_⌋_⌋_⌋_⌋_⌋	O9other
Oral Health, Continued			
Question	Response		Code
How often do you clean your teeth?	Never	1 If Never, go to O14a	O10
	Once a month	2	
	2-3 times a month	3	
	Once a week	4	
	2-6 times a week	5	
	Once a day	6	

	Twice or more a day	7	
Do you use toothpaste to clean your teeth?	Yes	1	O11
	No	2 If No, go to O13a	
Do you use toothpaste containing fluoride?	Yes	1	O12
	No	2	
	Don't know	77	
Do you use the following to clean your teeth? (RECORD FOR EACH) (Please enter a response for all questions on the screen.)			
Toothbrush	Yes	1	O13a
	No	2	
Wooden toothpicks	Yes	1	O13b
	No	2	
Plastic toothpicks	Yes	1	O13c
	No	2	
Thread (dental floss)	Yes	1	O13d
	No	2	
Charcoal	Yes	1	O13e
	No	2	
Chewstick/miswak	Yes	1	O13f
	No	2	
Other	Yes	1	O13g
	No	2	
	Other (please specify)	⌊_⌋_⌋_⌋_⌋_⌋_⌋	O13other

Have you experienced any of the following problems during the past 12 months because of the state of your teeth, gums or mouth? (RECORD FOR EACH) Please enter a response for all questions on the screen.			
Difficulty in chewing foods	Yes	1	O14a
	No	2	
Difficulty with speech/trouble pronouncing words	Yes	1	O14b
	No	2	
Mouth feels dry	Yes	1	O14c
	No	2	
Have a persistent wound and/or swelling in the mouth for more than three weeks	Yes	1	O14d
	No	2	
Have a red or red and white patch in the mouth	Yes	1	O14e
	No	2	
Felt tense because of problems with teeth or mouth	Yes	1	O14f
	No	2	
Embarrassed about appearance of teeth	Yes	1	O14g
	No	2	
Avoid smiling because of teeth	Yes	1	O14h
	No	2	
Sleep is often interrupted	Yes	1	O14i
	No	2	
Days not at work because of teeth or mouth	Yes	1	O14j
	No	2	
	Yes	1	O14k

Difficulty doing usual activities	No	2	
Less tolerant of spouse or people close to you	Yes	1	O14l
	No	2	
Reduced participation in social activities	Yes	1	O14m
	No	2	

Vision and hearing		
The next questions ask about your vison and hearing related issues.		
Question	Response	Code
Have you ever had your vision/eyes checked by a doctor or other health worker?	Yes 1 No 2 If no, go to X14	X12
If Yes, How long ago did you have your vision/eyes last checked by a doctor or other health worker? Leave blank if not known; otherwise, answer must be between 1 and 61 for Years, 1 to 11 for Months, or 1 to 30 for Weeks.	Years └_┴_┘	X13a
	Months └_┴_┘	X13b
	Weeks └_┴_┘	X13c
	Days └_┴_┘	X13d
	Don't know; 77 └_┴_┘	X13e

Have you ever had your hearing checked by a doctor or other health worker?	Yes 1 No 2 If No, go to HE2	X14
How long ago did you have your hearing last checked by a doctor or other health worker? Leave blank if not known; otherwise, answer must be between 1 and 61 for Years, 1 to 11 for Months, or 1 to 30 for Weeks.	Years ⌊_⌋⌊_⌋	X15a
	Months ⌊_⌋⌊_⌋	X15b
	Weeks ⌊_⌋⌊_⌋	X15c
	Days ⌊_⌋⌊_⌋	X15d
	Don't know; 77 ⌊_⌋⌊_⌋	X15e

CORE: Household energy use			
The next questions ask about household energy use. They include questions on the main device used for cooking, heating and lighting.			
COOKING			
What does this household use for cooking most of the time (including cooking food, making tea/coffee, boiling drinking water)? Please tell me the cookstove or device that is used for the most time.		1 If yes, go to X16a	HE2
	Solar cooker	2 If yes, go to X16a	
	Electric stove	3 If yes, go to X16a	
	Piped natural gas stove	4 If yes, go to X16a	
	Biogas stove	5 If yes, go to X16a	

.			
	Liquified petroleum gas/cooking gas stove	6 If yes, go to X16a	
	Manufactured solid fuel stove .	7 If yes, go to X16a	
	Traditional solid fuel stove (non-manufactured)	8 If yes, go to HE4	
	Liquid fuel stove (ethanol, alcohol, kerosene)	9 If yes, go to HE4	
	Moveable firepan/ stone stove/open fire .	10 (specify other)	
	Other	77 If yes, go to HE4	
What type of fuel or energy sources does this household use most of the time for cooking in this cookstove or device? (select all that apply)	Alcohol/ethanol .	1	HE4
	Gasoline/diesel (not in generator)	2	
	Kerosene /paraffin	3	
	Coal/lignite .	4	
	Charcoal	5	
	Wood	6	

	Agricultural or crop residue/grass/straw/shrubs/corn cobs/woodchips/sawdust 7	7	
	Animal waste/dung	8	
	Processed biomass pellets/briquettes .	9	
	Garbage/plastic .	10	
	Other	11 (Specify Other)	
	Don't know	77	

Costs related to NCDs			
Are you diagnosed to have any of the following condition/s? Please enter a response for all questions on the screen.			
Hypertension	Yes	1	X16a
	No	2	
Diabetes	Yes	1	X16b
	No	2	
Ischemic Heart Diseases -Angina/ Myocardial infarction	Yes	1	X16c
	No	2	
Chronic lung diseases (asthma/ chronic obstructive pulmonary disease/Chronic	Yes	1	X16d
	No	2	

bronchitis Bronchiectasis/other)			
Chronic kidney diseases	Yes	1	X16e
	No	2	
Cancer	Yes	1	X16f
	No	2	
Stroke	Yes	1	X16g
	No	2 If No and X16a==2, X16b==2, X16c==2, X16d==2, X16e==2, X16f==2, go to X24	
Instruction for the Interviewer: This section is to be administered only to those responding to yes to above questions. The following section is about the costs you may have incurred for treatment of any of the above diseases.			
During the past 12 months, were you hospitalized for any issue related to the above mentioned illnesses?	Yes	1	X17
	No	2. Skip to X24a	
	If yes How many times?	⌊_⌋⌊_⌋	X18
What were the condition/s?			
Hospitalization 1	High blood pressure/Hypertension	1	X19a
	Diabetes	2	
	Ischemic Heart Diseases - Angina/ Myocardial infarction (heart attack)	3	
	Chronic lung diseases (asthma/ chronic obstructive pulmonary	4	

	disease/Chronic bronchitis Bronchiectasis/other) NOT TB .		
	Chronic kidney diseases .	5	
	Cancer	6	
	Stroke	7	
Hospitalization 2	High blood pressure/Hypertension	1	X19b
	Diabetes	2	
	Ischemic Heart Diseases - Angina/ Myocardial infarction (heart attack)	3	
	Chronic lung diseases (asthma/ chronic obstructive pulmonary disease/Chronic bronchitis Bronchiectasis/other) NOT TB	4	
	Chronic kidney diseases	5	
	Cancer	6	
	Stroke	7	

Hospitalization 3	High blood pressure/Hypertension	1	X19c
	Diabetes	2	
	Ischemic Heart Diseases - Angina/ Myocardial infarction (heart attack)	3	
	Chronic lung diseases (asthma/ chronic obstructive pulmonary disease/Chronic bronchitis Bronchiectasis/other) NOT TB	4	
	Chronic kidney diseases	5	
	Cancer	6	
	Stroke	7	
The following questions are on the expenses you or on behalf of you family/friends had to spend on your hospital admission Pl. recall all the expenses including expenses that you have had to incur even in a Govt. hospital for additional/ non-available medicines/ tests etc. Instruction for the Interviewer: Enter '0' if service was free; or enter 7777 for "Don't know" and 9999 for "Not applicable". If the hospital bills are available, pl. use the bill to cross check. If the patient does not know bill/ bill does not give the breakdown indicate the whole amount in the relevant response category.			
Registration fee, bed charges and other supplies of the hospital	Amount	⌊_⌊_⌊_⌊_⌋	X20a
Medicines		⌊_⌊_⌊_⌊_⌋	X20b

	Amount	
Laboratory tests/investigation	Amount ⌊_⌋⌊_⌋⌊_⌋⌊_⌋	X20c
Surgeries and other forms of special therapies	Amount ⌊_⌋⌊_⌋⌊_⌋⌊_⌋	X20d
Cost of transport to bring the patient from home to hospital and from hospital to home after discharge	Amount ⌊_⌋⌊_⌋⌊_⌋⌊_⌋	X20e
Whole cost – ONLY if the breakdown is not known/not indicated in the bill Enter 0 if service was free or enter 7777 for 'Don't know' and 9999 for 'Not applicable'.	Amount ⌊_⌋⌊_⌋⌊_⌋⌊_⌋	X20f
Other non-medical expenses		
Expenses of the accompanying person(s) (food / accommodation, transport, escort, lodging charges)	Amount ⌊_⌋⌊_⌋⌊_⌋⌊_⌋	X21
Indirect Cost		
Loss of patient's and patient's attendant's income, if any, due to hospitalization	Amount ⌊_⌋⌊_⌋⌊_⌋⌊_⌋	X22

What were the sources through which you met the above expenses for health care and what is the amount covered? If there were multiple sources pl. indicate all the sources. Instruction for the Interviewer:: According to the applicable categories, ask how much respondent paid for or else enter 7777 for “Don’t know” and 9999 for “Not applicable”. Multiple answers are allowed.		
Household income personal income/ savings Enter 0 if service was free or enter 7777 for 'Don't know' and 9999 for 'Not applicable'.	Amount ⌊_⌋⌊_⌋⌊_⌋⌊_⌋ Don't know 7777 Not applicable 9999	X23a
Loans (bank/friends/relatives)	Amount ⌊_⌋⌊_⌋⌊_⌋⌊_⌋ Don't know 7777 Not applicable 9999	X23b
Contribution from friends/relatives	Amount ⌊_⌋⌊_⌋⌊_⌋⌊_⌋ Don't know 7777 Not applicable 9999	X23c
Selling assets/property .	Amount ⌊_⌋⌊_⌋⌊_⌋⌊_⌋ Don't know 7777 Not applicable 9999	X23d
Insurance coverage	Amount ⌊_⌋⌊_⌋⌊_⌋⌊_⌋ Don’t know 7777 Not applicable 9999	X23e
Reimbursement from employer .	Amount ⌊_⌋⌊_⌋⌊_⌋⌊_⌋ Don't know 7777 Not applicable 9999	X23f

Other, please specify		⌊_⌊_⌊_⌊_⌋	X23g
Section B			
Costs for OPD visits: Reference period past one month. This section is to gather information on your experiences during the last one month of outpatient visits to hospitals/ clinics or to pharmacies for issues related to the NCD conditions.			
Of the following illnesses which ones required an outpatient visit to a hospitals/ clinics/pharmacy, during the last one month?			
High blood pressure/Hypertension	Yes No	1 2	X24a
Diabetes	Yes No	1 2	X24b
Ischemic Heart Diseases -Angina/ Myocardial infarction Moras	Yes No	1 2	X24c
Chronic lung diseases (asthma/ chronic obstructive pulmonary disease/Chronic bronchitis Bronchiectasis/other)	Yes No	1 2	X24d
Chronic kidney diseases	Yes No	1 2	X24e
Cancer	Yes No	1 2	X24f
Stroke	Yes No	1 2	X24g

If the responses to all of the above is 'No' thank the respondent and end the interview.

The following questions are on the expenses you or on behalf of you family/friends may had to incur during the last one month for services, medicines or investigations during the outpatient visits to hospitals/ clinics. Pl. recall all the expenses including expenses that you have had to incur even in a Govt. hospital for additional/ non-available medicines/ tests etc.

Instruction for the Interviewer::

Enter '0' if service is free; or enter 7777 for "Don't know" and 9999 for "Not applicable". please make sure that all the expenses indicated are a TOTAL for the continued medicines/ therapies during the last one month and any non-hospitalized treatment for any acute complications.

Direct Medical cost		
Cost of medicines	Amount ⌊_⌋⌊_⌋⌊_⌋⌊_⌋ Free 0 Don't know 7777 Not applicable 9999	X25a
Cost of laboratory tests/investigation	Amount ⌊_⌋⌊_⌋⌊_⌋⌊_⌋ Free 0 Don't know 7777 Not applicable 9999	X25b
Cost of transport to bring the patient from home to hospital and from hospital to home after discharge	Amount ⌊_⌋⌊_⌋⌊_⌋⌊_⌋ Free 0 Don't know 7777 Not applicable 9999	X25c
Other non-medical expenses		
Expenses of the accompanying person(s) (food / accommodation, transport, escort, lodging charges)	Amount ⌊_⌋⌊_⌋⌊_⌋⌊_⌋ Free 0 Don't know 7777 Not applicable 9999	X26
Indirect Cost.		

Loss of patient's and patient's attendants income, if any, due to hospitalization	Amount	⌊_⌋⌊_⌋⌊_⌋⌊_⌋	X27
	Free 0 Don't know 7777 Not applicable 9999		

Step 2 Physical Measurements			
CORE: Blood Pressure			
Question	Response		Code
Has participant agreed to participate in Step 2 (physical measures)?	Yes 1 No 2 If No, End		S2C
Interviewer ID ID must be a positive number	⌊_⌋⌊_⌋⌊_⌋		M1
Device ID for blood pressure ID must be a positive number.	⌊_⌋⌊_⌋		M2
Cuff size used	Small 1 Medium 2 Large 3		M3
Reading 1 Enter '888' in all fields if participant has refused.	Systolic (mmHg) (Systolic blood pressure must be between 40 and 300mmHg.) ⌊_⌋⌊_⌋⌊_⌋		M4a
	Diastolic (mmHg)	⌊_⌋⌊_⌋⌊_⌋	M4b

	(Diastolic blood pressure must be between 30 and 200mmHg.) (Diastolic blood pressure cannot be greater than systolic blood pressure.)		
Reading 2 Enter '888' in all fields if participant has refused.	Systolic (mmHg) (Systolic blood pressure must be between 40 and 300mmHg.)	⌊_⌋⌊_⌋⌊_⌋	M5a
	Diastolic (mmHg) (Diastolic blood pressure must be between 30 and 200mmHg.) (Diastolic blood pressure cannot be greater than systolic blood pressure.)	⌊_⌋⌊_⌋⌊_⌋	M5b
Reading 3 Enter '888' in all fields if participant has refused.	Systolic (mmHg) (Systolic blood pressure must be between 40 and 300mmHg.)	⌊_⌋⌊_⌋⌊_⌋	M6a
	Diastolic (mmHg) (Diastolic blood pressure must be between 30 and 200mmHg.) (Diastolic blood pressure cannot be greater than systolic blood pressure.)	⌊_⌋⌊_⌋⌊_⌋	M6b
During the past two weeks, have you been treated for raised blood pressure with drugs (medication) prescribed by a	Yes	1	M7
	No	2	

doctor or other health worker?			
CORE: Height and Weight			
For women: Are you pregnant?	Yes No	1 If Yes, go to M 16a 2	M8
Interviewer ID ID must be a positive number.		⌊_⌋⌊_⌋⌊_⌋	M9
Device IDs for height and weight ID must be a positive number	Height Weight	⌊_⌋⌊_⌋ ⌊_⌋⌊_⌋	M10a M10b
Height (Height must be between 100 and 270cm.) Enter '888' if participant has refused.	in Centimetres (cm)	⌊_⌋⌊_⌋⌊_⌋. ⌊_⌋	M11
Weight Weight must be between 20 and 350kg. Enter '888' if participant has refused. If too large for scale 666.6	in Kilograms (kg)	⌊_⌋⌊_⌋⌊_⌋. ⌊_⌋	M12
CORE: Waist Sintura			
Device ID for waist		⌊_⌋⌊_⌋	M13

ID must be a positive number.			
Waist circumference / (Waist circumference must be between 30 and 200cm.) Enter '888' if participant has refused.	in Centimetres (cm) └┴┴┘.└┘		M14

EXPANDED: Hip Circumference and Heart Rate		
Hip circumference (Hip circumference must be between 45 and 300cm.) (Enter '888' in all 3 fields if refused.)	in Centimeters (cm) └┴┴┘.└┘	M15
Heart Rate (Heart rate cannot be less than 30bpm or more than 200bpm.) (Enter '888' in all 3 fields if refused.)		
Reading 1	Beats per minute └┴┴┘	M16a
Reading 2	Beats per minute └┴┴┘	M16b
Reading 3	Beats per minute └┴┴┘	M16c

Step 3 Biochemical Measurements			
CORE: Blood Glucose			
Question	Response		Code
During the past 12 hours have you had anything to eat or drink, other than water?	Yes No	1 2	B1
Technician ID ID must be a positive number.		⌊_⌋⌊_⌋⌊_⌋	B2
Device ID ID must be a positive number.		⌊_⌋⌊_⌋	B3
Time of day blood specimen taken (24-hour clock)	Hours: minutes	⌊_⌋⌊_⌋ : ⌊_⌋⌊_⌋ Hrs mins	B4
Fasting blood glucose – [CHOOSE ACCORDINGLY: MMOL/L OR MG/DL] (Fasting blood glucose must be at least 20 and no more than 600 mmol/l.) Enter '77' if participant has refused or if there is a problem with the reading.	mg/dl ⌊_⌋⌊_⌋⌊_⌋ . ⌊_⌋		B5
	Yes	1	B6

Today, have you taken insulin or other drugs (medication) that have been prescribed by a doctor or other health worker for raised blood glucose?	No	2	
CORE: Blood Lipids Mina iha Ran			
Device ID			B7
Total cholesterol – [CHOOSE ACCORDINGLY: MMOL/L OR MG/DL] - (Total cholesterol must be at least 100 and no more than 400 mmol/l.) Enter '77' if participant has refused or if there is a problem with the reading.	mg/dl	⌊_⌊_⌊_⌋.⌊_⌋	B8
During the past two weeks, have you been treated for raised cholesterol with drugs (medication) prescribed by a doctor or other health worker?	Yes No	1 2	B9

CORE: Urinary sodium and creatinine			
Had you been fasting prior to the urine collection?	Yes No	1 2	B10
Technician ID		⌊_⌋⌊_⌋⌊_⌋	B11
Device ID		⌊_⌋⌊_⌋	B12
Time of day urine sample taken (24 hour clock)	Hours : minutes	⌊_⌋⌊_⌋ : ⌊_⌋⌊_⌋ hrs mins	B13
Urinary sodium	mmol/l	⌊_⌋⌊_⌋⌊_⌋⌊_⌋ . ⌊_⌋	B14
Urinary creatinine	mmol/l	⌊_⌋⌊_⌋ . ⌊_⌋⌊_⌋	B15
Urinary iodine	mmol/l	⌊_⌋⌊_⌋ . ⌊_⌋⌊_⌋	X28

Location		
GPS coordinates (Record GPS coordinates) (GPS coordinates are easier to get when outside.) (No GPS coordinates entered. Please try again.)	⌊_⌋⌊_⌋ . ⌊_⌋⌊_⌋	L1

Annex III:

Tool to asses availability and readiness of essential promotive, preventive and curative services for NCDs and mental health in primary, secondary and tertiary care facilities

National Hospital of Timor-Leste

Mod /Ind		FACILITY IDENTIFIERS		Skip
	100	Facility code Sucos ID/ Enumeration Area ID	— — – – — — — _____	
	102	Official name of facility (name used for reporting)	_____	
	103	Address of facility location	_____	
	104	Interview date	VISIT NO. / DATE (DD MM YYYY) / INTER- VIEWER CODE	

	(A) FACILITY CHARACTERISTICS		
	First, I would like to know about the various departments in this facility.		
	1. DEPARTMENTS		
105	Does this facility have following Departments?		
	Department		
	Internal medicine and paediatrics	Yes, functional.....1 Yes, non-functional.....2 No.....3	
	Surgery and operating block	Yes, functional.....1 Yes, non-functional.....2 No.....3	
	Obstetrics and Gynaecology	Yes, functional.....1 Yes, non-functional.....2 No.....3	
	Accident and Emergency section	Yes, functional.....1 Yes, non-functional.....2 No.....3	
	Physiotherapy unit	Yes, functional.....1 Yes, non-functional.....2 No.....3	

	Blood bank	Yes, functional……1 Yes, non-functional……2 No……3	
	Intensive care unit	Yes, functional……1 Yes, non-functional……2 No……3	
	High dependency unit	Yes, functional……1 Yes, non-functional……2 No……3	
	Stroke Unit	Yes, functional……1 Yes, non-functional……2 No……3	
	Others (Specify)		

2. STAFF CATEGORIES

I would like to know about personnel who work in this facility. These may be full-time, part-time, or seconded persons**.**

106 Are the following staff categories in service in this hospital at present?

		Staff categories	(A) (Please tick Yes/No option)		(B) If yes, numbers in service	
			NO	YES	FULL TIME	VISITING
	1	General Doctors	➔ 105_2			
	2	Anesthesiologists	➔ 105_3			
	3	Pediatrician	➔ 105_4			
	4	Obstetrician	➔ 105_5			
	5	Dentist	➔ 105_6			
	6	Internist	➔ 105_7			
	7	General Nurses	➔ 105_8			
	8	Anesthesia Nurses	➔ 105_9			
	9	Midwives	➔ 105_10			
	10	Nutritionist	➔ 105_11			
	11	Radiologists	➔ 105_12			
	12	Surgeons	➔ 105_13			
	13	Laboratory Technicians	➔ 105_14			
	14	Pharmacy Technicians	➔ 105_15			
	15	Radiology Technicians	➔ 105_16			
	16	Electro-medical Technicians	➔ 105_17			
	17	Public Health Technicians	➔ 105_18			
	18	Medical Record Technician	➔ 105_19			
	19	General Ancillary Staff	➔ 105_20			
	20	Others (Specify)	**END**			

	(B) BASIC INFRASTRUCTURE AND SYSTEMS		
	I would like to know about the infrastructure resources available in this facility including facilities for transportation.		
	1. COMMUNICATION		**Skip**
107	Is there access to email or internet within the facility? (Describe the experience of the previous month).	Yes, and there is a computer/ another device belonging to the facility to access internet……..1 Yes, but there is no computer/ another device belonging to the facility to access internet and the access is only through private devices……..2 No……..3	➔ 109
108	How consistently is internet available in the facility?	Always……..1 Most of the days in a month……..2 Sometimes……..3	
	2. POWER SUPPLY		
109	Does the facility have electricity available? (Describe the experience of the previous week).	Yes, always at all times open for services……..1 yes, often available with some interruptions of less than 2 hours per day at times open for services……..2 yes, sometimes available with frequent or prolonged interruptions of more than 2 hours per day at times open for services)……..3 No electricity……..4	
	3. WATER AVAILABILITY		
110	Is drinking water available for patients at all times in the facility which is open for services? (Describe the experience of the previous week).	Yes, always available at all times open for services……..1 Yes, often available with some interruptions of less than 2 hours per day at times open for services……..2 Sometimes available, with frequent or prolonged interruptions of more than 2 hours per day at times open for services……..3 Not available……..4	
	4. SANITATION		
111	Is there a toilet (latrine) on the premises that is accessible for patients? IF YES, ASK: May I see the facility that is available today?	Yes, available and functional……..1 yes, available but not functional……..2 Not available……..3	➔ 113
112	Did you observe the following in the toilet on the day of visit?		
	1. Running Water	YES……..1 NO……..2	
	2. Soap	YES……..1 NO……..2	
	5. EMERGENCY TRANSPORTATION SYSTEMS		
113	Does this facility have multifunctional vehicle, for emergency transportation for clients that is either stationed at this facility or that the facility can call for?	Yes, with driver and fuel available for 24 hours……..1 Yes, but driver and/or fuel not available for 24 hours……..2 Not available……..3	
114	Does this facility have an ambulance, for emergency transportation for clients that is either stationed at	Yes, with driver and fuel available for 24 hours……..1 Yes, but driver and/or fuel not available for 24 hours……..2 Not available……..3	

	this facility or that the facility can call for?		
	6. BASIC LABORATORY SERVICES		
115	Does the facility have basic laboratory services?	YES……1 NO……2	➔ 119
116	Does the facility provide following laboratory services:		
	• Bio-chemistry	YES……1 NO……2	
	• Haematology	YES……1 NO……2	
117	Can the estimation of following be done in the lab:		
	• Blood sugar	YES……1 NO……2	
	• Urine ketone bodies	YES……1 NO……2	
	• Urine microalbuminuria	YES……1 NO……2	
	• HbA1c	YES……1 NO……2	
	• Serum cholesterol	YES……1 NO……2	
	• Serum creatinine	YES……1 NO……2	
118	Does the facility provide following Radiology services:		
	• Ultrasound scanning	YES……1 NO……2	
	• simple radiology	YES……1 NO……2	
	• contrast radiology	YES……1 NO……2	
	8. OTHERS		
119	Does the facility have a physical separation between General OPD and wards for in-patient care?	YES……1 NO……2	

	(C) SERVICES RELATED TO NON-COMMUNICABLE DISEASES		
	Now, I would like to know if the following services for noncommunicable diseases are available in this facility today.		
	1. Promotion and Prevention		
120	Does this facility involve in the organization of NCD Clinics and providing support to them?	YES……1 NO ……2	
	2. Integrated Screening and services for Diabetes, Hypertension, CVD and CRD		
121	Does this facility offer any screening and services for Diabetes, Hypertension, CVD cardiovascular diseases and chronic respiratory disease?	YES……1 NO……2	➔ 129
122	Does this facility perform following procedures for screening purposes?		
	• Check urine albumin	YES, on all above 40 years …… ……1 YES, only for adults selected by staff……2 YES, on request by the person……3 NO……4	
	• Check blood sugar – capillary sample	YES, on all above 40 years ……1 YES, only for adults selected by staff……2 YES, on request by the person……3 NO……4	
	• Assess smoking status	YES……1 NO……2	
	• Assess CVD risk	YES……1 NO……2	
	• Measure Peak Expiratory Flow Rate (PEFR)	YES……1 NO……2	
	• Screening for Albuminaria	YES……1 NO……2	
123	If found to be positive, what is the next step:		
	• refer all to higher care	YES……1 NO……2	
	• follow PEN protocol to decide on counsel or refer	YES……1 NO……2	
124	Does this facility offer services to manage the following acute or emergency conditions:		
	• Acute coronary event-myocardial infarction(heart attack), angina	YES……1 NO……2	
	• Acute heart failure	YES……1 NO……2	
	• acute exacerbations of asthma and COPD using systemic steroids, inhaled beta agonists, and, if indicated, oral antibiotics and oxygen therapy	YES……1 NO……2	
	• acute ventilatory failure	YES……1 NO……2	
	• Acute stroke	YES……1 NO……2	

	• Percutaneous coronary intervention for acute myocardial infarction	YES.....1 NO.....2	
125	Does this facility offer services to follow up and manage:		
	• Patients with hypertension	YES.....1 NO.....2	
	• Patients with diabetes	YES.....1 NO.....2	
	• Patients who have had cardiac events- myocardial infarction	YES.....1 NO.....2	
	• Patients who have had a stroke	YES.....1 NO.....2	
126	Does this facility provide any rehabilitation services?	YES.....1 NO.....2	
127	Does this facility provide the following rehabilitation services:		
	• Physiotherapy	YES.....1 NO.....2	
	• Any other	YES.....1 NO.....2	
128	Does this facility offer services to:		
	• Treat acute pharyngitis (children) to prevent rheumatic fever	YES.....1 NO.....2	
	• Prophylaxis treatment of penicillin for rheumatic fever or established rheumatic heart disease	YES.....1 NO.....2	
	3. Cancer services		
129	Does this facility offer any cancer screening/related services (within the facility or through home visits)?	YES.....1 NO.....2	➔ 131
130	Does this facility provide the following services?		
	• Vaccination against HPV as per EPI protocol	YES.....1 NO.....2	
	• refer all women presenting abnormal vaginal bleeding, foul smelling discharge or pain during vaginal intercourse as per PEN protocol to the National Hospital	YES.....1 NO.....2	
	• conduct health education sessions about breast cancer (including self exploration for early detection)	YES.....1 NO.....2	
	• Refer all women presenting with breast lump or any other breast problems as per PEN protocol	YES.....1 NO.....2	

	• Health education about prevention and early identification of symptoms of oral cancer	YES.....1 NO.....2	
	• Screen people using tobacco (smoking or smokeless) or/and using areca nut as per PEN protocol	YES.....1 NO.....2	
	• Use of Oral immediate release morphine and injectable morphine	YES.....1 NO.....2	
131	Does this facility provide the surgical treatment service for cancers?	YES.....1 NO.....2	➔ 133
132	Does this facility provide the surgical treatment service for the following cancers?		
	• Oral cancer	YES.....1 NO.....2	
	• Cervical Cancer	YES.....1 NO.....2	
	• Eye Cancer	YES.....1 NO.....2	
	• Others (Specify)	YES.....1 NO.....2	
133	Does this facility provide the chemotherapy service for cancers?	YES.....1 NO.....2	➔ 135
134	Does this facility provide the chemotherapy service for the following cancers?		
	• Oral cancer	YES.....1 NO.....2	
	• Cervical Cancer	YES.....1 NO.....2	
	• Eye Cancer	YES.....1 NO.....2	
	• Others (Specify)	YES.....1 NO.....2	
	4. Mental health services		
135	Does this facility offer any mental health related services (within the facility or through home visits)?	YES.....1 NO.....2	➔ 138
136	Does this facility offer the following mental health services?		
	• Mental health promotion in the community	YES.....1 NO.....2	
	• Screening and proactive case finding of psychosis, depression, and anxiety disorders	YES.....1 NO.....2	
	• Screening for detection of dementia	YES.....1 NO.....2	
	• Diagnosis of childhood Attention Deficit Hyperactivity Disorder	YES.....1 NO.....2	
	• Diagnosis of childhood autism	YES.....1 NO.....2	
	• Diagnosis and management of schizophrenia	YES.....1 NO.....2	

	• Diagnosis and management depression	YES.....1 NO.....2	
	• Diagnosis and management of affective bipolar disease	YES.....1 NO.....2	
	• Diagnosis and management of anxiety	YES.....1 NO.....2	
	• Diagnosis and management of epilepsy	YES.....1 NO.....2	
	• Counselling to patient with mental problem and family	YES.....1 NO.....2	
	• Management of prolonged seizures or status epilepticus	YES.....1 NO.....2	
	• Diagnostic and management of illicit drug abuse	YES.....1 NO.....2	
	• Management of refractory psychosis with clozapine	YES.....1 NO.....2	
	• Surgery for refractory epilepsy	YES.....1 NO.....2	
137	Does the facility offer follow up of patients diagnosed with mental illnesses to check on continuation of treatment	YES.....1 NO.....2	
	5. Oral health services		
138	Does this facility offer services of identifying and refer any oral/dental problems (within the facility or through home visits)?	YES.....1 NO.....2	➔ 141
139	Does this facility offer services of identifying common dental problems requiring interventions?	YES.....1 NO.....2	
140	Does this facility offer the following oral health services?		
	• Scaling (dental cleaning	YES.....1 NO.....2	
	• Simple tooth extraction	YES.....1 NO.....2	
	• Simple composite restoration	YES.....1 NO.....2	
	• Complex composite resin restoration	YES.....1 NO.....2	
	• Oral antimicrobials for oral infections	YES.....1 NO.....2	
	• Incision & drainage of dento-alveolar abscess	YES.....1 NO.....2	
	• Root Canal Treatment (RCT)	YES.....1 NO.....2	

	• Dental crown exposure	YES.....1 NO.....2	
141	Does this facility Oral health promotion activities in schools?	YES.....1 NO.....2	
	6. Eye health services		
142	Does this facility offer any eye health related services (within the facility or through home visits)?	YES.....1 NO.....2	➔ 146
143	Does this facility offer the following eye health services?		
	• Identification and treatment of suspected conjunctivitis	YES.....1 NO.....2	
	• Retinopathy screening		
	• Treatment for retinopathy		
	• Diagnosis and treatment of glaucoma	YES.....1 NO.....2	
	• Diagnosis and treatment of eye tumour	YES.....1 NO.....2	
	• Diagnosis and treatment of granuloma	YES.....1 NO.....2	
	• Diagnosis and treatment of chalazion	YES.....1 NO.....2	
	• Diagnosis and treatment of light keratitis	YES.....1 NO.....2	
	• Diagnosis and treatment of dacrocytes	YES.....1 NO.....2	
	• Diagnosis and treatment of hyphaemia	YES.....1 NO.....2	
	• Diagnosis and treatment of retinal detachment	YES.....1 NO.....2	
	• Diagnosis and treatment of blunt ophthalmology trauma	YES.....1 NO.....2	
	• Treatment for visual refraction abnormalities	YES.....1 NO.....2	
	• Treatment for strabismus	YES.....1 NO.....2	
	• Detection of paediatric retinoblastoma and referral		
	• Cataract extraction and insertion of intraocular lens	YES.....1 NO.....2	
144	Does the facility offer ophthalmologic surgeries service?	YES.....1 NO.....2	➔ 146
145	Does the facility offer ophthalmologic surgeries service for the following conditions?		
	• Chalazion	YES.....1 NO.....2	
	• palpebral abscess		
	• pterygium		
	• tarsotomy		

	• glaucoma,		
	• evisceration		
	• tumour biopsy		

(D) Maintenance of registers of patients screened for NCDs				
Now, I would like to know if the following registers for noncommunicable diseases related services are available in this facility today.				
146	Do you maintain individual patient records?		YES.....1 NO.....2	➔ 152
147	If Yes, what mode is used for keeping of records?		Paper based.....1 Electronic.....2	
148	Do you maintain a register for patients screened for: (IF AVAILABLE, ASK TO SEE THE DOCUMENT)			
	1	Diabetes	Yes, observed .....1 Yes, reported not observed.....2 No.....3	
	2	Hypertension	Yes, observed .....1 Yes, reported not observed.....2 No.....3	
149	Do you maintain a register for patients managed for: (IF AVAILABLE, ASK TO SEE THE DOCUMENT)			
	1	Diabetes	Yes, observed .....1 Yes, reported not observed.....2 No.....3	
	2	Hypertension	Yes, observed .....1 Yes, reported not observed.....2 No.....3	
150	Does the facility maintain any forms of records to contribute to the Cancer Registry? (IF YES, ASK TO SEE THE DOCUMENT)		Yes, observed .....1 Yes, reported not observed.....2 No.....3	
151	Does the records maintained in the facility allows the tracking of the patient?		YES.....1 NO.....2	

(E) Availability and use of guidelines in the facility			
I would like to know if the following documents for noncommunicable diseases are available in this facility today.			
152	Do you follow the PEN or other Guideline for screening of NCDs? Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed .....1 Yes, reported not seen.....2 No..... 3	➔ 154
153	Is the guideline also available as algorithm for easy reference? Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed and displayed for easy reference....1 Yes, observed but not displayed.....2 Yes, reported not observed.....3 No.....4	

154	Availability of WHO-CVD Risk Chart Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed ……1 Yes, reported not observed……2 No……3	
155	Referral protocols and guidelines Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT). (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed ……1 Yes, reported not observed……2 No……3	
156	Do you follow any protocol for management of Hypertension? Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed ……1 Yes, reported not observed……2 No……3	➔ 158
157	Is the guideline also available as algorithm for easy reference? Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed and displayed for easy reference….1 Yes, observed but not displayed……2 Yes, reported not observed……3 No……4	
158	Do you follow any protocol for management of diabetes? Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed ……1 Yes, reported not observed……2 No……3	➔ 160
159	Is the guideline also available as algorithm for easy reference? Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed and displayed for easy reference….1 Yes, observed but not displayed……2 Yes, reported not observed……3 No……4	
160	Do you follow any protocol for management of Chronic Respiratory diseases? Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed ……1 Yes, reported not observed……2 No……3	➔ 162
161	Is the guideline also available as algorithm for easy reference? Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed and displayed for easy reference….1 Yes, observed but not displayed……2 Yes, reported not observed……3 No……4	
162	Do you follow any protocol for management of exacerbated asthma or COPD (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed and displayed for easy reference….1 Yes, observed but not displayed……2 Yes, reported not observed……3 No……4	➔ 164
163	Is the guideline also available as algorithm for easy reference? Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed and displayed for easy reference….1 Yes, observed but not displayed……2 Yes, reported not observed……3 No……4	

(F) Training of staff in NCD services in last 5 years				
	Now I would like to ask about trained medical staffs for NCD related services available in this facility today.			
164	Does any medical staff in the facility received any training on screening and management of following NCDs within the last 5 years?			
		DOCTORS	**NURSES**	
1	Diabetes screening and care	YES.....1 NO.....2	YES.....1 NO.....2	
2	Hypertension screening and care	YES.....1 NO.....2	YES.....1 NO.....2	
3	CVD screening and care	YES.....1 NO.....2	YES.....1 NO.....2	
4	Identification and counselling for mental health illness	YES.....1 NO.....2	YES.....1 NO.....2	
5	Diagnosis of chronic respiratory diseases	YES.....1 NO.....2	YES.....1 NO.....2	

(G) AVAILABILITY OF THE KEY MEDICINES RELATED TO NCDs									
	Now I would like to ask about key medicines for NCD related services available in this facility today.								
		Generic drug name	**AVAILABLE**					**ANY STOCK OUT IN THE PAST 3 MONTHS? (C)**	
			OBSERVED (A)		**NOT OBSERVED (B)**				
			AT LEAST ONE NOT EXPIRED	**AVAILABLE BUT EXPIRED**	**REPORTED AVAILABLE BUT NOT SEEN**	**NOT AVAILABLE TODAY**	**NEVER AVAILABLE**	**YES**	**NO**
165	Medicines to treat cardio vascular diseases/ hypertension								
	1	Aspirin							
	2	ACE inhibitor (enalapril) or ARB							
	3	Beta blocker (atenolol)							
	4	Calcium channel blocker							
	5	Hydrochlorothiazide							
	6	Enalapril							
	7	Nifedipine retard							
	8	Statin (lovastatin or simvastatin)							
	9	Atorvastatin							
	10	Other (specify)							
166	Medicines to treat Diabetes								
	1	Insulin human soluble short-acting Injection							
	2	Metformin hydrochloride Tablet							
	3	Sulphonylurea (glibenclamide / gliclazide / glipizide)							

	4	Others (Specify)							
167	Medicines to treat asthma/ Chronic respiratory disease								
	1	Salbutamol tablets							
	2	Salbutamol inhalers							
	3	Beclamathazone inhaler							
	4	Oxygen							
	5	Other- specify							
168	Medicines to treat mental illnesses								
		(Specify)							
169	Medicines to treat /prevent Rheumatic heart disease								
	1	Oral penicillin							
	2	Benzathine penicillin							
	3	Other- specify							

(H) AVAILABILITY OF MEDICAL DEVICES ON SURVEY DATE

170 Now I would like to know if the following diagnostics devices are available onsite at any location in this facility.

			A) AVAILABLE			(B) FUNCTIONAL/VALID	
			Observed	Reported not seen	Not available	Yes	No
	1	Blood pressure Machine/Mobile					
	2	Blood pressure Manual					
	3	Stethoscope Binaural					
	4	Scales for adults					
	5	Stadiometer					
	6	Electrocardiograph (EKG)					
	7	Oxygen Concentrator					
	8	Nebulizer					
	9	Ambu Bag for Adult					
	10	Resuscitator set. Adult/child. Compressing with Resuscitation bag 1600 ml.					
	11	Patient Monitor (5 parameters)					
	12	Eye Chart					
	13	Emergency Kits					
	14	Oxygen Face mask-adult size					
	15	Glucometer with strips					

	16	Urine dipstick testing – protein					
	17	Urine dipstick testing –glucose					
	18	Urine dipstick testing –sugar					
	19	Dipstick for urine albumin					
	20	Others (Specify)					
	Only for the facilities providing oral health services:						
	1	Dental Chair					
	2	Examination Light					
	3	Autoclave bench top					
	4	Sterilizing Units, Steam, Table top					
	5	Cabinets, Treatment, Dentistry					
	6	Tables, Instrument					
	7	Kick Buckets					
	8	Waste-Disposal Units, Sharps					
	9	Others (Specify)					
	Only for the facilities providing eye care services:						
	1	Fundus Camera					
	2	LASER, OPTHALMIC, YAG					
	3	Ophthalmic Diagnostic Set					
	4	Others (Specify)					

Referral hospitals

Mod /Ind		FACILITY IDENTIFIERS		Skip
	100	Facility code Sucos ID/ Enumeration Area ID	— — — — — — – –	
	102	Official name of facility (name used for reporting)	_____	
	103	Address of facility location	_____	
	104	Interview date	VISIT NO. / DATE (DD MM YYYY) / INTER- VIEWER CODE	

	(B) FACILITY CHARACTERISTICS		
	First, I would like to know about the various departments in this facility.		
3.	**DEPARTMENTS**		
105	Does this facility have following Departments?		
	Department		
	Internal medicine and paediatrics	Yes, functional.....1 Yes, non-functional.....2 No.....3	
	Surgery and operating block	Yes, functional.....1 Yes, non-functional.....2 No.....3	
	Obstetrics and Gynaecology	Yes, functional.....1 Yes, non-functional.....2 No.....3	
	Accident and Emergency section	Yes, functional.....1 Yes, non-functional.....2 No.....3	
	Physiotherapy unit	Yes, functional.....1 Yes, non-functional.....2 No.....3	
	Blood bank	Yes, functional.....1 Yes, non-functional.....2 No.....3	
	High dependency unit	Yes, functional.....1 Yes, non-functional.....2 No.....3	
4.	**STAFF CATEGORIES**		
	I would like to know about personnel who work in this facility. These may be full-time, part-time, or seconded persons.		
106	Are the following staff categories in service in this hospital at present?		
	Staff categories	**(A)**	**(B)**

			(Please tick Yes/No option)		If yes, numbers in service	
			NO	YES	FULL TIME	VISITING
	1	General Doctors	➔ 105_2			
	2	Anesthesiologists	➔ 105_3			
	3	Pediatrician	➔ 105_4			
	4	Obstetrician	➔ 105_5			
	5	Dentist	➔ 105_6			
	6	Internist	➔ 105_7			
	7	General Nurses	➔ 105_8			
	8	Anesthesia Nurses	➔ 105_9			
	9	Midwives	➔ 105_10			
	10	Nutritionist	➔ 105_11			
	11	Radiologists	➔ 105_12			
	12	Surgeons	➔ 105_13			
	13	Laboratory Technicians	➔ 105_14			
	14	Pharmacy Technicians	➔ 105_15			
	15	Radiology Technicians	➔ 105_16			
	16	Electro-medical Technicians	➔ 105_17			
	17	Public Health Technicians	➔ 105_18			
	18	Medical Record Technician	➔ 105_19			
	19	General Ancillary Staff	**END**			

	(B) BASIC INFRASTRUCTURE AND SYSTEMS		
	I would like to know about the infrastructure resources available in this facility including facilities for transportation.		
	1. COMMUNICATION		**Skip**
107	Is there access to email or internet within the facility? (Describe the experience of the previous month).	Yes, and there is a computer/ another device belonging to the facility to access internet.....1 Yes, but there is no computer/ another device belonging to the facility to access internet and the access is only through private devices.....2 No.....3	➔ 109
108	How consistently is internet available in the facility?	Always.....1 Most of the days in a month.....2 Sometimes.....3	
	2. POWER SUPPLY		
109	Does the facility have electricity available? (Describe the experience of the previous week).	Yes, always at all times open for services.....1 yes, often available with some interruptions of less than 2 hours per day at times open for services.....2 yes, sometimes available with frequent or prolonged interruptions of more than 2 hours per day at times open for services).....3 No electricity.....4	
	3. WATER AVAILABILITY		
110	Is drinking water available for patients at all times in the facility which is open for services? (Describe the experience of the previous week).	Yes, always available at all times open for services.....1 Yes, often available with some interruptions of less than 2 hours per day at times open for services.....2 Sometimes available, with frequent or prolonged interruptions of more than 2 hours per day at times open for services.....3 Not available.....4	
	4. SANITATION		

111	Is there a toilet (latrine) on the premises that is accessible for patients? IF YES, ASK: May I see the facility that is available today?	Yes, available and functional.....1 yes, available but not functional.....2 Not available.....3	➔ 113
112	Did you observe the following in the toilet on the day of visit?		
	3. Running Water	YES.....1 NO.....2	
	4. Soap	YES.....1 NO.....2	
	5. EMERGENCY TRANSPORTATION SYSTEMS		
113	Does this facility have multifunctional vehicle, for emergency transportation for clients that is either stationed at this facility or that the facility can call for?	Yes, with driver and fuel available for 24 hours.....1 Yes, but driver and/or fuel not available for 24 hours.....2 Not available.....3	
114	Does this facility have an ambulance, for emergency transportation for clients that is either stationed at this facility or that the facility can call for?	Yes, with driver and fuel available for 24 hours.....1 Yes, but driver and/or fuel not available for 24 hours.....2 Not available.....3	
	6. BASIC LABORATORY SERVICES		
115	Does the facility have basic laboratory services?	YES.....1 NO.....2	➔ 119
116	Does the facility provide following laboratory services:		
	• Bio-chemistry	YES.....1 NO.....2	
	• Haematology	YES.....1 NO.....2	
117	Can the estimation of following be done in the lab:		
	• Blood sugar	YES.....1 NO.....2	
	• Urine ketone bodies	YES.....1 NO.....2	
	• Urine microalbuminuria	YES.....1 NO.....2	
	• HbA1c	YES.....1 NO.....2	
	• Serum cholesterol	YES.....1 NO.....2	
	• Serum creatinine	YES.....1 NO.....2	
118	Does the facility provide following Radiology services:		
	• Ultrasound scanning	YES.....1 NO.....2	
	• simple radiology	YES.....1 NO.....2	
	• contrast radiology	YES.....1 NO.....2	
	8. OTHERS		
119	Does the facility have a physical separation between General OPD and wards for in-patient care?	YES.....1 NO.....2	

	(C) SERVICES RELATED TO NON-COMMUNICABLE DISEASES		
	Now, I would like to know if the following services for noncommunicable diseases are available in this facility today.		
	7. Promotion and Prevention		
120	Does this facility involve in the organization of NCD Clinics and providing support to them?	YES.....1 NO 2	
	8. Integrated Screening and services for Diabetes, Hypertension, CVD and CRD		
121	Does this facility offer any screening and services for Diabetes, Hypertension, CVD cardiovascular diseases and chronic respiratory disease?	YES.....1 NO.....2	➔ 129
122	Does this facility perform following procedures for screening purposes?		
	• Check urine albumin	YES, on all above 40 years ....1 YES, only for adults selected by staff.....2 YES, on request by the person.....3 NO.....4	
	• Check blood sugar – capillary sample	YES, on all above 40 years .....1 YES, only for adults selected by staff.....2 YES, on request by the person.....3 NO.....4	
	• Assess smoking status	YES.....1 NO.....2	
	• Assess CVD risk	YES.....1 NO.....2	
	• Measure Peak Expiratory Flow Rate (PEFR)	YES.....1 NO.....2	
	• Screening for Albuminaria	YES.....1 NO.....2	
123	If found to be positive, what is the next step:		
	• refer all to higher care	YES.....1 NO.....2	
	• follow PEN protocol to decide on counsel or refer	YES.....1 NO.....2	
124	Does this facility offer services to manage the following acute or emergency conditions:		
2	• Acute coronary event- myocardial infarction(heart attack), angina	YES.....1 NO.....2	
	• Acute heart failure	YES.....1 NO.....2	
	• acute exacerbations of asthma and COPD using systemic steroids, inhaled beta agonists, and, if indicated, oral antibiotics and oxygen therapy	YES.....1 NO.....2	
	• Acute stroke	YES.....1 NO.....2	
125	Does this facility offer services to follow up and manage:		
	• Patients with hypertension	YES.....1 NO.....2	
	• Patients with diabetes	YES.....1 NO.....2	
	• Patients who have had cardiac events- myocardial infarction	YES.....1 NO.....2	

	• Patients who have had a stroke	YES.....1 NO.....2	
126	Does this facility provide any rehabilitation services?	YES.....1 NO.....2	
127	Does this facility provide the following rehabilitation services:		
	• Physiotherapy	YES.....1 NO.....2	
	• Any other	YES.....1 NO.....2	
128	Does this facility offer services to:		
	• Treat acute pharyngitis (children) to prevent rheumatic fever	YES.....1 NO.....2	
	• Prophylaxis treatment of penicillin for rheumatic fever or established rheumatic heart disease	YES.....1 NO.....2	
	9. Cancer services		
129	Does this facility offer any cancer screening/related services (within the facility or through home visits)?	YES.....1 NO.....2	➔ 131
130	Does this facility provide the following services?		
	• Vaccination against HPV as per EPI protocol	YES.....1 NO.....2	
	• refer all women presenting abnormal vaginal bleeding, foul smelling discharge or pain during vaginal intercourse as per PEN protocol to the National Hospital	YES.....1 NO.....2	
	• conduct health education sessions about breast cancer (including self exploration for early detection)	YES.....1 NO.....2	
	• Refer all women presenting with breast lump or any other breast problems as per PEN protocol	YES.....1 NO.....2	
	• Health education about prevention and early identification of symptoms of oral cancer	YES.....1 NO.....2	
	• Screen people using tobacco (smoking or smokeless) or/and using areca nut as per PEN protocol	YES.....1 NO.....2	
	• Use of Oral immediate release morphine and injectable morphine	YES.....1 NO.....2	
	10. Mental health services		
131	Does this facility offer any mental health related services (within the facility or through home visits)?	YES.....1 NO.....2	➔ 134
132	Does this facility offer the following mental health services?		
	• Mental health promotion in the community	YES.....1 NO.....2	
	• Screening and proactive case finding of psychosis, depression, and anxiety disorders	YES.....1 NO.....2	
	• Screening for detection of dementia	YES.....1 NO.....2	

	• Diagnosis of childhood Attention Deficit Hyperactivity Disorder	YES.....1 NO.....2	
	• Diagnosis of childhood autism	YES.....1 NO.....2	
	• Diagnosis and management of schizophrenia	YES.....1 NO.....2	
	• Diagnosis and management depression	YES.....1 NO.....2	
	• Diagnosis and management of affective bipolar disease	YES.....1 NO.....2	
	• Diagnosis and management of anxiety	YES.....1 NO.....2	
	• Diagnosis and management of epilepsy	YES.....1 NO.....2	
	• Counselling to patient with mental problem and family	YES.....1 NO.....2	
	• Management of prolonged seizures or status epilepticus	YES.....1 NO.....2	
	• Diagnostic and management of illicit drug abuse	YES.....1 NO.....2	
133	Does the facility offer follow up of patients diagnosed with mental illnesses to check on continuation of treatment	YES.....1 NO.....2	
	11. Oral health services		
134	Does this facility offer services of identifying and refer any oral/dental problems (within the facility or through home visits)?	YES.....1 NO.....2	➔ 138
135	Does this facility offer services of identifying common dental problems requiring interventions?	YES.....1 NO.....2	
136	Does this facility offer the following oral health services?		
	• Scaling (dental cleaning	YES.....1 NO.....2	
	• Simple tooth extraction	YES.....1 NO.....2	
	• Simple composite restoration	YES.....1 NO.....2	
	• Complex composite resin restoration	YES.....1 NO.....2	
	• Oral antimicrobials for oral infections	YES.....1 NO.....2	
	• Incision & drainage of dento-alveolar abscess	YES.....1 NO.....2	
	• Root Canal Treatment (RCT)	YES.....1 NO.....2	
137	Does this facility Oral health promotion activities in schools?	YES.....1 NO.....2	
	12. Eye health services		
138	Does this facility offer any eye health related services (within the facility or through home visits)?	YES.....1 NO.....2	➔ 140
139	Does this facility offer the following eye health services?		
	• Identification and treatment of suspected conjunctivitis	YES.....1 NO.....2	

	• Diagnosis and treatment of cataract	YES.....1 NO.....2	
	• Diagnosis and treatment of glaucoma	YES.....1 NO.....2	
	• Diagnosis and treatment of eye tumour	YES.....1 NO.....2	
	• Diagnosis and treatment of granuloma	YES.....1 NO.....2	
	• Diagnosis and treatment of chalazion	YES.....1 NO.....2	
	• Diagnosis and treatment of light keratitis	YES.....1 NO.....2	
	• Diagnosis and treatment of dacrocytes	YES.....1 NO.....2	
	• Diagnosis and treatment of hyphaemia	YES.....1 NO.....2	
	• Diagnosis and treatment of retinal detachment	YES.....1 NO.....2	
	• Diagnosis and treatment of blunt ophthalmology trauma	YES.....1 NO.....2	

(G) Maintenance of registers of patients screened for NCDs			
Now, I would like to know if the following registers for noncommunicable diseases related services are available in this facility today.			
140	Do you maintain individual patient records?	YES.....1 NO.....2	➔ 146
141	If Yes, what mode is used for keeping of records?	Paper based.....1 Electronic.....2	
142	Do you maintain a register for patients screened for: (IF AVAILABLE, ASK TO SEE THE DOCUMENT)		
	1 Diabetes	Yes, observed .....1 Yes, reported not observed.....2 No.....3	
	2 Hypertension	Yes, observed .....1 Yes, reported not observed.....2 No.....3	
143	Do you maintain a register for patients managed for: (IF AVAILABLE, ASK TO SEE THE DOCUMENT)		
	1 Diabetes	Yes, observed .....1 Yes, reported not observed.....2 No.....3	
	2 Hypertension	Yes, observed .....1 Yes, reported not observed.....2 No.....3	
144	Does the facility maintain any forms of records to contribute to the Cancer Registry? (IF YES, ASK TO SEE THE DOCUMENT)	Yes, observed .....1 Yes, reported not observed.....2 No.....3	
145	Does the records maintained in the facility allows the tracking of the patient?	YES.....1 NO.....2	

(H) Availability and use of guidelines in the facility			
I would like to know if the following documents for noncommunicable diseases are available in this facility today.			
146	Do you follow the PEN or other Guideline for screening of NCDs? Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed .....1 Yes, reported not seen.....2 No..... 3	➔ 148
147	Is the guideline also available as algorithm for easy reference? Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed and displayed for easy reference....1 Yes, observed but not displayed.....2 Yes, reported not observed.....3 No.....4	
148	Availability of WHO-CVD Risk Chart Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed .....1 Yes, reported not observed.....2 No.....3	
149	Referral protocols and guidelines Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT). (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed .....1 Yes, reported not observed.....2 No.....3	
150	Do you follow any protocol for management of Hypertension? Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed .....1 Yes, reported not observed.....2 No.....3	➔ 152
151	Is the guideline also available as algorithm for easy reference? Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed and displayed for easy reference....1 Yes, observed but not displayed.....2 Yes, reported not observed.....3 No.....4	
152	Do you follow any protocol for management of diabetes? Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed .....1 Yes, reported not observed.....2 No.....3	➔ 154
153	Is the guideline also available as algorithm for easy reference? Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed and displayed for easy reference....1 Yes, observed but not displayed.....2 Yes, reported not observed.....3 No.....4	
154	Do you follow any protocol for management of Chronic Respiratory diseases? Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed .....1 Yes, reported not observed.....2 No.....3	➔ 156
155	Is the guideline also available as algorithm for easy reference? Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed and displayed for easy reference....1 Yes, observed but not displayed.....2 Yes, reported not observed.....3 No.....4	
156	Do you follow any protocol for management of exacerbated asthma or COPD (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed and displayed for easy reference....1 Yes, observed but not displayed.....2 Yes, reported not observed.....3 No.....4	➔ 158
157	Is the guideline also available as algorithm for easy reference? Is it available in this facility today?	Yes, observed and displayed for easy reference....1 Yes, observed but not displayed.....2 Yes, reported not observed.....3 No.....4	

	(IF AVAILABLE, ASK TO SEE THE DOCUMENT).		

(I) Training of staff in NCD services in last 5 years				
	Now I would like to ask about trained medical staffs for NCD related services available in this facility today.			
158	Does any medical staff in the facility received any training on screening and management of following NCDs within the last 5 years?			
		DOCTORS	**NURSES**	
1	Diabetes screening and care	YES.....1 NO.....2	YES.....1 NO.....2	
2	Hypertension screening and care	YES.....1 NO.....2	YES.....1 NO.....2	
3	CVD screening and care	YES.....1 NO.....2	YES.....1 NO.....2	
4	Identification and counselling for mental health illness	YES.....1 NO.....2	YES.....1 NO.....2	
5	Diagnosis of chronic respiratory diseases	YES.....1 NO.....2	YES.....1 NO.....2	

(G) AVAILABILITY OF THE KEY MEDICINES RELATED TO NCDs									
	Now I would like to ask about key medicines for NCD related services available in this facility today.								
		Generic drug name	**AVAILABLE**					**ANY STOCK OUT IN THE PAST 3 MONTHS? (C)**	
			OBSERVED (A)		**NOT OBSERVED (B)**				
			AT LEAST ONE NOT EXPIRED	**AVAILABLE BUT EXPIRED**	**REPORTED AVAILABLE BUT NOT SEEN**	**NOT AVAILABLE TODAY**	**NEVER AVAILABLE**	**YES**	**NO**
159	Medicines to treat cardio vascular diseases/ hypertension								
	1	Aspirin							
	2	ACE inhibitor (enalapril) or ARB							
	3	Beta blocker (atenolol)							
	4	Calcium channel blocker							
	5	Hydrochlorothiazide							
	6	Enalapril							
	7	Nifedipine retard							
	8	Statin (lovastatin or simvastatin)							
	9	Atorvastatin							
	10	Other (specify)							
160	Medicines to treat Diabetes								
	1	Insulin human soluble short-acting Injection							
	2	Metformin hydrochloride Tablet							
	3	Sulphonylurea (glibenclamide / gliclazide / glipizide)							
	4	Others (Specify)							

161	Medicines to treat asthma/ Chronic respiratory disease								
	1	Salbutamol tablets							
	2	Salbutamol inhalers							
	3	Beclamathazone inhaler							
	4	Oxygen							
	5	Other- specify							
162	Medicines to treat mental illnesses								
		(Specify)							
163	Medicines to treat /prevent Rheumatic heart disease								
	1	Oral penicillin							
	2	Benzathine penicillin							
	3	Other- specify							

(I) AVAILABILITY OF MEDICAL DEVICES ON SURVEY DATE

163 Now I would like to know if the following diagnostics devices are available onsite at any location in this facility.

			A) AVAILABLE			(B) FUNCTIONAL/VALID	
			Observed	**Reported not seen**	**Not available**	**Yes**	**No**
	1	Blood pressure Machine/Mobile					
	2	Blood pressure Manual					
	3	Stethoscope Binaural					
	4	Scales for adults					
	5	Stadiometer					
	6	Electrocardiograph (EKG)					
	7	Oxygen Concentrator					
	8	Nebulizer					
	9	Ambu Bag for Adult					
	10	Resuscitator set. Adult/child. Compressing with Resuscitation bag 1600 ml.					
	11	Patient Monitor (5 parameters)					
	12	Eye Chart					
	13	Emergency Kits					
	14	Oxygen Face mask-adult size					
	15	Glucometer with strips					
	16	Urine dipstick testing – protein					

	17	Urine dipstick testing –glucose					
	18	Urine dipstick testing –sugar					
	19	Dipstick for urine albumin					
	Only for the facilities providing oral health services:						
	1	Dental Chair					
	2	Examination Light					
	3	Autoclave bench top					
	4	Sterilizing Units, Steam, Table top					
	5	Cabinets, Treatment, Dentistry					
	6	Tables, Instrument					
	7	Kick Buckets					
	8	Waste-Disposal Units, Sharps					
	Only for the facilities providing eye care services:						
	1	Fundus Camera					
	2	LASER, OPTHALMIC, YAG					
	3	Ophthalmic Diagnostic Set					

Community Health Centre-3 (CHC-3)

Mod /Ind		FACILITY IDENTIFIERS		Skip
	100	Facility code Sucos ID/ Enumeration Area ID	— — – – — — —	
	102	Official name of facility (name used for reporting)	_____	
	103	Address of facility location	_____	
	104	Interview date	VISIT NO. / DATE (DD MM YYYY) / INTER- VIEWER CODE	

	(C) FACILITY CHARACTERISTICS					
	I would like to know about personnel who work in this facility. These may be full-time, part-time, or seconded persons.					
105	Are the following staff categories in service in this hospital at present?					
	Staff categories		(A) (Please tick Yes/No option)		(B) If yes, numbers in service	
			NO	YES	FULL TIME	VISITING
	1	General Doctors	➔ 105_2			
	2	Nurses	➔ 105_3			
	3	Midwives	➔ 105_4			
	4	Nutritionist	➔ 105_5			
	5	Laboratory Technicians	➔ 105_6			
	6	Pharmacy Technicians	➔ 105_7			
	7	Pediatrician	➔ 105_8			
	8	Dentist	➔ 105_9			
	9	Internist	➔ 105_10			
	10	Radiology Technicians	➔ 105_11			
	11	Electro-medical Technicians	➔ 105_12			
	12	Public Health Technicians	➔ 105_13			
	13	Medical Record Technician	➔ 105_14			
	14	General Ancillary Staff	**END**			

	(B) BASIC INFRASTRUCTURE AND SYSTEMS		
	I would like to know about the infrastructure resources available in this facility including facilities for transportation.		
	1. COMMUNICATION		**Skip**
106	Is there access to email or internet within the facility? (Describe the experience of the previous month).	Yes, and there is a computer/ another device belonging to the facility to access internet.....1 Yes, but there is no computer/ another device belonging to the facility to access internet and the access is only through private devices.....2 No.....3	➔ 107
107	How consistently is internet available in the facility?	Always.....1 Most of the days in a month.....2 Sometimes.....3	
	2. POWER SUPPLY		
108	Does the facility have electricity available? (Describe the experience of the previous week).	Yes, always at all times open for services.....1 yes, often available with some interruptions of less than 2 hours per day at times open for services.....2 yes, sometimes available with frequent or prolonged interruptions of more than 2 hours per day at times open for services).....3 No electricity.....4	
	3. WATER AVAILABILITY		
109	Is drinking water available for patients at all times in the facility which is open for services? (Describe the experience of the previous week).	Yes, always available at all times open for services.....1 Yes, often available with some interruptions of less than 2 hours per day at times open for services.....2 Sometimes available, with frequent or prolonged interruptions of more than 2 hours per day at times open for services.....3 Not available.....4	
	4. SANITATION		
110	Is there a toilet (latrine) on the premises that is accessible for patients? IF YES, ASK: May I see the facility that is available today?	Yes, available and functional.....1 yes, available but not functional.....2 Not available.....3	➔ 112
111	Did you observe the following in the toilet on the day of visit?		
	5. Running Water	YES.....1 NO.....2	
	6. Soap	YES.....1 NO.....2	
	5. EMERGENCY TRANSPORTATION SYSTEMS		
112	Does this facility have multifunctional vehicle, for emergency transportation for clients that is either stationed at this facility or that the facility can call for?	Yes, with driver and fuel available for 24 hours.....1 Yes, but driver and/or fuel not available for 24 hours.....2 Not available.....3	
113	Does this facility have an ambulance, for emergency transportation for clients that is either stationed at this facility or that the facility can call for?	Yes, with driver and fuel available for 24 hours.....1 Yes, but driver and/or fuel not available for 24 hours.....2 Not available.....3	
	6. BASIC X-RAY SERVICES		

114	Does the facility have basic X-ray services? IF YES, ASK: May I see the facility that is available today?	Yes, available and functional.....1 yes, available but not functional.....2 Not available.....3	
	7. BASIC LABORATORY SERVICES		
115	Does the facility have basic laboratory services? IF YES, ASK: May I see the facility that is available today?	YES.....1 NO..... 2	➔ 117
116	Can the following be done in the lab:		
	• Blood sugar estimation	YES.....1 NO.....2	
	• Serum total cholesterol estimation	YES.....1 NO.....2	

	(C) SERVICES RELATED TO NON-COMMUNICABLE DISEASES		
	Now, I would like to know if the following services for noncommunicable diseases are available in this facility today.		
	13. Promotion and Prevention		
117	Does this facility offer any health education services for prevention of NCDs and promotion of healthy lifestyle?	YES.....1 NO 2	➔ 119
118	Does this facility offer following health education services for prevention of NCDs and promotion of healthy lifestyle?		
	• conduct education sessions	YES.....1 NO 2	
	• display material focused on prevention of tobacco, alcohol, unhealthy diet, physical inactivity	YES.....1 NO 2	
119	Does this facility involve in the organization of NCD Clinics?	YES.....1 NO 2	
	14. Integrated Screening and services for Diabetes, Hypertension, CVD and CRD		
120	Does this facility offer any screening and services for Diabetes, Hypertension, CVD cardiovascular diseases and chronic respiratory disease?	YES.....1 NO.....2	➔ 125
121	Does this facility perform following procedures for screening purposes?		
	• Check urine albumin	YES, on all above 40 years ....1 YES, only for adults selected by staff.....2 YES, on request by the person.....3 NO.....4	
	• Check blood sugar – capillary sample	YES, on all above 40 years .....1 YES, only for adults selected by staff.....2 YES, on request by the person.....3 NO.....4	
	• Assess smoking status	YES.....1 NO.....2	
	• Assess CVD risk	YES.....1 NO.....2	

	• Measure Peak Expiratory Flow Rate (PEFR)	YES.....1 NO.....2	
	• Screening for Albuminaria	YES.....1 NO.....2	
122	If found to be positive, what is the next step:		
	• refer all to higher care	YES.....1 NO.....2	
	• follow PEN protocol to decide on counsel or refer	YES.....1 NO.....2	
123	Does this facility offer services to manage:		
2	• exacerbated asthma or COPD as per PEN protocol	YES.....1 NO.....2	
	• Long-term patients of ischemic heart disease	YES.....1 NO.....2	
	• Long-term patients of stroke	YES.....1 NO.....2	
	• Long-term patients of Peripheral artery disease	YES.....1 NO.....2	
	• long-term patients of diabetes	YES.....1 NO.....2	
124	Does this facility offer services to:		
	• Treat acute pharyngitis (children) to prevent rheumatic fever	YES.....1 NO.....2	
	• prophylaxis treatment of penicillin for rheumatic fever or established rheumatic heart disease	YES.....1 NO.....2	
	15. Cancer services		
125	Does this facility offer any cancer screening/related services (within the facility or through home visits)?	YES.....1 NO.....2	➔ 127
126	Does this facility provide the following services?		
	• Vaccination against HPV as per EPI protocol	YES.....1 NO.....2	
	• refer all women presenting abnormal vaginal bleeding, foul smelling discharge or pain during vaginal intercourse as per PEN protocol to the National Hospital	YES.....1 NO.....2	
	• conduct health education sessions about breast cancer (including self exploration for early detection)	YES.....1 NO.....2	
	• Refer all women presenting with breast lump or any other breast problems as per PEN protocol	YES.....1 NO.....2	
	• Health education about prevention and early identification of symptoms of oral cancer	YES.....1 NO.....2	

	• Screen people using tobacco (smoking or smokeless) or/and using areca nut as per PEN protocol	YES.....1 NO.....2	
	16. Mental health services		
127	Does this facility offer any mental health related services (within the facility or through home visits)?	YES.....1 NO.....2	➔ 129
128	Does this facility offer the following mental health services?		
	• Home visit to people with mental problem	YES.....1 NO.....2	
	• Mental health promotion in the community	YES.....1 NO.....2	
	• Screening and proactive case finding of psychosis, depression, and anxiety disorders	YES.....1 NO.....2	
	• Screening for detection of dementia	YES.....1 NO.....2	
	• Screening for developmental disorders in children	YES.....1 NO.....2	
	• Diagnosis and management of epilepsy	YES.....1 NO.....2	
	• Counselling to patient with mental problem and family	YES.....1 NO.....2	
	• Parent skills training for developmental disorders	YES.....1 NO.....2	
	• Management of depression	YES.....1 NO.....2	
	• Management of anxiety	YES.....1 NO.....2	
	• Maternal mental health interventions	YES.....1 NO.....2	
	• Management of prolonged seizures or status epilepticus	YES.....1 NO.....2	
	• Follow up of patients diagnosed with mental illnesses to check on continuation of treatment	YES.....1 NO.....2	
	17. Oral health services		
129	Does this facility offer services of identifying and refer any oral/dental problems (within the facility or through home visits)?	YES.....1 NO.....2	➔ 132
130	Does this facility offer services of identifying common dental problems requiring interventions?	YES.....1 NO.....2	
131	Does this facility offer the following oral health services?		
	• Scaling (dental cleaning	YES.....1 NO.....2	
	• Simple tooth extraction	YES.....1 NO.....2	
	• Simple composite restoration	YES.....1 NO.....2	

	• Complex composite resin restoration	YES.....1 NO.....2	
	• Oral antimicrobials for oral infections	YES.....1 NO.....2	
	• Incision & drainage of dento-alveolar abscess	YES.....1 NO.....2	
	• Root Canal Treatment (RCT)	YES.....1 NO.....2	
132	Does this facility Oral health promotion activities in schools?	YES.....1 NO.....2	
	18. Eye health services		
133	Does this facility offer any eye health related services (within the facility or through home visits)?	YES.....1 NO.....2	➔ 135
134	Does this facility offer the following eye health services?		
	• Identification and treatment of suspected conjunctivitis	YES.....1 NO.....2	
	• Diagnosis and treatment of cataract	YES.....1 NO.....2	
	• Diagnosis and treatment of glaucoma	YES.....1 NO.....2	
	• Diagnosis and treatment of eye tumour	YES.....1 NO.....2	
	• Diagnosis and treatment of granuloma	YES.....1 NO.....2	
	• Diagnosis and treatment of chalazion	YES.....1 NO.....2	
	• Diagnosis and treatment of light keratitis	YES.....1 NO.....2	
	• Diagnosis and treatment of dacrocytes	YES.....1 NO.....2	

(J) Maintenance of registers of patients screened for NCDs				
Now, I would like to know if the following registers for noncommunicable diseases related services are available in this facility today.				
135	Do you maintain a register for patients screened for: (IF AVAILABLE, ASK TO SEE THE DOCUMENT)			
	1	Diabetes	Yes, observed .....1 Yes, reported not observed.....2 No.....3	
	2	Hypertension	Yes, observed .....1 Yes, reported not observed.....2 No.....3	
136	Do you maintain a register for patients managed for: (IF AVAILABLE, ASK TO SEE THE DOCUMENT)			
	1	Diabetes	Yes, observed .....1 Yes, reported not observed.....2 No.....3	
	2	Hypertension	Yes, observed .....1 Yes, reported not observed.....2 No.....3	

(K) Availability and use of guidelines in the facility			
I would like to know if the following documents for noncommunicable diseases are available in this facility today.			
137	Do you follow the PEN or other Guideline for screening of NCDs? Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed .....1 Yes, reported not seen.....2 No..... 3	➔ 139
138	Is the guideline also available as algorithm for easy reference? Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed and displayed for easy reference....1 Yes, observed but not displayed.....2 Yes, reported not observed.....3 No.....4	
139	Availability of WHO-CVD Risk Chart Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed .....1 Yes, reported not observed.....2 No.....3	
140	Referral protocols and guidelines Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT). (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed .....1 Yes, reported not observed.....2 No.....3	
141	Do you follow any protocol for management of Hypertension? Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed .....1 Yes, reported not observed.....2 No.....3	➔ 143
142	Is the guideline also available as algorithm for easy reference? Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed and displayed for easy reference....1 Yes, observed but not displayed.....2 Yes, reported not observed.....3 No.....4	
143	Do you follow any protocol for management of diabetes? Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed .....1 Yes, reported not observed.....2 No.....3	➔ 145
144	Is the guideline also available as algorithm for easy reference? Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed and displayed for easy reference....1 Yes, observed but not displayed.....2 Yes, reported not observed.....3 No.....4	
145	Do you follow any protocol for management of Chronic Respiratory diseases? Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed .....1 Yes, reported not observed.....2 No.....3	➔ 147
146	Is the guideline also available as algorithm for easy reference? Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed and displayed for easy reference....1 Yes, observed but not displayed.....2 Yes, reported not observed.....3 No.....4	

(L) Training of staff in NCD services in last 5 years				
	Now I would like to ask about trained medical staffs for NCD related services available in this facility today.			
147	Does any medical staff in the facility received any training on screening and management of following NCDs within the last 5 years?			
		DOCTORS	**NURSES**	
1	Diabetes screening and care	YES.....1 NO.....2	YES.....1 NO.....2	
2	Hypertension screening and care	YES.....1 NO.....2	YES.....1 NO.....2	
3	CVD screening and care	YES.....1 NO.....2	YES.....1 NO.....2	
4	Identification and counselling for mental health illness	YES.....1 NO.....2	YES.....1 NO.....2	
5	Diagnosis of chronic respiratory diseases	YES.....1 NO.....2	YES.....1 NO.....2	

(G) AVAILABILITY OF THE KEY MEDICINES RELATED TO NCDs									
	Now I would like to ask about key medicines for NCD related services available in this facility today.								
		Generic drug name	**AVAILABLE**					**ANY STOCK OUT IN THE PAST 3 MONTHS? (C)**	
			OBSERVED (A)		**NOT OBSERVED (B)**				
			AT LEAST ONE NOT EXPIRED	**AVAILABLE BUT EXPIRED**	**REPORTED AVAILABLE BUT NOT SEEN**	**NOT AVAILABLE TODAY**	**NEVER AVAILABLE**	**YES**	**NO**
148	Medicines to treat cardio vascular diseases/hypertension								
	1	Aspirin							
	2	Hydrochloro thiazide							
	3	Enalapril							
	4	Nifedipine retard							
	5	Atorvastatin							
	6	Atenolol							
	7	Other (specify)							
149	Medicines to treat Diabetes								
		Insulin human soluble short-acting Injection							
		Metformin hydrochlorid e Tablet							
		Others (Specify)							
150	Medicines to treat asthma/ Chronic respiratory disease								
	1	Salbutamol tablets							

	2	Salbutamol inhalers							
	3	Beclamathazone inhaler							
	4	Other-specify							
151	Medicines to treat mental illnesses								
		(Specify)							
152	Medicines to treat /prevent Rheumatic heart disease								
	1	Oral penicillin							
	2	Benzathine penicillin							
	3	Other-specify							

(J) AVAILABILITY OF MEDICAL DEVICES ON SURVEY DATE

153 Now I would like to know if the following diagnostics devices are available onsite at any location in this facility.

			A) AVAILABLE			(B) FUNCTIONAL/VALID	
			Observed	**Reported not seen**	**Not available**	**Yes**	**No**
	1	Blood pressure Machine/Mobile					
	2	Blood pressure Manual					
	3	Stethoscope Binaural					
	4	Scales for adults					
	5	Stadiometer					
	6	Electrocardiograph (EKG)					
	7	Oxygen Concentrator					
	8	Nebulizer					
	9	Ambu Bag for Adult					
	10	Resuscitator set. Adult/child. Compressing with Resuscitation bag 1600 ml.					
	11	Patient Monitor (5 parameters)					
	12	Eye Chart					
	13	Emergency Kits					
	14	Oxygen Face mask-adult size					
	15	Glucometer with strips					
	16	Dipstick for urine albumin					
	Only for the facilities providing oral health services:						
	1	Dental Chair					

	2	Examination Light					
	3	Autoclave bench top					
	4	Sterilizing Units, Steam, Table top					
	5	Cabinets, Treatment, Dentistry					
	6	Tables, Instrument					
	7	Kick Buckets					
	8	Waste-Disposal Units, Sharps					
	Only for the facilities providing eye care services:						
	1	Fundus Camera					
	2	LASER, OPTHALMIC, YAG					
	3	Ophthalmic Diagnostic Set					

Community Health Centre 1 & 2 (CHC-1 & CHC-2)

Mod /Ind		FACILITY IDENTIFIERS		Skip
	100	Facility code Sucos ID/ Enumeration Area ID	— — — — — —	
	102	Official name of facility (name used for reporting)	_____	
	103	Address of facility location	_____	
	104	Interview date	FIRST VISIT(S) VISIT NO. / DATE (DD MM YYYY) / INTER- VIEWER CODE	

	(D) FACILITY CHARACTERISTICS	
	I would like to know about personnel who work in this facility. These may be full-time, part-time, or seconded persons.	
105	Are the following staff categories in service in this hospital at present?	

	Staff categories		(A) (Please tick Yes/No option)		(B) If yes, numbers in service	
			NO	YES	FULL TIME	VISITING
	1	General Doctors	➔ 105_2			
	2	Nurses	➔ 105_3			
	3	Midwives	➔ 105_4			
	4	Nutritionist	➔ 105_5			
	5	Laboratory Technicians	➔ 105_6			
	6	Pharmacy Technicians	➔ 105_7			
	7	General Ancillary Staff	**CHC 1** ➔ 106 **CHC 2** ➔ 105_8			
	8	Pediatrician	➔ 105_9			
	9	Dentist	➔ 105_10			
	10	Internist	➔ 105_11			
	11	Radiology Technicians	➔ 105_12			
	12	Electro-medical Technicians	➔ 105_13			
	13	Public Health Technicians	➔ 105_14			
	14	Medical Record Technician	**END**			

	(B) BASIC INFRASTRUCTURE AND SYSTEMS		
	I would like to know about the infrastructure resources available in this facility including facilities for transportation.		
	1. COMMUNICATION		**Skip**
106	Is there access to email or internet within the facility? (Describe the experience of the previous month).	Yes, and there is a computer/ another device belonging to the facility to access internet.....1 Yes, but there is no computer/ another device belonging to the facility to access internet and the access is only through private devices.....2 No.....3	➔ 107
107	How consistently is internet available in the facility?	Always.....1 Most of the days in a month..... .....2 Sometimes.....3	
	2. POWER SUPPLY		
108	Does the facility have electricity available? (Describe the experience of the previous week).	Yes, always at all times open for services.....1 yes, often available with some interruptions of less than 2 hours per day at times open for services.....2 yes, sometimes available with frequent or prolonged interruptions of more than 2 hours per day at times open for services).....3 No electricity.....4	
	3. WATER AVAILABILITY		
109	Is drinking water available for patients at all times in the facility which is open for services? (Describe the experience of the previous week).	Yes, always available at all times open for services.....1 Yes, often available with some interruptions of less than 2 hours per day at times open for services.....2 Sometimes available, with frequent or prolonged interruptions of more than 2 hours per day at times open for services.....3 Not available.....4	
	4. SANITATION		
110	Is there a toilet (latrine) on the premises that is accessible for patients? IF YES, ASK: May I see the facility that is available today?	Yes, available and functional.....1 yes, available but not functional.....2 Not available.....3	➔ 112
111	Did you observe the following in the toilet on the day of visit?		
	7. Running Water	YES.....1 NO.....2	
	8. Soap	YES.....1 NO.....2	
	5. EMERGENCY TRANSPORTATION SYSTEMS		
112	Does this facility have multifunctional vehicle, for emergency transportation for clients that is either stationed at this facility or that the facility can call for?	Yes, with driver and fuel available for 24 hours.....1 Yes, but driver and/or fuel not available for 24 hours.....2 Not available.....3	**END**

	(C) SERVICES RELATED TO NON-COMMUNICABLE DISEASES		
	Now, I would like to know if the following services for noncommunicable diseases are available in this facility today.		
	19. Promotion and Prevention		
113	Does this facility offer any health education services for prevention of NCDs and promotion of healthy lifestyle?	YES.....1 NO 2	➔ 115
114	Does this facility offer following health education services for prevention of NCDs and promotion of healthy lifestyle?		
	• conduct education sessions	YES.....1 NO 2	
	• display material focused on prevention of tobacco, alcohol, unhealthy diet, physical inactivity	YES.....1 NO 2	
	20. Integrated Screening and services for Diabetes, Hypertension, CVD and CRD		
115	Does this facility offer any screening and services for Diabetes, Hypertension, CVD cardiovascular diseases and chronic respiratory disease?	YES.....1 NO.....2	➔ 119
116	Does this facility perform following procedures for screening purposes?		
	• check seated blood pressure in all adults > 40 years twice with 10 minutes interval	YES, on all above 40 years ....1 YES, only for adults selected by staff.....2 YES, on request by the person.....3 NO.....4	
	• Check urine albumin	YES, on all above 40 years .....1 YES, only for adults selected by staff.....2 YES, on request by the person.....3 NO.....4	
	• Check blood sugar – capillary sample	YES, on all above 40 years .....1 YES, only for adults selected by staff.....2 YES, on request by the person.....3 NO.....4	
	• Assess smoking status	YES.....1 NO.....2	
	• Measure BMI status	YES.....1 NO.....2	
	• Assess CVD risk	YES.....1 NO.....2	
117	If found to be positive, what is the next step:		
	• refer all to higher care	YES.....1 NO.....2	
	• follow PEN protocol to decide on counsel or refer	YES.....1 NO.....2	
118	Does this facility has a **system of following up** those who were counselled for:		
	• Tobacco cessation	YES.....1 NO.....2	
	• Alcohol cessation	YES.....1 NO.....2	

	• Obesity	YES.....1 NO.....2	
	21. Cancer services		
119	Does this facility offer any cancer screening/related services (within the facility or through home visits).	YES.....1 NO.....2	➔ 121
120	Does this facility provide the following services		
	• Vaccination against HPV as per EPI protocol	YES.....1 NO.....2	
	• refer all women presenting abnormal vaginal bleeding, foul smelling discharge or pain during vaginal intercourse as per PEN protocol to the National Hospital	YES.....1 NO.....2	
	• conduct health education sessions about breast cancer (including self exploration for early detection)	YES.....1 NO.....2	
	• Refer all women presenting with breast lump or any other breast problems as per PEN protocol	YES.....1 NO.....2	
	• Health education about prevention and early identification of symptoms of oral cancer	YES.....1 NO.....2	
	• Screen people using tobacco (smoking or smokeless) or/and using areca nut as per PEN protocol	YES.....1 NO.....2	
	22. Mental health services		
121	Does this facility offer any mental health related services (within the facility or through home visits).	YES.....1 NO.....2	➔ 123
122	Does this facility offer the following mental health services		
	• Home visit to people with mental problem	YES.....1 NO.....2	
	• Counselling to patient with mental problem and family	YES.....1 NO.....2	
	• Refer acute MH episodes (e.g. psychotic attack, epilepsy, etc. for diagnostic and treatment	YES.....1 NO.....	
	• Identification and referral of suspected mental illnesses	YES.....1 NO.....2	
	• Follow up of patients diagnosed with mental illnesses to check on continuation of treatment	YES.....1 NO.....2	

	23. Oral health services		
123	Does this facility Oral health promotion activities in schools	YES.....1 NO.....2	
124	Does this facility offer services of identifying and refer any oral/dental problems (within the facility or through home visits)	YES.....1 NO.....2	
	24. Eye health services		
125	Does this facility offer the following eye health services (within the facility or through home visits):		
	• Identification and referral of suspected conjunctivitis	YES.....1 NO.....2	
	• Early identification of visual problems (e.g. cataract, glaucoma, eye tumour)	YES.....1 NO.....2	
	• Emergency care for eye trauma	YES.....1 NO.....2	

	(M) Maintenance of registers of patients screened for NCDs			
Now, I would like to know if the following registers for noncommunicable diseases related services are available in this facility today.				
126	Do you maintain a register for patients screened for: (IF AVAILABLE, ASK TO SEE THE DOCUMENT)			
	1	Diabetes	Yes, observed .....1 Yes, reported not observed.....2 No.....3	
	2	Hypertension	Yes, observed .....1 Yes, reported not observed.....2 No.....3	

	(N) Availability and use of guidelines in the facility		
I would like to know if the following documents for noncommunicable diseases are available in this facility today.			
127	Do you follow the PEN or other Guideline for screening of NCDs? Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed .....1 Yes, reported not seen.....2 No..... 3	➔ 128
128	Is the guideline also available as algorithm for easy reference? Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed and displayed for easy reference.....1 Yes, observed but not displayed.....2 Yes, reported not observed.....3 No.....4	
129	Availability of WHO-CVD Risk Chart Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed .....1 Yes, reported not observed.....2 No..... 3	
130	Referral protocols and guidelines Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT). (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed .....1 Yes, reported not observed.....2 No..... 3	

	(O) Training of staff in NCD services in last 5 years	
	Now I would like to ask about trained medical staffs for NCD related services available in this facility today.	

131	Does any medical staff in the facility received any training on screening and management of following NCDs within the last 5 years?			
		DOCTORS	**NURSES**	
1	Diabetes screening and care	YES.....1 NO.....2	YES.....1 NO.....2	
2	Hypertension screening and care	YES.....1 NO.....2	YES.....1 NO.....2	
3	Identification of mental health illness	YES.....1 NO.....2	YES.....1 NO.....2	
4	Diagnosis of chronic respiratory diseases	YES.....1 NO.....2	YES.....1 NO.....2	

	(G) AVAILABILITY OF THE KEY MEDICINES RELATED TO NCDS								
	Now I would like to ask about key medicines for NCD related services available in this facility today.								
		Generic drug name	**AVAILABLE**					**ANY STOCK OUT IN THE PAST 3 MONTHS? (C)**	
			OBSERVED (A)		**NOT OBSERVED (B)**				
			AT LEAST ONE NOT EXPIRED	**AVAILABLE BUT EXPIRED**	**REPORTED AVAILABLE BUT NOT SEEN**	**NOT AVAILABLE TODAY**	**NEVER AVAILABLE**	**YES**	**NO**
132	Medicines to treat cardio vascular diseases/hypertension								
	1	Aspirin							
	2	Hydrochlorothiazide							
	3	Enalapril							
	4	Nifedipine retard							
	5	Atorvastatin							
	6	Atenolol							
	7	Other (specify)							
133	Medicines to treat Diabetes								
		Insulin human soluble short-acting Injection							
		Metformin hydrochloride Tablet							
		Others (Specify)							
134	Medicines to treat asthma/ Chronic respiratory disease								
	1	Salbutamol tablets							
	2	Salbutamol inhalers							
	3	Beclamathazone inhaler							
	4	Other- specify							

135	Medicines to treat mental illnesses								
		(Specify)							

11. AVAILABILITY OF MEDICAL DEVICES ON SURVEY DATE

136 Now I would like to know if the following diagnostics devices are available onsite at any location in this facility.

			A) AVAILABLE			(B) FUNCTIONAL/VALID	
			Observed	**Reported not seen**	**Not available**	**Yes**	**No**
	1	Blood pressure Machine/Mobile					
	2	Blood pressure Manual					
	3	Stethoscope Binaural					
	4	Weighing Scales for adults					
	5	Stadiometer					
	6	Eye Chart					
	7	Glucometer with strips					
	8	Dipstick for urine albumin					
	9	Waste-Disposal Units, Sharps					

Health Posts

Mod /Ind		FACILITY IDENTIFIERS		Skip
	100	Facility code Sucos ID/ Enumeration Area ID	— — — — — — —	
	102	Official name of facility (name used for reporting)	_____	
	103	Address of facility location	_____	
	104	Interview date	FIRST VISIT(S) VISIT NO. / DATE (DD MM YYYY) / INTER- VIEWER CODE	

VISIT NO.	DATE								INTER- VIEWER CODE
	DD		MM		YYYY				

	(E) FACILITY CHARACTERISTICS					
	I would like to know about personnel who work in this facility. These may be full-time, part-time, or seconded persons.					
105	Are the following staff categories in service in this hospital at present?					
	Staff categories		(A) (Please tick Yes/No option)		(B) If yes, numbers in service	
			NO	YES	FULL TIME	VISITING
	1	General Doctors	➔ 105_2			
	2	Nurses	➔ 105_3			
	3	Midwives	➔ 105_4			
	4	Public Health Technicians	➔ 105_5			
	5	General Ancillary Staff	**END**			

	(B) BASIC INFRASTRUCTURE AND SYSTEMS		
	I would like to know about the infrastructure resources available in this facility including facilities for transportation.		
	1. COMMUNICATION		**Skip**
106	Is there access to email or internet within the facility? (Describe the experience of the previous month).	Yes, and there is a computer/ another device belonging to the facility to access internet……1 Yes, but there is no computer/ another device belonging to the facility to access internet and the access is only through private devices……2 No……3	➔ 107
107	How consistently is internet available in the facility?	Always……1 Most of the days in a month…… ……2 Sometimes……3	
	2. POWER SUPPLY		
108	Does the facility have electricity available? (Describe the experience of the previous week).	Yes, always at all times open for services……1 yes, often available with some interruptions of less than 2 hours per day at times open for services……2 yes, sometimes available with frequent or prolonged interruptions of more than 2 hours per day at times open for services)……3 No electricity……4	
	3. WATER AVAILABILITY		
109	Is drinking water available for patients at all times in the facility which is open for services? (Describe the experience of the previous week).	Yes, always available at all times open for services……1 Yes, often available with some interruptions of less than 2 hours per day at times open for services……2 Sometimes available, with frequent or prolonged interruptions of more than 2 hours per day at times open for services……3 Not available……4	
	4. SANITATION		
110	Is there a toilet (latrine) on the premises that is accessible for patients? IF YES, ASK: May I see the facility that is available today?	Yes, available and functional……1 yes, available but not functional……2 Not available……3	➔ 112
111	Did you observe the following in the toilet on the day of visit?		
	9. Running Water	YES……1 NO……2	
	10. Soap	YES……1 NO……2	

	(C) SERVICES RELATED TO NON-COMMUNICABLE DISEASES		
	Now, I would like to know if the following services for noncommunicable diseases are available in this facility today.		
	25. Promotion and Prevention		
112	Does this facility offer any health education services for prevention of NCDs and promotion of healthy lifestyle?	YES.....1 NO 2	➔ 114
113	Does this facility offer following health education services for prevention of NCDs and promotion of healthy lifestyle?		
	• conduct education sessions	YES.....1 NO 2	
	• display material focused on prevention of tobacco, alcohol, unhealthy diet, physical inactivity	YES.....1 NO 2	
	26. Integrated Screening and services for Diabetes, Hypertension, CVD and CRD		
114	Does this facility offer any screening and services for Diabetes, Hypertension, CVD cardiovascular diseases and chronic respiratory disease?	YES.....1 NO.....2	➔ 118
115	Does this facility perform following procedures for screening purposes?		
	• check seated blood pressure in all adults > 40 years twice with 10 minutes interval	YES, on all above 40 years .....1 YES, only for adults selected by staff.....2 YES, on request by the person.....3 NO.....4	
	• Check urine albumin	YES, on all above 40 years .....1 YES, only for adults selected by staff.....2 YES, on request by the person.....3 NO.....4	
	• Check blood sugar – capillary sample	YES, on all above 40 years .....1 YES, only for adults selected by staff.....2 YES, on request by the person.....3 NO.....4	
	• Measure BMI status	YES.....1 NO.....2	
116	If found to be positive, what is the next step:		
	• refer all to higher care	YES.....1 NO.....2	
	• follow PEN protocol to decide on counsel or refer	YES.....1 NO.....2	
	27. Cancer services		
118	Does this facility offer any cancer screening /related services (within the facility or through home visits).	YES.....1 NO.....2	➔ 120
119	Does this facility provide the following services		

	• refer all women presenting abnormal vaginal bleeding, foul smelling discharge or pain during vaginal intercourse as per PEN protocol to the National Hospital	YES……1 NO……2	
	• conduct health education sessions about breast cancer (including self exploration for early detection)	YES……1 NO……2	
	• Refer all women presenting with breast lump or any other breast problems as per PEN protocol	YES……1 NO……2	
	• Health education about prevention and early identification of symptoms of oral cancer	YES……1 NO……2	
	• Screen people using tobacco (smoking or smokeless) or/and using areca nut as per PEN protocol	YES……1 NO……2	
	28. Mental health services		
120	Does this facility offer any mental health related services (within the facility or through home visits).	YES……1 NO……2	➔ 122
121	Does this facility offer the following mental health services		
	• Counselling to patient with mental problem and family	YES……1 NO……2	
	• Refer acute MH episodes (e.g. psychotic attack, epilepsy, etc. for diagnostic and treatment	YES……1 NO…….	
	• Identification and referral of suspected mental illnesses	YES……1 NO……2	
	• Follow up of patients diagnosed with mental illnesses to check on continuation of treatment	YES……1 NO……2	
	29. Oral health services		
122	Does this facility offer services of identifying and refer any oral/dental problems (within the facility or through home visits)	YES……1 NO……2	
	30. Eye health services		
123	Does this facility offer the following eye health services (within the facility or through home visits):		
	• Identification and referral of suspected conjunctivitis	YES……1 NO……2	

	• Early identification of visual problems (e.g. cataract, glaucoma, eye tumour)	YES.....1 NO.....2	
	• Emergency care for eye trauma	YES.....1 NO.....2	

	(P) Maintenance of registers of patients screened for NCDs			
Now, I would like to know if the following registers for noncommunicable diseases related services are available in this facility today.				
124	Do you maintain a register for patients screened for: (IF AVAILABLE, ASK TO SEE THE DOCUMENT)			
	1	Diabetes	Yes, observed .....1 Yes, reported not observed.....2 No.....3	
	2	Hypertension	Yes, observed .....1 Yes, reported not observed.....2 No.....3	

(Q) Availability and use of guidelines in the facility			
I would like to know if the following documents for noncommunicable diseases are available in this facility today.			
125	Do you follow the PEN or other Guideline for screening of NCDs? Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed .....1 Yes, reported not seen.....2 No..... 3	➔ 129
126	Is the guideline also available as algorithm for easy reference? Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed and displayed for easy reference.....1 Yes, observed but not displayed.....2 Yes, reported not observed.....3 No.....4	
127	Availability of WHO-CVD Risk Chart Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed .....1 Yes, reported not observed.....2 No..... 3	
128	Referral protocols and guidelines Is it available in this facility today? (IF AVAILABLE, ASK TO SEE THE DOCUMENT). (IF AVAILABLE, ASK TO SEE THE DOCUMENT).	Yes, observed .....1 Yes, reported not observed.....2 No..... 3	

	(R) Training of staff in NCD services in last 5 years			
	Now I would like to ask about trained medical staffs for NCD related services available in this facility today.			
129	Does any medical staff in the facility received any training on screening and management of following NCDs within the last 5 years?			
		DOCTORS	**NURSES**	
1	Diabetes screening and care	YES……1 NO……2	YES……1 NO……2	
2	Hypertension screening and care	YES……1 NO……2	YES……1 NO……2	
3	Identification of mental health illness	YES……1 NO……2	YES……1 NO……2	
4	Diagnosis of chronic respiratory diseases	YES……1 NO……2	YES……1 NO……2	

	(G) AVAILABILITY OF THE KEY MEDICINES RELATED TO NCDS								
	Now I would like to ask about key medicines for NCD related services available in this facility today.								
		Generic drug name	AVAILABLE					ANY STOCK OUT IN THE PAST 3 MONTHS ? (C)	
			OBSERVED (A)		NOT OBSERVED (B)				
			AT LEAST ONE NOT EXPIRED	AVAILABLE BUT EXPIRED	REPORTED AVAILABLE BUT NOT SEEN	NOT AVAILABLE TODAY	NEVER AVAILABLE	YES	NO
130	Medicines to treat cardio vascular diseases/hypertension								
	1	Aspirin							
	2	Hydrochlorothiazide							
	3	Enalapril							
	4	Nifedipine retard							
	5	Atorvastatin							
	6	Atenolol							
	7	Other (specify)							
131	Medicines to treat Diabetes								
		(Specify)							
132	Medicines to treat asthma/ Chronic respiratory disease								
	1	Salbutamol tablets							
	2	Salbutamol inhalers							
	3	Beclamathazone inhaler							
	4	Other-specify							
133	Medicines to treat mental illnesses								
		(Specify)							

	11. AVAILABILITY OF MEDICAL DEVICES ON SURVEY DATE						
134	Now I would like to know if the following diagnostics devices are available onsite at any location in this facility.						
			A) AVAILABLE			(B) FUNCTIONAL/VALID	
			Observed	Reported not seen	Not available	Yes	No
	1	Blood pressure Manual					
	2	Stethoscope Binaural					
	3	Weighing Scales for adults					
	4	Stadiometer					
	5	Eye Chart					
	6	Glucometer with strips					
	7	Dipstick for urine albumin					
	8	Waste-Disposal Units, Sharps					

Annex IV

Socio-demographic characteristics

Mean number of years of education of respondents, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	Mean	SD	n	Mean	SD	n	Mean	SD
18-44	783	10.1	4.8	1342	9.5	4.7	2125	9.7	4.7
45-69	515	6.7	5.3	560	5.0	5.2	1075	5.8	5.3
18-69	1298	8.8	5.2	1902	8.1	5.3	3200	8.4	5.3

Highest level of education of respondents, by age category and sex

Age group (years)	n	No formal education	Less than primary school	Primary school completed	Secondary school completed	High school completed	College/ university completed	Post graduate degree completed
Males								
18-44	830	13.0	11.5	6.5	11.8	43.1	13.1	1.0
45-69	586	29.0	23.0	12.0	11.1	15.4	8.4	1.2
18-69	1416	19.6	16.2	8.8	11.5	31.6	11.2	1.1
Females								
18-44	1410	14.5	10.6	7.7	15.8	41.1	9.5	0.8
45-69	691	49.8	17.5	9.6	8.4	9.3	5.1	0.4
18-69	2101	26.1	12.9	8.3	13.4	30.7	8.0	0.7
Both sexes								
18-44	2240	13.9	10.9	7.3	14.3	41.9	10.9	0.9
45-69	1277	40.3	20.1	10.7	9.6	12.1	6.6	0.8
18-69	3517	23.5	14.2	8.5	12.6	31.1	9.3	0.8

Marital status of respondents, by age category and sex

Age group (years)	n	Never married	Currently married	Separated	Divorced	Widowed	Cohabiting
Males							
18-44	826	38.5	58.8	0.4	0.5	0.4	1.5
45-69	584	2.7	89.6	0.9	0.9	5.5	0.5
18-69	1410	23.7	71.6	0.6	0.6	2.5	1.1
Females							
18-44	1410	20.3	74.1	1.2	1.3	1.6	1.6
45-69	690	4.1	70.6	1.2	2.2	22.0	0.0
18-69	2100	15.0	73.0	1.2	1.6	8.3	1.0
Both sexes							
18-44	2236	27.0	68.5	0.9	1.0	1.1	1.5
45-69	1274	3.5	79.3	1.0	1.6	14.4	0.2
18-69	3510	18.5	72.4	0.9	1.2	6.0	1.1

Employment status of respondents, by age category and sex

Age group (years)	n	Government employee	Non-government employee	Self employed	Unpaid/ unemployed/ retired / others	Total
Males						
18-44	829	13.6	3.4	51.3	31.7	100.0
45-69	585	18.1	2.4	63.9	15.6	100.0
18-69	1414	15.5	3.0	56.5	25.0	100.0
Females						
18-44	1410	7.5	1.5	25.3	65.7	100.0
45-69	689	7.3	0.6	42.2	49.9	100.0
18-69	2099	7.4	1.2	30.9	60.6	100.0
Both sexes						
18-44	2239	9.7	2.2	34.9	53.2	100.0
45-69	1274	12.2	1.4	52.2	34.1	100.0
18-69	3513	10.7	1.9	41.2	46.3	100.0

Unpaid work and unemployed respondents, by age category and sex

Age group (years)	n	Non paid	Student	Home maker	Retired	Unemployed		Total
						able to work	not able to work	
Males								
18-44	263	42.6	40.7	4.2	0.0	11.4	1.1	100.0
45-69	91	73.6	1.1	2.2	4.4	11.0	7.7	100.0
18-69	354	50.6	30.5	3.7	1.1	11.3	2.8	100.0
Females								
18-44	927	13.5	12.4	70.8	0.0	2.9	0.4	100.0
45-69	344	15.4	0.0	80.5	0.6	1.7	1.7	100.0
18-69	1271	14.0	9.1	73.4	0.2	2.6	0.8	100.0
Both sexes								
18-44	1190	19.9	18.7	56.1	0.0	4.8	0.6	100.0
45-69	435	27.6	0.2	64.1	1.4	3.7	3.0	100.0
18-69	1625	22.0	13.7	58.2	0.4	4.5	1.2	100.0

Per capita annual income of respondents in USD

n	Mean
2,597	2333.4

Tobacco use

Current tobacco users

Percentage of current tobacco users (current smokers and current smokeless tobacco users) among respondents, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
Current tobacco smokers									
18-44	830	75.2	63.9-83.8	1410	12.9	9.6-17.1	2240	40.4	33.4-47.8
45-69	586	73.8	60.4-83.9	691	20.9	13.3-31.1	1277	48.8	38.8-58.8
18-69	1416	74.7	67.5-80.8	2101	14.9	11.2-19.5	3517	42.8	38.2-47.5
Current users of smokeless tobacco									
18-44	830	13.1	9.2-18.3	1410	29.1	20.5-39.4	2240	22.0	16.4-28.9
45-69	586	20.1	11.9-31.8	691	53.9	42.4-65.1	1277	36.1	27.8-45.3
18-69	1416	15.4	10.9-21.2	2101	35.3	27.7-43.8	3517	26.0	21.4-31.2
Current tobacco users (smoke and smokeless)									
18-44	830	78.1	70.2-84.3	1410	38.2	30.0-47.2	2240	55.8	49.7-61.7
45-69	586	76.4	63.6-85.7	691	63.6	53.7-72.5	1277	70.4	60.6-78.6
18-69	1416	77.5	72.1-82.3	2101	44.6	37.9-51.5	3517	60.0	55.0-64.7

Note: weighted percentage and unweighted n are presented in the table

Tobacco smokers

Percentage of current tobacco smokers, former tobacco smokers and never smokers among respondents, by age category and sex

Age group	Men			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
Current tobacco smokers									
18-44	830	75.2	63.9-83.8	1410	12.9	9.6-17.1	2240	40.4	33.4-47.8
45-69	586	73.8	60.4-83.9	691	20.9	13.3-31.1	1277	48.8	38.8-58.8
18-69	1416	74.7	67.5-80.8	2101	14.9	11.2-19.5	3517	42.8	38.2-47.5
Former tobacco smokers									
18-44	830	7.1	4.2-11.8	1410	3.1	1.5-6.4	2240	4.9	3.1-7.6
45-69	586	5.5	3.2-9.4	691	1.5	0.7-3.2	1277	3.6	2.3-5.6
18-69	1416	6.6	4.6-9.5	2101	2.7	1.4-5.1	3517	4.5	3.2-6.4
Never smokers									
18-44	830	17.7	9.9-29.5	1410	84.0	80.3-87.2	2240	54.7	47.0-62.2
45-69	586	20.7	12.1-33.0	691	77.7	67.7-85.2	1277	47.6	38.5-56.8
18-69	1416	18.7	12.7-26.5	2101	82.4	78.5-85.8	3517	52.7	47.6-57.8

Current tobacco smokers

Percentage current smokers and former smokers, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
Current daily smokers									
18-44	830	60.5	49.5-70.5	1410	4.5	2.5-8.0	2240	29.2	23.0-36.4
45-69	586	50.9	38.1-63.5	691	12.1	5.8-23.4	1277	32.5	23.7-42.8
18-69	1416	57.4	48.8-65.6	2101	6.4	4.6-8.9	3517	30.2	25.6-35.1
Current non-daily smokers									
18-44	830	14.7	11.1-19.2	1410	8.4	5.4-12.8	2240	11.2	9.2-13.6
45-69	586	22.9	16.1-31.5	691	8.8	4.0-18.2	1277	16.3	11.1-23.1
18-69	1416	17.3	14.3-20.9	2101	8.5	6.1-11.7	3517	12.6	10.6-14.9
Former daily smokers									
18-44	830	11.3	8.6-14.7	1410	4.1	2.0-7.9	2240	7.3	5.6-9.3
45-69	586	15.5	9.7-23.7	691	7.1	2.6-17.7	1277	11.5	7.8-16.7
18-69	1416	12.6	9.5-16.6	2101	4.8	2.7-8.4	3517	8.5	6.9-10.3
Former non-daily smokers									
18-44	830	10.6	7.0-15.7	1410	7.4	4.9-11.0	2240	8.8	6.4-12.1
45-69	586	13.0	8.4-19.6	691	3.2	1.9-5.5	1277	8.4	5.7-12.2
18-69	1416	11.3	64.0-78.0	2101	6.4	4.4-9.1	3517	8.7	6.8-11.0

Daily and non-daily smokers, ever smokers, never smokers

Percentage of respondents, by smoking status, age category and sex

Age group	n	Current Smoker				Non-Smoker			
		Daily (%)	CI	Non daily (%)	CI	Former Smoker	CI	Never Smoker (%)	CI
Males									
18-44	830	60.5	49.5-70.5	14.7	11.1-19.2	7.1	4.2-11.8	17.7	9.9-29.5
45-69	586	50.9	38.1-63.5	22.9	16.1-31.5	5.5	3.2-9.4	20.7	12.1-33.0
18-69	1416	57.4	48.8-65.6	17.3	14.3-20.9	6.6	4.6-9.5	18.7	12.7-26.5
Females									
18-44	1410	4.5	2.5-8.0	8.4	5.4-12.8	3.1	1.5-6.4	84.0	80.3-87.2
45-69	691	12.1	5.8-23.4	8.8	4.0-18.2	1.5	0.7-3.2	77.7	67.7-85.2
18-69	2101	6.4	4.6-8.9	8.5	6.1-11.7	2.7	1.4-5.1	82.4	78.5-85.8
Both sexes									
18-44	2240	29.2	23.0-36.4	11.2	9.2-13.6	4.9	3.1-7.6	54.7	47.0-62.2
45-69	1277	32.5	23.7-42.8	16.3	11.1-23.1	3.6	2.3-5.6	47.6	38.5-56.8
18-69	3517	30.2	25.6-35.1	12.6	10.6-14.9	4.5	3.2-6.4	52.7	47.6-57.9

Age of initiation and duration of smoking

Mean age at initiation of smoking and duration of smoking among current smokers, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
Mean age at initiation of smoking in years									
18-44	389	17.2	16.5-17.9	25	22.3	17.1-27.6	414	17.7	17.1-18.3
45-69	221	18.4	17.1-19.6	28	25.8	20.5-31.1	249	19.5	18.4-20.6
18-69	610	17.5	16.8-18.2	53	23.6	19.5-27.7	663	18.2	17.7-18.7
Duration of smoking in years									
18-44	389	12.5	11.0-14.0	25	14.2	6.2-22.1	414	12.7	10.9-14.4
45-69	221	34.8	33.4-36.3	28	28.0	21.7-34.3	249	33.8	31.8-35.7
18-69	610	18.3	18.1-21.6	53	19.4	13.1-25.7	663	18.5	15.1-21.8

Smoking cessation

Percentage who attempted to quit smoking and received health worker advice to quit smoking among current smokers, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
Attempted to stop smoking in past 12 months									
18-44	637	50.7	41.6-59.7	90	76.6	54.6-89.9	727	55.3	47.1-63.2
45-69	566	41.3	30.5-53.0	77	45.1	19.3-73.8	443	42.1	33.4-51.3
18-69	1003	47.7	40.3-55.2	167	65.5	45.4-81.2	1170	51.0	43.8-58.2
Received health worker advice to quit tobacco during the past 12 months									
18-44	451	22.2	13.1-35.1	70	7.8	3.2-17.5	521	20.4	12.5-31.6
45-69	267	27.2	17.8-39.2	49	26.2	9.7-54.0	316	27.0	17.9-38.6
18-69	718	23.8	17.1-32.0	119	14.0	6.4-27.8	837	22.5	16.5-29.9

Types of smoked tobacco products used

Percentage of smoking manufactured cigarette among current smokers, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	637	90.1	83.2-94.4	90	69.5	44.4-86.7	727	86.5	80.6-90.7
45-69	366	84.9	76.3-90.7	77	90.3	74.8-96.7	443	86.0	77.5-91.6
18-69	1003	88.5	82.6-92.5	167	76.8	58.5-88.6	1170	86.3	80.9-90.3

Mean amount of different types of tobacco used per day by the current daily smokers, by age category and sex

Age group	Manufactured cigarettes			Hand rolled cigarettes			Cigars, cheroots or cigarillos		
(years)	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
Males									
18-44	390	4.9	3.6-6.2	396	9.3	7.6-11.1	348	3.3	2.1-4.5
45-69	218	4.3	2.6-6.0	221	8.8	7.3-10.2	204	1.7	1.0-2.3
18-69	608	4.7	3.5-6.0	617	9.2	7.8-10.6	552	2.8	1.8-3.9
Females									
18-44	28	1.6	1.0-2.3	30	14.9	7.6-22.2	19	16.2	10.8-21.6
45-69	36	3.7	1.6-5.8	34	22.5	8.9-36.1	28	13.0	0.0-34.2
18-69	64	2.6	1.3-3.9	64	18.5	9.9-27.1	47	14.2	0.9-27.6
Both sexes									

18-44	418	4.6	3.3-5.8	426	9.9	8.4-11.3	367	4.1	2.7-5.5
45-69	254	4.2	2.9-5.5	255	11.4	7.8-14.9	232	4.0	0.0-8.0
18-69	672	4.5	3.4-5.6	681	10.3	8.5-12.1	599	4.0	2.6-5.5

Percentage of current smokers by the quantities of manufactured or hand–rolled cigarettes per day, by age category and sex

Age group	n	% <5 cigs	95% CI	% 5-9 cigs	95% CI	% 10-14 cigs	95% CI	% 15-24 cigs	95% CI	% >=25 cigs	95% CI
Males											
18-44	368	8.8	5.1-14.9	28.5	18.7-41.0	17.6	10.4-28.1	37.6	20.6-58.3	7.4	3.8-14.1
45-69	208	7.1	2.5-18.2	34.2	14.7-61.1	15.0	6.6-30.6	35.4	18.2-57.6	8.3	3.5-18.2
18-69	576	8.3	5.0-13.6	30.1	19.9-42.6	16.9	10.7-25.6	37.0	23.0-53.6	7.7	4.4-12.9
Females											
18-44	26	19.9	2.8-68.3	10.8	2.3-38.5	2.1	0.4-9.6	35.0	7.9-77.0	32.2	6.9-75.3
45-69	34	18.8	4.3-54.6	17.1	4.8-46.0	4.6	1.4-14.5	2.8	0.6-11.5	56.6	21.1-86.4
18-69	60	19.4	5.7-49.1	13.8	4.2-37.1	3.3	1.3-8.2	19.5	4.8-53.9	44.0	18.0-73.8
Both sexes											
18-44	394	9.8	5.2-17.9	26.9	17.5-38.9	16.1	9.5-26.0	37.4	21.9-56.0	9.8	4.9-18.6
45-69	242	9.5	3.5-23.5	30.6	15.4-51.7	12.9	5.8-26.0	28.6	14.1-49.4	18.4	9.1-33.6
18-69	636	9.8	5.4-17.0	28.0	18.4-40.1	15.2	9.4-23.5	34.8	22.5-49.5	12.3	7.8-18.9

Mean average price paid for 20 manufactured cigarettes by current smokers in USD, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
18-44	162	25.9	20.7-31.1	9	20.0	9.6-30.4	171	25.6	20.7-30.6
45-69	97	26.0	21.1-31.0	12	20.6	2.5-38.7	109	25.9	20.7-30.4
18-69	259	26.0	21.5-30.5	21	20.3	9.7-30.9	280	25.6	21.3-30.0

Mean age at age at stopping of smoking and duration since stopping of smoking of former smokers, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
Mean age at stopping of smoking in years									
18-44	33	24.1	21.2-26.9	25	13.7	6.6-20.8	58	19.3	12.6-25.9
45-69	76	35.1	29.6-40.5	8	33.5	26.2-40.8	84	34.9	30.0-39.8
18-69	109	30.0	26.4-33.6	33	16.2	7.1-25.4	142	25.7	19.2-32.1
Duration since stopping smoking in years									
18-44	33	8.8	5.9-11.7	25	12.1	10.1-14.0	58	10.3	8.1-12.6
45-69	76	23.2	17.3-29.1	8	18.4	7.3-29.4	84	22.7	17.3-28.2
18-69	109	16.6	11.8-21.3	33	12.9	10.1-15.7	142	15.4	11.8-19.0

Smokeless tobacco users

Current smokeless tobacco users

Percentage of current smokeless tobacco users, former smokeless tobacco users and never users, by age category and sex

Age group	Males			Females			Both sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
Current smokeless tobacco users									
18-44	830	13.1	9.2-18.3	1410	29.1	20.5-39.4	2240	22.0	16.4-28.9
45-69	586	20.1	11.9-31.8	691	53.9	42.4-65.1	1277	36.1	27.8-45.3
18-69	1416	15.4	10.9-21.2	2101	35.3	27.7-43.8	3517	26.0	21.4-31.2
Former smokeless tobacco users									
18-44	830	4.2	2.3-7.3	1410	6.8	3.7-12.2	2240	5.6	3.6-8.9
45-69	586	2.4	0.9-6.3	691	6.4	3.6-11.2	1277	4.3	2.4-7.7
18-69	1416	3.6	2.2-5.9	2101	6.7	3.9-11.3	3517	5.3	3.4-8.0
Never users									
18-44	830	82.7	77.3-87.1	1410	64.1	53.3-73.7	2240	72.3	65.3-78.5
45-69	586	77.5	65.7-86.1	691	39.6	29.2-51.1	1277	59.6	50.3-68.3
18-69	1416	81.0	75.2-85.8	2101	58.0	49.0-66.4	3517	68.7	63.1-73.8

Daily and non-daily smokeless tobacco users, ever users, never users

Percentage current smokeless tobacco users and former smokeless tobacco users, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
Current daily smokeless tobacco users									
18-44	830	4.2	2.2-7.9	1410	0.8	0.4-1.4	2240	2.3	1.3-4.1
45-69	586	7.8	3.7-15.7	691	7.6	3.6-15.0	1277	7.7	4.8-12.1
18-69	1416	5.3	2.9-9.8	2101	2.5	1.4-4.5	3517	3.8	2.4-6.1
Current non-daily smokeless tobacco users									
18-44	830	8.9	5.5-14.1	1410	28.3	19.8-38.6	2240	19.7	14.4-26.5
45-69	586	12.3	5.5-25.0	691	46.4	36.3-56.8	1277	28.4	21.8-36.0
18-69	1416	10.0	6.0-16.3	2101	32.9	25.1-41.7	3517	22.2	17.9-27.1
Former daily smokers (4.18)									
18-44	830	2.5	1.1-5.7	1410	3.3	1.7-7.1	2240	2.9	1.7-4.9
45-69	586	1.3	0.4-4.4	691	4.7	2.3-9.1	1277	2.9	1.5-5.4
18-69	1416	2.1	1.0-4.3	2101	3.6	1.8-7.1	3517	2.9	1.8-4.8
Former non-daily smokers									
18-44	830	1.7	0.5-5.2	1410	3.5	1.7-7.1	2240	2.7	1.3-5.6
45-69	586	1.1	0.2-4.8	691	1.8	0.6-5.0	1277	1.4	0.4-4.7
18-69	1416	1.5	0.6-3.8	2101	3.1	1.6-5.7	3517	2.3	1.2-4.4

Percentage of respondents by status of smokeless tobacco use, by age category and sex

Age group (years)	n	Current user				Non-user			
		Daily (%)	95% CI	Non daily (%)	95% CI	Past user	95% CI	Never used (%)	95% CI
Males									
18-44	830	4.2	2.2-7.9	8.9	5.5-14.1	4.2	2.3-7.3	82.7	77.3-87.1
45-69	586	7.8	3.7-15.7	12.3	5.5-25.0	2.4	0.9-6.3	77.5	65.7-86.1

18-69	1416	5.3	2.9-9.8	10.0	6.0-16.3	3.6	2.2-5.9	81.0	75.2-85.8
Females									
18-44	1410	0.8	0.4-1.4	28.3	19.8-38.6	6.8	3.7-12.2	64.1	53.3-73.7
45-69	691	7.6	3.6-15.0	46.4	36.3-56.8	6.4	3.6-11.2	39.6	29.2-51.1
18-69	2101	2.5	1.4-4.5	32.9	25.1-41.7	6.7	3.9-11.3	58.0	49.0-66.4
Both sexes									
18-44	2240	2.3	1.3-4.1	19.7	14.4-26.5	5.6	3.6-8.9	72.3	65.3-78.5
45-69	1277	7.7	4.8-12.1	28.4	21.8-36.0	4.3	2.4-7.7	59.6	50.3-68.3
18-69	3517	3.8	2.4-6.1	22.2	17.9-27.1	5.3	3.4-8.0	68.7	63.1-73.8

Mean age at initiation of smokeless tobacco use in years among current users of smokeless tobacco, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
18-44	80	18.4	17.2-19.5	75	20.2	19.1-21.3	155	19.1	18.2-20.0
45-69	55	20.4	18.4-22.3	81	26.9	24.5-29.3	136	24.5	21.8.-27.2
18-69	135	19.1	18.0-20.2	156	24.1	21.6-26.6	291	21.6	19.7-23.6

Percentage of current users of smokeless tobacco using each of the following products, by age category and sex

Age group	n	% chewing tobacco	95% CI	% betel quid	95% CI
Males					
18-44	141	11.6	5.2-24.0	77.7	55.8-90.6
45-69	115	32.5	16.2-54.6	74.2	54.3-87.4
18-69	256	20.4	12.2-32.0	76.3	56.2-88.9
Females					
18-44	470	21.7	14.2-31.6	93.7	87.7-96.9
45-69	339	34.2	22.1-48.7	96.2	93.1-98.0
18-69	809	26.5	18.8-35.9	94.7	90.5-97.1
Both sexes					
18-44	611	19.0	12.6-27.7	89.5	80.6-94.6
45-69	454	33.7	23.3-46.0	89.8	82.4-94.3
18-69	1065	24.8	18.5-32.4	89.6	81.9-94.3

Mean number of times smokeless tobacco used in a day among smokeless tobacco users, by age category and sex

Age group	Chewing tobacco			Betel/quid			Other		
(years)	n	mean	95% CI	n	mean	95% CI	mean	%	95% CI
Males									
18-44	50	1.3	0.0-2.6	53	2.4	1.0-3.7	39	0.4	0.0-0.9
45-69	45	1.1	0.4-1.9	49	6.1	2.2-10.0	45	0.2	0.0-0.3
18-69	95	1.2	0.6-1.8	102	4.1	2.6-5.7	84	0.2	0.0-0.5
Females									
18-44	22	2.2	0.2-4.3	23	6.7	4.0-9.4	17	0.0	-
45-69	54	4.7	3.5-6.0	53	6.5	5.8-7.2	47	1.8	0.6-3.0
18-69	76	4.2	2.9-5.5	76	6.5	5.7-7.4	64	1.5	0.2-2.7
Both sexes									
18-44	72	1.5	0.4-2.6	76	3.1	1.7-4.6	56	0.3	0.0-0.7
45-69	99	2.9	1.8-4.0	102	6.3	4.2-8.4	92	0.9	0.0-1.9
18-69	171	2.3	1.4-3.2	178	4.9	3.9-5.9	148	0.7	0.0-1.5

Exposure to second-hand smoke

Percentage exposed to second hand smoke in home and workplace during the past 30 days, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
At home									
18-44	830	85.0	79.9-89.0	1410	77.5	68.1-84.8	2240	80.9	76.0-84.9
45-69	586	85.4	74.6-92.2	691	73.8	65.9-80.4	1277	79.9	72.3-85.9
18-69	1416	85.2	80.5-88.9	2101	76.6	70.1-82.1	3517	80.6	76.8-83.9
At workplace									
18-44	759	64.9	53.5-74.9	1315	46.4	36.7-56.4	2074	54.6	45.6-63.4
45-69	517	53.5	40.0-66.5	630	37.4	28.0-47.9	1147	45.7	34.7-57.3
18-69	1276	61.3	51.8-70.1	1945	44.1	35.2-53.5	3221	52.1	43.2-60.9
At home AND at workplace									
18-44	830	90.0	85.2-93.4	1410	86.0	79.0-91.0	2240	87.8	83.2-91.2
45-69	586	90.7	83.7-94.9	691	80.5	72.9-86.3	1277	85.9	79.4-90.5
18-69	1416	90.2	85.7-93.4	2101	84.6	79.3-88.8	3517	87.2	83.0-90.5

Evidence of implementation of national tobacco control legislations/policies

Exposure to media messages about the danger of smoking that encouraged quitting

Percentage noticed information in media about dangers of smoking or that encourages quitting information in media and cigarette packages during the past 30 days, by age category and sex

Age group	Newspapers or magazines <5			Television			Radio		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
Males									
18-44	780	61.3	55.9-66.4	797	80.9	75.3-85.5	793	54.6	48.1-60.9
45-69	530	56.5	412-70.7	553	69.3	55.6-80.3	546	46.3	41.0-51.7
18-69	1310	59.8	53.6-65.6	1350	77.2	70.5-82.7	1339	52.0	46.6-57.4
Females									
18-44	1260	59.5	51.7-66.8	1312	75.2	67.5-81.5	1310	56.9	49.9-63.8
45-69	579	45.3	32.6-58.5	614	67.5	56.0-77.2	611	39.0	29.4-49.4
18-69	1839	56.0	48.7-63.1	1926	73.4	66.4-79.3	1921	52.7	46.7-58.6
Both sexes									
18-44	2040	60.3	54.2-66.1	2109	77.7	72.5-82.2	2103	55.9	51.2-60.4
45-69	1109	51.4	41.8-61.0	1167	68.5	57.5-77.7	1157	43.0	36.6-49.6
18-69	3149	57.8	52.4-63.1	3276	75.2	69.7-80.0	3260	52.4	48.2-56.5

Noticing cigarette promotions

Percentage noticed any advertisement or signs promoting cigarettes in stores where cigarettes are sold during the past 30 days, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	719	38.3	26.8-51.3	1139	36.7	30.0-44.0	1858	37.4	29.9-45.6
45-69	483	27.9	21.6-35.2	542	27.3	17.2-40.3	1025	27.6	21.2-35.1
18-69	1202	35.2	26.6-44.7	1681	34.6	28.9-40.7	2883	34.8	29.3-40.8

Percentage who noticed cigarette promotions during the last 30 days, by age category and sex

Age group	Free sample of cigarette			Noticed sale prices on cigarettes			Noticed coupons for cigarettes			Noticed free gifts on buying cigarettes			Noticed clothing with a cigarette name or logo		
(years)	n	%	95% CI	n	%	95% CI	n	%	95 % CI	n	%	95 % CI	n	%	95% CI
Males															
18-44	673	20.2	13.9 - 28.3	727	86.7	80.2 - 91.4	625	9.2	5.1-16.2	629	7.8	4.5-13.5	695	66.9	56.5 - 75.9
45-69	456	9.3	4.7-17.5	482	76.1	64.4 - 84.8	423	4.8	2.3-9.8	428	2.8	1.4-5.5	448	39.5	28.9 - 51.3
18-69	1129	16.8	11.1 - 24.7	1209	83.4	76.1 - 88.8	1048	7.8	4.7-12.6	1057	6.3	4.0-10.0	1143	58.4	49.6 - 66.7
Females															
18-44	1088	11.2	7.0-17.7	1136	72.0	62.8 - 79.7	1009	4.7	2.6-8.1	1011	3.4	1.5-7.4	1095	50.8	43.2 - 58.4
45-69	516	18.0	10.4 - 29.2	531	60.6	49.3 - 70.9	474	4.1	1.8-8.9	476	2.7	1.0-7.3	497	46.8	32.7 - 61.4
18-69	1604	12.9	8.9-18.4	1667	69.2	60.7 - 76.6	1483	4.5	2.8-7.2	1487	3.3	1.7-6.2	1592	49.9	43.0 - 56.9
Both sexes															
18-44	1761	15.5	10.9 - 21.5	1863	78.9	70.7 - 85.3	1634	6.8	4.1-10.9	1640	5.5	3.7-8.2	1790	58.2	51.9 - 64.3
45-69	972	13.2	8.3-20.3	1013	69.1	58.8 - 77.8	897	4.5	2.3-8.8	904	2.8	1.5-5.1	945	42.5	34.5 - 50.9
18-69	2733	14.8	10.6 - 20.4	2876	76.1	68.5 - 82.4	2531	6.2	4.1-9.2	2544	4.8	3.4-6.6	2735	54.1	47.7 - 60.4

Noticing health warnings on cigarette packages

Percentage of current smokers who noticed health warnings on cigarette packages during the past 30 days, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	494	27.1	20.1-35.6	70	42.5	24.0-63.4	564	30.2	22.1-39.7
45-69	288	24.5	10.7-46.6	54	7.5	3.0-17.8	342	21.5	9.7-41.0
18-69	782	26.2	18.9-35.2	124	31.5	16.4-51.9	906	27.2	19.8-36.2

Percentage of current smokers who noticed health warnings on cigarette packages and thought of quitting during the past 30 days, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	112	29.9	12.4-56.1	13	36.2	8.5-77.7	125	31.9	15.7-54.0
45-69	64	44.0	21.7-69.1	17	24.1	8.9-50.8	81	41.1	21.7-63.6
18-69	176	32.7	15.7-55.9	30	35.2	9.3-74.3	206	33.4	18.2-53.2

Mean number of cigarettes purchased in the last purchase among current smokers, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
18-44	308	8.7	2.7-14.7	23	3.4	1.5-5.2	331	8.5	2.7-14.3
45-69	168	3.9	2.4-5.4	24	3.5	0.9-6.1	192	3.8	2.4-5.3
18-69	476	7.3	2.7-11.8	47	3.5	1.6-5.3	523	6.9	2.7-11.2

Use of electronic cigarettes

Percentage using electronic cigarettes, by age category and sex

Age group	Males			Females			Both sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
Current use									
18-44	830	5.0	2.2-11.1	1410	1.0	0.2-6.3	2240	2.8	1.2-6.5
45-69	586	2.9	0.6-12.6	691	0.1	0.0-0.5	1277	1.6	0.3-7.1
18-69	1416	4.3	1.9-9.6	2101	0.8	0.1-4.7	3517	2.4	1.1-5.4
Current daily use									
18-44	830	0.1	0.0-0.3	1410	-	-	2240	0.0	0.0-0.1
45-69	586	0.0	0.0-0.0	691	-	-	1277	0.0	0.0-0.0
18-69	1416	0.1	0.0-0.2	2101	-	-	3517	0.0	0.0-0.1

Alcohol use

Alcohol drinkers and abstainers

Percentage of alcohol users and abstainers, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
Current drinker (past 30 days)									
18-44	830	47.7	38.5-57.1	1410	10.7	6.9-16.2	2240	27.1	21.6-33.3
45-69	586	42.0	32.2-52.4	691	21.6	11.9-36.1	1277	32.2	22.3-44.4
18-69	1416	45.9	40.2-51.7	2101	13.4	9.6-18.4	3517	28.6	25.2-32.2
Drank in past 12 months									
18-44	830	21.3	16.9-26.6	1410	14.3	10.8-18.7	2240	17.4	14.1-21.2
45-69	586	18.1	11.6-27.1	691	8.3	4.4-15.0	1277	13.5	9.5-18.7
18-69	1416	20.3	16.8-24.3	2101	12.7	10.0-16.2	3517	16.3	13.7-19.1
Past 12 months abstainer									
18-44	830	6.4	3.7-10.8	1410	11.4	5.9-21.1	2240	9.2	5.6-14.7
45-69	586	12.9	7.1-22.5	691	9.4	3.9-21.1	1277	11.3	6.0-20.1
18-69	1416	8.5	5.7-12.5	2101	10.9	5.6-20.0	3517	9.8	5.9-15.7
Lifetime abstainer									
18-44	830	24.5	17.5-33.3	1410	63.6	52.7-73.3	2240	46.4	37.8-55.1
45-69	586	27.0	16.6-40.8	691	60.7	47.2-72.8	1277	43.0	31.0-55.9
18-69	1416	25.3	20.5-30.8	2101	62.9	53.3-71.6	3517	45.4	38.2-52.8

Percentage of respondents by status of alcohol use, by age category and sex

Age group (years)	n	% current drinker (past 30 days)	95% CI	%drank in the past 12 months, not current	95% CI	% past 12 months abstainer	95% CI	%life time abstainer	95% CI
Males									
18-44	830	47.7	38.5-57.1	21.3	16.9-26.6	6.4	3.7-10.8	24.5	17.5-33.3
45-69	586	42.0	32.2-52.4	18.1	11.6-27.1	12.9	7.1-22.5	27.0	16.6-40.8
18-69	1416	45.9	40.2-51.7	20.3	16.8-24.3	8.5	5.7-12.5	25.3	20.5-30.8
Females									
18-44	1410	10.7	6.9-16.2	14.3	10.8-18.7	11.4	5.9-21.1	63.6	52.7-73.3
45-69	691	21.6	11.9-36.1	8.3	4.4-15.0	9.4	3.9-21.1	60.7	47.2-72.8
18-69	2101	13.4	9.6-18.4	12.7	10.0-16.2	10.9	5.6-20.0	62.9	53.3-71.6
Both sexes									
18-44	2240	27.1	21.6-33.3	17.4	14.1-21.2	9.2	5.6-14.7	46.4	37.8-55.1
45-69	1277	32.2	22.3-44.4	13.5	9.5-18.7	11.3	6.0-20.1	43.0	31.0-55.9
18-69	3517	28.6	25.2-32.2	16.3	13.7-19.1	9.8	5.9-15.7	45.4	38.2-52.8

Frequency of alcohol consumption

Percentage of those who drank in the past 12 months by the frequency of drinking, by age category and sex

Age group (years)	n	daily	95% CI	5-6 days/ week	95% CI	3-4 days/ per week	95% CI	1-2 days/ week	95% CI	1-3 days /month	95% CI	< once a month	95% CI
Males													
18-44	494	4.4	1.5-12.0	0.4	0.1-1.5	0.6	0.3-1.4	8.9	5.0-15.4	42.5	31.3-54.6	43.2	35.3-51.5
45-69	292	5.7	1.4-20.4	1.2	0.3-3.8	4.5	0.8-21.6	16.0	7.7-30.2	23.9	13.4-38.9	48.8	39.2-58.5
18-69	786	4.7	2.0-10.7	0.6	0.2-1.5	1.8	0.5-5.6	11.0	6.8-17.3	37.1	28.1-46.1	44.8	39.0-50.8
Females													
18-44	226	0.0	-	0.7	0.1-4.2	0.2	0.0-1.3	19.4	8.5-38.4	25.2	15.8-37.6	54.6	38.5-69.7
45-69	144	0.2	0.0-1.3	0.0	0.0-0.2	0.0	-	1.3	0.4-4.0	28.8	14.8-48.5	69.7	50.5-83.8
18-69	370	0.0	0.0-0.4	0.5	0.1-3.0	0.1	0.0-1.0	14.2	6.5-28.1	26.2	17.3-37.6	58.9	46.0-70.8
Both sexes													
18-44	720	3.0	1.0-8.6	0.5	0.2-1.5	0.5	0.2-1.1	12.2	8.3-17.5	37.1	28.7-46.4	46.7	37.7-56.0
45-69	436	4.0	1.0-15.0	0.8	0.3-2.6	3.1	0.6-15.0	11.5	5.6-21.9	25.4	16.2-37.5	55.2	44.9-65.1
18-69	1156	3.3	1.4-7.4	0.6	0.2-1.3	1.2	0.4-3.9	12.0	8.0-17.5	33.7	27.2-41.0	49.2	42.0-56.4

Percentage of those who drank in the past 12 months by responses to the affordability to buy the same quantity of alcohol compared to one year ago , age category and sex

Age group	More affordable			Less affordable			Affordability is the same			No response/don't know		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI	n	%	95% CI
Males												
18-44	58	12.1	6.7-20.8	214	57.9	47.1-68.1	169	18.5	12.2-27.0	59	11.5	6.5-19.7
45-69	26	9.7	4.9-18.1	139	51.3	34.1-68.2	88	26.0	15.1-40.9	40	13.0	7.4-21.9
18-69	84	11.4	6.8-18.5	353	56.0	45.9-65.7	257	20.6	14.9-27.8	99	11.9	7.7-18.0
Females												
18-44	18	17.9	7.5-36.8	94	53.4	37.8-68.4	70	10.1	5.6-17.8	48	18.5	8.6-35.4
45-69	10	3.9	1.3-11.4	59	41.5	25.5-59.6	43	34.1	18.4-54.2	37	20.5	6.6-48.5
18-69	28	13.7	6.0-28.4	153	49.9	37.7-62.2	113	17.2	10.5-27.0	85	19.1	10.7-31.7
Both sexes												
18-44	76	13.8	8.1-22.7	308	56.6	49.0-63.9	239	15.9	10.9-22.6	107	13.7	10.3-17.9
45-69	36	7.8	4.4-13.7	198	48.2	37.4-59.1	131	28.6	18.0-42.2	77	15.4	10.0-23.0
18-69	112	12.1	7.7-18.6	506	54.1	47.0-61.1	370	19.6	14.7-25.6	184	14.2	11.3-17.6

Percentage of current drinkers (drank past 30 days) by the frequency of drinking , age category and sex

Age group	Daily			5-6 days/week			3-4 days per week			1-2 days a week			1-3 days /month			<once a month		
(years)	n	%	95 % CI	n	%	95 % CI	n	%	95 % CI	n	%	95 % CI	n	%	95% CI	n	%	95% CI
Males																		
18-44	12	6.3	2.1 - 17.6	5	0.5	0.1 - 2.1	14	0.9	0.4 - 2.0	64	11.4	5.8 - 21.1	149	40.6	27.8 - 54.8	149	40.3	30.6 - 50.8
45-69	6	7.8	1.8 - 27.7	7	1.5	0.4 - 5.3	9	6.5	1.2 - 28.7	25	16.8	9.1 - 28.9	67	28.7	15.6 - 46.8	99	38.8	30.2 - 48.1
18-69	18	6.8	2.8 - 15.6	12	0.8	0.3 - 2.0	23	2.5	0.8 - 8.1	89	13.0	8.0 - 20.4	216	37.1	26.6 - 48.9	248	39.8	33.0 - 47.1
Females																		
18-44	0	0.0	-	1	0.2	0.0 - 1.3	0	0.0	-	8	28.4	9.7 - 59.4	42	35.0	19.2 - 54.8	74	36.5	17.6 - 60.8
45-69	1	0.2	0.0 - 1.9	1	0.0	0.0 - 0.3	0	0.0	-	5	1.1	0.3 - 3.9	22	35.4	17.9 - 57.9	56	63.2	41.2 - 80.8
18-69	1	0.1	0.0 - 0.7	2	0.1	0.0 - 0.7	0	0.0	-	13	17.3	5.6 - 42.8	64	35.2	23.2 - 49.4	130	47.3	33.0 - 62.1
Both sexes																		
18-44	12	4.9	1.6 - 14.0	6	0.4	0.1 - 1.6	14	0.7	0.3 - 1.5	72	15.2	8.6 - 25.3	191	39.3	28.3 - 51.6	223	39.4	28.6 - 51.4
45-69	7	5.4	1.3 - 20.4	8	1.0	0.3 - 3.7	9	4.4	0.9 - 20.0	30	11.8	6.7 - 20.1	89	30.8	18.6 - 46.5	155	46.5	36.8 - 56.4
18-69	19	5.1	2.2 - 11.5	14	0.6	0.3 - 1.5	23	1.9	0.6 - 6.2	102	14.1	9.0 - 21.4	280	36.6	28.1 - 45.9	378	41.7	33.8 - 50.1

Percentage of those who drank in the past 7 days by the frequency of drinking, by age category and sex

Age group	n	daily	95% CI	5-6 days/ week	95% CI	3-4 days	95% CI	1-2 days	95% CI	% 0 days	95% CI
Males											
18-44	378	6.6	2.1-19.2	0.3	0.1-1.0	6.9	3.1-14.7	63.8	46.4-78.2	22.4	13.0-35.9
45-69	200	1.5	0.6-3.8	1.0	0.3-3.4	26.2	15.5-40.7	55.5	43.1-67.2	15.9	7.5-30.5
18-69	578	5.1	1.7-14.6	0.5	0.2-1.2	12.4	7.2-20.5	61.4	48.7-72.8	20.6	12.7-31.5
Females											
18-44	115	12.0	1.7-51.4	0.0	-	1.0	0.3-3.4	65.4	41.6-83.3	21.6	10.5-39.4
45-69	81	0.3	0.0-2.2	0.0	-	1.3	0.2-8.1	60.3	31.4-83.5	38.1	15.4-67.5
18-69	196	6.7	0.9-35.0	0.0	-	1.2	0.4-3.6	63.1	42.5-79.8	29.1	15.1-48.6
Both sexes											
18-44	493	7.5	2.2-22.5	0.2	0.1-0.8	5.9	2.8-11.9	64.1	47.9-77.6	22.3	14.4-32.9
45-69	281	1.1	0.4-2.8	0.7	0.2-2.4	18.5	11.6-28.2	57.0	41.8-70.9	22.7	10.9-41.5
18-69	774	5.5	1.7-16.5	0.4	0.2-0.9	9.9	6.2-15.5	61.8	50.2-72.2	22.4	15.0-32.2

Quantum of alcohol drunk

Percentage of current drinkers (those who drank in the past 30 days) by the amount, age category and sex

Age group	n	% high end	CI	% Intermediate	CI	% lower end	CI
Males		>=60g		40-59.9g		<40g	
18-44	318	2.4	0.9-6.1	8.3	3.2-20.0	89.3	78.9-94.9
45-69	176	0.1	0.0-0.5	15.8	5.5-37.7	84.1	62.3-94.4
18-69	494	1.8	0.7-4.3	10.2	5.1-19.6	88.0	79.1-93.4
Females		>=40g		20.-39.9g		<20g	
18-44	102	0.6	0.1-3.1	38.1	14.0-69.9	61.3	29.7-85.6
45-69	70	1.6	0.3-7.7	30.6	15.2-52.1	67.8	47.1-83.3
18-69	172	1.0	0.3-3.1	35.3	17.6-58.2	63.7	41.0-81.5
Both sexes							
18-44	420	8.5	4.0-17.1	53.2	43.0-63.3	38.3	28.8-48.8
45-69	246	11.3	3.7-30.0	52.4	35.6-68.6	36.3	22.1-53.4
18-69	666	9.3	5.2-16.1	53.0	43.9-61.9	37.7	30.5-45.6

Consumption of unrecorded alcohol

Percentage of respondents consuming unrecorded alcohol by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	266	33.1	20.1-49.3	81	10.9	3.3-30.4	347	27.9	18.6-39.6
45-69	155	22.1	12.0-37.2	51	9.8	2.7-29.4	206	18.8	9.9-32.7
18-69	421	29.6	18.9-43.2	132	10.5	3.6-26.9	553	25.0	16.8-35.4

Mean number of standard drinks and standard drinks of unrecorded alcohol on average per day in the past 7 days among current drinkers (those who drank in the past 30 days), by age category and sex

Age group	Males			Females			Both Sexes		
	n	mean	95% CI	n	mean	95% CI	n	mean	95% CI
Standard drinks									
18-44	378	0.4	0.3-0.5	115	0.4	0.1-0.6	493	0.4	0.3-0.5
45-69	200	0.4	0.3-0.5	81	0.1	0.1-0.2	281	0.3	0.2-0.4
18-69	578	0.4	0.3-0.5	196	0.3	0.1-0.4	774	0.4	0.3-0.4
Standard drinks of unrecorded alcohol									
18-44	101	0.6	0.3-0.8	19	0.5	0.0-1.1	120	0.6	0.3-0.8
45-69	54	0.6	0.3-0.9	9	0.5	0.2-0.8	63	0.6	0.3-0.8
18-69	155	0.6	0.4-0.8	28	0.5	0.1-0.8	183	0.6	0.4-0.8

Percentage of respondents by type of unrecorded alcohol consumed during the past 7 days, by age category and sex

Age group	home– brewed spirits			home– brewed beer/ wine			brought over border			surrogate alcohol			other		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI	n	%	95% CI	n	%	95% CI
Males															
18-44	104	81.7	59.8-93.0	104	15.6	6.3-33.8	104	23.3	13.0-38.3	104	0.4	0.1-1.7	104	33.2	135-61.2
45-69	62	84.9	64.4-94.6	62	13.5	4.7-32.7	62	6.0	1.7-19.5	62	0.0	-	62	18.1	6.0-43.0
18-69	166	82.4	65.7-92.0	166	15.1	7.3-28.8	166	19.3	10.3-33.3	166	0.3	0.1-1.3	166	29.7	13.7-53.0
Females															
18-44	20	47.2	10.-87.8	20	18.6	3.1-61.5	20	8.3	1.6-32.9	20	0.0	-	20	67.4	25.3-92.6
45-69	10	91.6	59.3-98.8	10	39.4	7.5-83.9	10	6.7	0.7-42.4	10	0.0	-	10	70.6	32.0-92.5
18-69	30	61.8	26.1-88.1	30	25.4	12.8-44.1	30	7.8	1.9-27.0	30	0.0	-	30	68.4	31.5-91.1
Both sexes															
18-44	124	78.5	57.6-90.8	124	15.9	6.8-32.9	124	22.0	12.1-36.6	124	0.3	0.1-1.5	124	36.3	16.2-62.6
45-69	72	85.8	68.5-94.4	72	17.1	6.9-36.4	72	6.1	1.9-17.6	72	0.0	-	72	25.3	9.1-53.5
18-69	196	80.3	64.7-90.1	196	16.2	8.5-28.7	196	18.1	9.6-31.5	196	0.3	0.1-1.1	196	33.6	16.6-56.3

Drinking occasions and drinks per occasion

Mean number of drinking occasions in the past 30 days among current drinkers (those who drank in the past 30 days), by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
18-44	300	5.4	3.7-7.2	99	3.9	1.8-6.0	399	5.1	3.6-6.5
45-69	163	5.0	3.1-7.0	70	2.4	1.2-3.5	233	4.0	2.5-5.6

18-69	463	5.3	3.8-6.8	169	3.3	1.9-4.6	632	4.8	3.5-6.0

Mean number of standard drinks per drinking occasion among current drinkers (those who drank in the past 30 days) by age category and sex

Age group (years)	Males			Females			Both Sexes		
	n	Mean	CI	n	Mean	CI	n	Mean	CI
18-44	300	5.4	3.7-7.2	99	3.9	1.8-6.0	399	5.1	3.6-6.5
45-69	163	5.0	3.1-7.0	70	2.4	1.2-3.5	233	4.0	2.5-5.6
18-69	463	5.3	3.8-6.8	169	3.3	1.9-4.6	632	4.8	3.5-6.0

Mean maximum number of standard drinks consumed on one occasion in the past 30 days among current drinkers (those who drank in the past 30 days), by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
18-44	249	3.3	2.5-4.2	80	2.3	1.5-3.1	329	3.2	2.4-3.9
45-69	139	4.2	0.2-8.2	54	2.0	1.7-2.3	193	3.5	0.8-6.1
18-69	388	3.6	2.2-5.0	134	2.2	1.7-2.7	522	3.3	2.2-4.3

Percentage of current drinkers (those who drank in the past 30 days) who drank six or more drinks on a single occasion in the past 30 days, by age category and sex

Age group	Males			Females			Both Sexes		
	n	% >=6 drinks	CI	n	% >=6 drinks	CI	n	% >=6 drinks	CI
18-44	830	6.3	3.6-10.9	1410	1.9	0.8-4.8	2240	3.9	2.5-5.8
45-69	586	2.2	0.8-5.7	691	4.5	1.1-16.8	1277	3.3	1.4-7.6
18-69	1416	5.0	3.0-8.1	2101	2.6	1.3-5.2	3517	3.7	2.6-5.2

Mean number of times with six or more drinks during a single occasion among current drinkers (those who drank in the past 30 days) in the past 30 days, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
18-44	58	4.3	1.6-7.0	17	2.1	1.3-2.8	75	3.7	1.9-5.5
45-69	22	3.5	1.5-5.4	12	1.5	0.5-2.4	34	2.2	0.9-3.5
18-69	80	4.2	1.9-6.5	29	1.8	1.1-2.6	109	3.3	1.9-4.7

Dietary habits

Fruits and vegetable consumption

Frequency of fruit and vegetables consumption

Mean number of days fruits and vegetables consumed in a typical week, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
fruits									
18-44	759	2.4	2.1-2.6	1312	2.7	2.4-2.9	2071	2.5	2.3-2.7
45-69	519	2.4	2.1-2.8	616	2.5	2.2-2.8	1135	2.5	2.2-2.7
18-69	1278	2.4	2.2-2.5	1928	2.6	2.4-2.9	3206	2.5	2.3-2.7

Vegetables									
18-44	822	6.6	6.4-6.8	1404	6.6	6.4-6.7	2226	6.6	6.5-6.7
45-69	572	6.5	6.3-6.7	682	6.5	6.3-6.7	1254	6.5	6.3-6.6
18-69	1394	6.7	6.4-6.7	2086	6.6	6.4-6.7	3480	6.6	6.4-6.7

Quantity of fruit and vegetables consumed

Mean number of servings of fruit, vegetable and combined fruit and vegetable serving on average per day, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
fruits									
18-44	722	1.0	0.9-1.2	1260	1.2	1.0-1.4	1982	1.2	1.0-1.3
45-69	490	1.3	1.0-1.7	590	1.1	0.9-1.3	1080	1.2	1.0-1.5
18-69	1212	1.1	1.0-1.3	1850	1.2	1.0-1.4	3062	1.2	1.0-1.3
Vegetables									
18-44	820	4.3	4.1-4.5	1401	4.3	4.0-4.5	2221	4.3	4.0-4.5
45-69	571	3.9	3.4-4.3	681	4.0	3.6-4.5	1252	3.9	3.6-4.3
18-69	1391	4.1	3.9-4.3	2082	4.2	3.9-4.5	3473	4.2	4.0-4.4
Combined fruits and Vegetables									
18-44	821	5.3	5.0-5.6	1402	5.4	5.0-5.8	2223	5.3	5.0-5.7
45-69	574	5.0	4.5-5.4	685	5.1	4.5-5.6	1259	5.0	4.6-5.4
18-69	1395	5.2	4.9-5.4	2087	5.3	4.9-5.7	3482	5.3	5.0-5.5

Percentage consuming different number of servings of fruit and/or vegetables on average per day, by age category and sex

Age group	No fruit and/or vegetables			1-2 fruit and/or vegetables			3-4 fruit and/or vegetables			>=5 fruit and/or vegetables		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI	n	%	95% CI
Males												
18-44	30	1.0	0.3-2.7	182	11.8	7.6-18.0	265	33.6	29.0-38.5	281	53.7	46.8-60.4
45-69	23	0.8	0.3-1.9	147	17.9	11.1-27.7	167	34.0	26.2-42.8	179	47.3	36.5-58.4
18-69	53	0.9	0.4-2.1	329	13.7	10.4-17.9	432	33.7	29.1-38.6	460	51.7	45.8-57.5
Females												
18-44	30	0.9	0.4-2.2	304	13.2	9.0-18.9	466	25.6	20.7-31.2	512	60.3	51.9-68.1
45-69	30	2.3	1.1-4.9	154	16.1	10.5-23.8	213	35.4	26.7-45.3	214	46.1	35.8-56.9
18-69	60	1.3	0.7-2.3	458	13.9	10.2-18.7	679	28.0	23.4-33.0	726	56.9	49.5-64.0
Both sexes												
18-44	60	0.9	0.4-2.1	486	12.6	8.9-17.5	731	29.1	25.3-33.3	793	57.4	50.8-63.7
45-69	53	1.5	0.8-3.0	301	17.1	11.8-24.0	380	34.7	27.9-42.1	393	46.8	38.0-55.8
18-69	113	1.1	0.6-2.0	787	13.8	10.8-17.4	1111	30.6	26.7-34.8	1186	54.4	49.0-59.8

Percentage consuming less than five servings of fruit and/or vegetables on average per day, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	758	46.3	39.6-53.2	1312	39.7	31.9-48.1	2070	42.6	36.3-49.2
45-69	516	52.7	41.6-63.5	611	53.9	43.1-64.2	1127	53.2	44.2-62.0
18-69	1274	48.3	42.5-54.2	1923	43.1	36.0-50.5	3197	45.6	40.2-51.0

Frequency of consuming carbonated drinks

Percentage of those who drank carbonated soft drinks by the frequency of drinking, during the past 7 days, by age category and sex

Age group (years)	n	% no drink	95% CI	% 1-3 times	95% CI	% 4-6 times	95% CI
Males							
18-44	830	73.4	64.7-80.5	25.4	17.4-35.5	1.2	0.2-6.3
45-69	586	68.4	54.9-79.5	28.1	16.7-43.2	3.5	0.6-18.8
18-69	1416	71.8	64.3-78.2	26.3	19.1-35.0	1.9	0.6-6.2
Females							
18-44	1410	72.4	65.7-78.2	24.9	18.7-32.4	2.7	0.9-7.6
45-69	691	75.7	63.1-85.0	24.2	14.9-36.8	0.1	0.0-0.7
18-69	2101	73.2	66.6-79.0	24.7	18.5-32.3	2.0	0.7-5.7
Both sexes							
18-44	2240	72.8	67.9-77.3	25.1	20.1-30.9	2.0	0.9-4.5
45-69	1277	71.9	64.3-78.4	26.2	19.1-34.9	1.9	0.3-10.3
18-69	3517	72.6	68.3-76.5	25.5	21.0-30.6	2.0	0.7-5.2

Frequency of consuming sugar-sweetened beverages

Percentage of those who drank sugar-sweetened drinks include sports drinks by the frequency of drinking, during the past 7 days, by age category and sex

Age group (years)	n	% no drink	95% CI	% 1-3 times	95% CI	% 4-6 times	95% CI
Males							
18-44	830	59.6	51.2-67.5	38.1	30.2-46.8	2.3	0.7-7.1
45-69	586	66.5	52.7-78.0	32.7	21.1-46.8	0.8	0.3-1.8
18-69	1416	61.8	55.5-67.8	36.4	30.2-43.0	1.8	0.7-4.9
Females							
18-44	1410	65.2	58.9-71.0	31.8	26.7-37.3	3.0	1.3-6.9
45-69	691	80.6	70.8-87.6	18.3	11.3-28.2	1.1	0.5-2.5
18-69	2101	69.0	63.5-74.1	28.4	23.6-33.8	2.6	1.2-5.4
Both sexes							
18-44	2240	62.7	56.2-68.8	34.6	28.7-41.0	2.7	1.3-5.6
45-69	1277	73.2	64.4-80.3	25.9	18.7-34.7	0.9	0.5-1.9
18-69	3517	65.7	60.1-70.8	32.1	27.1-37.6	2.2	1.1-4.2

Frequency of consuming energy drinks

Percentage of those who drank energy drinks by the frequency of drinking, during the past 7 days, by age category and sex

Age group (years)	n	% no drink	95% CI	% 1-3 times	95% CI	% 4-6 times	95% CI
Males							
18-44	830	71.7	62.2-79.6	28.2	20.3-37.7	0.0	0.0-0.2
45-69	586	91.1	82.5-95.7	8.7	4.2-17.3	0.2	0.0-0.5
18-69	1416	78.0	69.8-84.4	21.9	15.5-30.1	0.1	0.0-0.2
Females							
18-44	1410	90.7	84.7-94.5	9.2	5.4-15.2	0.1	0.1-0.4

45-69	691	96.7	93.1-98.4	3.2	1.5-6.8	0.1	0.0-0.7
18-69	2101	92.2	87.5-95.2	7.7	4.7-12.4	0.1	0.1-0.4
Both sexes							
18-44	2240	82.3	74.0-88.4	17.8	11.5-25.9	0.1	0.0-0.3
45-69	1277	93.8	89.1-96.5	6.1	3.4-10.8	0.1	0.0-0.4
18-69	3517	85.6	79.2-90.2	14.3	9.7-20.7	0.1	0.1-0.2

Frequency of consuming fruit juice

Percentage of those who drank 100% fruit drinks by the frequency of drinking, during the past 7 days, by age category and sex

Age group (years)	n	% no drink	95% CI	% 1-3 times	95% CI	% 4-6 times	95% CI
Males							
18-44	830	53.0	43.8-62.1	46.2	37.2-35.6	0.7	0.2-2.5
45-69	586	66.3	49.8-79.6	31.0	19.8-45.0	2.7	0.5-13.0
18-69	1416	57.3	48.6-65.6	41.3	33.3-49.8	1.4	0.4-4.3
Females							
18-44	1410	49.4	40.0-59.0	49.7	40.0-59.3	0.9	0.3-2.2
45-69	691	65.6	52.7-76.5	33.8	22.9-46.9	0.6	0.2-1.7
18-69	2101	53.5	45.5-61.3	45.7	37.7-53.9	0.8	0.3-1.8
Both sexes							
18-44	2240	51.0	43.9-58.1	48.2	41.0-55.4	0.8	0.4-1.8
45-69	1277	66.0	53.4-76.6	32.3	23.1-43.1	1.7	0.4-6.7
18-69	3517	55.3	48.3-62.1	43.7	37.1-50.5	1.1	0.5-2.2

Percentage of those who drank fruit juices which are not 100% fruit juices by the frequency of drinking, during the past 7 days, by age category and sex

Age group (years)	n	% no drink	95% CI	% 1-3 times	95% CI	% 4-6 times	95% CI
Males							
18-44	830	68.4	62.3-74.0	29.9	24.1-36.4	1.6	0.5-5.3
45-69	586	74.9	61.6-84.7	25.0	15.1-38.3	0.1	0.0-0.4
18-69	1416	70.5	65.2-75.3	28.3	23.3-34.0	1.2	0.4-3.7
Females							
18-44	1410	68.8	61.6-75.2	29.2	22.1-37.6	1.9	0.6-5.9
45-69	691	80.4	67.4-89.0	19.6	10.9-32.6	0.1	0.0-0.2
18-69	2101	71.7	65.3-77.4	26.8	21.0-33.4	1.5	0.5-4.4
Both sexes							
18-44	2240	68.7	63.7-73.3	29.5	24.2-35.5	1.8	0.6-4.9
45-69	1277	77.5	69.9-83.6	22.4	16.3-30.0	0.1	0.0-0.3
18-69	3517	71.2	66.0-75.8	27.5	22.7-32.9	1.3	0.5-3.6

Percentage of those who drank sugar-sweetened flavoured milks by the frequency of drinking, during the past 7 days, by age category and sex

Age group	n	% no drink	95% CI	% 1-3 times	95% CI	% 4-6 times	95%CI
Males							
18-44	830	43.1	33.4-53.3	54.8	44.5-64.8	2.1	0.9-4.6
45-69	586	64.2	48.5-77.4	30.9	17.6-48.5	4.8	1.8-12.4
18-69	1416	49.9	42.1-57.7	47.1	38.7-55.8	2.9	1.5-5.8

Females							
18-44	1410	40.2	33.7-47.1	56.6	49.6-63.4	3.1	1.5-6.4
45-69	691	63.8	52.8-73.5	30.2	21.7-40.4	6.0	1.8-18.3
18-69	2101	46.2	39.8-52.7	50.0	43.8-56.2	3.9	2.2-6.7
Both sexes							
18-44	2240	41.5	34.9-48.4	55.8	48.6-62.9	2.7	1.5-4.5
45-69	1277	64.0	55.0-72.1	30.6	21.7-41.2	5.4	2.7-10.6
18-69	3517	47.9	42.2-53.6	48.7	42.5-54.9	3.4	2.2-5.4

Dietary salt

Salt consumption habits

Percentage respondents with patterns of consuming high salt diet, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
Always or often add salt or a salty sauce such as soy sauce to food right before eating or while eating									
18-44	830	82.1	71.0-89.5	1403	74.3	62.8-83.2	2233	77.7	67.4-85.5
45-69	583	70.6	55.1-82.4	688	64.0	52.5-74.2	1271	67.5	54.7-78.1
18-69	1413	78.4	67.9-86.1	2091	71.7	60.3-80.9	3504	74.8	64.1-83.2
Always or often add salt, salty seasoning or a salty sauce added in cooking or preparing foods									
18-44	830	84.2	75.9-90.0	1404	80.5	71.2-87.3	2234	82.1	73.9-88.2
45-69	583	77.6	65.0-86.6	688	68.9	59.5-77.0	1271	73.5	63.0-81.9
18-69	1413	82.1	73.8-88.1	2092	77.6	68.8-84.4	3505	79.7	71.4-86.0
Always or often eat processed food high in salt									
18-44	829	4.8	2.7-8.3	1410	7.5	4.8-11.3	2239	6.3	4.2-9.2
45-69	586	11.7	6.7-19.8	688	4.1	2.3-7.2	1274	8.1	5.1-12.7
18-69	1415	7.0	4.6-10.6	2098	6.6	4.5-9.6	3513	6.8	5.1-9.0

Percentage of self–reported quantity of salt consumed, by age category and sex

Age group (years)	n	% far too much	95% CI	% too much	95% CI	% just the right amount	95% CI	% Too little	95% CI	% Far too little	95% CI
Males											
18-44	827	1.6	0.5-5.5	1.0	0.4-3.0	90.8	86.0-94.0	0.8	0.3-2.2	5.8	3.2-10.4
45-69	584	0.4	0.2-1.0	5.4	1.5-17.2	84.2	73.4-91.1	4.4	1.8-10.3	5.6	3.2-9.8
18-69	1411	1.2	0.4-3.9	2.4	1.0-5.5	88.6	84.8-91.6	1.9	0.8-4.5	5.7	3.6-9.2
Females											
18-44	1409	1.4	0.4-4.8	2.4	0.9-6.4	88.6	84.3-91.9	1.2	0.7-2.1	6.3	3.7-10.5

45-69	689	0.6	0.3-1.2	1.2	0.3-4.3	76.3	68.4-82.7	13.0	7.1-22.7	8.9	5.9-13.0
18-69	2098	1.2	0.4-3.5	2.1	0.9-5.0	85.5	81.7-88.6	4.2	2.7-6.6	6.9	4.4-10.7
Both sexes											
18-44	2236	1.5	0.7-3.4	1.8	0.8-3.9	89.6	85.7-92.5	1.0	0.6-1.8	6.1	3.8-9.5
45-69	1273	0.5	0.3-0.9	3.4	1.2-9.2	80.5	73.1-86.2	8.5	5.1-13.8	7.2	4.6-10.9
18-69	3509	1.2	0.6-2.6	2.3	1.3-3.8	87.0	83.9-89.5	3.2	2.0-4.9	6.4	4.2-9.6

Aware of the recommended maximum intake of salt

Percentage of respondents who knew the maximum amount of salt a person should take in a day from all sources, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	785	0.5	0.2-1.1	1333	1.2	0.5-2.9	2118	0.9	0.4-2.0
45-69	517	0.1	0.0-1.0	630	0.7	0.2-2.2	1147	0.4	0.2-1.1
18-69	1302	0.4	0.1-0.9	1963	1.1	0.5-2.5	3265	0.7	0.3-1.6

Percentage of respondents who reported using iodized salt for cooking, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	628	93.7	89.2-96.4	1062	94.7	90.7-97.1	1690	94.3	92.1-95.9
45-69	480	89.6	78.2-95.4	533	93.9	89.2-96.6	1013	91.6	85.6-95.3
18-69	1108	92.4	87.5-95.4	1595	94.5	91.5-96.5	2703	93.5	90.8-95.5

Household use of iodized salt

Percentage of households reported using iodized salt for cooking

households		
n	%	95% CI
2703	93.5	90.8-95.5

Percentage of households with adequate amount of iodine in the household salt used for for cooking

households		
n	%	95% CI
	92.8	88.3-95.6

Physical activity

Insufficient physical activity

Percentage respondents not meeting WHO recommendations on physical activity for health, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	655	1.9	0.8-4.3	997	2.5	1.0-6.0	1652	2.2	1.2-4.0
45-69	468	5.0	1.6-14.9	526	0.8	0.4-1.6	994	2.9	1.1-7.7
18-69	1123	2.9	1.3-6.0	1523	2.1	0.9-4.6	2646	2.4	1.4-4.0

Minutes spent on total physical activity on average per day by respondents, by age category and sex

Age group	Males			Females			Both sexes		
(years)	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
Moderate physical activity									
18-44	582	111.0	85.9-136.1	925	140.3	122.2-158.4	1507	128.1	110.9-145.4
45-69	416	138.5	103.7-173.4	481	163.8	140.8-186.9	897	151.5	130.3-172.6
18-69	998	119.2	96.4-142.1	1406	146.0	131.1-160.9	2404	134.4	117.9-150.8
Vigorous physical activity									
18-44	452	161.7	141.2-182.2	333	138.0	106.6-169.4	785	153.7	133.0-174.3
45-69	275	200.3	136.7-264.0	211	182.7	131.1-234.4	486	192.8	147.4-236.2
18-69	727	171.7	145.1-198.4	544	153.0	126.0-180.1	1271	164.9	140.5-189.3

Engagement in vigorous physical activity

Percentage of respondents not engaging in vigorous physical activity, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	816	48.3	39.5-57.1	1393	78.9	74.3-82.8	2209	65.4	59.7-70.6
45-69	572	61.7	53.0-69.6	674	68.2	56.8-77.8	1246	64.7	55.9-72.7
18-69	1388	52.6	44.8-60.2	2067	76.2	71.0-80.7	3455	65.2	59.9-70.1

Time spent in sedentary activity

Minutes spent in sedentary activity on a typical day, by age category and sex

Age group (years)	n	Mean	95% CI	Median	Inter-quartile range
Males					
18-44	808	194.8	163.6-225.9	120.0	90.0-240.0
45-69	564	197.7	168.3-227.1	140.0	120.0-240.0
18-69	1372	195.7	171.8-219.6	120.0	90.0-240.0
Females					
18-44	1363	221.3	190.3-252.3	180.0	90.0-323.0
45-69	665	214.1	170.4-257.8	120.0	90.0-300.0
18-69	2028	219.5	190.6-248.4	150.0	90.0-323.0
Both sexes					
18-44	2171	209.5	189.8-229.3	143.0	90.0-300.0

45-69	1229	205.4	177.7-233.1	135.0	120.0-240.0
18-69	3400	208.4	189.4-227.4	140.0	90.0-300.0

Overweight and obesity

Mean height (cm) of respondents, by age category and sex

Age group	Males			Females		
(years)	n	Mean	95% CI	n	Mean	95% CI
18-44	830	162.0	160.6-163.4	1338	154.8	154.1-155.5
45-69	585	163.0	159.8-166.3	686	152.0	150.9-153.0
18-69						

Mean weight (kg) of respondents, by age category and sex

Age group	Males			Females		
(years)	n	Mean	95% CI	n	Mean	95% CI
18-44	830	55.9	54.8-57.0	1338	53.3	51.5-55.1
45-69	583	57.4	53.7-61.0	686	53.1	49.0-57.3
18-69	1415	56.4	54.8-57.9	2024	53.3	51.3-55.2

Body mass index

Mean BMI (kg/m^2) of respondents, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	830	21.3	20.8-21.8	1337	22.3	21.6-22.9	830	21.3	20.8-21.8
45-69	582	21.3	20.7-21.8	685	22.3	21.2-23.5	582	21.3	20.7-21.8
18-69	1412	21.3	20.9-21.7	2022	22.3	21.6-23.0	1412	21.3	20.9-21.7

Percentage of respondents (excluding pregnant women) in each BMI category, by age category and sex

Age group	n	% underweight <18.5	95% CI	% normal weight 18.5-24.9	95% CI	% Overweight 25.0-29.9	95% CI	% Obese >= 30.0	95% CI
Males									
18-44	830	18.7	12.4-27.1	71.7	63.9-78.4	7.9	4.4-13.8	1.7	0.6-5.1
45-69	582	24.5	17.4-33.4	58.4	50.4-65.9	15.4	10.3-22.3	1.8	0.6-5.4
18-69	1412	20.6	15.0-27.4	67.4	61.0-73.3	10.3	7.1-14.8	1.7	0.7-4.0
Females									
18-44	1337	18.8	13.4-25.9	57.4	50.9-63.7	20.4	15.0-27.2	3.3	1.6-6.8
45-69	685	17.6	12.1-24.9	60.9	51.1-69.8	12.1	7.0-20.1	9.4	4.0-20.4
18-69	2022	18.5	13.9-24.2	58.3	53.5-63.0	18.3	13.8-23.9	4.9	2.3-10.0
Both sexes									
18-44	2167	18.8	14.0-24.7	63.9	59.7-67.9	14.7	10.8-19.8	2.6	1.2-5.5
45-69	1267	21.3	16.6-26.9	59.5	52.6-66.1	13.9	9.8-19.3	5.3	2.8-9.9
18-69	3434	19.5	15.4-24.3	62.7	59.0-66.1	14.5	11.0-18.9	3.4	1.7-6.5

Waist-hip ratio

Mean waist circumference (cm) and hip circumference (cm) among all respondents (excluding pregnant women), by age category and sex

Age group	Males			Females		
(years)	n	Mean	95% CI	n	Mean	95% CI
Waist circumference (cm)						
18-44	811	76.6	74.4-78.9	1329	79.8	77.9-81.6
45-69	572	78.0	76.1-79.9	676	82.0	79.5-84.5
18-69	1383	77.1	75.4-78.8	2005	80.3	78.8-81.8
Hip circumference (cm)						
18-44	811	86.8	84.1-89.4	1329	88.3	85.8-90.9
45-69	572	87.2	83.8-90.5	675	90.5	86.3-94.8
18-69	1383	86.9	84.5-89.2	2004	88.9	86.6-91.2

Mean waist to hip ratio among all respondents (excluding pregnant women), by age category and sex

Age group	Males			Females		
(years)	n	Mean	95% CI	n	Mean	95% CI
18-44	811	0.9	0.9-0.9	1329	0.9	0.9-0.9
45-69	572	0.9	0.9-0.9	675	0.9	0.9-0.9
18-69	1383	0.9	0.9-0.9	2004	0.9	0.9-0.9

Blood pressure

History of raised blood pressure

Percentage of respondents according to having blood pressure measured/diagnosed of hypertension in the past, by age category and sex

Age group	n	% never measured	95% CI	% measured not diagnosed	95% CI	% Diagnosed but not within past 12 months	95% CI	% Diagnosed within past 12 months	95% CI
Males									
18-44	830	43.3	36.0-50.8	43.4	33.8-53.5	0.2	0.1-0.6	13.1	6.3-25.4
45-69	586	41.0	27.3-56.2	40.8	31.1-51.1	7.4	3.2-16.1	10.9	5.4-20.5
18-69	1416	42.5	34.7-50.7	42.5	35.2-50.2	2.5	1.1-5.7	12.4	7.5-19.9
Females									
18-44	1410	37.3	31.9-43.1	53.7	45.2-61.9	1.8	0.6-5.2	7.3	5.1-10.3
45-69	691	36.8	28.5-46.1	48.6	37.9-59.3	2.8	1.6-4.7	11.8	5.7-22.8
18-69	2101	37.2	31.5-43.2	52.4	45.0-59.7	2.0	1.0-4.2	8.4	6.3-11.2
Both sexes									
18-44	2240	39.9	35.1-45.0	49.1	41.4-56.9	1.1	0.4-3.1	9.9	5.8-16.3
45-69	1277	39.0	29.8-49.1	44.5	37.0-52.2	5.2	2.7-9.6	11.3	6.2-19.7
18-69	3517	39.7	34.5-45.1	47.8	41.9-53.7	2.3	1.1-4.6	10.3	7.4-14.1

Medication for high blood pressure

Percentage of previously diagnosed hypertensive respondents, currently taking blood pressure drugs prescribed by doctor or health worker, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	49	12.0	3.8-31.9	81	20.7	6.6-49.2	130	16.0	6.6-34.1
45-69	105	27.1	12.5-49.0	100	70.8	47.0-86.9	205	45.3	30.3-61.3
18-69	154	17.9	8.8-33.2	181	38.4	17.5-64.6	335	27.0	14.3-45.1

Percentage of previously diagnosed hypertensive respondents who have visited or received treatment from a traditional healer, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
Seen a traditional healer									
18-44	49	7.8	1.8-28.1	81	8.3	2.9-22.0	130	8.1	2.6-22.3
45-69	105	11.1	4.9-23.2	100	18.0	6.8-39.9	205	14.0	7.0-26.1
18-69	154	9.1	3.7-20.8	181	11.8	5.5-23.3	335	10.3	5.0-19.9
Currently taking herbal or traditional remedies for high blood pressure									
18-44	49	14.6	5.1-35.2	81	9.4	3.4-23.5	130	12.2	5.1-26.3
45-69	105	7.4	3.3-15.8	100	35.0	11.6-68.7	205	18.9	7.4-40.4
18-69	154	11.7	5.1-24.7	181	18.4	8.7-34.9	335	14.7	7.8-25.9

Blood pressure measurement

Mean systolic and diastolic blood pressure (mmHg), including those currently on medication for raised blood pressure, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
Mean systolic blood pressure (mmHg)									
18-44	829	118.5	116.5-120.5	1409	119.0	115.8-122.3	2238	118.8	116.7-120.8
45-69	584	132.2	123.9-140.6	687	133.1	128.9-137.4	1271	132.7	126.8-138.5
18-69	1413	122.9	120.0-125.8	2096	122.6	119.8-125.4	3509	122.7	120.4-125.1
Mean diastolic blood pressure (mmHg)									
18-44	829	76.8	75.3-78.2	1409	78.3	77.6-79.1	2238	77.7	76.9-78.5
45-69	584	82.7	78.6-86.8	687	83.7	81.9-85.4	1271	83.2	80.5-85.8
18-69	1413	78.7	77.1-80.3	2096	79.7	78.8-80.6	3509	79.2	78.2-80.2

Percentage of respondents with raised blood pressure, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
SBP >140 and/or DBP > 90 mmHg, excluding those on medication for raised blood pressure									
18-44	810	6.9	4.4-10.6	1373	15.9	11.5-21.4	2183	11.9	9.1-15.5
45-69	545	26.2	17.6-37.2	648	34.3	26.9-42.5	1193	30.0	23.4-37.5
18-69	1355	13.0	9.9-17.0	2021	20.3	15.8-25.7	3376	16.9	13.7-20.7
SBP >140 and/or DBP > 90 mmHg or currently on medication for raised blood pressure									
18-44	810	6.9	4.4-10.6	1373	15.9	11.5-21.4	2183	11.9	9.1-15.5

45-69	545	26.2	17.6-37.2	648	34.3	26.9-42.5	1193	30.0	23.4-37.5
18-69	1355	13.0	9.9-17.0	2021	20.3	15.8-25.7	3376	16.9	13.7-20.7
SBP >160 and/or DBP > 100 mmHg, excluding those on medication for raised blood pressure									
18-44	810	2.0	1.0-3.9	1373	4.3	1.6-10.7	2183	3.3	1.5-7.0
45-69	545	15.3	8.9-25.0	648	13.2	8.7-19.5	1193	14.3	10.1-20.0
18-69	1355	6.2	3.8-10.11	2021	6.4	3.9-10.4	3376	6.3	4.1-9.5
SBP >160 and/or DBP > 100 mmHg or currently on medication for raised blood pressure									
18-44	829	7.3	4.1-12.5	1409	9.6	6.5-14.0	2238	8.6	6.1-11.9
45-69	584	21.4	13.9-31.4	687	23.0	15.7-32.5	1271	22.2	16.9-28.7
18-69	1413	11.8	9.2-15.0	2096	13.0	9.5-17.4	3509	12.4	10.2-15.1

Percentage of respondents with treated /controlled raised blood pressure, among those with raised blood pressure (SBP>140 and/or DBP>90 mmHg) or currently on medication for raised blood pressure

Age group	n	% on medication and SBP<140 and DBP<90	95% CI	% on medication and SBP>=140 and/or DBP>=90	95% CI	% Not on medication and SBP>=140 and/or DBP >=90	95% CI
Males							
18-44	145	40.8	19.5-66.3	4.1	0.6-22.1	55.1	31.8-76.4
45-69	215	9.4	1.6-39.4	13.4	6.8-24.5	77.2	57.4-89.5
18-69	360	23.4	10.5-44.3	9.2	4.2-19.3	67.4	49.8-81.2
Females							
18-44	251	21.4	11.3-37.0	5.6	1.2-23.0	72.9	58.4-83.8
45-69	275	1.3	0.6-3.0	25.8	11.7-47.6	72.9	51.7-87.1
18-69	526	13.3	7.1-23.5	13.8	6.1-28.4	72.9	57.5-84.3
Both sexes							
18-44	396	27.6	16.1-42.9	5.1	1.5-15.8	67.3	51.3-80.1
45-69	490	5.0	1.2-19.1	20.1	11.4-32.9	74.9	62.8-84.0
18-69	886	17.1	10.1-27.4	12.1	6.5-21.2	70.8	58.5-80.7

Hypertension care cascade

Percentages aware, treated and controlled among those with raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP), by age category and sex

Age group	Aware -Percentage who were aware of having hypertension			Treatment - Percentage who were on treatment			Percentage with controlled BP (SBP <140 and/or DBP< 90 mmHg)		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
Males									
18-44	164	72.5	48.9-87.9	164	8.7	2.8-23.8	164	8.4	2.6-23.8
45-69	231	54.2	40.7-67.2	231	14.7	7.4-26.9	231	3.3	0.8-12.2
18-69	395	64.0	48.3-77.3	395	11.5	6.0-20.9	395	6.0	2.3-15.2
Females									
18-44	271	41.2	31.2-51.8	271	8.5	2.9-22.7	271	2.9	0.9-8.9
45-69	297	33.0	18.8-51.1	297	23.8	10.7-44.9	297	1.9	0.9-4.1
18-69	568	37.9	30.4-46.0	568	14.6	6.5-29.6	568	2.5	1.1-5.8
Both sexes									

18-44	435	53.7	38.5-68.2	435	8.6	3.8-18.3	435	5.1	1.9-13.1
45-69	528	42.8	31.1-55.5	528	19.6	11.2-31.8	528	2.6	1.1-6.1
18-69	963	49.1	39.2-59.0	963	13.3	7.3-22.9	963	4.0	1.8-8.7

Mean heart rate (beats per minute) among all respondents, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
18-44	829	73.3	71.9-74.6	1409	77.7	75.9-79.5	2238	75.7	74.8-76.7
45-69	584	74.2	73.1-75.3	687	74.8	73.5-76.0	1271	74.5	73.5-75.4
18-69	1413	73.6	72.6-74.6	2096	76.9	75.6-78.3	3509	75.4	74.7-76.1

Blood glucose

History of raised blood sugar

History of raised blood glucose (diabetes mellitus)

Percentage pf respondents according to having blood sugar measured/diagnosed of hypertension in the past, by age category and sex

Age group (years)	n	% Never measured	95% CI	% Measured not diagnosed	95% CI	% Diagnosed but not within past 12 months	95% CI	% Diagnosed within past 12 months	95% CI
Males									
18-44	830	92.7	86.7-96.1	6.9	3.6-13.0	0.0	-	0.4	0.1-3.2
45-69	586	86.7	77.9-92.4	12.7	7.2-21.7	0.0	-	0.5	0.2-1.3
18-69	1416	90.8	85.8-94.1	8.8	5.5-13.6	0.0	-	0.5	0.1-1.7
Females									
18-44	1410	89.2	84.1-92.8	9.3	5.7-14.8	0.1	0.0-0.4	1.4	0.4-4.9
45-69	691	82.7	73.9-89.0	12.6	7.4-20.8	0.2	0.0-0.8	4.5	1.2-15.1
18-69	2101	87.6	82.6-91.3	10.1	6.3-15.9	0.1	0.0-0.3	2.2	0.9-5.2
Both sexes									
18-44	2240	90.7	87.5-93.2	8.2	5.8-11.5	0.1	0.0-0.2	1.0	0.3-2.7
45-69	1277	84.8	81.0-88.0	12.7	9.4-16.9	0.1	0.0-0.4	2.4	0.7-7.4
18-69	3517	89.1	87.1-90.7	9.5	7.5-12.0	0.1	0.0-0.2	1.4	0.6-2.9

Percentage of respondents currently oral medication and insulin, among those previously diagnosed, by age category and sex

Age group	n	Percent	95% CI
Taking oral drugs			
18-44	11	20.5	2.8-69.4
45-69	20	74.8	25.4-96.3
18-69	31	47.0	14.6-82.2
Taking insulin			
18-44	11	16.1	1.6-69.6

45-69	20	64.4	17.4-93.9
18-69	31	39.7	10.1-79.3

Percentage of respondents who have sought advise or treatment from a traditional healer for diabetes among those previously diagnosed, by age category and sex

Age group	n	percent	95% CI
Seen a traditional healer			
18-44	11	17.9	2.1-69.1
45-69	20	24.2	3.5-73.9
18-69	31	21.0	3.6-65.2
Currently taking herbal or traditional treatment			
18-44	11	18.6	2.3-69.1
45-69	20	8.1	1.6-32.8
18-69	31	13.5	3.5-40.4

Raised blood glucose

Mean fasting plasma glucose (mmol/L) among all respondents by category and sex

Age group	Men			Women			Both Sexes		
	n	Mean	CI	n	Mean	CI	n	Mean	CI
18-44	761	83.6	77.3-89.9	1295	84.1	79.5-88.6	2056	83.9	7933-88.4
45-69	541	88.6	73.3-103.9	647	84.4	78.7-90.2	1188	86.7	77.6-95.7
18-69	1302	85.3	79.9-90.8	1942	84.2	79.7-88.6	3244	84.7	81.1-88.3

Mean fasting plasma glucose (mg/dl) among all respondents, including those currently on medication for raised blood sugar by category and sex

Age group	Males			Females			Both Sexes		
(years)	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
18-44	761	83.6	77.3-89.9	1295	84.1	79.5-88.6	2056	83.9	7933-88.4
45-69	541	88.6	73.3-103.9	647	84.4	78.7-90.2	1188	86.7	77.6-95.7
18-69	1302	85.3	79.9-90.8	1942	84.2	79.7-88.6	3244	84.7	81.1-88.3

Percentage with impaired fasting glycaemia defined as having capillary whole blood value ≥5.6 mmol/L (100 mg/dl) and <6.1 mmol/L (126 mg/dl), by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	755	9.0	4.8-16.1	1287	18.0	15.7-20.6	2042	13.9	11.2-17.1
45-69	535	22.0	11.0-39.2	639	24.0	15.6-35.1	1174	22.9	15.6-32.3
18-69	1290	13.5	7.6-22.9	1926	19.7	16.8-22.8	3216	16.7	13.4-20.7

Percentage with raised fasting blood glucose (defined as having capillary whole blood value ≥ 6.1 mmol/L (126 mg/dl) or currently on medication for raised blood glucose, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	755	5.5	2.9-10.1	1287	6.2	3.5-10.8	2042	5.9	3.7-9.1
45-69	535	5.5	1.6-17.5	639	4.3	2.4-7.6	1174	4.9	2.3-10.3
18-69	1290	5.5	3.3-8.9	1926	5.7	3.6-9.0	3216	5.6	4.0-7.8

Percentage of respondents currently on medication for diabetes, by age category and sex

Age group	Men			Women			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	761	0.5	0.2-1.7	1295	1.7	0.4-6.6	2056	1.2	0.4-3.6
45-69	541	0.4	0.1-1.1	647	3.8	0.7-17.1	1188	2.0	0.5-8.1
18-69	1302	0.5	0.2-1.2	1942	2.3	0.5-9.4	3244	1.4	0.4-4.9

Diabetes care cascade

Percentages aware, treated and controlled among those with raised blood sugar (126 mg/dl) or currently on medication for raised blood sugar, by age category and sex

Age group	Aware -Percentage who were aware of having diabetes			Treatment - Percentage who were on treatment		
(years)	n	%	95% CI	n	%	95% CI
Males						
18-44	28	9.9	1.2-49.9	28	0.0	-
45-69	31	8.0	1.7-30.6	31	6.2	1.2-25.9
18-69	59	9.3	2.0-34.2	59	2.1	0.6-6.9
Females						
18-44	62	13.0	4.5-32.1	62	8.1	1.7-30.6
45-69	46	54.9	21.2-84.6	46	41.6	10.1-81.9
18-69	108	28.7	14.6-48.7	108	20.7	8.2-43.2
Both sexes						
18-44	90	11.5	4.2-28.0	90	4.4	1.0-17.6
45-69	77	35.0	10.8-70.5	77	26.5	6.0-67.3
18-69	167	20.0	9.6-37.0	167	12.3	4.3-30.7

Both raised blood pressure and blood sugar

Percentage with raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP) AND with raised blood sugar (126 mg/dl) or currently on medication for raised blood sugar, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	754	1.6	0.4-6.7	1286	0.4	0.2-0.8	2040	0.9	0.3-3.0
45-69	534	4.5	1.0-18.3	635	2.0	1.0-4.0	1169	3.3	1.1-9.6
18-69	1288	2.6	1.0-6.7	1921	0.8	0.4-1.5	3209	1.7	0.8-3.5

Abnormal lipids

History of raised total cholesterol

Percentage pf respondents according to having blood total cholesterol measured/diagnosed of high cholesterol in the past , by age category and sex

Age group	n	% Never measured	95% CI	% Measured not diagnosed	95% CI	% Diagnosed but not within past 12 months	95% CI	% Diagnosed within past 12 months	95% CI
Males									
18-44	830	95.5	90.4-98.0	3.1	1.5-6.3	0.1	0.0-0.4	1.4	0.2-9.4
45-69	586	91.1	82.5-95.7	7.6	3.3-16.4	1.1	0.2-6.0	0.2	0.1-0.7
18-69	1416	94.1	89.0-96.9	4.5	2.6-7.6	0.4	0.1-1.9	1.0	0.2-5.6
Females									
18-44	1410	93.6	87.4-96.8	4.9	2.3-9.9	0.0	-	1.6	0.5-4.9
45-69	691	91.1	76.9-96.9	8.0	2.5-23.1	0.0	-	0.9	0.2-5.5
18-69	2101	92.9	86.0-96.6	5.6	2.4-12.5	0.0	-	1.4	0.5-4.2
Both sexes									
18-44	2240	94.4	90.5-96.8	4.1	2.3-7.2	0.0	0.0-0.2	1.5	0.6-3.8
45-69	1277	91.1	81.5-96.0	7.8	3.1-17.8	0.6	0.1-3.2	0.6	0.1-2.4
18-69	3517	93.5	89.1-96.2	5.1	2.8-9.3	0.2	0.0-0.9	1.2	0.5-2.9

Percentage of respondents currently taking oral treatment (medication) prescribed for raised total cholesterol among those previously diagnosed, by age category

Age group	n	%	95% CI
18-44	12	11.1	1.0-59.6
45-69	11	85.7	47.7-97.5
18-69	23	28.0	6.0-70.4

Percentage of respondents previously diagnosed who have sought advise or treatment form a traditional healer for raised cholesterol, by age category

Age group	n	Percent	95% CI
Seen a traditional healer			
18-44	12	12.8	1.5-58.5
45-69	11	39.4	4.7-89.6
18-69	23	18.8	2.4-69.0
Currently taking herbal or traditional treatment			
18-44	12	52.1	10.0-91.4
45-69	11	83.1	44.4-96.8
18-69	23	59.1	19.1-89.9

Raised total blood cholesterol

Mean total cholesterol (mmol/L) among all respondents, including those currently on medication for raised cholesterol, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
18-44	751	131.3	123.7-138.9	1282	149.5	143.1-155.9	2033	141.4	137.3-145.5
45-69	539	137.3	124.5-150.1	643	155.1	147.8-162.5	1182	145.6	137.5-153.7
18-69	1290	133.4	126.7-140.1	1925	151.1	146.2-155.9	3215	142.7	138.7-146.8

Percentage of respondents with raised total cholesterol or on medication for raised cholesterol

Age group	Males			Females			Both sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
Total cholesterol => 5.0 mmol/L or > =190 mg/dl or currently on medication for raised cholesterol									
18-44	772	11.5	7.6-16.9	1313	17.3	11.5-25.2	2085	14.8	10.8-19.8
45-69	547	11.1	5.5-21.3	653	16.6	11.3-23.7	1200	13.7	9.2-19.8
18-69	1319	11.4	8.0-15.9	1966	17.1	12.9-22.4	3285	14.4	11.6-17.8
Total cholesterol => 6.2 mmol/L or= > 240 mg/dl or currently on medication for raised cholesterol									
18-44	772	2.4	0.8-6.8	1313	4.4	1.5-12.0	2085	3.5	1.6-7.8
45-69	547	5.2	1.4-17.5	653	3.6	1.8-7.0	1200	4.5	1.9-10.0
18-69	1319	3.4	1.5-7.4	1966	4.2	1.9-9.2	3285	3.8	2.3-6.4

Cardiovascular disease risk prediction

Combined risk factors for NCDs

Percentage of respondents according the number of CVD risk factors , by age category and sex

Age group	No risk factors			1-2 risk factors			3-5 risk factors		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
Males									
18-44	89	20.7	11.2-35.1	509	76.0	62.1-85.9	56	3.3	1.8-6.3
45-69	54	14.4	5.2-34.0	352	73.9	58.9-84.8	60	11.8	5.9-21.9
18-69	143	18.7	10.9-30.3	861	75.3	64.2-83.8	116	6.0	3.2-10.8
Females									
18-44	253	36.9	29.7-44.6	646	60.4	51.7-68.5	43	2.8	1.2-6.3
45-69	94	17.9	10.7-28.5	390	73.5	62.0-82.6	36	8.6	3.4-20.1
18-69	347	32.1	25.3-39.6	1036	63.7	54.9-71.7	79	4.2	2.5-7.1
Both sexes									
18-44	342	29.7	23.2-37.2	1155	67.3	60.1-73.7	99	3.0	1.9-4.8
45-69	148	16.1	9.8-25.3	742	73.7	65.9-80.3	96	10.2	6.2-16.3
18-69	490	25.9	20.7-31.9	1897	69.1	63.1-74.5	195	5.0	3.4-7.3

History of CVD

Percentage of respondents having ever had a heart attack or chest pain from heart disease or a stroke, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	830	0.5	0.2-1.1	1410	3.0	1.3-6.7	2240	1.9	0.9-4.0
45-69	586	0.8	0.4-1.9	691	2.3	0.9-5.8	1277	1.5	0.7-3.3
18-69	1416	0.6	0.6-1.1	2101	2.8	1.4-5.5	3517	1.8	1.0-3.2

Percentage of respondents currently taking aspirin/statins regularly to prevent or treat heart disease by age category and seX

Age group	Males			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
Taking aspirin									
18-44	830	0.1	0.0-0.5	1410	0.9	0.1-5.5	2240	0.5	0.1-2.7
45-69	586	1.3	0.3-4.8	691	1.1	0.2-6.1	1277	1.2	0.4-3.4
18-69	1416	0.5	0.2-1.5	2101	0.9	0.2-3.7	3517	0.7	0.3-1.9
Taking statin									
18-44	830	0.0	0.0-0.2	1410	1.5	0.5-4.9	2240	0.9	0.3-2.6
45-69	586	0.2	0.1-0.9	691	0.1	0.0-0.9	1277	0.2	0.1-0.6
18-69	1416	0.1	0.0-0.3	2101	1.2	0.4-3.7	3517	0.7	0.2-1.9

Cardiovascular disease risk prediction

Percentage of respondents with 10-year CVD risk = >20% or with existing CVD

Age group	Males			Females			Both Sexes		
	n	%	CI	n	%	CI	n	%	CI
40-54	404	0.5	0.2-1.5	515	0.8	0.2-3.3	919	0.6	0.2-1.7
55-69	266	16.3	4.8-43.0	298	4.2	1.2-14.1	564	10.0	4.0-23.1
Total	670	4.7	1.5-13.8	813	1.9	0.7-5.1	1483	3.4	1.4-8.0

Cervical cancer screening

Percentage of females who have ever had a screening test for cervical cancer, by age category

Age group	Females		
(years)	n	%	95% CI
18-44	1073	0.4	0.2-1.0
45-69	522	0.7	0.1-3.3
18-69	1595	0.5	0.2-1.1

Percentage of females aged 30-49 years who have ever had a screening test for cervical cancer

Age group	Females		
(years)	n	%	95% CI
30-49	775	0.6	0.2-1.8

Violence and injury

Involvement in road traffic accidents

Percentage of respondents who have been involved in a road traffic crash as a driver, passenger, pedestrian or cyclist during the past 12 months, by age category and sex

Age group	Yes, as a driver			Yes, as a passenger			Yes, as a pedestrian			Yes, as a cyclist			No		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI	n	%	95% CI	n	%	95% CI
Males															
18-44	83	10.5	5.8-18.3	35	5.2	1.2-20.6	11	0.7	0.2-2.6	0	-	-	699	83.5	74.3-89.9
45-69	28	12.3	3.9-32.5	16	1.0	0.4-2.4	8	0.7	0.2-2.4	0	-	-	530	86.0	67.4-94.8
18-69	111	11.1	5.4-21.6	51	3.9	1.0-14.3	19	0.7	0.3-1.9	0	-	-	1229	84.3	74.7-90.8
Females															
18-44	15	3.2	1.0-10.0	64	3.8	2.0-7.1	25	5.0	2.9-8.5	0	-	-	1299	87.9	78.8-93.4
45-69	1	0.1	0.0-0.7	22	1.8	0.9-3.3	19	4.5	2.3-8.6	0	-	-	643	93.6	89.6-96.2
18-69	16	2.5	0.8-7.5	86	3.3	1.9-5.7	44	4.9	3.2-7.4	0	-	-	1942	89.3	82.8-93.6
Both sexes															
18-44	98	6.5	3.3-12.3	99	4.4	2.0-9.6	36	3.1	1.8-5.3	0	-	-	1998	86.0	79.1-90.9
45-69	29	6.5	2.1-18.7	38	1.4	0.8-2.4	27	2.5	1.3-4.8	0	-	-	1173	89.6	80.4-94.7
18-69	127	6.5	3.0-13.6	137	3.6	1.8-7.1	63	2.9	2.0-4.3	0	-	-	3171	87.0	80.1-91.8

Use of seat-belt or helmet while driving or being a passenger

Percentage of drivers or passengers by pattern of using a seat belt during the past 30 days, by age category and sex

Age group	All the time			sometime			never			Have not been in a vehicle past 30 days			Other *		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI	n	%	95% CI	n	%	95% CI
Males															
18-44	71	12.9	8.0-20.0	99	20.9	13.6-30.8	232	24.2	17.5-32.5	176	7.2	4.1-12.5	248	34.7	29.6-40.2
45-69	53	21.2	10.9-37.3	56	11.2	6.2-19.3	161	23.7	14.6-36.0	176	13.7	7.9-22.7	132	30.2	23.1-38.4
18-69	124	15.6	10.0-23.4	155	17.8	12.9-24.1	393	24.1	17.6-32.0	352	9.3	5.7-14.9	380	33.2	28.2-38.7
Females															
18-44	74	10.8	71-16.2	138	13.5	8.5-20.8	470	34.8	27.8-42.6	333	10.3	6.4-16.0	388	30.6	23.5-38.7
45-69	33	11.3	5.0-23.3	59	13.2	7.3-22.8	225	26.0	18.7-35.0	189	16.1	10.9-23.1	172	33.4	22.0-47.2
18-69	107	10.9	6.9-16.8	197	13.4	9.8-18.2	695	32.7	27.5-38.3	522	11.7	7.7-17.5	560	31.3	25.0-38.3

Both sexes															
18-44	145	11.7	8.9-15.3	237	16.8	11.9-23.3	702	30.2	24.6-36.4	509	8.9	5.5-14.2	636	32.4	27.5-37.7
45-69	86	16.6	8.2-30.6	115	12.1	7.3-19.4	386	24.8	19.1-31.5	365	14.8	9.6-22.2	304	31.7	24.1-40.4
18-69	231	13.1	8.9-18.8	352	15.5	12.0-19.7	1088	28.6	23.4-34.5	874	10.6	6.8-16.2	940	32.2	27.8-36.9

*Note: 'Other' means 'No seat belt in the car'

Percentage of drivers or passengers of a motorcycle or motor-scooter not always using a helmet during the past 30 days, by age category and sex

Age group	All the time			sometime			never			Have not been in a motor bicycle/ scooter past 30 days			Do not own a helmet			Other		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI	n	%	95% CI	n	%	95% CI	n	%	95% CI
Males																		
18-44	516	84.2	78.8-88.4	165	9.2	6.2-13.6	53	2.8	1.2-6.8	85	2.5	1.3-4.7	10	1.2	0.2-5.9	1	0.0	0.0-0.3
45-69	267	74.0	62.7-82.9	126	11.5	6.4-19.9	62	4.2	2.2-7.8	120	7.6	3.9-14.2	10	2.6	0.5-13.2	1	0.0	0.0-0.1
18-69	783	80.9	74.9-85.8	291	10.0	7.2-13.6	115	3.3	1.9-5.8	205	4.1	2.3-7.2	20	1.7	0.5-5.0	2	0.0	0.0-0.2
Females																		
18-44	664	77.7	69.8-84.0	344	13.3	9.6-18.2	156	3.4	2.1-5.4	240	5.5	3.3-9.0	3	0.0	0.0-0.0	3	0.1	0.0-0.3
45-69	206	58.6	46.9-69.3	159	15.8	11.2-21.9	127	9.4	6.4-13.6	189	12.5	8.5-18.1	8	3.5	0.8-14.1	2	0.2	0.1-0.9
18-69	870	72.9	64.5-80.0	503	13.9	10.4-18.4	283	4.9	3.2-7.4	429	7.2	4.6-11.2	11	0.9	0.2-3.7	5	0.1	0.0-0.4
Both sexes																		
18-44	1180	80.6	74.5-85.5	509	11.5	8.6-15.3	209	3.1	1.9-5.1	325	4.2	2.5-6.9	13	0.5	0.1-2.7	4	0.1	0.0-0.3
45-69	473	66.7	55.7-76.1	285	13.6	9.3-19.5	189	6.7	4.2-10.5	309	9.9	6.2-15.5	18	3.0	1.1-8.4	3	0.1	0.0-0.4
18-69	1653	76.6	69.7-82.4	794	12.1	9.2-15.8	398	4.1	2.7-6.2	634	5.8	3.6-9.2	31	1.2	0.4-3.7	7	0.1	0.0-0.2

Percentage of respondents injured in a non-road traffic related accident that required medical attention in the past 12 months by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	129	48.5	28.5-68.9	104	35.1	19.8-54.2	233	42.0	27.6-58.0
45-69	51	25.2	3.9-73.4	42	21.9	6.5-53.0	93	24.2	6.3-60.5
18-69	180	41.8	28.2-56.8	146	33.1	19.4-50.4	326	38.0	27.0-50.3

Oral health, vision and hearing

Oral health

Percentage of respondents categories of reported natural teeth, by age category and sex

Age group	none			1-9			10-19			20 or more			Don't know			N
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI	n	%	95% CI	n	%	95% CI	
Males																
18-44	2	0.5	0.1-3.0	0	0.0	-	37	1.4	0.6-3.0	776	95.3	91.0-97.6	15	2.8	1.2-6.6	830
45-69	2	3.0	0.6-14.2	21	1.9	0.6-5.4	116	10.6	5.3-20.0	419	78.8	69.5-85.9	28	5.7	2.4-12.5	586
18-69	4	1.3	0.3-5.2	21	0.6	0.2-1.7	153	4.4	2.5-7.5	153	90.0	85.0-93.4	43	3.7	1.7-7.9	1416
Females																
18-44	1	1.1	0.2-6.5	1	0.0	0.0-0.0	55	1.1	0.6-2.0	1312	94.1	90.6-96.3	41	3.7	1.9-7.1	1410
45-69	3	0.2	0.1-0.9	20	4.6	0.9-19.5	105	10.2	6.2-16.3	526	78.9	69.4-86.0	37	6.1	3.4-10.5	691
18-69	4	0.9	0.2-4.7	21	1.2	0.3-5.1	160	3.4	2.2-5.4	1838	90.2	87.3-92.6	78	4.3	2.6-7.2	2101
Both sexes																
18-44	3	0.8	0.2-3.5	1	0.0	0.0-0.0	92	1.3	0.7-2.2	2088	94.6	91.5-96.6	56	3.3	1.8-6.1	2240
45-69	5	1.7	0.3-8.1	41	3.2	1.1-9.0	221	10.4	6.7-15.9	945	78.9	70.8-85.1	65	5.8	3.4-9.9	1277
18-69	8	1.1	0.2-4.8	42	0.9	0.3-2.6	313	3.9	2.6-5.6	3033	90.1	86.8-92.7	121	4.0	2.4-6.9	3517

Percentage of respondents reporting pain or discomfort in teeth, gums or mouth in the past 12 months by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	830	35.9	28.3-44.2	1410	36.1	29.5-43.2	2240	36.0	31.0-41.3
45-69	586	42.2	29.8-55.7	691	37.4	27.2-48.9	1277	39.9	30.5-50.2
18-60	1416	37.9	32.4-43.8	2101	36.4	30.9-42.3	3517	37.1	33.3-41.1

Percentage of respondents by the duration since they last saw a dentist by age category and sex

Age group	Last 6 months			6-12 months			More than 1 year but less than 2 years			Two years or more but less than 5 years			5 or more years			Never		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI	n	%	95% CI	n	%	95% CI	n	%	95% CI
Men																		
18-44	26	2.7	1.2-6.2	10	1.8	0.5-6.8	32	6.5	3.0-13.5	22	4.9	2.5-9.3	23	2.3	0.9-5.6	717	81.8	75.4-86.8
45-69	22	2.0	0.8-4.9	27	2.8	1.3-6.0	26	5.8	2.5-12.7	14	0.9	0.4-2.0	34	4.7	2.3-9.3	463	83.9	75.1-90.0
18-69	48	2.5	1.1-5.3	37	2.1	0.9-4.9	58	6.3	3.7-10.5	36	3.6	1.9-6.8	57	3.1	1.6-5.7	1180	82.5	78.4-85.9
Women																		
18-44	56	3.2	1.5-6.4	41	2.4	1.0-5.3	47	4.2	2.3-7.6	31	2.9	1.3-6.6	59	3.9	2.3-6.6	1176	83.4	78.6-87.3
45-69	22	4.0	1.0-15.0	29	8.4	3.8-17.7	27	6.1	2.5-14.2	25	2.2	1.2-4.0	18	1.4	0.7-2.6	570	77.9	65.6-86.7
18-69	78	3.4	1.4-7.7	70	3.9	1.9-7.7	74	4.7	3.0-7.2	56	2.7	1.4-5.3	77	3.3	2.0-5.2	1746	82.0	76.9-86.2
Both sexes																		

18-44	82	3.0	1.8-4.9	51	2.1	1.1-4.2	79	5.3	2.9-9.4	53	3.8	2.5-5.7	82	3.2	2.1-4.8	1893	82.7	78.8-86.0
45-69	44	2.9	1.1-7.4	56	5.4	3.0-9.7	53	5.9	2.7-12.7	39	1.5	0.9-2.6	52	3.1	1.8-5.5	1033	81.1	73.2-87.0
18-69	126	3.0	1.7-5.2	107	3.1	1.8-5.1	132	5.4	3.7-8.0	92	3.1	2.2-4.5	134	3.2	2.1-4.7	2926	82.2	79.2-84.9

Percentage of respondents who have visited the dentist by the reason for the visit, by age category and sex

Age group	Consultation/advice			Pain or trouble with teeth, gum mouth			Treatment/follow up treatment			Routine check up treatment			Other			n
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI	n	%	95% CI	n	%	95% CI	
Men																
18-44	11	3.0	0.6-13.6	89	89.1	69.5-96.7	9	1.4	0.5-3.7	1	5.6	0.7-31.9	3	0.9	0.1-5.9	113
45-69	8	1.7	0.6-5.0	101	87.0	73.6-94.1	8	8.6	2.8-23.5	2	1.9	0.4-8.2	4	0.8	0.2-3.6	123
18-69	19	2.6	0.7-9.2	190	88.5	75.4-95.1	17	3.5	1.3-9.0	3	4.5	0.8-22.2	7	0.9	0.2-3.7	236
Women																
18-44	30	7.0	1.9-22.8	182	83.3	58.1-94.7	14	1.6	0.7-3.8	6	8.0	2.4-24.0	2	0.1	0.0-0.5	234
45-69	16	17.2	3.6-53.3	90	68.0	36.1-88.9	7	3.4	1.0-10.8	2	10.9	1.5-49.3	6	0.5	0.1-1.8	121
18-69	46	10.2	4.4-21.7	272	78.5	56.2-91.3	21	2.2	0.9-4.9	8	8.9	2.1-30.9	8	0.2	0.1-0.6	355
Both sexes																
18-44	41	5.1	1.8-13.8	271	86.0	64.3-95.4	23	1.5	0.7-3.2	7	6.9	1.6-25.6	5	0.5	0.1-2.6	347
45-69	24	10.3	2.4-34.8	191	76.5	54.1-90.0	15	5.7	2.2-13.9	4	6.9	1.2-30.9	10	0.6	0.2-1.8	244
18-69	65	6.7	3.3-13.2	462	83.1	65.8-92.6	38	2.8	1.4-5.6	11	6.9	1.5-26.6	15	0.5	0.2-1.6	591

Percentage of respondents daily cleaning their teeth, by age category and sex

Age group	Males			Females			Both sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	828	89.2	81.9-93.7	1409	87.0	80.4-91.6	2237	87.9	81.7-92.3
45-69	584	87.5	80.7-92.1	688	76.2	65.5-84.4	1272	82.1	75.0-87.5
18-69	1412	88.6	82.6-92.8	2097	84.2	77.6-89.2	3509	86.3	80.3-90.7

Percentage of respondents using tooth paste containing fluoride, by age category and sex

Age group	Males			Females			Both sexes		
	n	%	CI	n	%	CI	n	%	CI
18-44	450	98.7	96.6-99.5	773	96.8	92.1-98.7	1223	97.7	94.3-99.1
45-69	300	97.2	93.1-98.8	319	96.6	93.4-98.3	619	96.9	93.9-98.5
18-69	750	98.3	96.1-99.3	1092	96.8	93.0-98.5	1842	97.5	94.6-98.9

Percentage of respondents by use of tooth paste to clean teeth, by age category and sex

Age group	Males			Females			Both sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	647	96.4	91.5-98.5	1112	98.3	96.6-99.2	1759	97.5	95.3-98.6
45-69	446	95.6	90.0-98.2	522	93.3	87.3-96.6	968	94.6	89.8-97.2
18-69	1093	96.1	93.3-97.8	1634	97.2	95.0-98.4	2727	96.7	94.8-97.9

Percentage of respondents by tools used to clean the teeth, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
Tooth brush									
18-44	647	99.8	99.5-99.9	1112	99.0	97.7-99.6	1759	99.3	98.6-99.7
45-69	446	99.0	95.7-99.8	522	93.6	88.2-96.7	968	96.6	93.2-98.4
18-69	1093	99.5	98.6-99.8	1634	97.8	95.9-98.8	2727	98.6	97.4-99.3
Wooden tooth pick									
18-44	647	50.1	43.3-57.0	1112	46.0	39.8-52.3	1759	47.8	43.5-52.2
45-69	446	53.8	41.5-65.7	522	59.9	47.5-71.2	968	56.5	47.3-65.3
18-69	1093	51.3	44.0-58.6	1634	49.2	43.5-54.9	2727	50.2	45.3-55.1
Plastic toothpick									
18-44	647	3.4	1.2-9.3	1112	0.6	0.3-1.4	1759	1.9	0.8-4.4
45-69	446	1.0	0.4-2.8	522	2.1	0.7-6.3	968	1.5	0.6-3.6
18-69	1093	2.7	1.0-6.7	1634	1.0	0.4-2.1	2727	1.8	0.9-3.6
Thread (dental floss)									
18-44	647	3.6	1.3-9.3	1112	0.5	0.1-2.3	1759	1.9	0.8-4.4
45-69	446	1.3	0.2-6.4	522	0.1	0.0-0.5	968	0.8	0.2-3.4
18-69	1093	2.9	1.2-6.8	1634	0.4	0.1-1.7	2727	1.6	0.7-3.6
Charcoal									
18-44	647	3.0	0.7-12.2	1112	4.7	2.3-9.2	1759	3.9	2.2-6.8
45-69	446	0.6	0.2-1.9	522	13.6	6.8-25.2	968	6.4	3.4-11.6
18-69	1093	2.3	0.6-8.7	1634	6.7	4.0-11.1	2727	4.6	3.0-6.9
Chewstick									
18-44	647	7.5	3.2-16.9	1112	3.0	1.3-6.7	1759	5.0	2.3-10.5
45-69	446	6.7	2.6-16.3	522	4.1	1.5-10.7	968	5.5	2.7-11.1
18-69	1093	7.3	3.7-13.8	1634	3.2	1.7-6.1	2727	5.1	2.8-9.3

Percentage of respondents with experiences related to teeth, gums and mouth during the past 12 months, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
difficulty in chewing foods									
18-44	830	27.4	20.6-35.4	1409	23.6	19.1-28.7	2239	25.3	22.0-28.8
45-69	585	29.0	19.7-40.5	688	32.1	21.4-45.0	1273	30.4	22.9-39.2
18-69	1415	27.9	23.1-33.2	2097	25.7	20.8-31.4	3512	26.7	24.2-29.4
Difficulty with speech/trouble pronouncing word									
18-44	830	18.0	12.0-26.0	1409	16.5	13.4-20.1	2239	17.1	14.1-20.7
45-69	585	12.8	7.3-21.3	688	22.3	12.6-36.3	1273	17.3	12.3-23.6
18-69	1415	16.3	11.3-22.9	2097	17.9	13.7-23.1	3512	17.2	14.6-20.1
Mouth feels dry									
18-44	830	12.8	7.2-21.5	1409	13.7	9.9-18.6	2239	13.3	9.4-18.5
45-69	585	7.9	4.6-13.2	688	10.3	5.9-17.3	1273	9.0	6.2-12.9
18-69	1415	11.2	6.8-18.0	2097	12.8	9.4-17.3	3512	12.1	8.9-16.2
Have a persistent wound and/or swelling in the mouth for more than three weeks									
18-44	830	6.9	3.9-12.0	1409	7.0	4.8-10.1	2239	7.0	5.2-9.3
45-69	585	12.4	6.3-23.1	688	8.5	4.4-15.9	1273	10.6	7.0-15.7
18-69	1415	8.7	5.7-13.0	2097	7.4	5.1-10.6	3512	8.0	6.5-9.8
Have a red or red and white patch in the mouth									

18-44	830	5.1	3.0-8.6	1409	3.7	2.1-6.4	2239	4.3	2.8-6.5
45-69	585	4.9	2.8-8.4	688	4.7	2.8-7.8	1273	4.8	3.0-7.5
18-69	1415	5.0	3.2-7.8	2097	3.9	2.5-6.1	3512	4.5	3.1-6.3
Felt tense because of problems with teeth or mouth									
18-44	830	10.7	6.3-17.4	1409	10.6	7.2-15.3	2239	10.6	7.8-14.2
45-69	585	12.5	7.2-21.0	688	13.5	8.8-20.2	1273	13.0	9.3-17.9
18-69	1415	11.3	7.9-15.7	2097	11.3	8.5-14.8	3512	11.3	9.0-14.1
Embarrassed about appearance of teeth									
18-44	830	5.1	2.5-9.9	1409	3.4	1.7-6.6	2239	4.1	2.7-6.3
45-69	585	4.1	2.2-7.4	688	10.2	4.3-22.1	1273	7.0	4.0-11.8
18-69	1415	4.7	2.8-8.0	2097	5.1	3.3-7.8	3512	4.9	3.4-7.2
Avoid smiling because of teeth									
18-44	830	7.0	4.5-10.6	1409	8.2	5.8-11.4	2239	7.7	5.5-10.5
45-69	585	7.0	4.0-11.8	688	9.6	5.4-16.6	1273	8.2	5.6-12.0
18-69	1415	7.0	4.7-10.2	2097	8.5	6.8-10.7	3512	7.8	6.1-10.0
Sleep is often interrupted									
18-44	830	19.5	14.8-25.2	1409	19.4	15.4-24.2	2239	19.5	16.4-23.0
45-69	585	17.1	10.1-27.5	688	24.3	15.3-36.2	1273	20.5	14.9-27.5
18-69	1415	18.7	14.3-24.2	2097	20.6	16.3-25.8	3512	19.8	16.7-23.3
Days not at work because of teeth or mouth									
18-44	830	12.3	8.7-17.1	1409	10.1	7.2-13.9	2239	11.1	8.9-13.7
45-69	585	10.4	6.2-17.0	688	13.4	8.7-20.1	1273	11.8	8.4-16.4
18-69	1415	11.7	8.8-15.4	2097	10.9	8.1-14.6	3512	11.3	9.1-13.9
Difficulty doing usual activities									
18-44	830	13.6	9.1-19.9	1409	14.1	9.3-20.8	2239	13.9	10.6-18.0
45-69	585	12.5	7.4-20.1	688	17.8	12.3-25.0	1273	15.0	10.7-20.5
18-69	1415	13.2	9.4-18.3	2097	15.0	10.4-21.2	3512	14.2	11.0-18.1
Less tolerant of spouse or people close to you									
18-44	830	9.4	5.7-14.9	1409	9.6	6.9-13.2	2239	9.5	7.3-12.2
45-69	585	9.0	5.3-14.8	688	12.6	7.9-19.4	1273	10.7	7.6-14.8
18-69	1415	9.3	6.3-13.3	2097	10.3	7.6-14.0	3512	9.8	7.7-12.5
Reduced participation in social activities									
18-44	830	11.4	7.5-17.1	1409	10.1	7.3-13.9	2239	10.7	8.2-13.8
45-69	585	9.7	5.8-15.9	688	13.2	8.4-20.0	1273	11.3	8.1-15.7
18-69	1415	10.9	7.7-15.2	2097	10.9	8.0-14.7	3512	10.9	8.5-13.8

Vision and hearing

Percentage of respondents who had ever had vision/hearing checked by a doctor or other health worker, by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
Vision									
18-44	830	9.0	6.0-13.1	1409	12.8	8.4-19.0	2239	11.1	8.1-15.1
45-69	585	14.2	7.3-25.8	688	14.6	8.7-23.5	1273	14.4	9.8-20.6
18-69	1415	10.6	7.4-15.1	2097	13.3	9.1-18.9	3512	12.0	9.4-15.3
Hearing									
18-44	830	2.8	1.1-6.9	1409	3.5	1.8-6.8	2239	3.2	1.6-6.2
45-69	585	1.7	0.6-4.7	688	7.7	2.9-18.8	1273	4.5	2.1-9.5

18-69	1415	2.5	1.2-5.1	2097	4.6	2.4-8.4	3512	3.6	2.0-6.4

Mean duration in years since the last check up of vision/hearing by age category and sex

Age group	Males			Females			Both Sexes		
(years)	n	Mean	95% CI	n	mean	95% CI	n	mean	95% CI
Vision									
18-44	54	0.9	0.5-1.2	94	1.4	0.6-2.3	148	1.2	0.7-1.7
45-69	92	2.8	1.6-4.0	99	1.5	0.7-2.3	191	2.2	1.4-2.9
18-69	146	1.7	1.1-2.3	193	1.4	0.7-2.2	339	1.6	1.0-2.1
Hearing									
18-44	29	1.4	0.6-2.1	26	2.5	1.0-3.9	55	2.0	0.9-3.1
45-69	17	3.4	0.0-7.5	18	0.9	0.0-1.8	35	1.4	0.1-2.6
18-69	46	1.8	0.6-3.0	44	1.8	0.6-3.0	90	1.8	0.8-2.8

Households primarily cooking with clean fuels and technology

Percentage of respondents reported that their households primarily cooking with clean fuels and technology

Households			
Age Group	n	%	95% CI
18-44	2019	46.6	36.1-57.5
45-69	1128	42.5	28.3-58.1
18-69	3147	45.5	34.6-56.7

Note: Clean technology included - Solar cooker, Electric stove, Piped natural gas stove, Biogas stove, Liquified petroleum gas/cooking gas stove
Clean fuel included - Alcohol/ethanol or Gasoline/diesel (not in generator)

Estimates of the out of pocket expenditure for NCDs among those diagnosed with NCDs

Percentage who reported as suffering from an NCD, by age category and sex

Age group	Males			Females			Both sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	830	8.0	4.3-14.3	1409	10.8	7.3-15.8	2239	9.6	6.5-14.0
45-69	585	17.8	9.9-29.8	688	23.2	15.7-32.8	1273	20.3	13.4-29.5
18-69	1415	11.1	9.0-13.7	2097	13.9	10.3-18.6	3512	12.6	10.4-15.3

Percentage hospitalized due to NCD in last 12 months, by age category and sex

Age group	Males			Females			Both sexes		
(years)	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	56	31.7	9.0-68.4	101	35.5	16.4-60.7	157	34.1	22.5-47.8
45-69	111	46.3	21.2-73.4	120	27.3	11.1-53.2	231	36.1	18.8-58.0
18-69	167	39.2	19.7-82.8	221	32.1	18.9-48.8	388	35.0	22.9-49.4

Average total expenditure on hospitalization due to NCD in last 12 months (in USD), in age category and sex

Age group	Males			Females			Both Sexes		
	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
18-44	17	5.5	0.0-16.7	32	9.5	0.0-21.9	49	8.1	0.0-16.9
45-69	31	126.5	0.0-266.6	27	17.8	0.0-52.5	58	82.2	14.6-149.9
18-69	48	78.9	0.0-176.0	59	12.4	0.0-27.3	107	43.0	0.0-86.4

Average total expenditure on out of patient care due to NCD in past one month (in USD), in age category and sex

Age group	Males			Females			Both Sexes		
	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
18-44	37	8.5	0.0-22.0	80	22.5	0.0-46.6	117	12.4	0.0-26.4
45-69	86	14.0	0.0-33.1	89	34.8	0.0-82.5	175	27.3	4.6-50.0
18-69	123	12.4	0.0-26.4	169	27.3	4.5-50.1	292	22.1	6.0-38.2

Percentage of household with catastrophic OOPE due to hospitalization (reported by respondents)

Age group	Males			Females			Both sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-44	11	2.9	0.3-20.4	26	11.1	2.3-39.7	37	8.7	2.2-28.5
45-69	22	69.4	37.6-89.6	22	25.8	8.5-56.6	44	50.0	25.9-74.0
18-69	33	26.7	6.2-66.7	48	13.5	4.0-36.7	81	18.2	7.4-38.2

Annex V

Detailed results: Facility survey

Table HP.1: The numbers of HPs with doctors covered in the survey by Municipality

Municipality	Number of HPs with doctors
Aileu	2
Ainaro	1
Atauro	2
Baucau	4
Bobonaro	2
Covalima	7
Dili	8
Ermera	2
Lautem	5
Manatuto	2
Manufahi	3
Oecusse	3
Viqueque	4
Total	**45**

(A) Availability of staff in HPs with doctors

Table HP.2.1: Availability of staff relevant to provide NCD related services in the HPs with doctors(N=45)

Staff Categories	Available		Not available		Total	
	n	%	n	%	n	%
General Doctors	45	100.0	0	0.0	45	100.0
Nurses	39	86.7	6	13.3	45	100.0
Midwives	41	91.1	4	8.9	45	100.0
Public Health Technicians	24	53.3	21	46.7	45	100.0
General Ancillary Staff	29	64.4	16	35.6	45	100.0

Table HP.2.1.1: Details of available staffs in the HPs with doctors which reported as staff available

Staff Categories	Full time staff	Visiting staff	Average number of personnel
	%	%	
General Doctors (N=45)	91.1	31.1	1.5
Nurses (N=39)	68.9	64.4	2.5
Midwives (N=41)	60.0	66.7	1.9
Public Health Technicians (N=24)	17.8	46.7	1.8
General Ancillary Staff(N=29)	51.1	26.7	1.9

(B) Availability of basic infrastructure and systems in in the HPs with doctors

Table: HP.3.1: Availability of email or internet connection within the HPs with doctors(N=45)

Access to email or internet connection within the facility	n	%
Yes, with a computer/another device belonging to the facility	10	22.2
Yes, without a computer/another devices, but availability of private devices	15	33.3
Not available	20	44.5
Total	**45**	**100.0**

Table: HP.3.1.1: Details of internet connectivity in the HPs with doctors where internet facility is available (N=25)

Consistently of internet in the facility	n	%
Always available	16	64.0
Available for most of the days in a month	1	4.0
Available sometimes	8	32.0
Total	**25**	**100.0**

Table: HP.3.2: Availability of power supply, water and sanitation facility within the HPs with doctors(N=45)

Availability of facilities	n	%
Power supply		
Yes, always at all times open for services	30	66.7
Yes, often available with some interruptions of less than 2 hours per day at times open for services	6	13.3
yes, sometimes available with frequent or prolonged interruptions of more than 2 hours per day at times open for services	8	17.8
Electricity not available	1	2.2
Total	**45**	**100.0**
Drinking water for patients		
Yes, always available at all times open for services	7	15.6
Yes, often available with some interruptions of less than 2 hours per day at times open for services	5	11.1
Sometimes available, with frequent or prolonged interruptions of more than 2 hours per day at times open for services	7	15.6
Drinking water not available	26	57.8
Total	**45**	**100.0**
Toilet on the premises for patients		
Yes, available and functional	41	91.1
yes, available but not functional	2	4.4
Toilet not available	2	4.4
Total	**45**	**100.0**

Table: HP.3.2.1: Details of sanitation facilities at the HPs with doctorswhere toilet facilities are available (N=43)

Details of sanitation facility	n	%
Running water in the toilet		
Yes	32	74.4
No	11	25.6
Total	**43**	**100**
Soap in the toilet		
Yes	38	88.4
No	5	11.6
Total	**43**	**100**

(B) Availability of services related to Non-Communicable diseases in the HPs with doctors

Education services for prevention of NCDs and promotion of healthy lifestyle

Table HP.4.1: Availability of health education services in the HPs with doctors for prevention of NCDs and promotion of healthy lifestyle (N=45)

Availability of health education services	n	%
Yes	39	86.7
No	6	13.7
Total	**45**	**100**

Table HP.4.1.1: Details of health education services in the HPs with doctorswhere health education services are available (N=39)

Details of health education services	n	%
Conduct education sessions		
Yes	36	92.3
No	3	7.7
Total	**39**	**100**
Display material focused on prevention of tobacco, alcohol, unhealthy diet, physical inactivity		
Yes	22	56.4
No	17	43.6
Total	**39**	**100**

Screening services for Diabetes, Hypertension, Cardiovascular disease and Chronic Respiratory disease and for risk factors

Table HP.4.2: Availability of screening services NCDs in the HPs with doctors(N=45)

Availability of screening services for diabetes, hypertension, cardiovascular disease and chronic respiratory disease		
Yes	25	55.5
No	20	44.5
Total	**45**	**100**

Table HP.4.2.1: Details of screening services for NCDs in the HPs with doctors where the services are available (N=25)

Details of screening services	n	%
Check seated blood pressure in all adults of age more than 40 years twice with 10 minutes interval.		
Yes, on all above 40 years	7	28.0
Yes, only for adults selected by staffs	9	36.0
Yes, on request by the person	4	16.0
No	2	8.0
Others	3	12.0
Total	**25**	**100.0**
Check urine albumin		
Yes, on all above 40 years	0	0.0
Yes, only for adults selected by staffs	3	12.0
Yes, on request by the person	0	0.0
No	22	88.0
Total	**25**	**100.0**
Check blood sugar capillary sample		
Yes, on all above 40 years	1	4.0

Yes, only for adults selected by staffs	3	12.0
Yes, on request by the person	0	0.0
No	21	84.0
Total	**25**	**100.0**
Measure BMI status		
Yes	17	68.0
No	8	32.0
Total	**25**	**100.0**

Table HP.4.2.2: Details of the steps followed for NCD positive patients after screening in the HPs with doctors where the services are available (N=25)

Refer all to higher care if the patients are screened positive for NCDs	n	%
Yes	19	76.0
No	6	24.0
Total	**25**	**100.0**
Follow PEN protocol to decide on counsel or refer if the patients are screened positive		
Yes	15	60.0
No	10	40.0
Total	**25**	**100.0**

Table HP.4.3: Availability of follow up system for counselled patients in HPs with doctors(N=25)

Availability of follow up system for counselled patients	n	%
Tobacco cessation		
Yes	10	40.0
No	15	60.0
Total	**25**	**100**
Alcohol cessation		
Yes	10	40.0
No	15	60.0
Total	**25**	**100**
Obesity/Healthy Diet/ Physical activity		
Yes	10	40.0
No	15	60.0
Total	**25**	**100**
Mental Health		
Yes	14	56.0
No	11	44
Total	**25**	**100**
Injury Prevention		
Yes	15	60.0
No	10	40.0
Total	**25**	**100**

Screening services for cancers

Table HP.4.4: Availability of cancer screening or related services in the HPs with doctors(N=45)

Availability of cancer screening /related services (within the facility or through home visits)	n	%
Yes	5	11.1
No	40	88.9
Total	**45**	**100**

Table HP.4.4.1: Details of cancer screening or related services in the HPs with doctors where cancer screening services are available (N=5)

Details of cancer screening or related services	n	%
Refer all women presenting abnormal vaginal bleeding, foul smelling discharge or pain during vaginal intercourse as per PEN protocol to the National Hospital		
Yes	4	80.0
No	1	20.0
Total	**5**	**100.0**
Conduct health education sessions about breast cancer (including self-exploration for early detection)		
Yes	4	80.0
No	1	20.0
Total	**5**	**100.0**
Refer all women presenting with breast lump or any other breast problems as per PEN protocol		
Yes	4	80.0
No	1	20.0
Total	**5**	**100.0**
Health education about prevention and early identification of symptoms of oral cancer		
Yes	2	40.0
No	3	60.0
Total	**5**	**100.0**
Screen people using tobacco (smoking or smokeless) or/and using areca nut as per PEN protocol		
Yes	2	40.0
No	3	60.0
Total	**5**	**100.0**

Mental health services

Table HP.4.5: Availability of mental health services in the HPs with doctors(N=45)

Availability of mental health services (within the facility or through home visits)	n	%
Yes	21	46.7
No	24	53.3
Total	**45**	**100**

Table HP.4.5.1: Details of mental health services in the HPs with doctorswhere mental health services are available (N=21)

Details of mental health services	n	%
Counselling to patient with mental problem and family		
Yes	21	100.0
No	0	0.0
Total	**21**	**100.0**
Refer acute mental health episodes (e.g. psychotic attack, epilepsy, etc. for diagnostic and treatment		
Yes	14	66.7
No	7	33.3
Total	**21**	**100.0**
Identification and referral of suspected mental illnesses		
Yes	16	76.2

No	5	23.8
Total	**21**	**100**
Follow up of patients diagnosed with mental illnesses to check on continuation of treatment		
Yes	21	100
No	0	0
Total	**21**	**100**

Oral health services

Table HP.4.6: Availability of oral health services in the HPs with doctors(N=45)

Availability of oral health services for identification and reference of any oral/dental problems (within the facility or through home visits)	n	%
Yes	15	33.3
No	30	66.7
Total	**45**	**100**

Eye health services

Table HP.4.7: Availability of eye health services in the HPs with doctorswhere eye health services are available (N=45)

Availability of eye health services	n	%
Identification and referral of suspected conjunctivitis		
Yes	38	84.44
No	7	15.56
Total	**45**	**100**
Early identification of visual problems		
Yes	20	44.4
No	25	55.6
Total	**45**	**100**
Emergency care for eye trauma		
Yes	22	48.9
No	23	51.1
Total	**45**	**100**

(D) Availability of registers for patients screened for NCDs in health posts

Table HP.5.1: Availability of patient registers for diabetes and hypertension in the HPs with doctors(N=45)

Patient Registers	n	%
Availability of register for patients screened for Diabetes		
Yes, observed	9	20.0
Yes, reported but not observed	6	13.3
No	30	66.7
Total	**45**	**100**
Availability of register for patients screened for Hypertension		
Yes, observed	19	42.2
Yes, reported but not observed	9	20.0
No	17	37.8
Total	**45**	**100**

(E) Availability and use of NCD related guidelines in the HPs with doctors

Table HP.6.1: Availability of NCD related guidelines in the HPs with doctors(N=45)

Availability of WHO PEN or other guidelines for management of NCDs	n	%
Yes, observed	7	15.6
Yes, reported but not observed	4	8.9
No	34	75.6
Total	**45**	**100**

Table HP.6.1.1: Details of available management guidelines in the HPs with doctors(N=11)

Management guideline also available as an algorithm forms for easy reference	n	%
Yes, observed and displayed for easy reference	5	45.5
Yes, observed but not displayed	2	18.2
Yes, reported but not observed	1	9.1
No	3	27.3
Total	**11**	**100**

Table HP.6.2: Availability of WHO-CVD risk chart and referral protocols and guidelines in the HPs with doctors (N=45)

WHO-CVD Risk Chart	n	%
Yes, observed	3	6.7
Yes, reported but not observed	5	11.1
No	37	82.2
Total	**45**	**100**
Referral protocols and guidelines	**n**	**%**
Yes, observed	16	35.6
Yes, reported but not observed	3	6.7
No	26	57.8
Total	**45**	**100**

(F) Trained staffs for NCD services

Table HP.7.1: Availability of trained staff to deliver NCD services at HPs with doctors (N=45)

HPs with doctors with trained staffs	n	%
Doctors trained within last 5 years for diabetes screening and care		
Yes	17	37.8
No	28	62.2
Total	**45**	**100**
Nurses trained within last 5 years for diabetes screening and care		
Yes	5	11.1
No	40	88.9
Total	**45**	**100**
Doctors trained within last 5 years for hypertension screening and care		
Yes	18	40.0
No	27	60.0
Total	**45**	**100**
Nurses trained within last 5 years for hypertension screening and care		
Yes	5	11.1
No	40	88.9
Total	**45**	**100**
Doctors trained within last 5 years or identification of mental health illness		

Yes	21	46.7
No	24	53.3
Total	**45**	**100**
Nurses trained within last 5 years for identification of mental health illness		
Yes	8	17.8
No	37	82.2
Total	**45**	**100**
Doctors trained within last 5 years for diagnosis of chronic respiratory diseases		
Yes	24	53.3
No	21	46.7
Total	**45**	**100**
Nurses trained within last 5 years for diagnosis of chronic respiratory diseases		
Yes	8	17.8
No	37	82.2
Total	**45**	**100**

(G) Availability of the key medicines related to NCDS in the HPs with doctors

Table HP.8.1: Availability of the key medicines related to NCDs in the HPs with doctors(N=45)

Generic drug name	Available, at least one not expired		Available but expired		Reported available but not seen		Not available today		Never available		Total	
	n	%	n	%	n	%	n	%	n	%	N	%
Medicines to treat cardiovascular diseases/hypertension												
Aspirin	10	22.2	3	6.7	0	0	19	42.2	13	28.9	45	100
Hydrochlorothiazide	19	42.2	1	2.2	2	4.4	13	28.9	10	22.2	45	100
Enalapril	0	0	0	0	0	0	6	13.3	39	86.7	45	100
Amlodipine	15	33.3	0	0	2	4.4	15	33.3	13	28.9	45	100
Captopril	21	72.4	0	0.0	1	3.4	3	10.3	4	13.8	29	100.0
Nefedipin	7	77.8	0	0.0	1	11.1	0	0.0	1	11.1	9	100.0
Methyldopa	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	100.0
Beclomethasone	2	50.0	0	0.0	0	0.0	0	0.0	2	50.0	4	100.0
Medicines to treat Diabetes												
Glibenclamide	8	17.8	0	0	0	0	10	22.2	27	60	45	100
Metformin	4	8.9	0	0	0	0	11	24.4	30	66.7	45	100
Medicines to treat asthma/Chronic respiratory disease												
Salbutamol tablets	37	82.2	1	2.2	1	2.2	5	11.1	1	2.2	45	100
Salbutamol inhalers	22	48.9	3	6.7	0	0	15	33.3	5	11.1	45	100
Antibiotics	39	86.7	0	0	1	2.2	2	4.4	3	6.7	45	100
Other (specify)												
Prednisolone	4	66.7	0	0.0	1	16.7	0	0.0	1	16.7	6	100.0
Dexamethasone	1	33.3	0	0.0	0	0.0	2	66.7	0	0.0	3	100.0
Hydrocortisone injection	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0	1	100.0
Carbamazepine	0	0.0	0	0.0	1	100.0	0	0.0	0	0.0	1	100.0
Ibuprofen	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0	1	100.0
Paracetamol	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0	1	100.0
Metoclpramida	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0	1	100.0

Note: The total cannot add up to 100% for some medicines which are available in the “other” categories and are available some health posts

Table HP.8.1.1: Details regarding the stock of the key medicines related to NCDs in the HPs with doctorsin which the medicines are available

Generic drug name	Availability reported	Any stock out in the past 3 Months among available medicines			
		Yes		No	
		n	%	n	%
Medicines to treat cardiovascular diseases/hypertension					
Aspirin	32	21	65.6	11	34.4
Hydrochlorothiazide	35	21	60	14	40
Enalapril	6	5	83.3	1	16.7
Amlodipine	32	19	59.3	13	40.6
Captopril	25	8	32.0	17	68.0
Nefedipin	9	3	33.3	6	66.7
Methyldopa	1	0	0.0	1	100.0
Beclomethasone	2	1	50.0	1	50.0
Medicines to treat Diabetes					
Glibenclamide	18	8	17.8	10	22.2
Metformin	15	12	26.7	3	6.7
Medicines to treat asthma/Chronic respiratory disease					
Salbutamol tablets	44	13	29.5	31	70.5
Salbutamol inhalers	40	17	42.5	23	57.5
Antibiotics	42	18	42.8	24	57.1
Other (specify)					
Prednisolone	5	3	60.0	2	40.0
Dexamethasone	3	1	33.3	2	66.7
Hydrocortisone injection	1	1	100.0	0	0.0
Carbamazepine	1	1	100.0	0	0.0
Ibuprofen	1	0	0.0	1	100.0
Paracetamol	1	0	0.0	1	100.0
Metoclpramida	1	0	0.0	1	100.0

Note: The total cannot add up to 100% for some medicines which are available in the “other” categories and are available some health posts

(H) Availability of medical devices in the HPs with doctorson survey date

Table HP.9.1: Availability of medical devices in the HPs with doctors(N=45)

Medical devices	Observed		Reported not Observed		Not available		Total	
	n	%	n	%	n	%	n	%
Stethoscope/ Stethoscope Binaural	42	93.3	1	2.2	2	4.4	45	100
Sphygmomanometer or BP apparatus/ Blood pressure manual	43	95.6	1	2.2	1	2.2	45	100
Weighing machine	41	91.1	1	2.2	3	6.7	45	100
Urine glucose strips for domiciliary visits		0.0	2	4.4	43	95.6	45	100
Urine albumin strips/ Dipstick for urine albumin	1	2.2	1	2.2	43	95.6	45	100
Glucometer and test strips	1	2.2	1	2.2	43	95.6	45	100
Posters, flip charts, brochure, and stickers on NCDs	17	37.8	2	4.4	26	57.8	45	100
Reporting Form	32	71.1	1	2.2	12	26.7	45	100
Food Models	26	57.8	2	4.4	17	37.8	45	100
Reporting Form	35	77.8	3	6.7	7	15.6	45	100

Weighing scale/ Weighing Scales for adults	36	80.0	3	6.7	6	13.3	45	100

Note: - The total cannot add up to 100% for some medical devices which are available in the "other" categories and are available some health posts

Table HP.9.1.1: Details of Functionality status of medical devices in the HPs with doctors where the medical devices are available

Medical Devices	Availability reported	Functionality of the devices			
		Functional		Non-functional	
		n	%	n	%
Stethoscope/ Stethoscope Binaural	43	43	100.0	0	0.0
Sphygmomanometer or BP apparatus/ Blood pressure Manual	44	44	100.0	0	0.0
Weighing machine	42	42	100.0	0	0.0
Urine glucose strips for domiciliary visits	2	0	0.0	2	100.0
Urine albumin strips/ Dipstick for urine albumin	2	1	50.0	1	50.0
Glucometer and test strips	2	2	100.0	0	0.0
Posters, flip charts, brochure, and stickers on NCDs	19	18	94.7	1	5.3
Reporting Form	33	32	97	1	3
Food Models	28	28	100.0	0	0.0
Reporting Form	39	36	92.3	3	7.7
Weighing scale/ Weighing Scales for adults	39	36	92.3	3	7.7

Note: - The total cannot add up to 100% for some medical devices which are available in the "other" categories and are available some health posts

Table CHC12.1: The numbers of Community health centre (level 1 and 2) included in the survey by Municipality

Municipality	Number of CHC (Level 1 and 2)
Aileu	1
Ainaro	1
Atauro	1
Baucau	2
Bobonaro	3
Covalima	2
Dili	2
Ermera	2
Lautem	1
Manatuto	1
Manufahi	2
Oecusse	2
Viqueque	2
Total	**22**

(C) Availability of staff in community health centres (level 1 and 2)

Table CHC12.2.1: Availability of staff relevant to provide NCD related services in the community health centres (level 1 and 2) (N=22)

Staff Categories	Available		Not available		No response	Total	
	n	%	n	%	n	n	%
General Doctors	22	100.0	0	0.0	0	22	100.0
Nutritionist	17	77.3	5	33.7	0	22	100.0
Dentist	10	45.5	3	13.6	9	22	100.0
Internists	1	4.5	12	54.5	9	22	100.0

Nurses	22	100.0	0	0.0	0	22	100.0
Midwives	22	100.0	0	0.0	0	22	100.0
Laboratory Technicians	20	90.1	2	9.1	0	22	100.0
Pharmacy Technicians	21	95.5	1	4.5	0	22	100.0
General Ancillary Staff	11	50.0	2	9.1	9	22	100.0
Public Health Technicians	13	59.1	0	59.1	9	22	100.0
Medical Record Technician	7	31.8	6	27.3	9	22	100.0

Table CHC12.2.1.1: Details of available staffs in the community health centres (level 1 and 2) which reported as staff available

Staff Categories	Full time staff %	Visiting staff %	Average number of personnel
General Doctors (N=22)	100.0	45.5	7.8
Nutritionist (N=17)	52.9	52.9	1.4
Dentist (N=10)	100.0	40.0	3.3
Internists (N=1)	0.0	0.0	0
Nurses (N=22)	100	77.3	11.7
Midwives (N=22)	100	72.7	8.2
Laboratory Technicians (N=20)	100.0	30.0	2.3
Pharmacy Technicians (N=21)	100.0	33.3	2.4
General Ancillary Staff(N=11)	90.9	36.4	6.9
Public Health Technicians (N=13)	76.9	61.5	5.3
Medical Record Technician (N=7)	100.0	14.3	1.6

(B) Availability of basic infrastructure and systems in in the community health centres (level 1 and 2)

Table: CHC12.3.1: Availability of email or internet connection within the community health centres (Level 1 and 2) (N=22)

Access to email or internet connection within the facility	n	%
Yes, with a computer/ another device belonging to the facility	12	54.5
Yes, without a computer/ another devices, but availability of private devices	6	27.3
Not available	4	18.2
Total	**22**	**100**

Table: CHC12.3.1.1: Details of internet connectivity in the community health centres (Level 1 and 2) where internet facility is available (N=18)

Consistently of internet in the facility	n	%
Always available	9	50.0
Available for most of the days in a month	1	5.6
Available sometimes	8	4.4
Total	**18**	**100**

Table: CHC12.3.2: Availability of power supply, water and sanitation facility within the community health centres (level 1 and 2) (N=22)

Availability of facilities	N	%
Power supply		
Yes, always at all times open for services	12	54.5
Yes, often available with some interruptions of less than 2 hours per day at times open for services	2	9.1

yes, sometimes available with frequent or prolonged interruptions of more than 2 hours per day at times open for services	8	36.4
Electricity not available	0	0.0
Total	**22**	**100.0**
Drinking water for patients		
Yes, always available at all times open for services	6	27.3
Yes, often available with some interruptions of less than 2 hours per day at times open for services	5	22.7
Sometimes available, with frequent or prolonged interruptions of more than 2 hours per day at times open for services	1	4.5
Drinking water not available	0	45.5
Total	**22**	**100**
Toilet on the premises for patients		
Yes, available and functional	19	86.4
yes, available but not functional	3	13.6
Toilet not available	0	0.0
Total	**22**	**100**

Table: CHC12.3.2.1: Details of sanitation facilities at the community health centres (level 1 and 2) where toilet facilities are available (N=22)

Details of sanitation facility	n	%
Running water in the toilet		
Yes	14	63.6
No	8	36.4
Total	**22**	**100**
Soap in the toilet		
Yes	16	72.7
No	6	27.3
Total	**22**	**100**

Table: CHC12.3.3: Availability of emergency transportation system at the community health centres (level 1 and 2) (N=22)

Availability of emergency transportation system of a multifunctional vehicle, for emergency transportation for clients, either stationed at this facility or that the facility can call for	n	%
Yes, with driver and fuel available for 24 hours	17	77.3
Yes, but driver and/or fuel not available for 24 hours	5	22.7
Not available	0	0.0
Total	**22**	**100.0**

(C) Availability of services related to Non-Communicable diseases in the community health centres (level 1 and 2)

Education services for prevention of NCDs and promotion of healthy lifestyle

Table CHC12.4.1: Availability of health education services in the community health centres (level 1 and 2) for prevention of NCDs and promotion of healthy lifestyle (N=22)

Availability of health education services	n	%
Yes	21	95.5
No	1	4.5
Total	**22**	**100**

Table CHC12.4.1.1: Details of health education services in the community health centres (level 1 and 2) where health education services are available (n=21)

Details of health education services	n	%
Conduct education sessions		
Yes	19	90.5
No	2	9.5
Total	**21**	**100**
Display material focused on prevention of tobacco, alcohol, unhealthy diet, physical inactivity		
Yes	18	85.7
No	3	14.3
Total	**21**	**100**

Screening services for Diabetes, Hypertension, Cardiovascular disease and Chronic Respiratory disease and for risk factors

Table CHC12. 4.2: Availability of screening services NCDs in the community health centres (level 1 and 2 (N=22)

Availability of screening services for diabetes, hypertension, cardiovascular disease and chronic respiratory disease		
Yes	15	68.2
No	7	31.8
Total	**22**	**100**

Table CHC12.4.2.1: Details of screening services for NCDs in the community health centres (level 1 and 2) where the services are available (N=15)

Details of screening services	n	%
Check seated blood pressure in all adults of age more than 40 years twice with 10 minutes interval.		
Yes, on all above 40 years	5	33.3
Yes, only for adults selected by staffs	3	20.0
Yes, on request by the person	1	6.7
No	1	6.7
Others	5	33.3
Total	**15**	**100**
Check urine albumin		
Yes, on all above 40 years	1	6.7
Yes, only for adults selected by staffs	2	13.3
Yes, on request by the person	1	6.7
No	11	73.3
Total	**15**	**100**
Check blood sugar capillary sample		
Yes, on all above 40 years	3	20.0
Yes, only for adults selected by staffs	2	13.3
Yes, on request by the person	2	13.3
No	6	40.0
Others	2	13.3
Total	**15**	**100.0**
Assess smoking status		
Yes	9	60.0
No	6	40.0
Total	**15**	**100**
Measure BMI status		
Yes	13	86.7
No	2	13.3

Total	**15**	**100**
Assess CVD risk		
Yes	9	60.0
No	6	40.0
Total	**15**	**100**

Table CHC12.4.2.2: Details of the steps followed for NCD positive patients after screening in the community health centres (level 1 and 2) where the services are available (N=15)

Refer all to higher care if the patients are screened positive for NCDs	n	%
Yes	10	66.7
No	5	13.2
Total	**15**	**100**
Follow PEN protocol to decide on counsel or refer if the patients are screened positive		
Yes	13	86.7
No	2	13.3
Total	**15**	**100**

Table CHC12.4.2.3: Details of the availability of follow up system for NCD counselled patients in the community health centres (level 1 and 2) where the services are available (N=15)

Availability of follow up system for counselled patients	n	%
Tobacco cessation		
Yes	10	66.7
No	5	13.2
Total	**15**	**100**
Alcohol cessation		
Yes	9	60.0
No	6	40.0
Total	**15**	**100**
Obesity		
Yes	9	60.0
No	6	40.0
Total	**15**	**100**

Screening services for cancers

Table CHC12.4.3: Availability of cancer screening or related services in the community health centres (level 1 and 2) (N=22)

Availability of cancer screening /related services (within the facility or through home visits)	n	%
Yes	4	18.2
No	18	81.8
Total	**22**	**100**

Table CHC12.4.3.1: Details of cancer screening or related services in the community health centres (level 1 and 2) where cancer screening services are available (N=4)

Details of cancer screening or related services	n	%
Provide vaccination against HPV as per EPI protocol		
Yes	1	25.0
No	3	75.0
Total	**4**	**100.0**

Refer all women presenting abnormal vaginal bleeding, foul smelling discharge or pain during vaginal intercourse as per PEN protocol to the National Hospital		
Yes	4	100.0
No	0	100.0
Total	**4**	**100.0**
Conduct health education sessions about breast cancer (including self-exploration for early detection)		
Yes	4	100.0
No	0	100.0
Total	**4**	**100.0**
Refer all women presenting with breast lump or any other breast problems as per PEN protocol		
Yes	4	100.0
No	0	100.0
Total	**4**	**100.0**
Health education about prevention and early identification of symptoms of oral cancer		
Yes	4	100.0
No	0	100.0
Total	**4**	**100.0**
Screen people using tobacco (smoking or smokeless) or/and using areca nut as per PEN protocol		
Yes	3	75.0
No	1	25.0
Total	**4**	**100.0**

Mental Health services

Table CHC12.4.4: Availability of mental health services in the community health centres (level 1 and 2) (N=22)

Availability of mental health services (within the facility or through home visits)	n	%
Yes	17	77.3
No	5	22.7
Total	**22**	**100**

Table CHC12.4.4.1: Details of mental health services in the community health centres (level 1 and 2) where mental health services are available (N=17)

Details of mental health services	n	%
Home visit to people with mental problem		
Yes	15	88.2
No	2	11.8
Total	**17**	**100**
Counselling to patient with mental problem and family		
Yes	17	100
No	0	0.0
Total	**17**	**100**
Refer acute mental health episodes (e.g. psychotic attack, epilepsy, etc. for diagnostic and treatment		
Yes	15	88.2
No	2	11.8
Total	**17**	**100**

Identification and referral of suspected mental illnesses		
Yes	15	88.2
No	2	11.8
Total	**17**	**100**
Follow up of patients diagnosed with mental illnesses to check on continuation of treatment		
Yes	17	100
No	0	0.0
Total	**17**	**100**

Oral health services

Table CHC12.4.5: Availability of oral health services in the community health centres (level 1 and 2) (N=22)

Availability of oral health services	n	%
Oral health promotion activities in schools		
Yes	14	63.6
No	8	36.4
Total	**22**	**100**
Offer services of identifying and refer any oral/dental problems (within the facility or through home visits)		
Yes	14	63.6
No	8	36.4
Total	**22**	**100**

Eye health services

Table CHC12.4.6: Availability of eye health services in the community health centres (level 1 and 2) where eye health services are available (N=22)

Availability of eye health services	n	%
Identification and referral of suspected conjunctivitis		
Yes	19	86.4
No	3	13.6
Total	**22**	**100**
Early identification of visual problems		
Yes	12	54.5
No	10	45.5
Total	**22**	**100**
Emergency care for eye trauma		
Yes	10	45.5
No	12	54.5
Total	**22**	**100**

(I) Availability of registers for patients screened for NCDs in the community health centers (level 1 and 2)

Table CHC12.5.1: Availability of patient registers for diabetes and hypertension in the community health centres (level 1 and 2) (N=22)

Patient Registers	n	%
Availability of register for patients screened for Diabetes		
Yes, observed	7	31.8
Yes, reported but not observed	9	40.9
No	6	27.3
Total	**22**	**100**

Availability of register for patients screened for Hypertension		
Yes, observed	12	54.5
Yes, reported but not observed	7	31.8
No	3	13.6
Total	**22**	**100**

(J) Availability and use of NCD related guidelines in the community health centers (level 1 and 2)

Table CHC12.6.1: Availability of NCD related guidelines in the community health centres (level 1 and 2) (N=22)

Availability of WHO PEN or other guidelines for management of NCDs	n	%
Yes, observed	10	45.5
Yes, reported but not observed	7	31.8
No	5	22.7
Total	**22**	**100**

Table CHC12.6.1.1: Details of available management guidelines in the community health centres (level 1 and 2) (N=17)

Management guideline also available as an algorithm forms for easy Reference	n	%
Yes, observed and displayed for easy reference	7	41.2
Yes, observed but not displayed	6	35.3
Yes, reported but not observed	3	17.6
No	1	7.1
Total	**17**	**100**

Table CHC12.6.2: Availability of WHO-CVD risk chart and referral protocols and guidelines in the community health centres (level 1 and 2) (N=22)

WHO-CVD Risk Chart	n	%
Yes, observed	**9**	40.9
Yes, reported but not observed	5	22.7
No	8	36.4
Total	**22**	**100**
Referral protocols and guidelines	**n**	**%**
Yes, observed	13	59.1
Yes, reported but not observed	3	13.6
No	6	27.3
Total	**22**	**100**

(K) Trained staffs for NCD services

Table CHC12.7.1: availability of trained staff to deliver NCD services at Community health centres (level 1 and 2) (N=22)

Community health centres (level 1 and 2) with trained staffs	n	%
Doctors trained within last 5 years for diabetes screening and care		
Yes	17	77.3
No	5	22.7
Total	**22**	**100**
Nurses trained within last 5 years for diabetes screening and care		
Yes	14	63.6
No	8	36.4

Total	**22**	**100**
Doctors trained within last 5 years for hypertension screening and care		
Yes	16	72.7
No	8	27.3
Total	**22**	**100**
Nurses trained within last 5 years for hypertension screening and care		
Yes	13	59.1
No	9	40.9
Total	**22**	**100**
Doctors trained within last 5 years or identification of mental health illness		
Yes	14	63.6
No	8	36.4
Total	**22**	**100**
Nurses trained within last 5 years for identification of mental health illness		
Yes	15	68.2
No	7	31.8
Total	**22**	**100**
Doctors trained within last 5 years for diagnosis of chronic respiratory diseases		
Yes	17	77.3
No	5	22.7
Total	**22**	**100**
Nurses trained within last 5 years for diagnosis of chronic respiratory diseases		
Yes	12	54.5
No	10	45.5
Total	**22**	**100**

(L) Availability of the key medicines related to NCDS in the community health centers (level 1 and 2)

Table CHC12.8.1: Availability of the key medicines related to NCDs in the community health centres (level 1 and 2) (N=22)

Generic drug name	Available, at least one not expired		Available but expired		Reported available but not seen		Not available today		Never available		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
Medicines to treat cardiovascular diseases/hypertension												
Aspirin	13	59.1	1	4.5	1	4.5	7	31.8	0	0.0	22	100
Hydrochlorothiazide	16	72.7	2	9.1	1	4.5	3	13.6	0	0.0	22	100
Enalapril	1	4.5	0	0.0	0	0.0	4	18.2	17	77.3	22	100
Amlodipine	17	77.3	0	0.0	0	0.0	2	9.1	3	13.6	22	100
Atorvastatin	15	68.2	1	4.5	0	0.0	2	9.1	4	18.2	22	100
Atenolol	7	31.8	2	9.1	0	0.0	5	22.7	8	36.4	22	100
Nifedipine retard												
Captopril	6	54.5	0	0.0	0	0.0	3	27.3	2	18.2	11	100.0
Methyldopa	2	66.7	0	0.0	0	0.0	0	0.0	1	33.3	3	100.0
Isosorbide Dinitrate	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0	1	100.0

Medicines to treat Diabetes												
Insulin	0	0.0	0	0.0	0	0.0	1	4.5	21	95.2	22	100
Metformin	10	45.5	0	0.0	1	4.5	2	9.1	9	40.9	22	100
Glibenclamide	13	59.1	0	0.0	1	4.5	2	9.1	6	27.3	22	100
Medicines to treat asthma/ Chronic respiratory disease												
Salbutamol tablets	19	14.5	0	0.0	1	4.5	2	9.1	0	0.0	22	100
Salbutamol inhalers	12	54.5	1	4.5	1	4.5	8	36.4	0	0.0	22	100
Beclamathazone inhaler	10	45.5	0	0.0	0	0.0	9	40.9	3	13.6	22	100
Aminophylline injection	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0	1	100.0
Dexamethasone	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0	1	100.0
Prednisone	2	100.0	0	0.0	0	0	0.0	0	0.0	0	2	100.0
Hydrocortisone	1	50.0	0	0.0	1	50.0	0	0.0	0	0.0	2	100.0
Theophylline	4	80.0	0	0.0	1	20.0	0	0.0	0	0.0	5	100.0
Asthalin	3	100.0	0	0.0	0	0.0	0	0.0	0	0.0	3	100.0
Antibiotics	16	72.7	1	4.5	1	4.5	1	4.5	3	13.6	22	100

Note: 1- The total cannot add up to 22 (100%) for some medicines which are available in the "other" categories and are available some CHC-1,2

Table CHC12. 8.1.1: Details regarding the stock of the key medicines related to NCDs in the community health centres (level 1 and 2) in which the medicines are available

Generic drug name	Availability reported	Any stock out in the past 3 Months among available medicines			
		Yes		No	
		n	%	n	%
Medicines to treat cardiovascular diseases/hypertension					
Aspirin	22	10	45.5	12	55.5
Hydrochlorothiazide	22	11	50.0	11	50.0
Enalapril	5	4	80.0	1	20.0
Amlodipine	19	5	26.3	14	73.7
Atorvastatin	18	4	22.2	14	77.8
Atenolol	14	10	71.4	4	29.6
Captopril	10	3	30.0	7	70.0
Methyldopa	2	0	0.0	2	100.0
Isosorbide Dinitrate	1	0	0.0	1	100.0
Medicines to treat Diabetes					
Insulin	1	1	100.0	0	0.0
Metformin	13	6	46.2	7	53.8
Glibenclamide	16	9	56.3	7	43.7
Medicines to treat asthma/ Chronic respiratory disease					
Salbutamol tablets	22	7	31.8	15	68.2
Salbutamol inhalers	22	9	40.9	13	59.1

Beclamathazone inhaler	19	8	42.1	11	57.9
Aminophylline injection	1	0	0.0	1	100.0
Dexamethasone	1	1	100.0	0	0.0
Prednisone	1	0	0.0	1	100.0
Hydrocortisone	1	0	0.0	1	100.0
Theophylline	1	50.0	1	50.0	2
Asthalin	2	0	0.0	2	100.0
Antibiotics	19	10	52.6	9	47.4

Note: 1- The total cannot add up to 22 (100%) for some medicines which are available in the "other" categories and are available some CHC-1,2

(M) <u>Availability of medical devices in the community health centers (level 1 and 2) on survey date</u>

Table CHC12.9.1: Availability of medical devices in the community health centres (level 1 and 2) (N=22)

Medical devices	Observed		Reported not Observed		Not available		Total	
	n	%	n	%	n	%	n	%
Stethoscope/ Stethoscope Binaural	22	100.0	0	0.0	0	0.0	22	100
Sphygmomanometer or BP apparatus/ Blood pressure Machine/Mobile/Blood Pressure manual	19	86.4	1	4.5	2	9.1	22	100
Urine glucose strips for domiciliary visits	9	40.9	1	4.5	12	54.5	22	100
Urine albumin strips/ Dipstick for urine albumin	4	18.2	1	4.5	17	77.3	22	100
Blood sugar assay	13	59.1	1	4.5	8	36.4	22	100
Blood cholesterol assay (Semi-automated Biochemistry analyser)	6	27.3	0	0.0	16	72.7	22	100
Electrocardiograph (ECG)	3	13.6	1	4.5	18	81.8	22	100
Peak flow meter	7	31.8	2	9.1	13	59.1	22	100
Weighing scale /Weighing Scales for adults	21	95.5	0	0.0	1	4.5	22	100
Measuring tape	18	81.8	2	9.1	2	9.1	22	100
Nebulizer	17	77.3	0	0.0	5	22.7	22	100
Torch	12	54.5	0	0.0	10	45.5	22	100
Gloves	22	100.0	0	0.0	0	0.0	22	100
Posters, flip charts, brochure and stickers on NCDs	14	63.6	2	9.1	6	27.3	22	100
Reporting Form	17	77.3	2	9.1	3	13.6	22	100
Food Models	17	77.3	1	4.5	4	18.2	22	100
SPO2 Monitor	1	100.0	0	0.0	0	0.0	1	100.0
Ultrasound/ any details	1	50.0	0	0.0	1	50.0	2	100.0
Oxygen measure	1	100.0	0	0.0	0	0.0	1	100.0
Thermometer digital	1	100.0	0	0.0	0	0.0	1	100.0

Note: 2- The total cannot add up to 22 (100%) for some medical devices which are available in the "other" categories and are available some CHC-1,2

Table CHC12.9.1.1: Details of Functionality status of medical devices in the community health centres (level 1 and 2) where the medical devices are available

Medical Devices	Availability reported	Functionality of the devices			
		Functional		Non-functional	
		n	%	n	%
Stethoscope/ Stethoscope Binaural	22	22	100	0	0.0
Sphygmomanometer or BP apparatus/ Blood pressure Machine/Mobile/Blood Pressure manual	20	17	85.0	3	15.0
Urine glucose strips for domiciliary visits	10	10	100.0	0	0.0
Urine albumin strips/ Dipstick for urine albumin	5	5	100.0	0	0.0
Blood sugar assay	14	14	100.0	0	0.0
Blood cholesterol assay (Semi-automated Biochemistry analyser)	6	6	100.0	0	0.0
Electrocardiograph (ECG)	4	4	100.0	0	0.0
Peak flow meter	9	8	88.9	1	11.1
Weighing scale /Weighing Scales for adults	21	20	95.2	1	4.8
Measuring tape	20	19	95.0	1	5.0
Nebulizer	17	17	100	0	0.0
Torch	12	12	100	0	0.0
Gloves	22	22	100	0	0.0
Posters, flip charts, brochure and stickers on NCDs	16	16	100	0	0.0
Reporting Form	20	20	100	0	0.0
Food Models	18	17	94.4	1	5.6
Others					
BP, SPO2 Monitor	1	1	100.0	0	0.0
Ultrasodino	1	1	100.0	0	0.0
monitor, infus pump	1	1	100.0	0	0.0
oxigenio measure	1	1	100.0	0	0.0
Thermometer digital	1	1	100.0	0	0.0

Note: 2- The total cannot add up to 22 (100%) for some medical devices which are available in the "other" categories and are available some CHC-1,2

Table CHC-3.1: The numbers of Community health centre (level 3) included in the survey by Municipality

Municipality	Number of CHC (Level 3)
Aileu	1
Ainaro	1
Dili	1
Ermera	1
Lautem	1
Liquica	1
Viqueque	1
Total	**7**

(D) Availability of staff in community health centres (level 3)

Table CHC-3.2.1: Availability of staff relevant to provide NCD related services in the community health centres (level 3) (N=7)

Staff Categories	Available	Not available	Total
	n	n	n
General Doctors	7	0	7
Nutritionist	7	0	7
Dentist	6	1	7
Internists	0	7	7

Pediatrician	1	6	7
Nurses	7	0	7
Midwives	7	0	7
Laboratory Technicians	7	0	7
Pharmacy Technicians	7	0	7
Radiology technicians	7	0	7
Electro-medical Technicians	3	4	7
Public Health Technicians	7	0	7
Medical Record Technician	6	1	7
General Ancillary Staff	6	1	7

Table CHC-3.2.1.1: Details of available staffs in the community health centres(level 3) which reported as staff available

Staff Categories	Full time staff %	Visiting staff %	Average number of personnel
General Doctors (N=7)	7	4	14.0
Nutritionist (N=7)	6	3	1.6
Dentist (N=6)	5	4	1.8
Pediatrician (N=1)	0	7	1.0
Nurses(N=7)	7	3	15.4
Midwives (N=7)	7	3	12.9
Laboratory Technicians (N=7)	7	2	4.7
Pharmacy Technicians (N=7)	7	1	2.6
Radiology technicians (N=7)	7	1	1.6
Electro-medical Technicians (N=3)	5	0	0.6
Public Health Technicians (N=7)	5	4	5.3
Medical Record Technician (N=6)	7	2	1.7
General Ancillary Staff (N=6)	6	6	14.2

(B) Availability of basic infrastructure and systems in in the community health centres (level 3)

Table: 3.1: Availability of email or internet connection within the community health centres (Level 3) (N=7)

Access to email or internet connection within the facility	n
Yes, with a computer/ another device belonging to the facility	5
Yes, without a computer/ another devices, but availability of private devices	0
Not available	2
Total	**7**

Table: CHC-3. 3.1.1: Details of internet connectivity in the community health centres (Level 3) where internet facility is available (N=5)

Consistently of internet in the facility	n
Always available	3
Available for most of the days in a month	1
Available sometimes	1
Total	**5**

Table: CHC-3.3.2: Availability of power supply, water and sanitation facility within the community health centres (level 3) (N=7)

Availability of facilities	n
Power supply	
Yes, always at all times open for services	7
Yes, often available with some interruptions of less than 2 hours per day at times open for services	0
yes, sometimes available with frequent or prolonged interruptions of more than 2 hours per day at times open for services	0
Electricity not available	0
Total	**7**
Drinking water for patients	
Yes, always available at all times open for services	4
Yes, often available with some interruptions of less than 2 hours per day at times open for services	1
Sometimes available, with frequent or prolonged interruptions of more than 2 hours per day at times open for services	0
Drinking water not available	2
Total	**7**
Toilet on the premises for patients	
Yes, available and functional	6
yes, available but not functional	1
Toilet not available	0
Total	**7**

Table: CHC-3.3.2.1: Details of sanitation facilities at the community health centres (level 3) where toilet facilities are available (N=7)

Details of sanitation facility	n
Running water in the toilet	
Yes	7
No	0
Total	**7**
Soap in the toilet	
Yes	6
No	1
Total	**7**

Table: CHC-3.3.3: Availability of emergency transportation system at the community health centres (level 3) (N=7)

Availability of emergency transportation system	n
Availability of multifunctional vehicle, for emergency transportation for clients, either stationed at this facility or that the facility can call for	
Yes, with driver and fuel available for 24 hours	7
Yes, but driver and/or fuel not available for 24 hours	0
Not available	0
Total	**7**
Availability of an ambulance, for emergency transportation for clients that is either stationed at this facility or that the facility can call for	
Yes, with driver and fuel available for 24 hours	7
Yes, but driver and/or fuel not available for 24 hours	0
Not available	0
Total	**7**

Table: CHC-3.3.4 Availability of basic X ray and laboratory services at the community health centres (level 3) (N=7)

Availability of basic X ray and laboratory services	n
Availability of basic x-ray services	
Yes, available and functional	3
Yes, available but not functional	1
Not available	3
Total	**7**
Availability of basic laboratory services	
Yes	7
No	0
Total	**7**

Table CHC-3.3.4.1: Details of the laboratory services in the community health centres (level 3) where laboratory services are available (N=7)

Details of laboratory services	n
Blood sugar estimation	
Yes	6
No	1
Total	**7**
Serum total cholesterol estimation	
Yes	5
No	2
Total	**7**

(C) Availability of services related to Non-Communicable diseases in the community health centres (level 3)

Education services for prevention of NCDs and promotion of healthy lifestyle

Table CHC-3.4.1: Availability of health education services in the community health centres (level 3) for prevention of NCDs and promotion of healthy lifestyle (N=7)

Availability of health education services	n
Yes	6
No	1
Total	**7**

Table CHC-3.4.1.1: Details of health education services in the community health centres (level 3) where health education services are available (N=6)

Details of health education services	n
Conduct education sessions	
Yes	6
No	0
Total	**6**
Display material focused on prevention of tobacco, alcohol, unhealthy diet, physical inactivity	
Yes	6
No	0
Total	**6**

Screening services for Diabetes, Hypertension, Cardiovascular disease and Chronic Respiratory disease and for risk factors

Table CHC-3.4.2: Availability of screening services NCDs in the community health centres (level 3) (N=7)

Availability of screening services for diabetes, hypertension, cardiovascular disease and chronic respiratory disease	n
Yes	7
No	0
Total	**7**

Table CHC-3.4.2.1: Details of screening services for NCDs in the community health centres (level 3) where the services are available (N=7)

Details of screening services	n
Check urine albumin	
Yes, on all above 40 years	0
Yes, only for adults selected by staffs	2
Yes, on request by the person	1
No	3
Others	1
Total	**7**
Check blood sugar capillary sample	
Yes, on all above 40 years	1
Yes, only for adults selected by staffs	3
Yes, on request by the person	1
No	1
Others	1
Total	**7**
Assess smoking status	
Yes	6
No	1
Total	**7**
Assess CVD risk	
Yes	5
No	2
Total	**7**
Measure Peak Expiratory Flow Rate (PEFR)	
Yes	3
No	4
Total	**7**
Screening for Albuminaria	
Yes	2
No	5
Total	**7**

Table CHC-3.4.2.2: Details of the steps followed for NCD positive patients after screening in the community health centres (level 3) where the services are available (N=7)

Details of next steps after NCD screening	n
Refer all to higher care if the patients are screened positive for NCDs	
Yes	5
No	2
Total	**7**

Follow PEN protocol to decide on counsel or refer if the patients are screened positive	
Yes	7
No	0
Total	**7**

Table CHC-3.4.3: Availability of NCD Clinics to follow up the diagnosed NCD patients in the community health centres (level 3) (N=7)

Availability of NCD clinics to follow up the diagnosed NCD patients	n
Yes	5
No	2
Total	**7**

Table CHC-3.4.4: Details of the availability of management services for NCD in the community health centres (level 3) (N=7)

Availability of NCD management services	n
Services to manage exacerbations of asthma or COPD	
Yes	7
No	0
Total	**7**
Manage long-term patients of ischemic heart disease	
Yes	**6**
No	**1**
Total	**7**
Manage long-term patients of stroke	
Yes	5
No	2
Total	**7**
Manage long-term patients of Peripheral artery disease	
Yes	2
No	5
Total	**7**
Manage long-term patients of diabetes	
Yes	5
No	2
Total	**7**

Table CHC-3.4.5: Details of the availability of other services in the community health centres (level 3) (N=7)

Availability of the other services	n
Treat acute pharyngitis (children) to prevent rheumatic fever	
Yes	7
No	0
Total	**7**
Provide prophylaxis treatment of penicillin for rheumatic fever or established rheumatic heart disease	
Yes	6
No	1
Total	**7**

Screening services for cancers

Table CHC-3.4.6: Availability of cancer screening or related services in the community health centres (level 3) (N=7)

Availability of cancer screening /related services (within the facility or through home visits)	n
Yes	2
No	5
Total	**7**

Table CHC-3.4.6.1: Details of cancer screening or related services in the community health centres (level 3) where cancer screening services are available (N=2

Details of cancer screening or related services	n
Provide vaccination against HPV as per EPI protocol	
Yes	1
No	1
Total	**2**
Refer all women presenting abnormal vaginal bleeding, foul smelling discharge or pain during vaginal intercourse as per PEN protocol to the National Hospital	
Yes	2
No	0
Total	**2**
Conduct health education sessions about breast cancer (including self-exploration for early detection)	
Yes	1
No	1
Total	**2**
Refer all women presenting with breast lump or any other breast problems as per PEN protocol	
Yes	1
No	1
Total	**2**
Health education about prevention and early identification of symptoms of oral cancer	
Yes	2
No	0
Total	**2**
Screen people using tobacco (smoking or smokeless) or/and using areca nut as per PEN protocol	
Yes	2
No	0
Total	**2**

Mental Health services

Table CHC-3.4.7: Availability of mental health services in the community health centres (level 3) (N=7

Availability of mental health services (within the facility or through home visits)	n
Yes	7
No	0
Total	**7**

Table CHC-3.4.7.1: Details of mental health services in the community health centres (level 3) where mental health services are available (N=7

Details of mental health services	n
Home visit to people with mental problem	
Yes	6

No	1
Total	**7**
Mental health promotion in the community	
Yes	5
No	2
Total	**7**
Screening and proactive case finding of psychosis, depression, and anxiety disorders	
Yes	5
No	2
Total	**7**
Screening for detection of dementia	
Yes	**3**
No	**4**
Total	**7**
Screening for developmental disorders in children	
Yes	1
No	7
Total	**7**
Diagnosis and management of epilepsy	
Yes	7
No	0
Total	**7**
Counselling to patient with mental problem and family	
Yes	7
No	0
Total	**7**
Parent skills training for developmental disorders	
Yes	2
No	5
Total	**7**
Management of depression	
Yes	4
No	3
Total	**7**
Management of anxiety	
Yes	3
No	4
Total	**7**
Maternal mental health interventions	
Yes	5
No	2
Total	**7**
Management of prolonged seizures or status epilepticus	
Yes	6
No	1
Total	**7**
Follow up of patients diagnosed with mental illnesses to check on continuation of treatment	
Yes	7
No	0
Total	**7**

Oral health services

Table CHC-3.4.8: Availability of oral health services in the community health centres (level 3) (N=7

Availability of oral health services	n
Offer services of identifying and refer any oral/dental problems (within the facility or through home visits)	
Yes	7
No	0
Total	**7**
Offer services of identifying common dental problems requiring interventions	
Yes	6
No	1
Total	**7**

Table CHC-3.4.8.1: Details of oral health services in the community health centres (level 3) where oral health services are available (N=7)

Details of oral health services	n
Scaling (dental cleaning)	
Yes	6
No	1
Total	**7**
Simple tooth extraction	
Yes	7
No	0
Total	**7**
Simple composite restoration	
Yes	3
No	4
Total	**7**
Complex composite resin restoration	
Yes	**4**
No	**3**
Total	**7**
Oral antimicrobials for oral infections	
Yes	7
No	0
Total	**7**
Incision & drainage of dento-alveolar abscess	
Yes	5
No	2
Total	**7**
Root Canal Treatment (RCT)	
Yes	3
No	4
Total	**7**
Oral health promotion activities in schools	
Yes	6
No	1
Total	**7**

Eye health services

Table CHC-3.4.9: Availability of eye health services in the community health centres (level 3) (N=7)

Availability of eye health services or related services (within the facility or through home visits)	n
Yes	5
No	2
Total	**7**

Table CHC-3.4.9.1: Details of eye health services in the community health centres (level 3) where eye health services are available (N=5)

Details of eye health services	n
Identification and treatment of suspected conjunctivitis	
Yes	5
No	0
Total	**5**
Diagnosis and treatment of cataract	
Yes	3
No	2
Total	**5**
Diagnosis and treatment of glaucoma	
Yes	4
No	1
Total	**5**
Diagnosis and treatment of eye tumor	
Yes	2
No	3
Total	**5**
Diagnosis and treatment of granuloma	
Yes	3
No	2
Total	**5**
Diagnosis and treatment of chalazion	
Yes	3
No	2
Total	**5**
Diagnosis and treatment of light keratitis	
Yes	3
No	2
Total	**5**
Diagnosis and treatment of dacrocytes	
Yes	2
No	3
Total	**5**

(N) Availability of registers for patients screened for NCDs in the community health centers (level 3)

Table CHC-3.5.1: Availability of patient registers for diabetes and hypertension in the community health centres (level 3) (N=7)

Patient Registers	n
Availability of register for patients screened for Diabetes	
Yes, observed	7
Yes, reported but not observed	0

No	0
Total	**7**
Availability of register for patients screened for Hypertension	
Yes, observed	7
Yes, reported but not observed	0
No	0
Total	**7**
Availability of register for patients managed for Diabetes	
Yes, observed	5
Yes, reported but not observed	1
No	1
Total	**7**
Availability of register for patients managed for Hypertension	
Yes, observed	5
Yes, reported but not observed	1
No	1
Total	**7**

(O) Availability and use of NCD related guidelines in the community health centers (level 3)

Table CHC-3.6.1: Availability of NCD related guidelines in the community health centres (level 3) (N=7)

Availability of WHO PEN or other guidelines for screening of NCDs	n
Yes, observed	6
Yes, reported but not observed	1
No	0
Total	**7**

Table CHC-3.6.1.1: Details of available management guidelines in the community health centres (level 3) (N=)

Management guideline also available as an algorithm forms for easy reference	n
Yes, observed and displayed for easy reference	7
Yes, observed but not displayed	0
Yes, reported but not observed	0
No	0
Total	**7**

Table CHC-3.6.2: Availability of WHO-CVD risk chart and referral protocols and guidelines in the community health centres (level 3) (N=7)

WHO-CVD Risk Chart	n
Yes, observed	7
Yes, reported but not observed	0
No	0
Total	**7**
Referral protocols and guidelines	**n**
Yes, observed	7
Yes, reported but not observed	0
No	0
Total	**7**

Table CHC-3.6.3: Availability of protocol for management of hypertension in the community health centres (level 3) (N=7)

Availability of protocol for management of hypertension	n
Yes, observed	7
Yes, reported but not observed	0
No	0
Total	**7**

Table CHC-3.6.3.1: Details of available management guidelines for hypertension in the community health centres (level 3) (N=7)

Management guideline for hypertension also available as an algorithm forms for easy reference	n
Yes, observed and displayed for easy reference	6
Yes, observed but not displayed	1
Yes, reported but not observed	0
No	0
Total	**7**

Table CHC-3.6.4: Availability of protocol for management of diabetes in the community health centres (level 3) (N=7)

Availability of protocol for management of diabetes	n
Yes, observed	5
Yes, reported but not observed	1
No	1
Total	**7**

Table CHC-3.6.4.1: Details of available management guidelines for diabetes in the community health centres (level 3) (N=6)

Management guideline for diabetes also available as an algorithm forms for easy reference	n
Yes, observed	4
Yes, observed but not displayed	1
Yes, reported but not observed	1
No	0
Total	**6**

Table CHC-3.6.5: Availability of protocol for management of Chronic Respiratory diseases in the community health centres (level 3) (N=7)

Availability of protocol for management of Chronic Respiratory diseases	n
Yes, observed	5
Yes, reported but not observed	1
No	1
Total	**7**

Table CHC-3.6.5.1: Details of available management guidelines for Chronic Respiratory diseases in the community health centres (level 3) (N=6)

Management guideline for chronic respiratory diseases also available as an algorithm forms for easy reference	n
Yes, observed	4
Yes, observed but not displayed	1
Yes, reported but not observed	1
No	0
Total	**6**

(P) Trained staffs for NCD services

Table CHC-3.7.1: Availability of trained staff to deliver NCD services at Community health centres (level 3) (N=7)

Community health centres (level 3) with trained staffs	n
Doctors trained within last 5 years for diabetes screening and care	
Yes	5
No	2
Total	**7**
Nurses trained within last 5 years for diabetes screening and care	
Yes	6
No	1
Total	**7**
Doctors trained within last 5 years for hypertension screening and care	
Yes	6
No	1
Total	**7**
Nurses trained within last 5 years for hypertension screening and care	
Yes	6
No	1
Total	**7**
Doctors trained within last 5 years for CVD screening and care	
Yes	6
No	1
Total	**7**
Nurses trained within last 5 years for CVD screening and care	
Yes	5
No	2
Total	**7**
Doctors trained within last 5 years or identification of mental health illness	
Yes	4
No	3
Total	**7**
Nurses trained within last 5 years for identification of mental health illness	
Yes	5
No	2
Total	**7**
Doctors trained within last 5 years for diagnosis of chronic respiratory diseases	
Yes	6
No	1
Total	**7**
Nurses trained within last 5 years for diagnosis of chronic respiratory diseases	
Yes	5
No	2
Total	**7**

(P) Availability of the key medicines related to NCDS in the community health centers (level 3)

Table CHC-3.8.1: Availability of the key medicines related to NCDs in the community health centres (level 3) (N=7)

Generic drug name	Available, at least one not expired	Available but expired	Reported available but not seen	Not available today	Never available	Total
	n	n	n	n	n	n
Medicines to treat cardiovascular diseases/hypertension						
Aspirin	3	1	1	2	0	7
Hydrochlorothiazide	3	0	0	4	0	7
Enalapril	0	0	0	2	5	7
Amlodipine	7	0	0	0	0	7
Atorvastatin and Simvastatin	5	0	0	0	2	7
Atenolol	5	1	0	1	0	6
Nifedipine retard	7	0	0	0	0	7
Captopril	2	0	0	0	2	4
Methyldopa	2	0	0	0	1	3
Isosorbide Dinitrate						
Furosemid	1	0	0	0	1	2
Bisoprololop	1	0	0	0	1	2
Digoxin 0.25 mg	1	0	0	0	0	1
Tranexamic acid	1	0	0	0	0	1
Medicines to treat Diabetes						
Insulin	0	0	0	1	6	7
Metformin	6	0	1	0	0	7
Glibenclamide	7	0	0	0	0	7
Medicines to treat asthma/ Chronic respiratory disease						
Salbutamol tablets	6	1	0	0	0	7
Salbutamol inhalers	3	0	0	3	1	7
Beclamathazone inhaler	5	0	0	2	0	7
Aminophylline injection	1	0	0	0	1	2
Dexamethasone	1	0	0	0	0	1
Prednisone	2	0	0	1	0	3
Hydrocortisone	1	0	0	0	0	1
Asthalin	2	0	0	0	0	2
Theophylline	1	0	0	0	0	1
Esteroides	0	0	0	0	1	1
Antibiotics	7	0	0	0	0	**7**
Ampicilin	0	0	0	1	0	1
CVD management						

Note: 1- The total cannot add up to 7 (100%) for some medicines which are available in the “other” categories and are available some CHC-3

Table CHC-3.8.1.1: Details regarding the stock of the key medicines related to NCDs in the community health centres (level 3) in which the medicines are available

Generic drug name	Availability reported	Any stock out in the past 3 Months among available medicines	
		Yes	No
		n	n
Medicines to treat cardiovascular diseases/hypertension			
Aspirin	7	2	5
Hydrochlorothiazide	7	5	2
Enalapril	2	1	1
Amlodipine	7	2	5
Atorvastatin and Simvastatin	5	1	4
Atenolol	7	3	4
Nifedipine retard	7	2	5
Captopril	2	0	2
Methyldopa	2	0	2
Isosorbide Dinitrate	1	0	1
Furosemid	1	0	1
Digoxin 0.25 mg	1	0	1
Tranexamic acid	1	0	1
Medicines to treat Diabetes			
Insulin	1	1	0
Metformin	7	3	4
Glibenclamide	7	2	5
Medicines to treat asthma/ Chronic respiratory disease			
Salbutamol tablets	7	2	5
Salbutamol inhalers	6	3	3
Beclamathazone inhaler	7	2	5
Aminophylline injection	1	1	0
Dexamethasone	1	1	0
Prednisone	3	2	1
Hydrocortisone	1	0	1
Asthalin	2	1	1
Theofiline	1	1	0
Esteroides	0	0	0
Antibiotics	7	4	3
Ampicilina	1	1	0
CVD management			
	1	0	1

Note: 1- The total cannot add up to 7 (100%) for some medicines which are available in the “other” categories and are available some CHC-3

(Q) Availability of medical devices in the community health centers (level 3) on survey date

Table CHC-3.9.1: Availability of medical devices in the community health centres (level 3) (N=7)

Medical devices	Observed	Reported not Observed	Not available	Total
	n	n	n	n
Stethoscope/ Stethoscope Binaural	7	0	0	7
Sphygmomanometer or BP apparatus/ Blood pressure Machine/Mobile/Blood Pressure manual	7	0	0	7
Urine glucose strips for domiciliary visits	5	0	2	7
Urine albumin strips/ Dipstick for urine albumin	3	0	4	7
Blood sugar assay	7	0	0	7
Blood cholesterol assay (Semi-automated Biochemistry analyser)	6	0	1	7
Electrocardiograph (ECG)	6	0	1	7
Peak flow meter	3	0	4	7
Weighing scale /Weighing Scales for adults	7	0	0	7
Measuring tape	7	0	0	7
Nebulizer	7	0	0	7
Torch	6	0	1	7
Gloves	7	0	0	7
Posters, flip charts, brochure and stickers on NCDs	7	0	0	7
Reporting Form	7	0	0	7
Food Models	6	0	1	7
Only for the facilities providing oral health services:				
Dental Chair	7	0	0	7
Examination Light	7	0	0	7
Autoclave bench top	7	0	0	7
Sterilizing Units, Steam, Table top	7	0	0	7
Cabinets, Treatment, Dentistry	6	0	1	7
Tables, Instrument	7	0	0	7
Kick Buckets	6	0	1	7
Waste-Disposal Units, Sharp	5	0	2	7
Only for the facilities providing eye care services:				
Fundus Camera	1	0	4	5
LASER, OPTHALMIC, YAG	4	0	1	5
Ophthalmic Diagnostic Set	3	0	2	5

Note: 2- The total cannot add up to 7 (100%) for some medical devices which are available in the "other" categories and are available some CHC-3

Table CHC-3.9.1.1: Details of functionality status of medical devices in the community health centres (level 3) where the medical devices are available

Medical Devices	Availability reported	Functionality of the devices	
		Functional	Non-functional
		n	n
Stethoscope/ Stethoscope Binaural	7	6	1
Sphygmomanometer or BP apparatus/ Blood pressure Machine/Mobile/Blood Pressure manual	7	7	0

Urine glucose strips for domiciliary visits	5	3	2
Urine albumin strips/ Dipstick for urine albumin	3	3	0
Blood sugar assay	7	6	1
Blood cholesterol assay (Semi-automated Biochemistry analyser)	6	4	2
Electrocardiograph (ECG)	6	6	0
Peak flow meter	3	3	0
Weighing scale /Weighing Scales for adults	7	7	0
Measuring tape	7	7	0
Nebulizer	7	7	0
Torch	6	6	0
Gloves	7	7	0
Posters, flip charts, brochure and stickers on NCDs	7	7	0
Reporting Form	7	7	0
Food Models	6	6	0
Only for the facilities providing oral health services:			
Dental Chair	7	7	0
Examination Light	7	7	0
Autoclave bench top	7	7	0
Sterilizing Units, Steam, Table top	7	7	0
Cabinets, Treatment, Dentistry	6	6	0
Tables, Instrument	7	7	0
Kick Buckets	6	6	0
Waste-Disposal Units, Sharp	5	5	0
Only for the facilities providing eye care services:			
Fundus Camera	1	0	1
LASER, OPTHALMIC, YAG	4	3	1
Ophthalmic Diagnostic Set	3	3	0

Note: 2- The total cannot add up to 7 (100%) for some medical devices which are available in the "other" categories and are available some CHC-3

Table RH.1: The numbers of Referral hospitals covered in the survey by municipality

Municipality	Number of Referral hospitals
Ainaro	1
Baucau	1
Bobonaro	1
Covalima	1
Oecusse	1
Total	**5**

(A) <u>Availability of medical departments in referral hospitals</u>

Table: RH.2.1 Availability of different departments in the referral hospitals (N=5)

Departments	n
Internal medicine and pediatrics	
Yes, functional	5
Yes, non- functional	0
No	0
Total	**5**
Surgery and operating block	
Yes, functional	5
Yes, non- functional	0
No	0
Total	**5**

Obstetrics and Gynecology	
Yes, functional	5
Yes, non- functional	0
No	0
Total	**5**
Accident and Emergency section	
Yes, functional	4
Yes, non- functional	0
No	1
Total	**5**
Physiotherapy unit	
Yes, functional	3
Yes, non- functional	0
No	2
Total	**5**
Blood bank	
Yes, functional	3
Yes, non- functional	1
No	1
Total	**5**
High dependency unit	
Yes, functional	4
Yes, non- functional	0
No	1
Total	**5**

(B) Availability of staff in referral hospitals

Table RH.3.1: Availability of staff relevant to provide NCD related services in the referral hospitals (N=5)

Staff Categories	Available	Not available	Total
	n	n	n
General Doctors	5	0	5
Anaesthesiologists	4	1	5
Paediatrician	5	0	5
Obstetrician	5	0	5
Dentist	4	1	5
Internists	5	0	5
Nutritionist	5	0	5
Radiologists	2	3	5
Surgeons	4	1	5
Nurses	5	0	5
Dental nurse	5	0	5
Anaesthesia Nurses	5	0	5
Midwives	5	0	5
Laboratory Technicians	5	0	5
Pharmacy Technicians	5	0	5
Radiology technicians	5	0	5
Electro-medical Technicians	5	0	5
Public Health Technicians	4	1	5
Medical Record Technician	5	0	5
General Ancillary Staff	5	0	5

Table RH.3.1.1: Details of available staffs in the referral hospitals which reported as staff available

Staff Categories	Full time staff	Visiting staff	Average number of personnel
	n	n	
General Doctors (N=5)	5	3	18.2
Anaesthesiologists (N=4)	2	2	2
Paediatrician (N=5)	3	3	1.6
Obstetrician (N=5)	3	3	1.4
Dentist (N=4)	2	0	1.5
Internists (N=5)	3	3	1.4
Nutritionist (N=5)	5	2	2.6
Radiologists (N=2)	1	0	1.5
Surgeons (N=4)	3	2	1.3
Nurses (N=5)	5	4	49.2
Dental nurse (N=5)	5	0	2.2
Anaesthesia Nurses (N=5)	5	1	3.4
Midwives (N=5)	5	3	19.6
Laboratory Technicians (N=5)	5	3	11.4
Pharmacy Technicians (N=5)	5	2	7
Radiology technicians (N=5)	5	1	4
Electro-medical Technicians (N=5)	5	2	2.8
Public Health Technicians (N=4)	3	2	3.5
Medical Record Technician (N=5)	5	0	3
General Ancillary Staff (N=5)	3	4	50.8

(C) Availability of basic infrastructure and systems in in the referral hospitals

Table: RH.4.1: Availability of email or internet connection within the referral hospitals (N=5)

Access to email or internet connection within the facility	n
Yes, with a computer/ another device belonging to the facility	5
Yes, without a computer/ another devices, but availability of private devices	0
Not available	0
Total	**5**

Table: RH.4.1.1: Details of internet connectivity in the referral hospitals where internet facility is available (N=5)

Consistently of internet in the facility	n
Always available	4
Available for most of the days in a month	0
Available sometimes	1
Total	**5**

Table: RH.4.2: Availability of power supply, water and sanitation facility within the referral hospitals (N=5)

Availability of facilities	n
Power supply	
Yes, always at all times open for services	4
Yes, often available with some interruptions of less than 2 hours per day at times open for services	0

yes, sometimes available with frequent or prolonged interruptions of more than 2 hours per day at times open for services	1
Electricity not available	0
Total	**5**
Drinking water for patients	
Yes, always available at all times open for services	5
Yes, often available with some interruptions of less than 2 hours per day at times open for services	0
Sometimes available, with frequent or prolonged interruptions of more than 2 hours per day at times open for services	0
Drinking water not available	0
Total	**5**
Toilet on the premises for patients	
Yes, available and functional	4
yes, available but not functional	1
Toilet not available	0
Total	**5**

Table: RH.4.2.1: Details of sanitation facilities at the referral hospitals where toilet facilities are available (N=5)

Details of sanitation facility	n
Running water in the toilet	
Yes	5
No	0
Total	**5**
Soap in the toilet	
Yes	4
No	1
Total	**5**

Table: RH.4.3: Availability of emergency transportation system at the referral hospitals (N=5)

Availability of emergency transportation system	n
Availability of multifunctional vehicle, for emergency transportation for clients, either stationed at this facility or that the facility can call for	
Yes, with driver and fuel available for 24 hours	4
Yes, but driver and/or fuel not available for 24 hours	0
Not available	1
Total	**5**
Availability of an ambulance, for emergency transportation for clients that is either stationed at this facility or that the facility can call for	
Yes, with driver and fuel available for 24 hours	4
Yes, but driver and/or fuel not available for 24 hours	0
Not available	1
Total	**5**

Table: RH 4.4 Availability of basic laboratory services at the referral hospitals (N=5)

Availability of basic laboratory services	
Yes	5
No	0
Total	**5**

Table RH.4.4.1: Details of the laboratory services in the referral hospitals where laboratory services are available (N=5)

Details of laboratory services	n
Bio-chemistry	
Yes	4
No	1
Total	**5**
Hematology	
Yes	5
No	0
Total	**5**

Table RH.4.4.2: Details of the types of laboratory services available in the referral hospitals (N=5)

Details of services	n
Services to estimate blood sugar	
Yes	5
No	0
Total	**5**
Services to estimate urine ketone bodies	
Yes	5
No	0
Total	**5**
Services to estimate micro albuminuria	
Yes	**3**
No	**2**
Total	**5**
Services to estimate HbA1c	
Yes	**3**
No	**2**
Total	**5**
Services to estimate serum cholesterol	
Yes	**4**
No	**1**
Total	**5**
Services to estimate serum creatinine	
Yes	**4**
No	**1**
Total	**5**

Table RH.4.5: Availability of the radiology services in the referral hospitals (N=5)

Availability of the radiology services	n
Ultrasound scanning	
Yes	5
No	0
Total	**5**
Simple radiology	
Yes	5
No	0
Total	**5**
Contrast radiology	
Yes	3
No	2
Total	**5**

Table RH.4.6: Availability of physical separation between General OPD and wards for in-patient care in the referral hospitals (N=5)

Availability of physical separation between General OPD and wards for in-patient care	n
Yes	4
No	1
Total	**5**

(C) Availability of services related to Non-Communicable diseases in the referral hospitals

Screening services for Diabetes, Hypertension, Cardiovascular disease and Chronic Respiratory disease and for risk factors

Table RH.5.1: Availability of screening services NCDs in the referral hospitals (N=5)

Availability of screening services for diabetes, hypertension, cardiovascular disease and chronic respiratory disease	n
Yes	2
No	3
Total	**5**

Table RH.5.1.1: Details of screening services for NCDs in the referral hospitals where the services are available (N=2)

Details of screening services	n
Check urine albumin	
Yes, on all above 40 years	0
Yes, only for adults selected by staffs	2
Yes, on request by the person	0
No	0
Total	2
Check blood sugar capillary sample	
Yes, on all above 40 years	0
Yes, only for adults selected by staffs	2
Yes, on request by the person	0
No	0
Others	0
Total	2
Assess smoking status	
Yes	1
No	1
Total	**2**
Assess CVD risk	
Yes	1
No	1
Total	**2**
Measure Peak Expiratory Flow Rate (PEFR)	
Yes	0
No	2
Total	**2**
Screening for albuminuria	
Yes	0
No	2
Total	**2**

Table RH.5.1.2: Details of the steps followed for NCD positive patients after screening in the referral hospitals where the services are available (N=2)

Details of next steps after NCD screening	n
Refer all to higher care if the patients are screened positive for NCDs	
Yes	2
No	0
Total	**2**
Follow PEN protocol to decide on counsel or refer if the patients are screened positive	
Yes	2
No	0
Total	**2**

Table RH.5.2: Availability of NCD Clinics to follow up the diagnosed NCD patients in the referral hospitals (N=5)

Availability of NCD clinics to follow up the diagnosed NCD patients	n
Yes	3
No	2
Total	**5**

Table RH.5.3: Details of the availability of management services for NCD in the referral hospitals (N=2)

Availability of NCD management services	n
Services to manage Acute coronary event- myocardial infarction(heart attack), angina	
Yes	2
No	0
Total	**2**
Services to manage acute heart failure	
Yes	2
No	0
Total	**2**
Services to manage acute exacerbations of asthma and COPD using systemic steroids, inhaled beta agonists, and, if indicated, oral antibiotics and oxygen therapy	
Yes	2
No	0
Total	**2**
Services to manage acute stroke	
Yes	2
No	0
Total	**2**

Table RH.5.4 Availability of follow up and management services for NCD in the referral hospitals (N=2)

Availability of follow up and management services	n
follow up and management services for patients with hypertension	
Yes	2
No	0
Total	**2**
follow up and management services for patients with diabetes	
Yes	2
No	0
Total	**2**

follow up and management services for patients who have had cardiac events- myocardial infarction	
Yes	2
No	0
Total	**2**
follow up and management services for patients who have had a stroke	
Yes	2
No	0
Total	**2**

Table RH.5.5: Availability of rehabilitation services in the referral hospitals (N=2)

Availability of rehabilitation services	n
Yes	2
No	0
Total	**2**

Table RH.5.5.1: Details of the availability of rehabilitation services in the referral hospitals (N=2)

Details of rehabilitation services	n
Physiotherapy	
Yes	2
No	0
Total	**2**
Other services	
Yes	1
No	1
Total	**2**

Table RH.5.6: Details of the availability of other services in the referral hospitals (N=2)

Availability of the other services	n
Treat acute pharyngitis (children) to prevent rheumatic fever	
Yes	2
No	0
Total	**2**
Provide prophylaxis treatment of penicillin for rheumatic fever or established rheumatic heart disease	
Yes	1
No	1
Total	**2**

Screening services for cancers

Table RH.5.7: Availability of cancer screening or related services in the referral hospitals (N=5**)**

Availability of cancer screening /related services (within the facility or through home visits)	n
Yes	2
No	3
Total	5

Table RH.5.7.1: Details of cancer screening or related services in the referral hospitals where cancer screening services are available (N=2)

Details of cancer screening or related services	n
Provide vaccination against HPV as per EPI protocol	
Yes	1
No	1
Total	**2**

Refer all women presenting abnormal vaginal bleeding, foul smelling discharge or pain during vaginal intercourse as per PEN protocol to the National hospitals	
Yes	2
No	0
Total	**2**
Conduct health education sessions about breast cancer (including self-exploration for early detection)	
Yes	1
No	1
Total	**2**
Refer all women presenting with breast lump or any other breast problems as per PEN protocol	
Yes	1
No	1
Total	**2**
Health education about prevention and early identification of symptoms of oral cancer	
Yes	1
No	1
Total	**2**
Screen people using tobacco (smoking or smokeless) or/and using areca nut as per PEN protocol	
Yes	1
No	1
Total	**2**
Use of Oral immediate release morphine and injectable morphine	
Yes	1
No	1
Total	**2**

Mental Health Services

Table RH.5.8: Availability of mental health services in the referral hospitals (N=5)

Availability of mental health services (within the facility or through home visits)	n
Yes	1
No	4
Total	**5**

Table RH.5.8.1: Details of mental health services in the referral hospitals where mental health services are available (N=1)

Details of mental health services	n
Mental health promotion in the community	
Yes	1
No	0
Total	**1**
Screening and proactive case finding of psychosis, depression, and anxiety disorders	
Yes	1
No	0
Total	**1**
Screening for detection of dementia	
Yes	1
No	0
Total	**1**
Diagnosis of childhood Attention Deficit Hyperactivity Disorder	
Yes	1
No	0
Total	**1**

Diagnosis of childhood autism	
Yes	1
No	0
Total	**1**
Diagnosis and management of schizophrenia	
Yes	1
No	0
Total	**1**
Diagnosis and management depression	
Yes	1
No	0
Total	**1**
Diagnosis and management of affective bipolar disease	
Yes	1
No	0
Total	**1**
Diagnosis and management of anxiety	
Yes	1
No	0
Total	**1**
Diagnosis and management of epilepsy	
Yes	1
No	0
Total	**1**
Counselling to patient with mental problem and family	
Yes	1
No	0
Total	**1**
Management of prolonged seizures or status epileptics	
Yes	1
No	0
Total	**1**
Diagnostic and management of illicit drug abuse	
Yes	1
No	0
Total	**1**
Follow up of patients diagnosed with mental illnesses to check on continuation of treatment	
Yes	1
No	0
Total	**1**

Oral health services

Table RH.5.9: Availability of oral health services in the referral hospitals (N=5)

Availability of oral health services	n
Offer services of identifying and refer any oral/dental problems (within the facility or through home visits)	
Yes	5
No	0
Total	**5**
Offer services of identifying common dental problems requiring interventions	
Yes	5
No	0
Total	**5**

Table RH.5.9.1: Details of oral health services in the referral hospitals where oral health services are available (N=5)

Details of oral health services	n
Scaling (dental cleaning)	
Yes	4
No	1
Total	**5**
Simple tooth extraction	
Yes	4
No	1
Total	**5**
Simple composite restoration	
Yes	**5**
No	**0**
Total	**5**
Complex composite resin restoration	
Yes	**3**
No	**2**
Total	**5**
Oral antimicrobials for oral infections	
Yes	**5**
No	**0**
Total	**5**
Incision & drainage of dento-alveolar abscess	
Yes	4
No	1
Total	**5**
Root Canal Treatment (RCT)	
Yes	**3**
No	**2**
Total	**5**
Oral health promotion activities in schools	
Yes	1
No	4
Total	**5**

Eye health services

Table RH.6.1: Availability of eye health services in the referral hospitals (N=5)

Availability of eye health services or related services (within the facility or through home visits)	n
Yes	**5**
No	**0**
Total	**5**

Table RH.6.1.1: Details of eye health services in the referral hospitals where eye health services are available (N=5)

Details of eye health services	n
Identification and treatment of suspected conjunctivitis	
Yes	**5**
No	**0**
Total	**5**
Diagnosis and treatment of cataract	

Yes	4
No	1
Total	**5**
Diagnosis and treatment of glaucoma	
Yes	4
No	1
Total	**5**
Diagnosis and treatment of eye tumor	
Yes	**3**
No	**2**
Total	**5**
Diagnosis and treatment of granuloma	
Yes	**3**
No	**2**
Total	**5**
Diagnosis and treatment of chalazion	
Yes	4
No	1
Total	**5**
Diagnosis and treatment of light keratitis	
Yes	**5**
No	**0**
Total	**5**
Diagnosis and treatment of dacrocytes	
Yes	**3**
No	**2**
Total	**5**
Diagnosis and treatment of hyphaemia	
Yes	4
No	1
Total	**5**
Diagnosis and treatment of retinal detachment	
Yes	**2**
No	**3**
Total	**5**
Diagnosis and treatment of blunt ophthalmology trauma	
Yes	**3**
No	**2**
Total	**5**

(R) Availability of registers for patients screened for NCDs in the referral hospitals

Table RH.7.1: Availability of individual patient records for NCD related services in the referral hospitals (N=5**)**

Availability of individual patient records	n
Yes	4
No	1
Total	**5**

Table RH.7.1.1: Details of individual patient records for NCD related services in the referral hospitals where individual patient records are available (N=4)

Details of individual patient records	n
Paper based mode is used for keeping of records	3
electronic mode is used for keeping of records	1

Total	**4**

Table RH.7.1.2: Availability of patient registers for diabetes and hypertension in the referral hospitals where the records/registers are available (N=4)

Patient Registers	n
Availability of register for patients screened for Diabetes	
Yes, observed	2
Yes, reported but not observed	0
No	2
Total	**4**
Availability of register for patients screened for Hypertension	
Yes, observed	2
Yes, reported but not observed	0
No	2
Total	**4**
Availability of register for patients managed for Diabetes	
Yes, observed	2
Yes, reported but not observed	1
No	1
Total	**4**
Availability of register for patients managed for Hypertension	
Yes, observed	2
Yes, reported but not observed	1
No	1
Total	**4**

Table RH.7.1.3: Availability of facility to maintain records in the referral hospitals for contributing to the cancer registry where records/registers are available (N=4)

Availability of facility to maintain records for cancer registry	n
Yes, observed	1
Yes, reported but not observed	2
No	1
Total	**4**

Table RH.7.1.4: Availability of facility to maintain records in the referral hospitals for tracking of patients where records/registers are available (N=4)

Availability of facility to maintain records for tracking of patients	
Yes	3
No	1
Total	**4**

(S) Availability and use of NCD related guidelines in the referral hospitals

Table RH.8.1: Availability of NCD related guidelines in the referral hospitals (N=5)

Availability of WHO PEN or other guidelines for screening of NCDs	n
Yes, observed	1
Yes, reported but not observed	2
No	2
Total	**5**

Table RH.8.1.1: Details of available management guidelines in the referral hospitals (N=3)

Management guideline also available as an algorithm forms for easy reference	n
Yes, observed and displayed for easy reference	1
Yes, observed but not displayed	2
Yes, reported but not observed	0
No	0
Total	**3**

Table RH.8.2: Availability of WHO-CVD risk chart and referral protocols and guidelines in the referral hospitals (N=5)

WHO-CVD Risk Chart	n
Yes, observed	1
Yes, reported but not observed	1
No	3
Total	**5**
Referral protocols and guidelines	**n**
Yes, observed	2
Yes, reported but not observed	3
No	0
Total	**5**

Table RH.8.3: Availability of protocol for management of hypertension in the referral hospitals (N=5)

Availability of protocol for management of hypertension	n
Yes, observed	2
Yes, reported but not observed	3
No	0
Total	**5**

Table RH.8.3.1: Details of available management guidelines for hypertension in the referral hospitals (N=5)

Management guideline for hypertension also available as an algorithm forms for easy reference	n
Yes, observed	2
Yes, observed but not displayed	1
Yes, reported but not observed	2
No	0
Total	**5**

Table RH.8.4: Availability of protocol for management of diabetes in the referral hospitals (N=5)

Availability of protocol for management of diabetes	n
Yes, observed	2
Yes, reported but not observed	3
No	0
Total	**5**

Table RH.8.4.1: Details of available management guidelines for diabetes in the referral hospitals (N=5)

Management guideline for diabetes also available as an algorithm forms for easy reference	n
Yes, observed	2
Yes, observed but not displayed	1
Yes, reported but not observed	2
No	0
Total	**5**

Table RH.8.5: Availability of protocol for management of Chronic Respiratory diseases in the referral hospitals (N=5)

Availability of protocol for management of Chronic Respiratory diseases	n
Yes, observed	**3**
Yes, reported but not observed	**2**
No	**0**
Total	**5**

Table RH.8.5.1: Details of available management guidelines for Chronic Respiratory diseases in the referral hospitals (N=5)

Management guideline for chronic respiratory diseases also available as an algorithm forms for easy reference	n
Yes, observed	2
Yes, observed but not displayed	1
Yes, reported but not observed	2
No	0
Total	**5**

Table RH.8.6: Availability of protocol for management of exacerbated asthma or COPD in the referral hospitals (N=5)

Availability of protocol for management of exacerbated asthma or COPD	n
Yes, observed	**3**
Yes, observed but not displayed	**0**
Yes, reported but not observed	**2**
No	**0**
Total	**5**

Table RH.8.6.1: Details of available management guidelines for exacerbated asthma or COPD in the referral hospitals (N=3)

Management guideline for exacerbated asthma or COPD also available as an algorithm forms for easy reference	n
Yes, observed and displayed for easy reference	3
Yes, observed but not displayed	0
Yes, reported but not observed	0
No	0
Total	**3**

(T) Trained staffs for NCD services

Table RH.9.1: Availability of trained staff to deliver NCD services at referral hospitals (N=5)

Referral hospitals with trained staffs	n
Doctors trained within last 5 years for diabetes screening and care	
Yes	3
No	2
Total	**5**
Nurses trained within last 5 years for diabetes screening and care	
Yes	2
No	3
Total	**5**
Doctors trained within last 5 years for hypertension screening and care	
Yes	3

No	2
Total	**5**
Nurses trained within last 5 years for hypertension screening and care	
Yes	3
No	2
Total	**5**
Doctors trained within last 5 years for CVD screening and care	
Yes	2
No	3
Total	**5**
Nurses trained within last 5 years for CVD screening and care	
Yes	2
No	3
Total	**5**
Doctors trained within last 5 years or identification of mental health illness	
Yes	1
No	4
Total	**5**
Nurses trained within last 5 years for identification of mental health illness	
Yes	1
No	4
Total	**5**
Doctors trained within last 5 years for diagnosis of chronic respiratory diseases	
Yes	3
No	2
Total	**5**
Nurses trained within last 5 years for diagnosis of chronic respiratory diseases	
Yes	3
No	2
Total	**5**

(U) Availability of the key medicines related to NCDS in the referral hospitals

Table RH.10.1: Availability of the key medicines related to NCDs in the referral hospitals (N=5)

Generic drug name	Available, at least one not expired	Available but expired	Reported available but not seen	Not available today	Never available	Total
	n	n	n	n	n	n
Medicines to treat cardiovascular diseases/hypertension						
Aspirin	4	0	0	1	0	5
Hydrochlorothiazide	3	0	0	2	0	5
Enalapril	0	1	0	1	3	5
Amlodipine	5	0	0	0	0	5
Nifedipine retard	5	0	0	0	0	5
Atenolol	4	0	0	1	0	5
Espironolactona,	3	0	0	0	0	3
Furosemide	2	0	0	0	0	2
Digoxin	2	0	0	0	0	2
Metyldopa	1	0	0	0	0	1
Isosorbide	1	0	0	0	0	1
Captopril	3	0	0	1	0	4
bisoprilol	2	0	0	0	0	2

Atorvastatin and Simvastatin	1	0	0	0	0	1
Propanolol	1	0	0	0	0	1
Medicines to treat Diabetes						
Insulin	2	1	0	2	0	5
Metformin	4	0	0	1	0	5
Glibenclamide	5	0	0	0	0	5
Medicines to treat asthma/ Chronic respiratory disease						
Salbutamol tablets	5	0	0	0	0	5
Salbutamol inhalers	4	0	0	1	0	0
Beclamathazone inhaler	5	0	0	0	0	5
Oxygen	5	0	0	0	0	5
Theophylline	3	0	0	0	0	3
Dexamethasone	1	0	0	0	0	1
Salbutamol nebulizer	1	0	0	0	0	1
Aminophylline(IV)	1	0	0	0	0	1
Prednisone	1	0	0	0	0	1
Antibiotics	5	0	0	0	0	5
Amoxicillin	1	0	0	0	0	1
Medicines for neurological and neuropsychiatric conditions, as well as conditions related to pain						
Carbamazepine	3	0	0	0	0	3
Phenytoin	1	0	0	0	0	1
Diazepam	1	0	0	0	0	1
Isosorbide	1	0	0	0	0	1
Ergotamine	1	0	0	0	0	1
Allopurinol	1	0	0	0	0	1

Note: 1- The total cannot add up to 5 (100%) for some medicines which are available in the “other” categories and are available some RHs

Table RH.10.1.1: Details regarding the stock of the key medicines related to NCDs in the referral hospitals in which the medicines are available

Generic drug name	Availability reported	Any stock out in the past 3 Months among available medicines	
		Yes	No
		n	n
Medicines to treat cardiovascular diseases/hypertension			
Aspirin	5	2	3
Hydrochlorothiazide	5	3	2
Enalapril	2	1	1
Amlodipine	5	1	4
Nifedipine retard	5	2	3
Atenolol	5	3	2
Spironolactone,	3	3	0
Furosemide	1	1	0
Digoxin	2	2	0
Methyldopa	2	1	1
Isosorbide	1	0	1
Captopril	4	3	1
Bisoprilol	2	2	0
Atorvastatin and Simvastatin	5	4	1
Propranolol	1	1	0
Medicines to treat Diabetes			

Insulin	5	4	1
Metformin	5	4	1
Glibenclamide	5	3	2
Medicines to treat asthma/ Chronic respiratory disease			
Salbutamol tablets	5	2	3
Salbutamol inhalers	5	2	3
Beclamathazone inhaler	5	2	3
Oxygen	5	3	2
Theophylline	3	2	1
Dexamethasone	1	1	0
Salbutamol nebulizer	1	0	1
Aminophylline(IV)	1	0	1
Prednisone	1	0	1
Antibiotics	5	3	2
Amoxicillin	1	0	1
Medicines for neurological and neuropsychiatric conditions, as well as conditions related to pain			
Carbamazepine	3	2	0
Phenytoin	1	1	0
Diazepam	1	1	0
Isosorbide	1	1	0
Ergotamine	1	1	0
Allopurinol	1	1	0

Note: 1- The total cannot add up to 5 (100%) for some medicines which are available in the "other" categories and are available in some RHs

(V) Availability of medical devices in the referral hospitals on survey date

Table RH.11.1: Availability of medical devices in the referral hospitals (N=5)

Medical devices	Observed	Reported not Observed	Not available	Total
	n	n	n	n
Stethoscope/ Stethoscope Binaural	5	0	0	5
Sphygmomanometer or BP apparatus/ Blood pressure Machine/Mobile/Blood Pressure manual	5	0	0	5
Urine glucose strips for domiciliary visits	3	1	1	5
Urine albumin strips/ Dipstick for urine albumin	4	0	1	5
Blood sugar assay	4	0	1	5
Blood cholesterol assay (Semi-automated Biochemistry analyser)	4	0	1	5
Electrocardiograph (ECG)	5	0		5
Peak flow meter	2	0	3	5
Weighing scale /Weighing Scales for adults	5	0	0	5
Measuring tape	5	0	0	5
Nebulizer	5	0	0	5
Torch	5	0	0	5
Gloves	5	0	0	5
Posters, flip charts, brochure and stickers on NCDs	1	3	1	5
Reporting Form	2	2	1	5
Food Models	4	0	1	5
Only for the facilities providing oral health services:				
Dental Chair	5	0	0	5
Examination Light	4	0	1	5

Autoclave bench top	3	1	1	5
Sterilizing Units, Steam, Table top	4	0	1	5
Cabinets, Treatment, Dentistry	4	0	1	5
Tables, Instrument	5	0	0	5
Kick Buckets	3	1	1	5
Waste-Disposal Units, Sharp	3	0	0	2
Only for the facilities providing eye care services:				
Fundus Camera	3	1	1	5
LASER, OPTHALMIC, YAG	4	0	1	5
Ophthalmic Diagnostic Set	5	0	0	5

Table RH.11.1.1: Details of functionality status of medical devices in the referral hospitals where the medical devices are available

Medical Devices	Availability reported	Functionality of the devices	
		Functional	Non-functional
		n	n
Stethoscope/ Stethoscope Binaural	5	5	0
Sphygmomanometer or BP apparatus/ Blood pressure Machine/Mobile/Blood Pressure manual	5	5	0
Urine glucose strips for domiciliary visits	4	3	1
Urine albumin strips/ Dipstick for urine albumin	4	4	0
Blood sugar assay	4	4	0
Blood cholesterol assay (Semi-automated Biochemistry analyser)	4	4	0
Electrocardiograph (ECG)	5	5	0
Peak flow meter	2	2	0
Weighing scale /Weighing Scales for adults	5	5	0
Measuring tape	5	5	0
Nebulizer	5	5	0
Torch	5	5	0
Gloves	5	5	0
Posters, flip charts, brochure and stickers on NCDs	4	3	1
Reporting Form	4	4	0
Food Models	4	4	0
Only for the facilities providing oral health services:			
Dental Chair	5	5	0
Examination Light	4	4	0
Autoclave bench top	4	4	0
Sterilizing Units, Steam, Table top	4	4	0
Cabinets, Treatment, Dentistry	4	3	1
Tables, Instrument	5	3	2
Kick Buckets	4	3	1
Waste-Disposal Units, Sharp	3	3	0
Only for the facilities providing eye care services:			
Fundus Camera	4	4	0
LASER, OPTHALMIC, YAG	4	4	0
Ophthalmic Diagnostic Set	5	5	0

(A) Availability of medical departments in National hospital

Table NH.1: Availability of different departments in the national hospital (N=1)

Departments	Availability and functionality status
Internal medicine and pediatrics	Yes available and functional
Surgery and operating block	Yes available and functional
Obstetrics and Gynecology	Yes available and functional
Accident and Emergency section	Yes available and functional
Physiotherapy unit	Yes available and functional
Blood bank	Yes available and functional
Intensive care unit	Yes available and functional
High dependency unit	Yes available and functional
Stroke unit	Yes available and functional

(B) Availability of staff in national hospital

Table NH.2.1: Availability of staff relevant to provide NCD related services in the national hospital (N=1)

Staff Categories	Availability status
General Doctors	Yes, available
Anesthesiologists	Yes, available
Pediatrician	Yes, available
Obstetrician	Yes, available
Dentist	Yes, available
Internists	Yes, available
Nutritionist	Yes, available
Radiologists	Yes, available
Surgeons	Yes, available
Nurses	Yes, available
Anesthesia Nurses	Yes, available
Midwives	Yes, available
Laboratory Technicians	Yes, available
Pharmacy Technicians	Yes, available
Radiology technicians	Yes, available
Electro-medical Technicians	Yes, available
Public Health Technicians	Yes, available
Medical Record Technician	Yes, available
General Ancillary Staff	Yes, available

Table NH.2.1.1: Details of available staffs in the national hospital

Staff Categories	Full time staff	Visiting staff
General Doctors (N=1)	No	No
Anesthesiologists (N=1)	No	No
Pediatrician (N=1)	No	No
Obstetrician (N=1)	No	No
Dentist (N=1)	No	No
Internists (N=1)	No	No
Nutritionist (N=1)	No	No
Radiologists (N=1)	No	No
Surgeons (N=1)	No	No
Nurses (N=1)	No	No
Anesthesia Nurses (N=1)	No	No
Midwives (N=1)	No	No
Laboratory Technicians (N=1)	No	No
Pharmacy Technicians (N=1)	No	No
Radiology technicians (N=1)	No	No

Electro-medical Technicians (N=1)	No	No
Public Health Technicians (N=1)	No	No
Medical Record Technician (N=1)	No	No
General Ancillary Staff (N=1)	No	No

(C) Availability of basic infrastructure and systems in the national hospital

Table: NH.3.1: Availability of email or internet connection within the national hospital (N=1)

Access to email or internet connection within the facility	Yes available , with a computer/ another device belonging to the facility

Table: 3.1.1: Details of internet connectivity in the national hospital

Consistently of internet in the facility	Always available

Table: NH.3.2: Availability of power supply, water and sanitation facility within the national hospital (N=1)

Availability of facilities	Availability status
Power supply	Yes, always at all times open for services
Drinking water for patients	Yes, always available at all times open for services
Toilet on the premises for patients	Yes, available and functional

Table: NH.3.2.1: Details of sanitation facilities at the national hospital (N=1)

Details of sanitation facility	Availability status
Running water in the toilet	Yes
Soap in the toilet	Yes

Table: NH.3.3: Availability of emergency transportation system at the national hospital (N=1)

Availability of emergency transportation system	Availability status
Availability of multifunctional vehicle, for emergency transportation for clients, either stationed at this facility or that the facility can call for	Yes available , with driver and fuel available for 24 hours
Availability of an ambulance, for emergency transportation for clients that is either stationed at this facility or that the facility can call for	Yes available , with driver and fuel available for 24 hours

Table: NH.3.4 Availability of basic laboratory services at the national hospital (N=1**)**

Availability of basic laboratory services	Yes

Table NH.3.4.1: Details of the laboratory services in the national hospital (N=1)

Details of laboratory services	Availability status
Bio-chemistry	Yes
Hematology	Yes

Table NH.3.4.2: Details of the types of laboratory services available in the national hospital (N=1)

Details of services	Availability status
Services to estimate blood sugar	Yes
Services to estimate urine ketone bodies	Yes
Services to estimate micro albuminuria	Yes
Services to estimate HbA1c	No
Services to estimate serum cholesterol	Yes
Services to estimate serum creatinine	Yes

Table NH.3.5: Availability of the radiology services in the national hospital (N=1)

Availability of the radiology services	Availability status
Ultrasound scanning	Yes
Simple radiology	Yes
Contrast radiology	Yes

Table 3.6: Availability of physical separation between General OPD and wards for in-patient care in the national hospital (N=1)

Availability of physical separation between General OPD and wards for in-patient care	Yes

(D) Availability of services related to Non-Communicable diseases in the national hospital

Screening services for Diabetes, Hypertension, Cardiovascular disease and Chronic Respiratory disease and for risk factors

Table NH.4.1: Availability of screening services NCDs in the national hospital (N=1)

Availability of screening services for diabetes, hypertension, cardiovascular disease and chronic respiratory disease	Yes

Table 5.1.1: Details of screening services for NCDs in the national hospital (N=1**)**

Details of screening services	Availability status
Check urine albumin	Yes, only for adults selected by staffs
Check blood sugar capillary sample	Yes, only for adults selected by staffs
Assess smoking status	Yes
Assess CVD risk	Yes
Measure Peak Expiratory Flow Rate (PEFR)	Yes
Screening for albuminuria	Yes

Table NH.4.1.2: Details of the steps followed for NCD positive patients after screening in the national hospital (N=1)

Details of next steps after NCD screening	Availability status
Refer all to higher care if the patients are screened positive for NCDs	Yes
Follow PEN protocol to decide on counsel or refer if the patients are screened positive	Yes

Table NH.4.2: Availability of NCD Clinics to follow up the diagnosed NCD patients in the national hospital (N=1)

Availability of NCD clinics to follow up the diagnosed NCD patients	Yes

Table NH.4.3: Details of the availability of management services for NCD in the national hospital (N=1)

Availability of NCD management services	Availability status
Services to manage Acute coronary event- myocardial infarction (heart attack), angina	Yes
Services to manage acute heart failure	Yes
Services to manage acute exacerbations of asthma and COPD using systemic steroids, inhaled beta agonists, and, if indicated, oral antibiotics and oxygen therapy	Yes
Services to manage acute stroke	Yes
Services to manage percutaneous coronary intervention for acute myocardial infarction	Yes

Table NH.4.4 Availability of follow up and management services for NCD in the national hospital (N=1)

Availability of follow up and management services	Availability status
follow up and management services for patients with hypertension	Yes
follow up and management services for patients with diabetes	Yes
follow up and management services for patients who have had cardiac events-myocardial infarction	Yes
follow up and management services for patients who have had a stroke	Yes

Table NH.4.5: Availability of rehabilitation services in the national hospital (N=1)

Availability of rehabilitation services	**Yes**

Table NH.4.5.1: Details of the availability of rehabilitation services in the national hospital (N=1)

Details of rehabilitation services	Availability status
Physiotherapy	Yes
Other services	Yes

Table NH.4.6: Details of the availability of other services in the national hospital (N=1)

Availability of the other services	Availability status
Treat acute pharyngitis (children) to prevent rheumatic fever	Yes
Provide prophylaxis treatment of penicillin for rheumatic fever or established rheumatic heart disease	Yes

Screening services for cancers

Table NH.4.7: Availability of cancer screening or related services in the national hospital (N=1)

Availability of cancer screening /related services (within the facility or through home visits)	Yes

Table NH.4.7.1: Details of cancer screening or related services in the national hospital (N=1)

Details of cancer screening or related services	Availability status
Provide vaccination against HPV as per EPI protocol	No
Refer all women presenting abnormal vaginal bleeding, foul smelling discharge or pain during vaginal intercourse as per PEN protocol to the National hospitals	Yes
Conduct health education sessions about breast cancer (including self-exploration for early detection)	Yes
Refer all women presenting with breast lump or any other breast problems as per PEN protocol	Yes
Health education about prevention and early identification of symptoms of oral cancer	Yes
Screen people using tobacco (smoking or smokeless) or/and using areca nut as per PEN protocol	Yes
Use of Oral immediate release morphine and injectable morphine	Yes

Table NH.4.8: Availability of surgical treatment services for cancers in the national hospital (N=1)

Availability of surgical treatment services for cancers	**Yes**

Table NH.4.8.1: Details of surgical treatment services for cancers in the national hospital (N=1)

Details of surgical treatment services for cancers	Availability status
Provide surgical treatment services for oral cancer	No
Provide surgical treatment services for cervical cancer	No
Provide surgical treatment services for eye cancer	Yes

Table NH.4.9: Availability of chemotherapy service for cancers in the national hospital (N=1)

Availability of chemotherapy services for cancers	No

Table NH.4.9.1: Details of chemotherapy service for cancers in the national hospital (N=1)

Details of chemotherapy service for cancers	Availability status
Provide surgical treatment services for oral cancer	No
Provide surgical treatment services for cervical cancer	No
Provide surgical treatment services for eye cancer	No

Mental Health services

Table NH.5.1: Availability of mental health services in the national hospital (N=1)

Availability of mental health services (within the facility or through home visits)	Yes

Table NH.5.1.1: Details of mental health services in the national hospital (N=1)

Details of mental health services	Availability status
Mental health promotion in the community	Yes
Screening and proactive case finding of psychosis, depression, and anxiety disorders	Yes
Screening for detection of dementia	Yes
Diagnosis of childhood attention deficit hyperactivity disorder	Yes
Diagnosis of childhood autism	Yes
Diagnosis and management of schizophrenia	Yes
Diagnosis and management depression	Yes
Diagnosis and management of affective bipolar disease	Yes
Diagnosis and management of anxiety	Yes
Diagnosis and management of epilepsy	Yes
Counselling to patient with mental problem and family	Yes
Management of prolonged seizures or status epileptics	Yes
Diagnostic and management of illicit drug abuse	Yes
Management of refractory psychosis with clozapine	No
Surgery for refractory epilepsy	No
Follow up of patients diagnosed with mental illnesses to check on continuation of treatment	Yes

Oral health services

Table NH.5.2: Availability of oral health services in the national hospital (N=1)

Availability of oral health services	Availability status
Offer services of identifying and refer any oral/dental problems (within the facility or through home visits)	Yes
Offer services of identifying common dental problems requiring interventions	Yes

Table NH.5.2.1: Details of oral health services in the national hospital (N=1)

Details of oral health services	Availability status
Scaling (dental cleaning)	Yes
Simple tooth extraction	Yes
Simple composite restoration	Yes
Complex composite resin restoration	Yes
Oral antimicrobials for oral infections	Yes
Incision & drainage of dento-alveolar abscess	Yes
Root Canal Treatment (RCT)	Yes

Dental crown exposure	Yes
Oral health promotion activities in schools	Yes

Eye health services

Table NH.5.3: Availability of eye health services in the national hospital (N=1)

Availability of eye health services or related services (within the facility or through home visits)	Yes

Table NH.5.3.1: Details of eye health services in the national hospital (N=1)

Details of eye health services	Availability status
Identification and treatment of suspected conjunctivitis	Yes
Retinopathy screening	Yes
Treatment for retinopathy	Yes
Diagnosis and treatment of glaucoma	Yes
Diagnosis and treatment of eye tumor	Yes
Diagnosis and treatment of granuloma	Yes
Diagnosis and treatment of chalazion	Yes
Diagnosis and treatment of light keratitis	Yes
Diagnosis and treatment of dacrocytes	Yes
Diagnosis and treatment of hyperemia	Yes
Diagnosis and treatment of retinal detachment	Yes
Diagnosis and treatment of blunt ophthalmology trauma	Yes
Treatment for visual refraction abnormalities	Yes
Treatment for strabismus	Yes
Detection of pediatric retinoblastoma and referral	Yes
Cataract extraction and insertion of intraocular lens	Yes

Table NH.5.4: Availability of ophthalmologic surgeries service in the national hospital (N=1)

Availability of ophthalmologic surgeries service	**Yes**

Table NH.5.4.1: Details of ophthalmologic surgeries services in the national hospital (N=1)

Details of ophthalmologic surgeries services	Availability status
Ophthalmologic surgeries services for Chalazion	Yes
Ophthalmologic surgeries services for palpebral abscess	Yes
Ophthalmologic surgeries services for pterygium	Yes
Ophthalmologic surgeries services for tarsotomy	Yes
Ophthalmologic surgeries services for glaucoma	Yes
Ophthalmologic surgeries services for evisceration	Yes
Ophthalmologic surgeries services for tumor biopsy	Yes

(W) Availability of registers for patients screened for NCDs in the National hospital

Table NH.6.1: Availability of individual patient records for NCD related services in the national hospital (N=1)

Availability of individual patient records	**Yes**

Table NH.6.1.1: Details of individual patient records for NCD related services in the national hospital (N=1)

Details of individual patient records	Yes, available

Table NH.6.1.2: Availability of patient registers for diabetes and hypertension in the national hospital (N=1)

Patient Registers	Availability status
Availability of register for patients screened for diabetes	Yes
Availability of register for patients screened for hypertension	Yes
Availability of register for patients managed for diabetes	Yes
Availability of register for patients managed for hypertension	Yes

Table NH.6.1.3: Availability of facility to maintain records in the national hospital for contributing to the cancer registry (N=1)

Availability of facility to maintain records for cancer registry	**Yes**

Table NH.6.1.4: Availability of facility to maintain records in the national hospital for tracking of patients (N=1)

Availability of facility to maintain records for tracking of patients	Yes

(X) Availability and use of NCD related guidelines in the national hospital

Table NH. 7.1: Availability of NCD related guidelines in the national hospital (N=1)

Availability of WHO PEN or other guidelines for screening of NCDs	Yes

Table NH.7.1.1: Details of available management guidelines in the national hospital (N=1)

Management guideline also available as an algorithm forms for easy reference	Yes

Table NH.7.2: Availability of WHO-CVD risk chart and referral protocols and guidelines in the national hospital (N=1)

Availability of WHO-CVD risk chart and referral protocols and guidelines	Availability status
WHO-CVD Risk Chart	Yes
Referral protocols and guidelines	Yes

Table NH.7.3: Availability of protocol for management of hypertension in the national hospital (N=1)

Availability of protocol for management of hypertension	**Yes**

Table NH.7.3.1: Details of available management guidelines for hypertension in the national hospital (N=1)

Management guideline for hypertension also available as an algorithm forms for easy reference	Availability status
Yes, observed	Yes

Table NH.7.4: Availability of protocol for management of diabetes in the national hospital (N=1)

Availability of protocol for management of diabetes	Availability status
Yes, observed	Yes

Table NH.7.4.1: Details of available management guidelines for diabetes in the national hospital (N=1)

Management guideline for diabetes also available as an algorithm forms for easy reference	Availability status
Yes, observed	Yes

Table NH.7.5: Availability of protocol for management of Chronic Respiratory diseases in the national hospital (N=1)

Availability of protocol for management of Chronic Respiratory diseases	Availability status
Yes, observed	Yes

Table NH.7.5.1: Details of available management guidelines for Chronic Respiratory diseases in the national hospital (N=1)

Management guideline for chronic respiratory diseases also available as an algorithm forms for easy reference	Availability status
Yes, observed	Yes

Table NH.7.6: Availability of protocol for management of exacerbated asthma or COPD in the national hospital (N=1)

Availability of protocol for management of exacerbated asthma or COPD	Availability status
Yes, observed	Yes

Table NH.7.6.1: Details of available management guidelines for exacerbated asthma or COPD in the national hospital (N=)

Management guideline for exacerbated asthma or COPD also available as an algorithm forms for easy reference	Availability status
Yes, observed	Yes

(Y) Trained staffs for NCD services

Table NH.8.1: Availability of trained staff to deliver NCD services at national hospital (N=1)

National hospital with trained staffs	Availability status
Doctors trained within last 5 years for diabetes screening and care	Yes
Nurses trained within last 5 years for diabetes screening and care	Yes
Doctors trained within last 5 years for hypertension screening and care	Yes
Nurses trained within last 5 years for hypertension screening and care	Yes
Doctors trained within last 5 years for CVD screening and care	Yes
Nurses trained within last 5 years for CVD screening and care	Yes
Doctors trained f within last 5 years or identification of mental health illness	Yes
Nurses trained within last 5 years for identification of mental health illness	Yes
Doctors trained within last 5 years for diagnosis of chronic respiratory diseases	Yes
Nurses trained within last 5 years for diagnosis of chronic respiratory diseases	Yes

(D) Availability of the key medicines related to NCDS in the National hospital

Table NH.9.1: Availability of the key medicines related to NCDs in the national hospital (N=1)

Generic drug name	Available, at least one not expired	Not available today	Never available
	n	n	n
Aspirin	Yes		
Hydrochlorothiazide	Yes		
Enalapril			Yes
Amlodipine	Yes		
Nifedipine retard	Yes		
Atenolol			Yes
Captopril	Yes		
Insulin	Yes		
Metformin	Yes		

Glibenclamid	Yes		
Atorvastatin and Simvastatin		Yes	
Salbutamol tablets	Yes		
Salbutamol inhalers	Yes		
Beclamathazone inhaler	Yes		
Oxygen	Yes		
Antibiotics	Yes		

Table NH.9.1.1: Details regarding the stock of the key medicines related to NCDs in the national hospital in which the medicines are available

Generic drug name	Availability reported	Any stock out in the past 3 Months among available medicines
		Availability status
Aspirin	Yes	Yes
Hydrochlorothiazide	Yes	yes
Enalapril	No	-
Amlodipine	Yes	No
Nifedipine retard	Yes	No
Atenolol	No	-
Captopril		No
Insulin	Yes	No
Metformin	Yes	No
Glibenclamid	Yes	No
Atorvastatin and Simvastatin	Yes	No
Salbutamol tablets		No
Salbutamol inhalers		No
Beclamathazone inhaler		No
Oxygen		No
Antibiotics		No

(E) <u>Availability of medical devices in the National hospital on survey date</u>

Table NH.10.1: Availability of medical devices in the national hospital (N=1)

Medical devices	Observed	Reported not Observed
	n	n
Stethoscope/ Stethoscope Binaural	Yes	
Sphygmomanometer or BP apparatus/ Blood pressure Machine/Mobile/Blood Pressure manual	Yes	
Urine glucose strips for domiciliary visits	Yes	
Urine albumin strips/ Dipstick for urine albumin	Yes	
Blood sugar assay	Yes	
Blood cholesterol assay (Semi-automated Biochemistry analyser)	Yes	
Electrocardiograph (ECG)	Yes	
Peak flow meter	Yes	
Weighing scale /Weighing Scales for adults	Yes	
Measuring tape	Yes	
Nebulizer	Yes	
Torch	Yes	
Gloves	Yes	

Posters, flip charts, brochure and stickers on NCDs	Yes	
Reporting Form	Yes	
Food Models	Yes	
Dental Chair	Yes	
Examination Light	Yes	
Autoclave bench top		Yes
Sterilizing Units, Steam, Table top	Yes	
Cabinets, Treatment, Dentistry	Yes	
Tables, Instrument	Yes	
Kick Buckets	Yes	
Waste-Disposal Units, Sharp	Yes	
Fundus Camera	Yes	
LASER, OPTHALMIC, YAG	Yes	
Ophthalmic Diagnostic Set	Yes	

Table NH.10.1.1: Details of functionality status of medical devices in the national hospital (N=1)

Medical Devices	Availability reported	Functionality status of the devices
Stethoscope/ Stethoscope Binaural	Yes	Yes, functional
Sphygmomanometer or BP apparatus/ Blood pressure Machine/Mobile/Blood Pressure manual	Yes	Yes, functional
Urine glucose strips for domiciliary visits	Yes	Yes, functional
Urine albumin strips/ Dipstick for urine albumin	Yes	Yes, functional
Blood sugar assay	Yes	Yes, functional
Blood cholesterol assay (Semi-automated Biochemistry analyser)	Yes	Yes, functional
Electrocardiograph (ECG)	Yes	Yes, functional
Peak flow meter	Yes	Yes, functional
Weighing scale /Weighing Scales for adults	Yes	Yes, functional
Measuring tape	Yes	Yes, functional
Nebulizer	Yes	Yes, functional
Torch	Yes	Yes, functional
Gloves	Yes	Yes, functional
Posters, flip charts, brochure and stickers on NCDs	Yes	Yes, functional
Reporting Form	Yes	Yes, functional
Food Models	Yes	Yes, functional
Dental Chair	Yes	Yes, functional
Examination Light	Yes	Yes, functional
Autoclave bench top	Yes	No, not functional
Sterilizing Units, Steam, Table top	Yes	Yes, functional
Cabinets, Treatment, Dentistry	Yes	Yes, functional
Tables, Instrument	Yes	Yes, functional
Kick Buckets	Yes	Yes, functional
Waste-Disposal Units, Sharp	Yes	Yes, functional
Fundus Camera	Yes	Yes, functional
LASER, OPTHALMIC, YAG	Yes	Yes, functional
Ophthalmic Diagnostic Set	Yes	Yes, functional

Readiness for Integrated screening services of Non-Communicable Diseases by Health Facilities in Timor-Leste, 2023: Domain-wise and Overall score

Table 1a: Health facility wise readiness scores for the availability of trained staffs, guidelines and registers for integrated screening of Non-communicable Diseases, Timor Leste, 2023

Type of facilities	Number of facilities surveyed	Percentage of facilities with trained staffs						Percentage of facilities with tracer guidelines				Registers		Readiness score for the trained staffs and guidelines for the integrated screening services of NCD
		Availability of doctor in the facility received any training on Diabetes screening and care	Availability of nurse in the facility received any training on Diabetes screening and care	Availability of doctor in the facility received any training on hypertension screening and care	Availability of nurse in the facility received any training on Hypertension screening and care	Availability of doctor in the facility received any training on CVD screening and care	Availability of nurse in the facility received any training on CVD screening and care	Availability of PEN or other Guideline for screening of ncds at the day of survey	Availability of the guideline as algorithm for easy reference at the day of survey	Availability of WHO-CVD Risk Chart at the day of survey	Availability of referral protocols and guidelines at the day of survey	Maintain of registers of patients screened for diabetes	Maintain of registers of patients screened for hypertension	
National Hospital (NH)	**1**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Referral hospitals (RH)														
RH-Ainaro	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**0**
RH-Baucau	1	100.0	100.0	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	**50**
RH-Bobonaro	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	100.0	**25**
RH-Covalima	1	100.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	**92**

RH-Oecusse	1	100.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	**33**
Community health centres (level3) (CHC-3)														
CHC3-Alieu	**1**	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	**100**
CHC3-Ainaro	**1**	100.0	100.0	0.0	100.0	0.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0	**75**
CHC3-Dili	**1**	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	**100**
CHC3-Ermera	**1**	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	**100**
CHC3-Lautem	**1**	0.0	0.0	100.0	0.0	100.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0	**67**
CHC3-Liquica	**1**	100.0	0.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0	100.0	**83**
CHC3-Viqueque	**1**	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	**100**
Community health centres (level 1 and 2) (CHC-1 and 2)														
Aileu	1	100.0	100.0	100	100.0	_	_	0.0	0.0	0.0	100.0	0.0	100.0	**60**
Ainaro	1	0.0	0.0	0	0.0	_	_	0.0	0.0	0.0	0.0	0.0	0.0	**0**
Atauro	1	0.0	0.0	0	0.0	_	_	100.0	100.0	100.0	100.0	100.0	100.0	**60**
Baucau	2	50.0	50.0	50	50.0	_	_	0.0	0.0	50.0	0.0	0.0	0.0	**25**
Bobonaro	3	100.0	66.7	100	66.7	_	_	100.0	100.0	33.3	66.7	0.0	100.0	**73**
Covalima	2	100.0	100.0	50	50.0	_	_	50.0	50.0	0.0	50.0	0.0	0.0	**45**
Dili	2	100.0	100.0	100	100.0	_	_	100.0	100.0	100.0	100.0	100.0	100.0	**100**
Ermera	2	100.0	100.0	100	100.0	_	_	100.0	100.0	100.0	100.0	0.0	50.0	**85**
Lautem	1	100.0	0.0	100	0.0	_	_	0.0	0.0	0.0	0.0	0.0	0.0	**20**

Manatuto	1	100.0	100.0	100	100.0	_	_	100.0	100.0	100.0	100.0	100.0	100.0	**100**
Manufahi	2	100.0	50.0	100	50.0	_	_	100.0	100.0	0.0	50.0	0.0	0.0	**55**
Oecusse	2	50.0	50.0	50	50.0	_	_	50.0	50.0	0.0	50.0	100.0	100.0	**55**
Viqueque	2	50.0	50.0	50	50.0	_	_	100.0	100.0	50.0	50.0	50.0	50.0	**60**
Health Post (HP)														
Aileu	2	100.0	50.0	100.0	50.0	_	_	0.0	50.0	0.0	50.0	0.0	50.0	**45**
Ainaro	1	0.0	0.0	0.0	0.0	_	_	0.0	100.0	0.0	0.0	0.0	0.0	**10**
Atauro	2	50.0	0.0	50.0	0.0	_	_	0.0	0.0	0.0	50.0	50.0	50.0	**25**
Baucau	4	25.0	0.0	25.0	0.0	_	_	0.0	0.0	0.0	0.0	0.0	25.0	**8**
Bobonaro	2	0.0	0.0	0.0	0.0	_	_	0.0	0.0	0.0	0.0	0.0	0.0	**0**
Covalima	7	14.3	0.0	14.3	0.0	_	_	42.8	42.9	14.3	0.0	42.9	42.9	**21**
Dili	8	62.5	37.5	62.5	37.5	_	_	12.5	12.5	12.5	87.5	50.0	50.0	**43**
Lautem	2	0.0	0.0	0.0	0.0	_	_	0.0	0.0	0.0	0.0	0.0	0.0	**0**
Liquica	5	80.0	20.0	80.0	20.0	_	_	0.0	0.0	0.0	100.0	0.0	80.0	**38**
Manatuto	2	0.0	0.0	0.0	0.0	_	_	0.0	0.0	0.0	0.0	0.0	0.0	**0**
Manufahi	3	66.7	0.0	100.0	0.0	_	_	33.3	33.3	33.3	0.0	33.3	33.3	**33**
Oecusse	3	0.0	0.0	0.0	0.0	_	_	66.7	33.3	0.0	66.7	0.0	100.0	**27**
Viqueque	4	25.0	0.0	25.0	0.0	_	_	0.0	0.0	0.0	0.0	0.0	25.0	**8**

Table 2a: Health facility wise readiness scores for the availability of equipment for integrated screening of Non-Communicable Diseases, Timor Leste, 2023

Type of facilities	Number of facilities surveyed	Percentage of facilities with the tracer equipment							
		Sphygmomanometer or BP apparatus/ Blood pressure Machine/Mobile/Blood Pressure manual	Weighing scale /Weighing Scales for adults	Measuring tape	Stethoscope/ Stethoscope Binaural	ECG	Urine glucose strips for domiciliary visits	Blood sugar assay	Readiness score
National Hospital (NH)	1	100.0	100.0	100	100.0	100.0	100.0	100.0	100
Referral hospitals (RH)									
RH-Ainaro	1	100.0	100.0	100	100.0	100.0	100.0	0.0	86
RH-Baucau	1	100.0	0.0	100	100.0	100.0	0	100.0	71
RH-Bobonaro	1	100.0	0.0	100	100.0	100.0	100.0	100.0	86
RH-Covalima	1	100.0	0.0	100	100.0	100.0	0	100.0	71
RH-Oecusse	1	100.0	100.0	100	100.0	100.0	100.0	100.0	100
Community health centres (level3) (CHC-3)									
CHC3-Alieu	1	0.0	0.0	100	100.0	100.0	0	100.0	57
CHC3-Ainaro	1	100.0	0.0	100	100.0	100.0	0	100.0	71
CHC3-Dili	1	100.0	100.0	100	100.0	100.0	100.0	100.0	100
CHC3-Ermera	1	100.0	100.0	100	100.0	100.0	100.0	100.0	100
CHC3-Lautem	1	100.0	100.0	100	100.0	100.0	0	100.0	86
CHC3-Liquica	1	100.0	0.0	100	100.0	0.0	0	100.0	57
CHC3-Viqueque	1	100.0	0.0	100	100.0	100	100.0	100.0	86
Community health centres (level 1 and 2) (CHC-1 and 2)									
Aileu	1	100.0	100.0	100.0	100.0	0.0	0.0	0.0	57
Ainaro	1	100.0	100.0	100.0	100.0	0.0	0.0	100.0	71

Atauro	1	100.0	100.0	100.0	100.0	0.0	100.0	0.0	71
Baucau	2	100.0	50.0	0.0	100.0	0.0	0.0	100.0	50
Bobonaro	3	33.3	100.0	100.0	100.0	0.0	50.0	66.7	64
Covalima	2	100.0	100.0	100.0	100.0	0.0	50.0	100.0	79
Dili	2	100.0	100.0	100.0	100.0	100.0	100.0	50.0	93
Ermera	2	50.0	100.0	100.0	100.0	0.0	0.0	50.0	57
Lautem	1	100.0	100.0	100.0	100.0	0.0	100.0	100.0	86
Manatuto	1	100.0	100.0	100.0	100.0	0.0	0.0	0.0	57
Manufahi	2	100.0	100.0	0.0	100.0	0.0	0.0	50.0	50
Oecusse	2	100.0	100.0	100.0	100.0	0.0	100.0	100.0	86
Viqueque	2	50.0	50.0	50.0	100.0	50.0	50.0	50.0	57
Health Post (HP)									
Aileu	2	100.0	100.0	100.0	100.0	_	0.0	_	80
Ainaro	1	0.0	0.0	0.0	0.0	_	0.0	_	0
Atauro	2	100.0	100.0	100.0	100.0	_	0.0	_	80
Baucau	4	100.0	100.0	100.0	25.0	_	0.0	_	65
Bobonaro	2	100.0	0.0	100.0	100.0	_	0.0	_	60
Covalima	7	100.0	100.0	100.0	100.0	_	0.0	_	80
Dili	8	100.0	100.0	100.0	100.0	_	0.0	_	80
Lautem	2	100.0	100.0	100.0	50.0	_	0.0	_	70
Liquica	5	100.0	100.0	100.0	100.0	_	0.0	_	80
Manatuto	2	100.0	100.0	100.0	100.0	_	0.0	_	80
Manufahi	3	100.0	100.0	100.0	100.0	_	0.0	_	80
Oecusse	3	100.0	100.0	100.0	100.0	_	0.0	_	80
Viqueque	4	25.0	75.0	25.0	100.0	_	0.0	_	45

Table 3a: Health facility wise readiness scores for availability diagnostics for integrated screening of Non-Communicable Diseases, Timor Leste, 2023

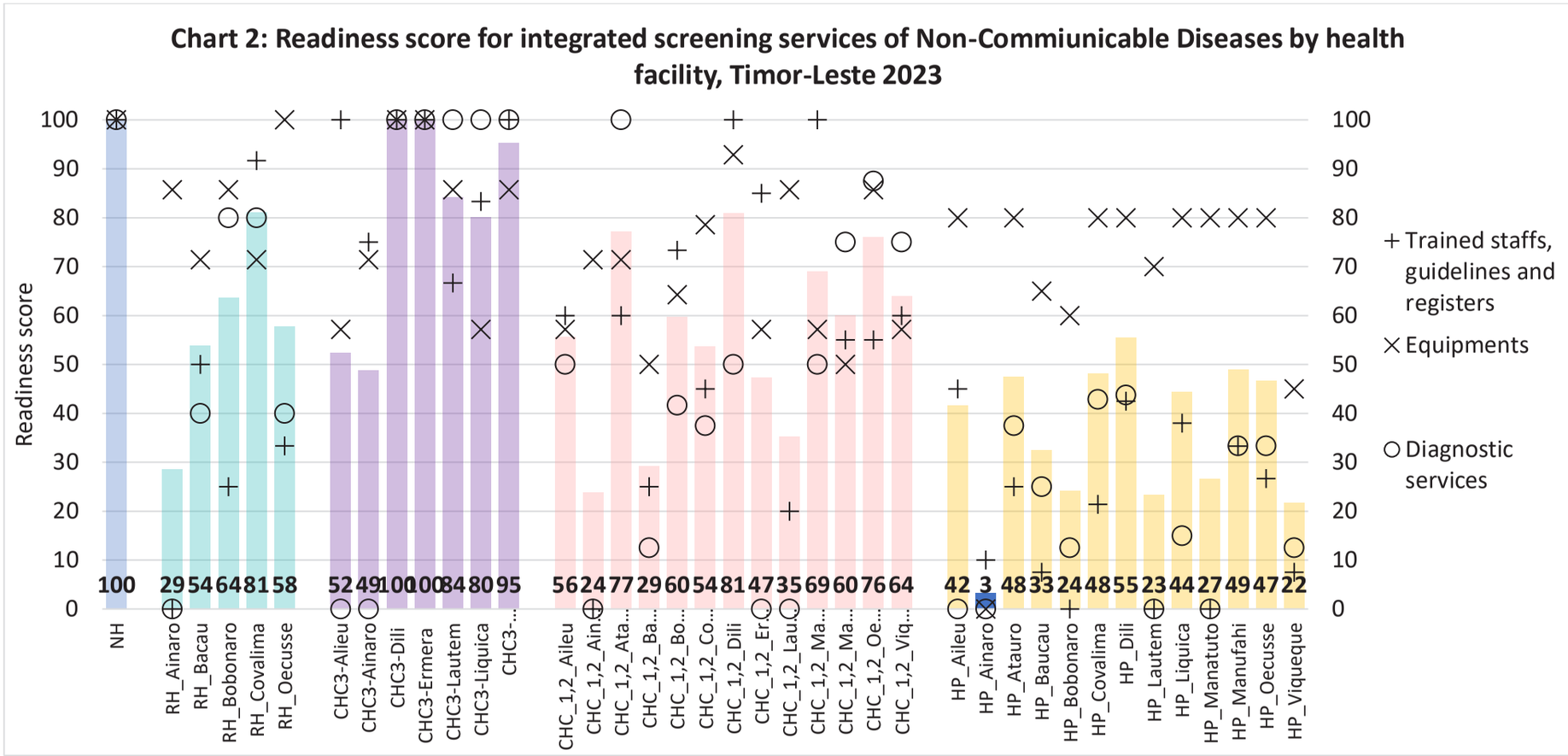
Type of facilities	Number of facilities surveyed	Checking of seated blood pressure in all adults > 40 years twice with 10 minutes interval.	Checking of urine albumin	Checking of blood sugar – capillary sample (Multiple answers possible).	Measure BMI status	Screening For Albuminaria	Does the facility provide following laboratory services: Bio-chemistry	Can the estimation of following be done in the lab: Serum cholesterol	Readiness score
National Hospital (NH)	1	_	100	100	_	100	100	100	100
Referral hospitals (RH)									
RH-Ainaro	1	_	0.0	0.0	_	0.0	0.0	0.0	0
RH-Baucau	1	_	0.0	0.0	_	0.0	100.0	100.0	40
RH-Bobonaro	1	_	100.0	100.0	_	0.0	100.0	100.0	80
RH-Covalima	1	_	100.0	100.0	_	0.0	100.0	100.0	80
RH-Oecusse	1	_	0.0	0.0	_	0.0	100.0	100.0	40
Community health centres (level3) (CHC-3)									
CHC3-Alieu	1	_	0.0	100.0	_	0.0	_	0.0	0
CHC3-Ainaro	1	_	100.0	0.0	_	0.0	_	0.0	0
CHC3-Dili	1	_	100.0	100.0	_	100.0	_	100.0	100
CHC3-Ermera	1	_	0.0	100.0	_	0.0	_	100.0	100
CHC3-Lautem	1	_	0.0	100.0	_	0.0	_	100.0	100
CHC3-Liquica	1	_	100.0	100.0	_	100.0	_	100.0	100
CHC3-Viqueque	1	_	100.0	100.0	_	0.0	_	100.0	100
Community health centres (level 1 and 2) (CHC-1 and 2)									
Aileu	1	100.0	0.0	0.0	100.0	_	_	_	50
Ainaro	1	0.0	0.0	0.0	0.0	_	_	_	0

Atauro	1	100.0	100.0	100.0	100.0	_	_	_	100
Baucau	2	50.0	0.0	0.0	0.0	_	_	_	13
Bobonaro	3	66.7	0.0	33.3	66.7	_	_	_	42
Covalima	2	50.0	0.0	50.0	50.0	_	_	_	38
Dili	2	50.0	50.0	50.0	50.0	_	_	_	50
Ermera	2	0.0	0.0	0.0	0.0	_	_	_	0
Lautem	1	0.0	0.0	0.0	0.0	_	_	_	0
Manatuto	1	100.0	0.0	0.0	100.0	_	_	_	50
Manufahi	2	100.0	0.0	100.0	100.0	_	_	_	75
Oecusse	2	100.0	50.0	100.0	100.0	_	_	_	88
Viqueque	2	100.0	50.0	50.0	100.0	_	_	_	75
Health Post (HP)									
Aileu	2	0.0	0.0	0.0	0.0	_	_	_	0
Ainaro	1	0.0	0.0	0.0	0.0	_	_	_	0
Atauro	2	100.0	0.0	0.0	50.0	_	_	_	38
Baucau	4	100.0	0.0	0.0	0.0	_	_	_	25
Bobonaro	2	0.0	0.0	0.0	50.0	_	_	_	13
Covalima	7	71.4	0.0	42.9	57.1	_	_	_	43
Dili	8	62.5	37.5	12.5	62.5	_	_	_	44
Lautem	2	0.0	0.0	0.0	0.0	_	_	_	0
Liquica	5	40.0	0.0	0.0	20.0	_	_	_	15
Manatuto	2	0.0	0.0	0.0	0.0	_	_	_	0
Manufahi	3	66.7	0.0	0.0	66.7	_	_	_	33
Oecusse	3	66.7	0.0	0.0	66.7	_	_	_	33
Viqueque	4	25.0	0.0	0.0	25.0	_	_	_	13

Table 4a: Health facility wise overall readiness scores for integrated screening of Non-Communicable Diseases, Timor Leste, 2023

Type of facilities	Readiness score for availability of trained staffs and guidelines for integrated screening of Non-Communicable Disease	Readiness score for availability of equipment for integrated screening of Non-Communicable Disease	Readiness score for the availability of diagnostic services for integrated screening of Non-Communicable Disease	Overall readiness score for integrated screening of Non-Communicable Disease
National Hospital (NH)	100	100	100	100
Referral hospitals (RH)				
RH-Ainaro	0	86	0	29
RH-Baucau	50	71	**40**	54
RH-Bobonaro	25	86	**80**	64
RH-Covalima	92	71	**80**	81
RH-Oecusse	33	100	**40**	58
Community health centres (level3) (CHC-3)				
CHC3-Alieu	100	57	0	52
CHC3-Ainaro	75	71	0	49
CHC3-Dili	100	100	100	100
CHC3-Ermera	100	100	100	100
CHC3-Lautem	67	86	100	84
CHC3-Liquica	83	57	100	80
CHC3-Viqueque	100	86	100	95
Community health centres (level 1 and 2) (CHC-1 and 2)			–	
CHC_1,2_Aileu	60	57	50	56
CHC_1,2_Ainaro	0	71	0	24
CHC_1,2_Atauro	60	71	100	77
CHC_1,2_Baucau	25	50	13	29
CHC_1,2_Bobonaro	73	64	42	60
CHC_1,2_Covalima	45	79	38	54
CHC_1,2_Dili	100	93	50	81
CHC_1,2_Ermera	85	57	0	47

CHC_1,2_Lautem	20	86	0	35
CHC_1,2_Manatuto	100	57	50	69
CHC_1,2_Manufahi	55	50	75	60
CHC_1,2_Oecusse	55	86	88	76
CHC_1,2_Viqueque	60	57	75	64
Health Post (HP)			_	
HP_Aileu	45	80	0	42
HP_Ainaro	10	0	0	3
HP_Atauro	25	80	38	48
HP_Baucau	8	65	25	33
HP_Bobonaro	0	60	13	24
HP_Covalima	21	80	43	48
HP_Dili	43	80	44	55
HP_Lautem	0	70	0	23
HP_Liquica	38	80	15	44
HP_Manatuto	0	80	0	27
HP_Manufahi	33	80	33	49
HP_Oecusse	27	80	33	47
HP_Viqueque	8	45	13	22



Note: Figure inside each bar indicates overall readiness score while symbols denotes the level of readiness score for respective d

Percentage of facilities with availability of all tracers by domains for screening of CRD by health facility

TO BE ADDED

Readiness for screening of Chronic Respiratory Disease by Health Facilities in Timor-Leste, 2023: Domain-wise and Overall score

Table 1a: Health facility wise readiness scores for the availability of trained staffs and guidelines for screening of Chronic Respiratory Disease, Timor Leste, 2023

Type of facilities	Number of facilities surveyed	Percentage of facilities with trained staffs		Percentage of facilities with tracer guidelines		Readiness score for the trained staffs and guidelines for the screening services for of Chronic Respiratory Disease
		Training of doctors in NCD services in last 5 years for diagnosis of Chronic Respiratory Disease	Training of nurses in NCD services in last 5 years for diagnosis of Chronic Respiratory Disease	Availability of PEN or other Guideline for screening of NCDs at the day of survey	Availability of the guideline as algorithm for easy reference at the day of survey	
National Hospital (NH)	**1**	**100**	**100**	**100**	**100**	**100**
Referral hospitals (RH)						
RH-Ainaro	1	100.0	100.0	0.0	0.0	**50**
RH-Baucau	1	100.0	100.0	0.0	0.0	**50**
RH-Bobonaro	1	0.0	0.0	0.0	0.0	**0**
RH-Covalima	1	0.0	0.0	100.0	100.0	**50**
RH-Oecusse	1	100.0	100.0	0.0	0.0	**50**
Community health centres (level3) (CHC-3)						
CHC3-Alieu	**1**	100.0	100.0	100.0	100.0	**100**
CHC3-Ainaro	**1**	0.0	100.0	100.0	100.0	**75**
CHC3-Dili	**1**	100.0	100.0	100.0	100.0	**100**
CHC3-Ermera	**1**	100.0	100.0	100.0	100.0	**100**
CHC3-Lautem	**1**	100.0	0.0	100.0	100.0	**75**
CHC3-Liquica	**1**	100.0	0.0	0.0	100.0	**50**
CHC3-Viqueque	**1**	100.0	100.0	100.0	100.0	**100**
Community health centres (level 1 and 2) (CHC-1 and 2)						
CHC_1,2_Aileu	1	100.0	100.0	0.0	0.0	**50**
CHC_1,2_Ainaro	1	0.0	0.0	0.0	0.0	**0**

CHC_1,2_Atauro	1	0.0	0.0	100.0	100.0	**50**
CHC_1,2_Baucau	2	50.0	50.0	0.0	0.0	**25**
CHC_1,2_Bobonaro	3	100.0	33.3	33.3	100.0	**67**
CHC_1,2_Covalima	2	50.0	50.0	50.0	50.0	**50**
CHC_1,2_Dili	2	100.0	100.0	100.0	100.0	**100**
CHC_1,2_Ermera	2	100.0	50.0	50.0	50.0	**63**
CHC_1,2_Lautem	1	100.0	0.0	0.0	0.0	**25**
CHC_1,2_Manatuto	1	100.0	100.0	100.0	100.0	**100**
CHC_1,2_Manufahi	2	100.0	50.0	50.0	100.0	**75**
CHC_1,2_Oecusse	2	50.0	50.0	50.0	50.0	**50**
CHC_1,2_Viqueque	2	100.0	100.0	50.0	50.0	**75**
Health Post (HP)						
HP_Aileu	2	100.0	50.0	0.0	0.0	**38**
HP_Ainaro	1	0.0	0.0	0.0	0.0	**0**
HP_Atauro	2	50.0	0.0	0.0	0.0	**13**
HP_Baucau	4	25.0	0.0	0.0	0.0	**6**
HP_Bobonaro	2	0.0	0.0	0.0	0.0	**0**
HP_Covalima	7	71.4	28.6	42.8	42.8	**46**
HP_Dili	8	62.5	37.5	12.5	12.5	**31**
HP_Lautem	2	0.0	0.0	0.0	0.0	**0**
HP_Liquica	5	80.0	20.0	0.0	0.0	**25**
HP_Manatuto	2	0.0	0.0	0.0	0.0	**0**
HP_Manufahi	3	100.0	33.3	33.3	33.3	**50**
HP_Oecusse	3	33.3	0.0	66.7	33.3	**33**
HP_Viqueque	4	50.0	0.0	0.0	0.0	**13**

Note: The readiness scores for the registers have not been computed as the registers are not available for the screening of CRD.

Table 2a: Health facility wise readiness scores for the availability of equipment for screening of Chronic Respiratory Disease, Timor Leste, 2023

Type of facilities	Number of facilities surveyed	Percentage of facilities with the tracer equipment		
		Stethoscope/ Stethoscope Binaural	Peak flow meter	Readiness score for equipment for the screening services of Chronic Respiratory Disease
National Hospital (NH)	1	100.0	100.0	**100**
Referral hospitals (RH)				
RH-Ainaro	1	100.0	100.0	**100**

RH-Baucau	1	100.0	0.0	**50**
RH-Bobonaro	1	100.0	0.0	**50**
RH-Covalima	1	100.0	0.0	**50**
RH-Oecusse	1	100.0	100.0	**100**
Community health centres (level3) (CHC-3)				
CHC3-Alieu	1	0.0	0.0	**0**
CHC3-Ainaro	1	100.0	0.0	**50**
CHC3-Dili	1	100.0	100.0	**100**
CHC3-Ermera	1	100.0	100.0	**100**
CHC3-Lautem	1	100.0	100.0	**100**
CHC3-Liquica	1	100.0	0.0	**50**
CHC3-Viqueque	1	100.0	0.0	**50**
Community health centres (level 1 and 2) (CHC-1 and 2)				
CHC_1,2_Aileu	1	100.0	0.0	50.0
CHC_1,2_Ainaro	1	100.0	0.0	50.0
CHC_1,2_Atauro	1	100.0	0.0	50.0
CHC_1,2_Baucau	2	100.0	0.0	50.0
CHC_1,2_Bobonaro	3	100.0	66.7	83.4
CHC_1,2_Covalima	2	100.0	0	50.0
CHC_1,2_Dili	2	100.0	50.0	75.0
CHC_1,2_Ermera	2	100.0	100.0	100.0
CHC_1,2_Lautem	1	100.0	0	50.0
CHC_1,2_Manatuto	1	100.0	0	50.0
CHC_1,2_Manufahi	2	100.0	50.0	75.0
CHC_1,2_Oecusse	2	100.0	0.0	50.0
CHC_1,2_Viqueque	2	100.0	0.0	50.0
Health Post (HP)				
HP_Aileu	2	100.0	_	100.0
HP_Ainaro	1	0.0	_	0.0
HP_Atauro	2	100.0	_	100.0
HP_Baucau	4	75.0	_	75.0
HP_Bobonaro	2	100.0	_	100.0
HP_Covalima	7	100.0	_	100.0
HP_Dili	8	100.0	_	100.0
HP_Lautem	2	50.0	_	50.0
HP_Liquica	5	100.0	_	100.0
HP_Manatuto	2	100.0	_	100.0
HP_Manufahi	3	100.0	_	100.0
HP_Oecusse	3	100.0	_	100.0
HP_Viqueque	4	100.0	_	100.0

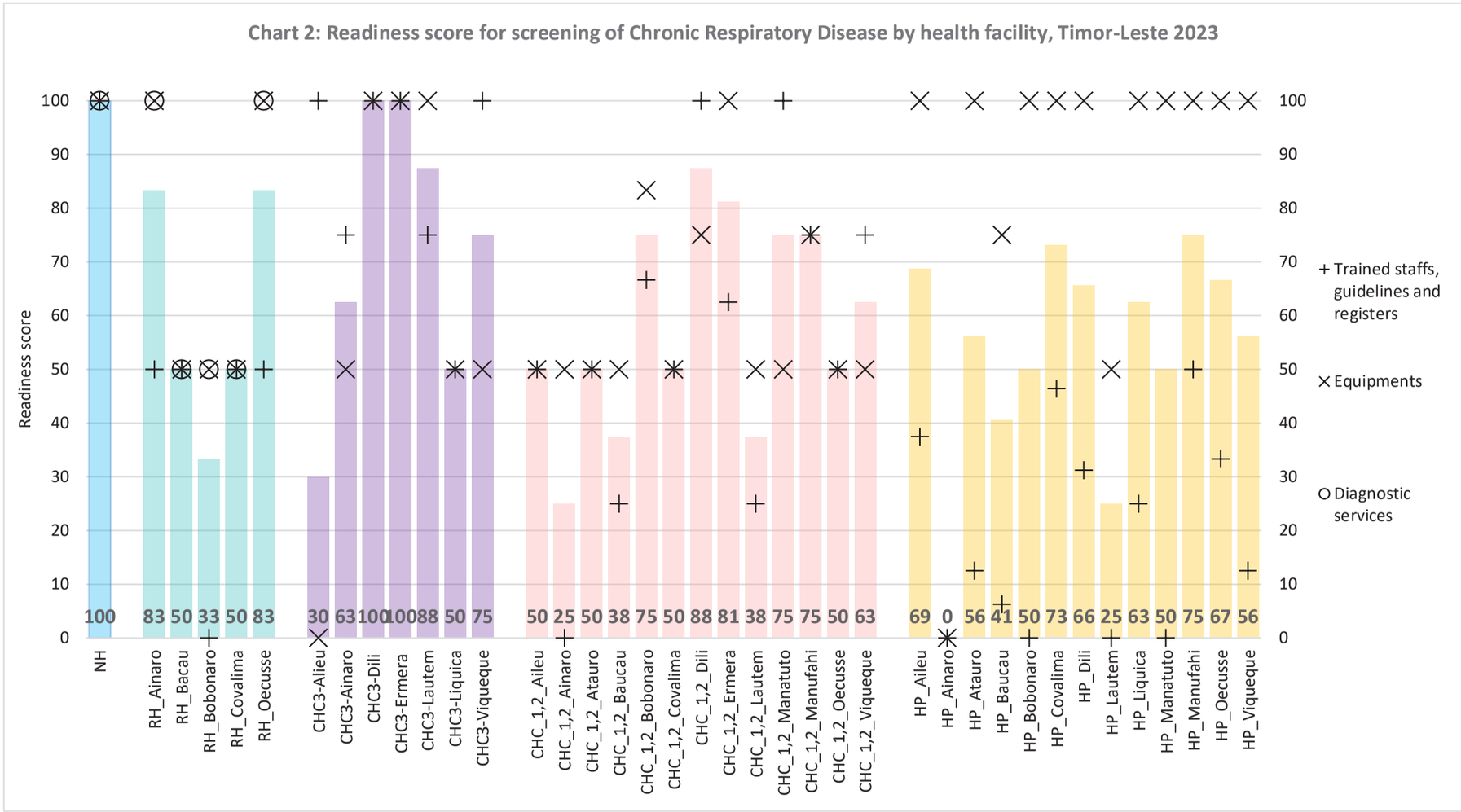
Table 3a: Health facility wise readiness scores for availability diagnostics for screening of Chronic Respiratory Disease, Timor Leste, 2023

Type of facilities	Number of facilities surveyed	Simple radiology	Contrast radiology	Readiness score for diagnostic services for the screening services of Chronic Respiratory Disease
National Hospital (NH)	1	100.0	100.0	**100**
Referral hospitals (RH)				
RH-Ainaro	1	100.0	100.0	**100**
RH-Baucau	1	100.0	0.0	**50**
RH-Bobonaro	1	100.0	0.0	**50**
RH-Covalima	1	100.0	0.0	**50**
RH-Oecusse	1	100.0	100.0	**100**
Community health centres (level3) (CHC-3)				
CHC3-Alieu	1	_	_	_
CHC3-Ainaro	1	_	_	_
CHC3-Dili	1	_	_	_
CHC3-Ermera	1	_	_	_
CHC3-Lautem	1	_	_	_
CHC3-Liquica	1	_	_	_
CHC3-Viqueque	1	_	_	_
Community health centres (level 1 and 2) (CHC-1 and 2)		_	_	_
CHC_1,2_Aileu	1	_	_	_
CHC_1,2_Ainaro	1	_	_	_
CHC_1,2_Atauro	1	_	_	_
CHC_1,2_Baucau	2	_	_	_
CHC_1,2_Bobonaro	3	_	_	_
CHC_1,2_Covalima	2	_	_	_
CHC_1,2_Dili	2	_	_	_
CHC_1,2_Ermera	2	_	_	_
CHC_1,2_Lautem	1	_	_	_
CHC_1,2_Manatuto	1	_	_	_
CHC_1,2_Manufahi	2	_	_	_
CHC_1,2_Oecusse	2	_	_	_
CHC_1,2_Viqueque	2	_	_	_
Health Post (HP)		_	_	_
HP_Aileu	2	_	_	_
HP_Ainaro	1	_	_	_
HP_Atauro	2	_	_	_
HP_Baucau	4	_	_	_
HP_Bobonaro	2	_	_	_
HP_Covalima	7	_	_	_
HP_Dili	8	_	_	_
HP_Lautem	2	_	_	_
HP_Liquica	5	_	_	_
HP_Manatuto	2	_	_	_
HP_Manufahi	3	_	_	_
HP_Oecusse	3	_	_	_
HP_Viqueque	4	_	_	_

Table 4a: Health facility wise overall readiness scores for screening of Chronic Respiratory Disease, Timor Leste, 2023

Type of facilities	Readiness score for availability of trained staffs and guidelines for screening of Chronic Respiratory Disease	Readiness score for availability of equipment for screening of Chronic Respiratory Disease	Readiness score for the availability of diagnostic services for screening of Chronic Respiratory Disease	Overall readiness score for screening of Chronic Respiratory Disease
National Hospital (NH)	100	100	100	100
Referral hospitals (RH)				
RH-Ainaro	50	100	100	83
RH-Baucau	50	50	**50**	50
RH-Bobonaro	0	50	**50**	33
RH-Covalima	50	50	**50**	50
RH-Oecusse	50	100	**100**	83
Community health centres (level3) (CHC-3)				
CHC3-Alieu	100	0	_	50
CHC3-Ainaro	75	50	_	63
CHC3-Dili	100	100	_	100
CHC3-Ermera	100	100	_	100
CHC3-Lautem	75	100	_	88
CHC3-Liquica	50	50	_	50
CHC3-Viqueque	100	50	_	75
Community health centres (level 1 and 2) (CHC-1 and 2)			_	
CHC_1,2_Aileu	50	50	_	50
CHC_1,2_Ainaro	0	50	_	25
CHC_1,2_Atauro	50	50	_	50
CHC_1,2_Baucau	25	50	_	38
CHC_1,2_Bobonaro	67	83	_	75
CHC_1,2_Covalima	50	50	_	50
CHC_1,2_Dili	100	75	_	88
CHC_1,2_Ermera	63	100	_	81
CHC_1,2_Lautem	25	50	_	38
CHC_1,2_Manatuto	100	50	_	75
CHC_1,2_Manufahi	75	75	_	75
CHC_1,2_Oecusse	50	50	_	50
CHC_1,2_Viqueque	75	50	_	63
Health Post (HP)			_	
HP_Aileu	38	100	_	69
HP_Ainaro	0	0	_	0
HP_Atauro	13	100	_	56
HP_Baucau	6	75	_	41
HP_Bobonaro	0	100	_	50
HP_Covalima	46	100	_	73
HP_Dili	31	100	_	66

HP_Lautem	0	50	_	25
HP_Liquica	25	100	_	63
HP_Manatuto	0	100	_	50
HP_Manufahi	50	100	_	75
HP_Oecusse	33	100	_	67
HP_Viqueque	13	100	_	56



Note: Figure inside each bar indicates overall readiness score while symbols denotes the level of readiness score for respective domain

Table 5: Percentage of facilities with availability of all tracers by domains for screening of Chronic Respiratory Disease by health facility, Timor-Leste 2023

Type of facilities	Percentage of facilities with all tracer items for availability of trained staffs and guidelines for screening of Chronic Respiratory Disease	Percentage of facilities with all tracer equipment for screening of Chronic Respiratory Disease	Percentage of facilities with all tracer diagnostic services for screening of Chronic Respiratory Disease
National Hospital (NH)	100	100	100
Referral hospitals (RH)	0.0	40.0	60.0
RH-Ainaro	0.0	100.0	100.0
RH-Baucau	0.0	0.0	0.0
RH-Bobonaro	0.0	0.0	0.0
RH-Covalima	0.0	0.0	100.0
RH-Oecusse	0.0	100.0	100.0
Community health centres (level3) (CHC-3)	57.1	42.9	_
CHC3-Alieu	100	0	_
CHC3-Ainaro	0	0	_
CHC3-Dili	100	100	_
CHC3-Ermera	100	100	_
CHC3-Lautem	0	100	_
CHC3-Liquica	0	0	_
CHC3-Viqueque	100	0	_
Community health centres (level 1 and 2) (CHC-1 and 2)	**31.8**	36.4	_
CHC_1,2_Aileu	0.0	0.0	_
CHC_1,2_Ainaro	0.0	0.0	_
CHC_1,2_Atauro	0.0	0.0	_
CHC_1,2_Baucau	0.0	0.0	_
CHC_1,2_Bobonaro	33.3	66.7	_
CHC_1,2_Covalima	50.0	0.0	_
CHC_1,2_Dili	100.0	50.0	_
CHC_1,2_Ermera	50.0	100.0	_

CHC_1,2_Lautem	0.0	0.0	_
CHC_1,2_Manatuto	100.0	0.0	_
CHC_1,2_Manufahi	0.0	50.0	_
CHC_1,2_Oecusse	0.0	0.0	_
CHC_1,2_Viqueque	50.0	50.0	_
Health Post (HP)	6.7	93.3	_
HP_Aileu	0.0	100.0	_
HP_Ainaro	0.0	0.0	_
HP_Atauro	0.0	100.0	_
HP_Baucau	0.0	75.0	_
HP_Bobonaro	0.0	100.0	_
HP_Covalima	28.6	100.0	_
HP_Dili	0.0	100.0	_
HP_Lautem	0.0	50.0	_
HP_Liquica	0.0	100.0	_
HP_Manatuto	0.0	100.0	_
HP_Manufahi	33.3	100.0	_
HP_Oecusse	33.3	100.0	_
HP_Viqueque	0.0	100.0	_

Readiness for Follow-up and Management of Diabetes by Health Facilities in Timor-Leste, 2023: Domain-wise and Overall score

Table 1a: Health facility wise readiness scores for the availability of trained staffs and guideline and registers for follow up and management of Diabetes, Timor Leste, 2023

Type of facilities	Percentage of facilities with trained staffs		Percentage of facilities with tracer guidelines		Percentage of facilities with registers	Readiness score for the trained staffs and guidelines for follow up and management for diabetes
	Training of doctors in NCD services in last 5 years for diabetes screening and care	Training of nurses in NCD services in last 5 years for diabetes screening and care	Availability of protocol for management of diabetes at the day of survey	Availability of guideline as algorithm for easy reference at the day of survey	Availability of registers of patients managed for diabetes	
National Hospital (NH)	100	100	100	100	100	**100**
Referral hospitals (RH)						
RH-Ainaro	0	0	0	100	0	**20**
RH-Baucau	100	100	0	0	0	**40**
RH-Bobonaro	0	0	100	100	100	**60**
RH-Covalima	100	0	100	100	100	**80**
RH-Oecusse	100	100	0	0	0	**40**
Community health centres (level3) (CHC-3)						
CHC3-Alieu	100	100	**0**	**0**	**0**	**40**
CHC3-Ainaro	0	100	**0**	100	**0**	**40**
CHC3-Dili	100	100	100	100	100	**100**
CHC3-Ermera	100	100	100	100	100	**100**
CHC3-Lautem	0	0	100	100	100	**60**
CHC3-Liquica	100	100	100	100	100	**100**
CHC3-Viqueque	100	100	100	100	100	**100**

Table 2a: Health facility wise readiness scores for the availability of equipment for follow up and management of Diabetes, Timor Leste, 2023

Type of facilities	Percentage of facilities with the tracer equipment						
	Sphygmomanometer or BP apparatus/ Blood pressure Machine/Mobile/ Blood Pressure manual	Weighing scale /Weighing Scales for adults	Measuring tape	Stethoscope/ Stethoscope Binaural	Urine glucose strips for domiciliary visits	Blood sugar assay	Readiness score for equipment
National Hospital (NH)	100.0	100.0	100.0	100.0	100.0	100.0	**100**
Referral hospitals (RH)							
RH-Ainaro	100.0	100.0	100.0	100.0	100.0	0.0	**83**
RH-Baucau	100.0	100.0	100.0	100.0	0	100.0	**83**
RH-Bobonaro	100.0	100.0	100.0	100.0	100.0	100.0	**100**
RH-Covalima	100.0	100.0	100.0	100.0	0	100.0	**83**
RH-Oecusse	100.0	100.0	100.0	100.0	100.0	100.0	**100**
Community health centres (level3) (CHC-3)							
CHC3-Alieu	100.0	100.0	100.0	100.0	0	100.0	**83**
CHC3-Ainaro	100.0	100.0	100.0	100.0	0	100.0	**83**
CHC3-Dili	100.0	100.0	100.0	100.0	100.0	100.0	**100**
CHC3-Ermera	100.0	100.0	100.0	100.0	100.0	100.0	**100**
CHC3-Lautem	100.0	100.0	100.0	100.0	0	100.0	**83**
CHC3-Liquica	100.0	100.0	100.0	100.0	0	100.0	**83**
CHC3-Viqueque	100.0	100.0	100.0	100.0	100.0	100.0	**100**

Table 3a: Health facility wise readiness scores for availability diagnostics for follow up and management of Diabetes, Timor Leste, 2023

Type of facilities	Availability of basic laboratory services	Availability of basic laboratory services: Bio-chemistry	Availability of blood sugar estimation services	Availability of HbA1c estimation services	Availability of Urine ketone bodies estimation services	Availability of Serum cholesterol estimation services	Readiness score for diagnostic services related to follow up and management of diabetes
National Hospital (NH)	100	100	100	100	100	100	**100**
Referral hospitals (RH)							
RH-Ainaro	100.0	0	100.0	0	100.0	0	**50**
RH-Baucau	100.0	100.0	100.0	0	100.0	100.0	**83**
RH-Bobonaro	100.0	100.0	100.0	100.0	100.0	100.0	**100**
RH-Covalima	100.0	100.0	100.0	100.0	100.0	100.0	**100**
RH-Oecusse	100.0	100.0	100.0	100.0	100.0	100.0	**100**
Community health centres (level3) (CHC-3)							
CHC3-Alieu	100.0	_	100.0	_	_	0	**67**
CHC3-Ainaro	100.0	_	0	_	_	0	**33**
CHC3-Dili	100.0	_	100.0	_	_	100.0	**100**
CHC3-Ermera	100.0	_	100.0	_	_	100.0	**100**
CHC3-Lautem	100.0	_	100.0	_	_	100.0	**100**
CHC3-Liquica	100.0	_	100.0	_	_	100.0	**100**
CHC3-Viqueque	100.0	_	100.0	_	_	100.0	**100**

Table 4a: Health facility wise readiness scores for the availability of medicines and commodities for follow up and management of Diabetes, Timor Leste, 2023

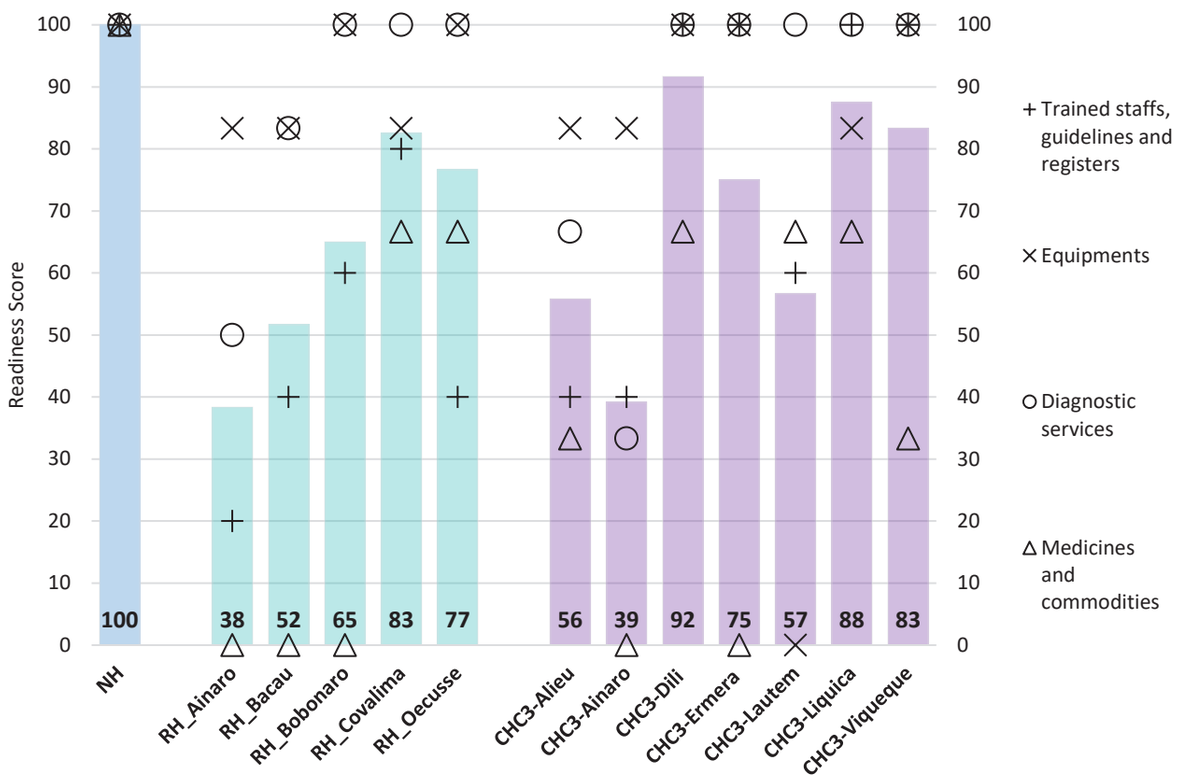
Type of facilities	Percentage of facilities with tracer medicines and commodities			Readiness score for medicines and commodities
	Glibenclamide	Metformin	Insulin	
National Hospital (NH)	100	100	100	**100**
Referral hospitals (RH)				
RH-Ainaro	0.0	0.0	0.0	**0**
RH-Baucau	0.0	0.0	0.0	**0**
RH-Bobonaro	0.0	0.0	0.0	**0**
RH-Covalima	100.0	100.0	0.0	**67**
RH-Oecusse	100.0	0.0	100.0	**67**

Community health centres (level3) (CHC-3)				
CHC3-Alieu	100.0	100.0	0.0	**33**
CHC3-Ainaro	0.0	0.0	0.0	**0**
CHC3-Dili	100.0	100.0	0.0	**67**
CHC3-Ermera	0.0	0.0	0.0	**0**
CHC3-Lautem	100.0	100.0	0.0	**67**
CHC3-Liquica	100.0	100.0	0.0	**67**
CHC3-Viqueque	100.0	0.0	0.0	**33**

Table 5a: Health facility wise overall readiness scores for follow up and management of Diabetes, Timor Leste, 2023

Facilities	Readiness score for availability of trained staffs, guidelines and registers for the follow up and management of Diabetes	Readiness score for availability of equipment for the follow up and management of Diabetes	Readiness score for the availability of diagnostic services for the follow up and management of Diabetes	Readiness score for the availability of medicines and commodities for the follow up and management of Diabetes	Overall readiness score for follow up and management for Diabetes
National Hospital (NH)	100	100	100	100	**100**
Referral hospitals (RH)					
RH-Ainaro	20	83	50	0	**38**
RH-Baucau	40	83	83	0	**52**
RH-Bobonaro	60	100	100	0	**65**
RH-Covalima	80	83	100	67	**83**
RH-Oecusse	40	100	100	67	**77**
Community health centres (level3) (CHC-3)					
CHC3-Alieu	**40**	**83**	**67**	**33**	**56**
CHC3-Ainaro	**40**	**83**	**33**	**0**	**39**
CHC3-Dili	**100**	**100**	**100**	**67**	**92**
CHC3-Ermera	**100**	**100**	**100**	**0**	**75**
CHC3-Lautem	**60**	**83**	**100**	**67**	**78**
CHC3-Liquica	**100**	**83**	**100**	**67**	**88**
CHC3-Viqueque	**100**	**100**	**100**	**33**	**83**

Chart 2: Readiness score for follow up and management of Diabetes by health facility, Timor-Leste 2023



Note: Figure inside each bar indicates overall readiness score while symbols denotes the level of readiness score for respective domain

Table 6: Percentage of facilities with availability of all tracers by domains for follow up and management of Diabetes, Timor Leste, 2023

Type of facility	Percentage of facilities with all tracer items for availability of trained staffs and guidelines for the follow up and management of Diabetes	Percentage of facilities with all tracer equipment for the follow up and management of Diabetes	Percentage of facilities with all tracer diagnostic services for the follow up and management of Diabetes	Percentage of facilities with all tracer medicines and commodities for the follow up and management of Diabetes
National Hospital(NH)	100	100	100	100
Referral Hospitals (RH)	0.0	40	60.0	0.0
RH-Ainaro	0.0	0.0	0.0	0.0
RH-Baucau	0.0	0.0	0.0	0.0

RH-Bobonaro	0.0	100.0	100.0	0.0
RH-Covalima	0.0	0.0	100.0	0.0
RH-Oecusse	0.0	100.0	100.0	0.0
Community Health Centres (level3) (CHC-3)	42.9	42.9	71.4	0.0
CHC3-Alieu	0.0	0.0	0.0	0.0
CHC3-Ainaro	0.0	0.0	0.0	0.0
CHC3-Dili	100.0	100.0	100.0	0.0
CHC3-Ermera	100.0	100.0	100.0	0.0
CHC3-Lautem	0.0	0.0	100.0	0.0
CHC3-Liquica	0.0	0.0	100.0	0.0
CHC3-Viqueque	100.0	100.0	100.0	0.0

Readiness for Follow-up and Management of Hypertension by Health Facilities in Timor-Leste, 2023: Domain-wise and Overall score

Table 1a: Health facility wise readiness scores for the availability of trained staffs guidelines and registers for follow up and management of Hypertension, Timor Leste, 2023

Type of facilities	Percentage of facilities with trained staffs		Percentage of facilities with tracer guidelines		Percentage of facilities with registers	Readiness score for the trained staffs and guidelines for follow-up and management for hypertension
	Training of doctors in NCD services in the last 5 years for hypertension screening and care	Training of nurses in NCD services in last 5 years for hypertension screening and care	Availability of protocol for management of hypertension at the day of survey	Availability of guidelines as algorithm for easy reference at the day of survey	Availability of registers of patients managed for hypertension	
National Hospital (NH)	100	100	100	100	100	**100**
Referral Hospitals (RH)						
RH-Ainaro	0.0	0.0	100.0	100.0	0.0	**40**
RH-Baucau	100.0	100.0	0.0	0.0	0.0	**40**
RH-Bobonaro	0.0	0.0	100	100	100.0	**60**
RH-Covalima	100.0	100.0	100	100	100.0	**100**
RH-Oecusse	100.0	100.0	0.0	0.0	0.0	**40**
Community Health Centres (level3) (CHC-3)						

CHC3-Alieu	100.0	100.0	100.0	**0.0**	**0.0**	**60**
CHC3-Ainaro	**0.0**	100.0	100.0	100.0	**0.0**	**60**
CHC3-Dili	100.0	100.0	100.0	100.0	100.0	**100**
CHC3-Ermera	100.0	100.0	100.0	100.0	100.0	**100**
CHC3-Lautem	100.0	**0.0**	100.0	100.0	100.0	**80**
CHC3-Liquica	100.0	100.0	100.0	100.0	100.0	**100**
CHC3-Viqueque	100.0	100.0	100.0	100.0	100.0	**100**

Table 2a: Health facility wise readiness scores for the availability of equipment for follow up and management of Hypertension, Timor Leste, 2023

Type of facilities	Percentage of facilities with the tracer equipment					
	Sphygmomanometer or BP apparatus/ Blood pressure Machine/Mobile/Blood Pressure manual	Weighing scale /Weighing Scales for adults	Measuring tape	Stethoscope/ Stethoscope Binaural	ECG	Readiness score for equipment
National Hospital (NH)	100.0	100.0	100.0	100.0	100.0	**100**
Referral Hospitals (RH)						
RH-Ainaro	100.0	100.0	100.0	100.0	100.0	**100**
RH-Baucau	100.0	100.0	100.0	100.0	100.0	**100**
RH-Bobonaro	100.0	100.0	100.0	100.0	100.0	**100**
RH-Covalima	100.0	100.0	100.0	100.0	100.0	**100**
RH-Oecusse	100.0	100.0	100.0	100.0	100.0	**100**
Community Health Centres (level3) (CHC-3)						
CHC3-Alieu	100.0	100.0	100.0	100.0	100.0	**100**
CHC3-Ainaro	100.0	100.0	100.0	100.0	100.0	**100**
CHC3-Dili	100.0	100.0	100.0	100.0	100.0	**100**
CHC3-Ermera	100.0	100.0	100.0	100.0	100.0	**100**
CHC3-Lautem	100.0	100.0	100.0	100.0	100.0	**100**
CHC3-Liquica	100.0	100.0	100.0	100.0	0.0	**80**
CHC3-Viqueque	100.0	100.0	100.0	100.0	100	**100**

Table 3a: Health facility wise readiness scores for availability diagnostic services for follow up and management of Hypertension, Timor Leste, 2023

Type of facilities	Does the facility have basic laboratory services?	Does the facility provide following laboratory services: Biochemistry	Can the estimation of following be done in the lab: Serum cholesterol	Readiness score for diagnostic services related to follow up and management of hypertension
National Hospital (NH)	100	100	100	**100**
Referral Hospitals (RH)				
RH-Ainaro	100.0	0.0	0.0	**33**
RH-Baucau	100.0	100.0	100.0	**100**
RH-Bobonaro	100.0	100.0	100.0	**100**
RH-Covalima	100.0	100.0	100.0	**100**
RH-Oecusse	100.0	100.0	100.0	**100**
Community Health Centres (level3) (CHC-3)				
CHC3-Alieu	100.0	_	0.0	**50**
CHC3-Ainaro	100.0	_	0.0	**50**
CHC3-Dili	100.0	_	100.0	**100**
CHC3-Ermera	100.0	_	100.0	**100**
CHC3-Lautem	100.0	_	100.0	**100**
CHC3-Liquica	100.0	_	100.0	**100**
CHC3-Viqueque	100.0	_	100.0	**100**

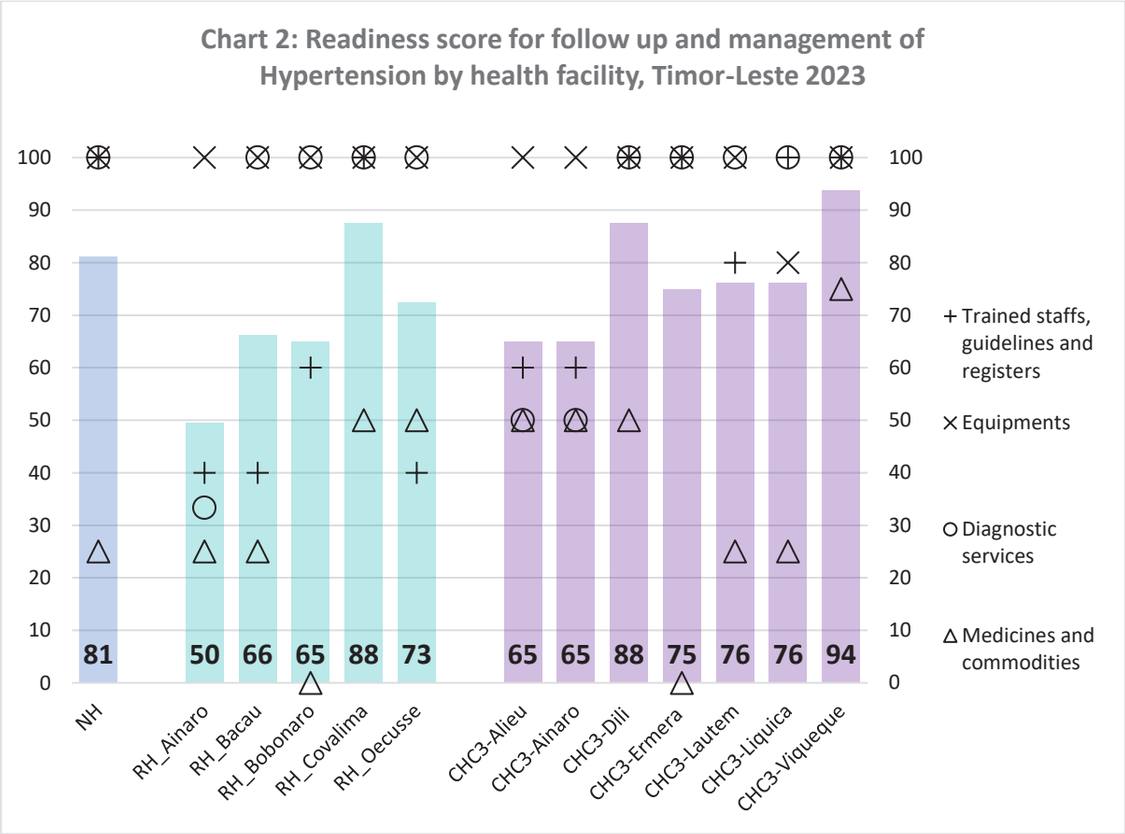
Table 4a: Health facility wise readiness scores for the availability of medicines and commodities for follow up and management of Hypertension, Timor Leste, 2023

Type of facilities	Percentage of facilities with tracer medicines and commodities				Readiness score for medicines and commodities
	Hydrochlorothiazide	Enalapril	Atorvastatin and Simvastatin	Amlodipine	
National Hospital (NH)	0.0	0.0	0.0	100	**25**
Referral Hospitals (RH)					
RH-Ainaro	0.0	0.0	0.0	100.0	**25**
RH-Baucau	0.0	0.0	0.0	100.0	**25**
RH-Bobonaro	0.0	0.0	0.0	0.0	**0**
RH-Covalima	100.0	0.0	0.0	100.0	**50**
RH-Oecusse	100.0	0.0	0.0	100.0	**50**
Community Health Centres (level3) (CHC-3)					
CHC3-Alieu	100.0	0.0	0.0	100.0	**50**
CHC3-Ainaro	0.0	0.0	100.0	100.0	**50**
CHC3-Dili	0.0	0.0	100.0	100.0	**50**
CHC3-Ermera	0.0	0.0	0.0	0.0	**0**

CHC3-Lautem	0.0	0.0	100.0	0.0	**25**
CHC3-Liquica	0.0	0.0	0.0	100.0	**25**
CHC3-Viqueque	100.0	0.0	100.0	100.0	**75**

Table 5a: Health facility wise overall readiness scores for follow up and management of Hypertension, Timor Leste, 2023

Facilities	Readiness score for availability of trained staffs, guidelines and registers for the follow up and management of hypertension	Readiness score for availability of equipment for the follow up and management of hypertension	Readiness score for the availability of diagnostic services for the follow up and management of hypertension	Readiness score for the availability of medicines and commodities for the follow up and management of hypertension	Overall readiness score for follow up and management for hypertension
National Hospital (NH)	100	100	100	25	**81**
Referral Hospitals (RH)					
RH-Ainaro	40	100	33	25	**50**
RH-Baucau	40	100	100	25	**66**
RH-Bobonaro	60	100	100	0	**65**
RH-Covalima	100	100	100	50	**88**
RH-Oecusse	40	100	100	50	**73**
Community Health Centres (level3) (CHC-3)					
CHC3-Alieu	60	100	50	50	65
CHC3-Ainaro	60	100	50	50	65
CHC3-Dili	100	100	100	50	88
CHC3-Ermera	100	100	100	0	75
CHC3-Lautem	80	100	100	25	76
CHC3-Liquica	100	80	100	25	76
CHC3-Viqueque	100	100	100	75	94



Note: Figure inside each bar indicates overall readiness score while symbols denotes the level of readiness score for respective domain

Table 6: Percentage of facilities with availability of all tracers by domains for follow up and management of Hypertension, Timor Leste, 2023

Type of facility	Percentage of facilities with all tracer items for availability of trained staffs and guidelines for the follow up and management of Hypertension	Percentage of facilities with all tracer equipment for the follow up and management of Hypertension	Percentage of facilities with all tracer diagnostic services for the follow up and management of Hypertension	Percentage of facilities with all tracer medicines and commodities for the follow up and management of Hypertension
National Hospital (NH)	100	100	100	0.0
Referral Hospitals (RH)	40.0	100.0	80.0	0.0
RH-Ainaro	0.0	100.0	0.0	0.0
RH-Baucau	0.0	100.0	100.0	0.0
RH-Bobonaro	0.0	100.0	100.0	0.0

RH-Covalima	100.0	100.0	100.0	0.0
RH-Oecusse	100.0	100.0	100.0	0.0
Community Health Centres (level3) (CHC-3)	57.1	71.4	71.4	0.0
CHC3-Alieu	0.0	0.0	0.0	0.0
CHC3-Ainaro	0.0	100.0	100.0	0.0
CHC3-Dili	100.0	100.0	100.0	0.0
CHC3-Ermera	100.0	100.0	100.0	0.0
CHC3-Lautem	0.0	100.0	100.0	0.0
CHC3-Liquica	100.0	0.0	0.0	0.0
CHC3-Viqueque	100.0	100.0	100.0	0.0

Readiness for Follow-up and Management of Chronic Respiratory Disease by Health Facilities in Timor-Leste, 2023: Domain-wise and Overall score

Table 1a: Health facility wise readiness scores for the availability of trained staffs and guidelines for follow up and management of chronic respiratory disease, Timor Leste, 2023

Type of facility	Percentage of facilities with trained staffs		Percentage of facilities with tracer guidelines				Readiness score for the trained staffs, guidelines and patients registers related to follow up and management for CRD
	Training of doctors in NCD services in last 5 years for diagnosis of CRD	Training of nurses in NCD services in last 5 years for diagnosis of chronic respiratory diseases	Availability of protocol for management of CRD at the day of survey	Availability of guideline as algorithm for easy reference at the day of survey	Availability of any protocol for management of exacerbated asthma or COPD	Availability of the guideline for management of exacerbated asthma or COPD as algorithm for easy reference at the day of survey	
National Hospital (NH)	**100**	**100**	**100**	**100**	**100**	**100**	**100**
Referral Hospitals (RH)							
RH-Ainaro	0	0	100	100	100	100	**67**
RH-Baucau	100	100	0	0	0	0	**33**
RH-Bobonaro	0	0	100	100	100	100	**67**
RH-Covalima	100	100	100	0	100	100	**83**
RH-Oecusse	0	0	0	0	0	0	**0**
Community Health Centres (level3) (CHC-3)							

CHC3-Alieu	100	100	0	0	0	0	**33**
CHC3-Ainaro	0	100	0	0	0	0	**17**
CHC3-Dili	100	100	100	100	0	0	**67**
CHC3-Ermera	100	100	100	100	0	0	**67**
CHC3-Lautem	100	0	100	100	0	0	**50**
CHC3-Liquica	100	0	100	100	0	0	**50**
CHC3-Viqueque	100	100	100	100	0	0	**67**

Note: The readiness scores for the registers have not been computed as the registers are not available for the follow-up and management of CRD.

Table 2a: Health facility wise readiness scores for the availability of equipment for follow up and management of chronic respiratory disease, Timor Leste, 2023

Type of facility	Percentage of facilities with the tracer equipment				
	Weighing scale /Weighing Scales for adults	Stethoscope/ Stethoscope Binaural	Peak flow meter	Nebulizer	Readiness score for equipment
National Hospital (NH)	100	100	100	100	**100**
Referral Hospitals (RH)					
RH-Ainaro	100	100	100	100	**100**
RH-Baucau	100	100	0	100	**75**
RH-Bobonaro	100	100	0	100	**75**
RH-Covalima	100	100	0	100	**75**
RH-Oecusse	100	100	100	100	**100**
Community Health Centres (level3) (CHC-3)					
CHC3-Alieu	100	100	0	100	**75**
CHC3-Ainaro	100	100	0	100	**75**
CHC3-Dili	100	100	100	100	**100**
CHC3-Ermera	100	100	100	100	**100**
CHC3-Lautem	100	100	100	100	**100**
CHC3-Liquica	100	100	0	100	**75**
CHC3-Viqueque	100	100	0	100	**75**

Table 3a: Health facility wise readiness scores for availability diagnostic services for follow up and management of chronic respiratory disease, Timor Leste, 2023

Type of facility	Percentage of facilities with availability of basic laboratory services	Percentage of facilities with availability of simple radiology service	Readiness score for diagnostic services related to follow up and management of CRD
National Hospital (NH)	100	100	**100**
Referral Hospitals (RH)			
RH-Ainaro	100	100	**100**
RH-Baucau	100	100	**100**
RH-Bobonaro	100	100	**100**
RH-Covalima	100	100	**100**
RH-Oecusse	100	100	**100**
Community Health Centres (level3) (CHC-3)			
CHC3-Alieu	100	-	**100**
CHC3-Ainaro	100	-	**100**
CHC3-Dili	100	-	**100**
CHC3-Ermera	100	-	**100**
CHC3-Lautem	100	-	**100**
CHC3-Liquica	100	-	**100**
CHC3-Viqueque	100	-	**100**

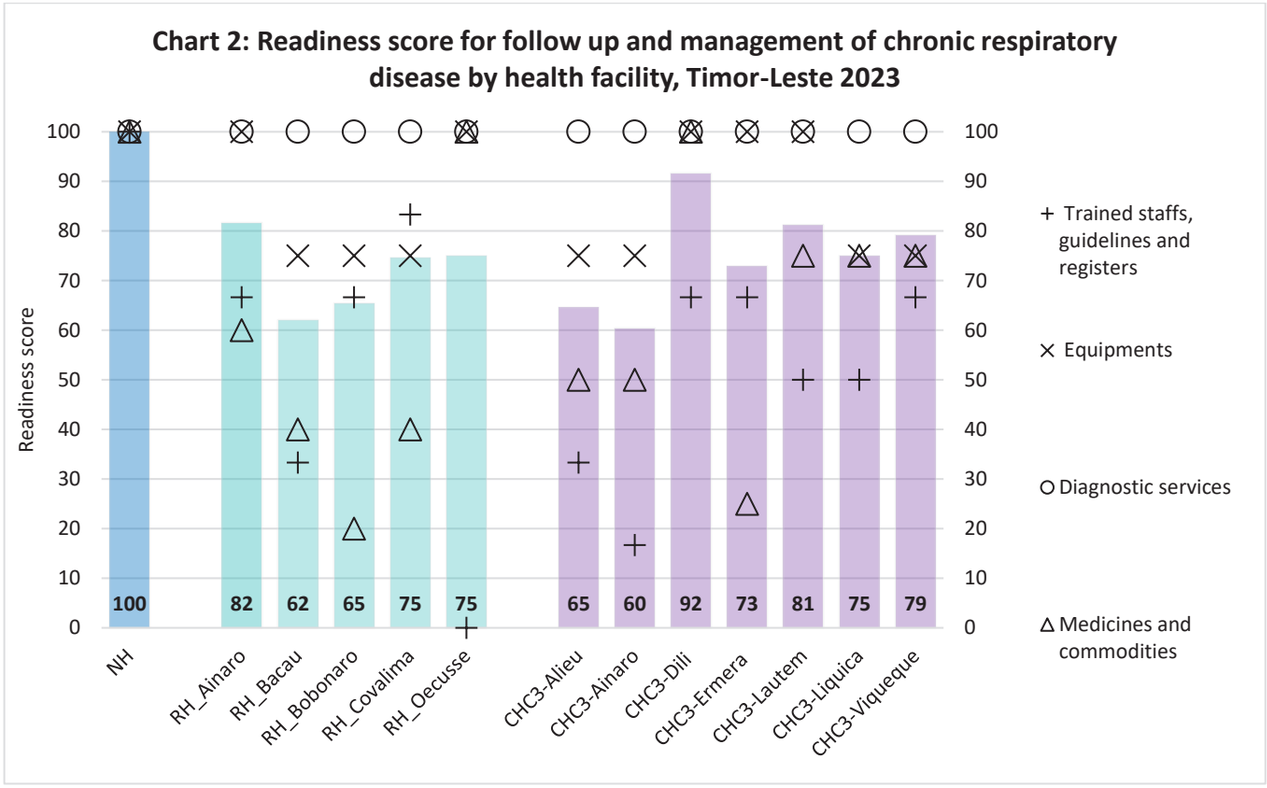
Table 4a: Health facility wise readiness scores for the availability of medicines and commodities for follow up and management of chronic respiratory disease, Timor Leste, 2023

Type of facility	Percentage of facilities with tracer medicines and commodities					Readiness score for medicines and commodities
	Salbutamol tablets	Salbutamol inhalers	Beclomethasone inhaler	Oxygen	Antibiotic	
National Hospital (NH)	100	100	100	100	100	**100**
Referral Hospitals (RH)						
RH-Ainaro	100	0	100	100	0	**60**
RH-Baucau	100	0	100	0	0	**40**
RH-Bobonaro	0	100	0	0	0	**20**
RH-Covalima	0	100	0	0	100	**40**
RH-Oecusse	100	100	100	100	100	**100**
Community Health Centres (level3) (CHC-3)						
CHC3-Alieu	100	0	100	-	0	**50**
CHC3-Ainaro	100	0	0	-	100	**50**
CHC3-Dili	100	100	100	-	100	**100**
CHC3-Ermera	100	0	0	-	0	**25**
CHC3-Lautem	100	100	100	-	0	**75**

CHC3-Liquica	100	0	100	-	100	**75**
CHC3-Viqueque	100	100	100	-	0	**75**

Table 5a: Health facility wise overall readiness scores for follow up and management of chronic respiratory disease, Timor Leste, 2023

Type of facility	Readiness score for availability of trained staffs, guidelines and registers for the follow up and management of CRD	Readiness score for availability of equipment for the follow up and management of CRD	Readiness score for the availability of diagnostic services for the follow up and management of CRD	Readiness score for the availability of medicines and commodities for the follow up and management of CRD	Overall readiness score for follow up and management for CRD
National Hospital (NH)	100	100	100	100	100
Referral Hospitals (RH)					
RH-Ainaro	67	100	100	60	**82**
RH-Baucau	33	75	100	40	**62**
RH-Bobonaro	67	75	100	20	**65**
RH-Covalima	83	75	100	40	**75**
RH-Oecusse	0	100	100	100	**75**
Community Health Centres (level3) (CHC-3)					
CHC3-Alieu	33	75	100	50	**65**
CHC3-Ainaro	17	75	100	50	**60**
CHC3-Dili	67	100	100	100	**92**
CHC3-Ermera	67	100	100	25	**73**
CHC3-Lautem	50	100	100	75	**81**
CHC3-Liquica	50	75	100	75	**75**
CHC3-Viqueque	67	75	100	75	**79**



Note: Figure inside each bar indicates overall readiness score while symbols denotes the level of readiness score for respective domain

Table 6: Percentage of facilities with availability of all tracers by domains for follow up and management of chronic respiratory disease, Timor Leste, 2023

Type of facility	Percentage of facilities with all 6 tracer items for availability of trained staffs and guidelines for the follow up and management of CRD	Percentage of facilities with all 4 tracer items for availability of equipment for the follow up and management of CRD	Percentage of facilities with all 2 tracer items for availability of diagnostic services for the follow up and management of CRD	Percentage of facilities with all 5 tracer items for availability of medicines and commodities for the follow up and management of CRD
National Hospital(NH)	100	100	100	100
Referral Hospitals (RH)	20	40	100	20
RH-Ainaro	100	100	100	0
RH-Baucau	0	0	100	0
RH-Bobonaro	0	0	100	0
RH-Covalima	0	0	100	0
RH-Oecusse	0	100	100	100

Community Health Centres (level3) (CHC-3)	42.9	42.9	100	14.3
CHC3-Alieu	0	0	100	0
CHC3-Ainaro	0	0	100	100
CHC3-Dili	100	100	100	0
CHC3-Ermera	100	100	100	0
CHC3-Lautem	0	100	100	0
CHC3-Liquica	0	0	100	0
CHC3-Viqueque	100	0	100	0


NCD RISK FACTORS & FACILITY SURVEY
TIMOR-LESTE
2023
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2023

STEPS