



**World Health
Organization**



WORLD **DIABETES** FOUNDATION

Non-Communicable Disease Risk Factor Baseline Survey

UGANDA 2014 REPORT

MINISTRY OF HEALTH

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ABBREVIATIONS

ACRONYM	EXPLANATION
AIDS	Acquired Immune Deficiency Syndrome
BP	Blood Pressure
CDC	Center for Disease Control
CI	Confidence Interval
CVD	Cardiovascular Disease
DALYs	Disability Adjusted Life Years
EA	Enumeration Area
FGD	Focus Group Discussions
FPG	Fasting Plasma Glucose
IDI	In-Depth- Interviews
KII	Key Informant Interviews
KISH	Leslie Kish Grid Technique
HDL -C	High Density Lipoprotein Cholesterol
HIV	Human Immune Deficiency Virus
MET	Metabolic Equivalent of Task
MKPGMS	Mother Kevina Postgraduate Medical School
MoH	Ministry of Health
MUK	Makerere University Kampala
NCD	Non-Communicable Disease
PDA	Personal Digital Assistant
PPS	Probability Proportional to Size
PSU	Primary Sampling Unit
STEPs	STEPwise approach to surveillance
SW	Sampling Weight
TC	Total Cholesterol
UBOS	Uganda Bureau of Statistics
USU	Ultimate Sampling Unit
WHO	World Health Organization

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EXECUTIVE SUMMARY

INTRODUCTION

Chronic Non-communicable Diseases (NCDs) are currently responsible for 56 percent of all deaths and 46 percent of the disease burden measured in disability-adjusted life years (DALYs) in low- and middle-income countries. In Uganda, the burden of disease is still shifted towards infectious diseases with the top three causes of DALYs being HIV/AIDS, malaria, and lower respiratory infections. However, in the past 10 years, the prevalence of NCDs has rapidly increased and currently NCDs are among the first 25 main causes of DALYs in Uganda. This trend of a dual burden of infectious and non-infectious diseases requires innovative strategies for their management and control, especially amid scarce resources. Moreover, HIV/AIDS is now regarded as a chronic disease condition, further complicating the picture of the predicted danger of a dual burden of infectious and non-communicable chronic diseases in Uganda. It is against this background that the Uganda National NCDs risk factors survey was done.

OBJECTIVES

This report presents the findings of the Uganda National NCDs risk factors STEPS survey carried out between March and July 2014. The report further summarizes the outcomes of the adjunctive qualitative study on NCDs risk factors. The Specific objectives of the STEPS survey were to determine the prevalence of hypertension, diabetes and abnormal lipid levels (total cholesterol [T-C] and High Density Lipoprotein Cholesterol [HDL-C]) and their risk factors (tobacco smoking, alcohol consumption, physical inactivity, overweight/obesity and inadequate vegetable and fruit intake).

The objective of the adjunctive qualitative NCDs risk factors survey was to determine the knowledge, attitudes, perceptions and practices of Ugandan communities regarding non-communicable diseases and their risk factors.

METHODOLOGY

The study methodology followed the World Health Organization's (WHO) STEPwise approach to surveillance (STEPS) which provides a standardized method for analyzing and disseminating data on risk factors for non-communicable diseases (NCD). A multi-stage cluster sampling design was used to produce a national representative sample. Participants were people aged 18 - 69 years. Data was collected in STEPs 1, 2 and 3 using personal digital assistants (PDAs). Socio-demographic and behavioural information was collected in STEP 1. Physical measurements such as height, weight, blood pressure and waist and hip circumference were collected in STEP 2. Biochemical measurements were collected to assess total cholesterol and High Density Lipoprotein levels and fasting blood glucose in STEP 3. Data was weighed for age, gender and population size for Uganda and analyzed using WHO STEPS Survey software.

Overall, the STEPS survey reached a sample of 3987 household respondents aged 18-69 years old, 60% being females.

For the qualitative study, two districts were purposively selected from each of the Central, Eastern and Western Regions, and three districts from the Northern Region. Thus overall there were nine

districts selected: Arua, Lira, Gulu, Mbarara, Hoima, Masaka, Kampala, Jinja, and Mbale. The qualitative study employed focus group discussions (FGDs), in-depth interviews (IDI) with subjects having risk factors for NCDs, and key informant interviews (KII). All the FGDs, in-depth interviews and key informant interviews were transcribed by the research assistant and later typed in Microsoft Word® ready for entry into MS Excel. The responses were logged into a mastersheet/logbook for analysis. Data findings were further analyzed for commonalities, variations, and disagreements across the FGDs, IDI and KII within the different districts. Summative content analysis was used in data analysis with the aid of ATLAS.ti version 6.1.

RESULTS

The STEPS survey comprised of 3,987 participants (1,604 males; 2,383 females). The response rate for listed households was 99.0% for STEP 1&2 and 92.2% for all STEP 1, 2 & 3. About one in four participants (24.3%) were regarded as having raised BP (either had raised blood pressure (BP) or had been taking medication for raised BP). Raised BP was more prevalent in males (25.8%) than females (22.9%) and more in urban (25.5%) than in rural (24.4%). Noteworthy is that the majority (76.1%) of the participants with raised BP were not taking medications for lowering blood pressure.

The magnitude of raised fasting glucose including diabetes was estimated at a prevalence of 1.3%; with the prevalence higher in the urban (2.7%) than in the rural areas (1.0%). There was no significant gender difference in the prevalence of raised fasting glucose (males 1.7% vs females 1.0%). Of the participants with raised blood glucose (90.5% Impaired Fasting Glycaemia, and 48.9% with diabetes) were not on medication and not aware of their abnormal blood glucose status.

The magnitude of raised total cholesterol was estimated at 6.7 % with the prevalence higher in the urban (11.5%) than in the rural areas (5.6%); the trend being a worse dyslipidaemia in females than in males. The prevalence of raised cholesterol among females in the urban areas was higher (16.5% vs 7.0%) than in the rural areas. Similarly males in the urban areas had a higher prevalence of raised total cholesterol (5.5% vs 4.1%) than males in the rural areas. The prevalence of raised total cholesterol was higher among females than males in the urban areas (16.5% vs 5.5%). Similarly the prevalence of raised total cholesterol was higher in females than in males in the rural areas (7.0% vs 4.1%). A very high prevalence of low HDL cholesterol was observed; 62.7% and 55.8% in urban females and males; and 69.7% and 60.7% in rural females and males respectively.

Overweight (BMI 25.0 - 29.9 kg/m²) was estimated at a prevalence of 14.5% . Females had a higher prevalence of overweight than males (females 19.5%; males 9.5%). Obesity (BMI ≥ 30 kg/m²) was estimated at a prevalence of 4.6% . Females had a higher prevalence of obesity than males (females 7.5% ; males 1.8%). Overweight and obesity was more prevalent among urban dwellers than rural dwellers (overweight 22.6% vs 12.6% and obesity 9.6% vs 3.5% for urban and rural respectively).

Only 4.3% of the participants were considered physically inactive. The median time spent in physical activity on average per day was 285 minutes. When travel to and from work is included, the average physical activity time was 309 minutes per day.

Eleven percent of the respondents were classified as current tobacco users, including smoking and use of smokeless tobacco with the proportion higher among males (18%) than females (5%). The

prevalence of daily tobacco smokers was higher among rural population than urban (9.0% vs 5.6%). Similarly the prevalence of smokeless tobacco users was higher in the rural than in urban population (4.3% vs 1.1%). The mean age of starting tobacco use was 22 years in the adult population (18 - 69 years).

Alcohol consumption defined by a positive consumption of alcohol within 30 days of the interview had an estimated prevalence of 28.9% with a lower prevalence in females (17.9%) than males (40.1%). There were fewer high end consumers of alcohol among females (1.2%) than males (5.0%). The prevalence of high end consumers of alcohol was higher in rural than in urban population (3.4 % vs 1.3%).

There was a low consumption of fruit and vegetables, with 27% of the respondents not having taken fruits or vegetables in the preceding week of the interview. 87% females and 88% males consumed less than 5 servings of fruit or vegetables per day.

Clustering of more than three of the following risk factors for NCDs (current daily smoking, less than five servings of fruit and /or vegetables per day, less than 150 minutes of physical activity per week or equivalent, overweight or obesity ($BMI \geq 25 \text{ kg/m}^2$), raised blood pressure ($SBP \geq 140$ and/or $DBP \geq 90 \text{ mmHg}$ or currently on medication for raised blood pressure) was observed in 9.8% of the participants. 10.5% of persons aged 40-69 years had a 10-year CVD risk $\geq 30\%$, or with existing CVD.

The qualitative study revealed that individuals in the community have heard about NCDs and indeed some have seen people in their community with NCDs, although their knowledge was not comprehensive. The reasons for cigarette smoking included the perception of getting satisfaction and relief from stress. Obesity was perceived as occurring among the urban dwellers and uncommon in the rural areas. Most FGD participants and key informants were of the view that there has been changes in people's dietary habits over the years, especially in the urban and peri-urban areas where the population ate more of fried fast foods and less vegetables and fruits.

CONCLUSION

This survey demonstrates that NCDs and their risk factors are a public health problem in Uganda. The study further reveals that there is a high prevalence of hypertension in the Ugandan population and that the majority of people with hypertension are not aware of the hypertension status. Furthermore, the survey demonstrated that approximately one in ten have a more than three risk factors for NCDs and that a similar number of persons aged 40 - 69 years have a 10-year CVD risk $\geq 30\%$, or with existing CVD.

RECOMMENDATION

There is a need to strengthen the existing efforts towards the prevention and management of NCDs in Uganda and to change the trends of persons being affected by NCDs. The goal should be to change the population from predominantly not being aware of risk factors for NCDs, and therefore a likelihood of presenting late with NCDs and their complications, to activities that support prevention, early detection and early treatment of NCDs. This may require a multi-sectoral action plan.

THE UGANDA NCD RISK FACTORS SURVEY

INTRODUCTION

Literature Review

Non-communicable diseases (NCDs) are currently responsible for 56 percent of all deaths and 46 percent of the disease burden measured in disability-adjusted life years (DALYs) in low- and middle-income countries [1]. From a projected total of 58 million deaths from all causes in 2005, it was estimated that non-communicable diseases accounted for 35 million, which is double the number of deaths from all communicable diseases (including HIV/AIDS, tuberculosis and malaria), maternal and perinatal conditions and nutritional deficiencies combined [1]. This alarming figure of burden of disease due to NCDs is projected to increase rapidly in the years ahead, posing a danger of a double burden of infectious and non-infectious diseases.

The epidemiological transition in global health from infectious to chronic non-communicable diseases, especially cardiovascular disease (CVD) not only poses a threat to the health of those affected, but also places an enormous burden on the health systems of nations, particularly those of the least developed countries as they must now address a double burden of acute and chronic diseases amidst scarce resources [2 - 4]. Moreover, this epidemiological transition will adversely impact on socio-economic development of the least developed nations as chronic non-communicable diseases tend to be more prevalent in the young working class [2]. As a more sophisticated workforce becomes a highly valued and harder-to-replace economic investment, the increasing prevalence of CVD risk factors in the developing countries, particularly Sub-Saharan Africa, becomes a real threat to economic investment, adversely impacting on all the previous gains made in combating HIV, malaria, tuberculosis and other infectious diseases [5].

Although based on limited data, acute infectious communicable diseases still contribute the major (75%) disease burden in Uganda with malaria, acute respiratory infections, and HIV/AIDS among the top 10 causes of illness and deaths [6]. However, with ageing populations, rising incomes, and increased exposure to risk factors that contribute to patterns of illness, disability, and premature death due to NCDs, a greater policy attention to NCDs than they have received in the past is highly justified, so as to avert the dual epidemic of communicable and non-communicable diseases.

An increase in the incidence of a set of behavioural and physiological risk factors in the Ugandan population is presumed to be responsible for the increase in the incidence of the main non-communicable diseases. This set includes physical inactivity; inappropriate diet that may be high in calories, fat, salt, sugar but low in fruit and vegetable content; tobacco use, excessive alcohol consumption; overweight and obesity; high blood pressure; high blood glucose and high blood cholesterol. These risk factors may not be the similar in men and women in all regions but the increase in the incidence of these risk factors is likely to be heralded by socio-economic changes like rising income, changes in lifestyle and improved nutrition in some population groups.

Non-communicable diseases, previously reported as rare in Uganda [7] are currently reported to be on the increase [8]. These diseases include systemic hypertension, cardiovascular diseases including stroke, and some cancers (mainly breast and cervical cancer). The International Diabetes Federation (IDF) put the estimate of diabetes mellitus in Uganda at 50,000 affected individuals in the year 2003, and projected a 10-fold increase in the cases of diabetes by 2025 if no interventions are initiated [8]. These numbers would enormously strain the health system.

It is crucial to quantify and understand the dynamics of these risk factors in our community to be able to prevent and manage non-communicable diseases in our population. By targeting risk factors for non-communicable diseases more than 50% of the deaths and disability from non-communicable diseases could be prevented by a combination of simple, cost-effective, national and individual efforts that reduce the risk factors and promote healthy lifestyles [9]. But, as evidenced in Uganda [10] and seen in most other African countries, there is still lack of awareness about the growing problem, which, unfortunately, is often coupled with the absence of a clear policy framework for the prevention and management of non-communicable diseases.

The World Health Organisation has taken the issue of preventing non-communicable diseases as a priority. In May 2004, the 57th World Health Assembly adopted a major resolution on "Global strategy on diet, physical activity and health", calling on relevant actors, including governments to undertake a prevention-orientated approach to addressing non-communicable diseases such as cardiovascular disease, type 2 diabetes, cancers and obesity-related conditions, emphasising the need for countries to develop coherent, multi-sectoral national strategies with a long-term, sustainable perspective, and to make the healthy choices the preferred alternative [11]. Indeed, this has been regarded as a landmark achievement in public health and provided Member States with a powerful instrument, which will enable them to develop effective and integrated national strategies to reduce the human and socioeconomic costs of non-communicable diseases [11]. Subsequently, a coordinated global response to NCDs which has been absent to date, is therefore expected to come from the following three processes:- Global Monitoring Framework, including indicators, and a set of voluntary global targets for the prevention and control of NCDs decided on at a formal WHO Member State consultation on the 5-7 November 2012, the Global Action Plan for the Prevention and Control of NCDs 2013-2020 adopted at the 66th World Health Assembly May 2013 in Geneva and from the options for strengthening and facilitating multi-sectoral action for the prevention and control of NCDs through partnerships presented in a report by the UN Secretary General in December 2012. This implies that Governments are expected to improve data collection and surveillance in order to honour the commitments of the UN Political Declaration on NCDs.

WHO released a final Discussion Paper on the 25 July 2012, proposing 11 global targets (including the "25 by 25" target) and 19 monitoring and surveillance indicators. It distinguishes between 4

targets that have already received strong support by governments and other stakeholders (salt, tobacco, physical inactivity, blood pressure) and those that have support but need further development (obesity, fat intake, alcohol, cholesterol, essential medicines and technologies, multidrug therapy). This survey addressed the 4 main risk factors that had already received strong support by governments and further addressed cholesterol and obesity.

In line with the 57th World Health Assembly resolution on non-communicable diseases, the Government of Uganda took note of the threat of non-communicable diseases, and through the Ministry of Health, the Government made the prevention and control of non-communicable diseases one of its top priorities. It is against the background of an increasing incidence and prevalence of non-communicable diseases and the strong measures undertaken by the Ministry of Health of Uganda Government and the international community as a whole in the control NCDs, that a survey of the major risk factors for non-communicable diseases was undertaken.

The Republic of Uganda

Geography

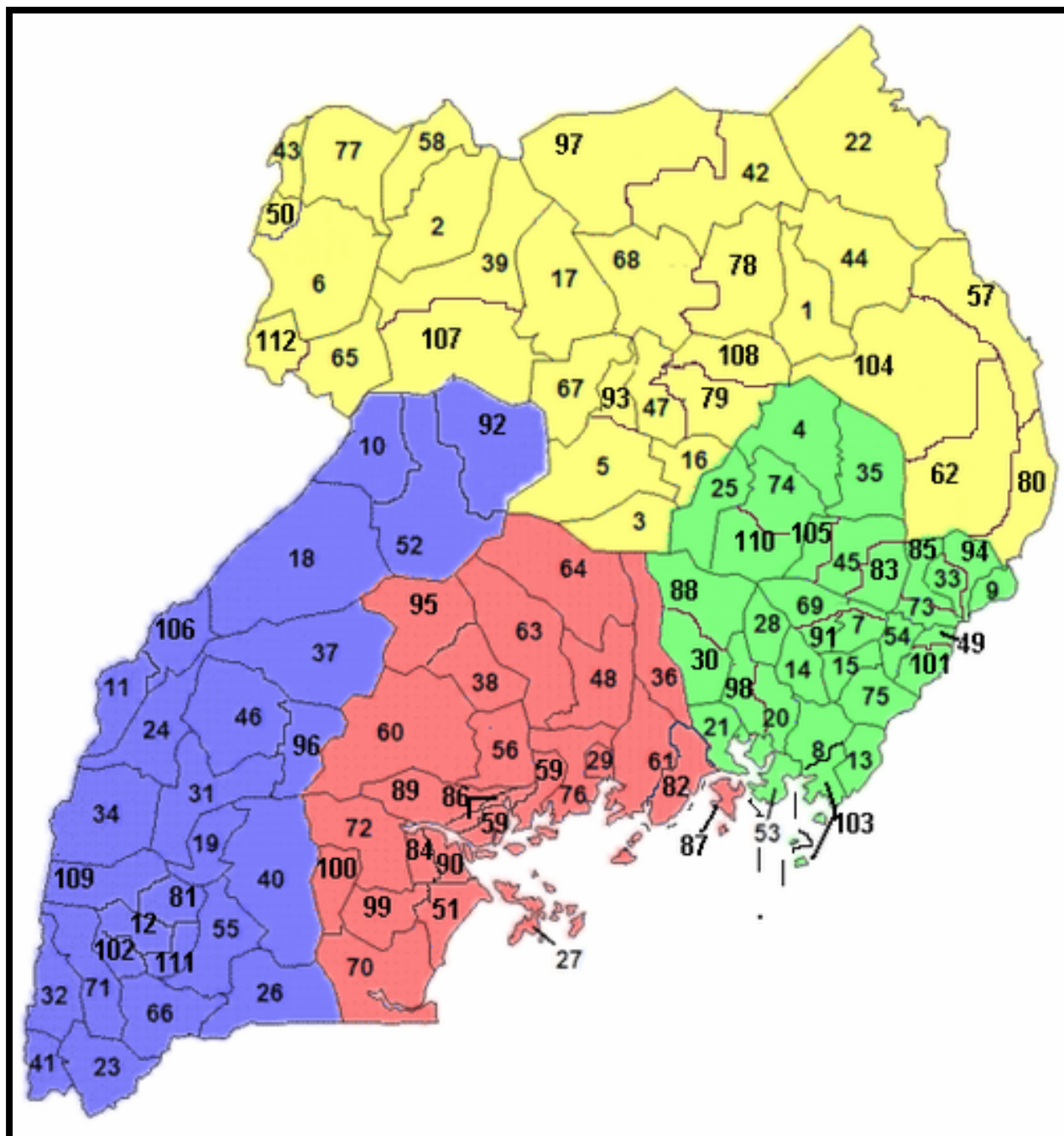
The Republic of Uganda is one of the world's most populous landlocked countries with a population of 34,856,813 people [1]. The country is divided into 111 districts and the Kampala Capital City, 181 Counties and 1,382 Sub-counties. The mapping of Uganda districts are displayed in Fig. 1.

The districts in Uganda may further be grouped into regions, namely Central, Eastern, Northern and Western Regions. While this grouping does not produce any complete homogeneity, the languages spoken and cultural practices in each region are closely related and are therefore an important factor in planning national surveys. Recent civil strife has affected the Northern Region predominantly with consequent internal displacement and rapid urbanization. The regions were taken into consideration during the estimation of the sample size for the STEPS survey. The regions of Uganda are displayed in Fig. 2. Below displays the regions of Uganda.

Health Services Delivery

The delivery of health services in Uganda is done by both the public and private sectors with Government of Uganda being the owner of most facilities. Government of Uganda owns 71.8% of the health centres and 52.2% of the hospitals, compared to 19.6% of health facilities and 40.7% of the hospitals owned by Private Not For Profit (NFP) organisations, and 8.6% of health centres and 7.1% of the hospitals owned by the Private Health Practitioners (PHP). The burden of disease still remains largely in the domain of infectious diseases.

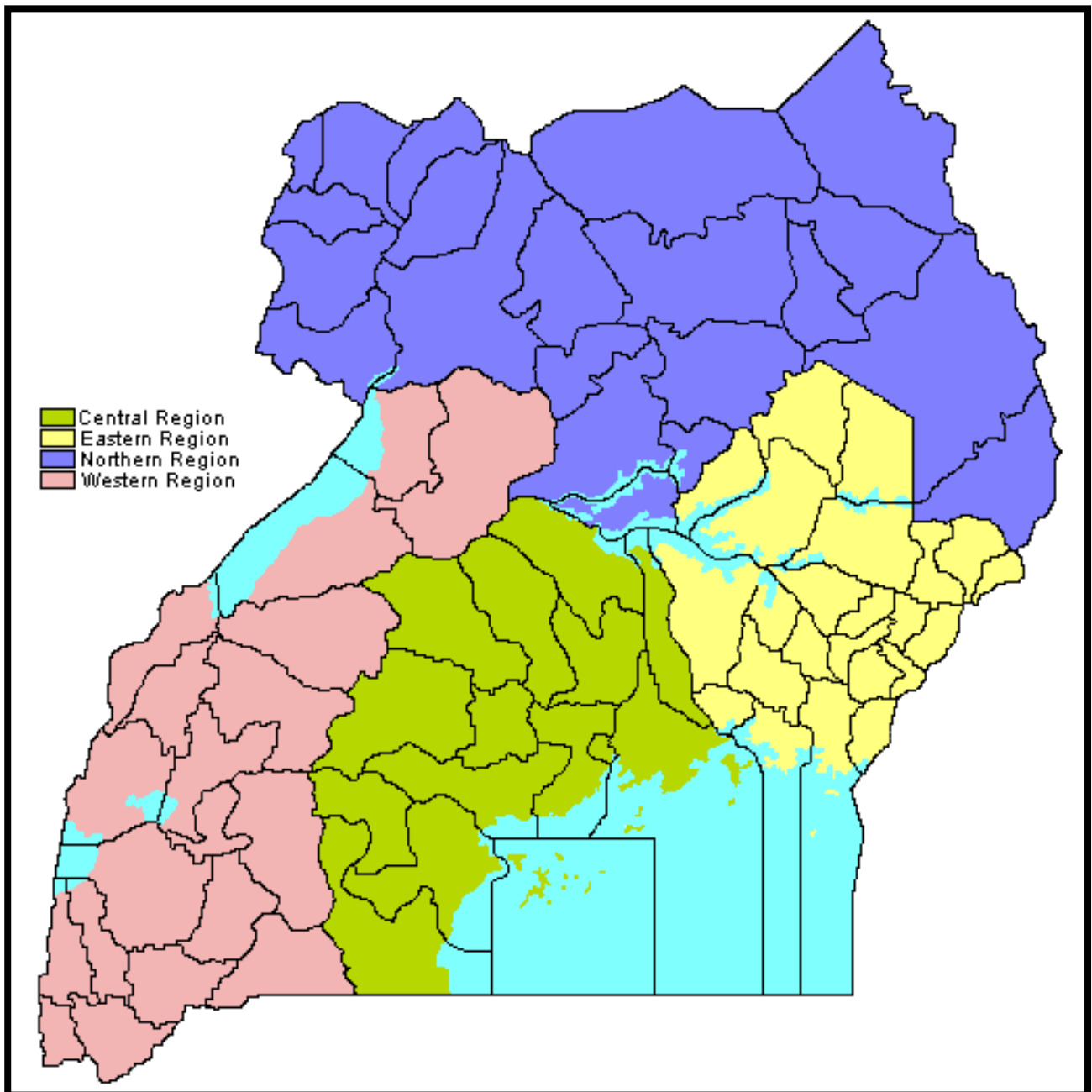
Fig. 1. Map of Uganda showing Districts, October 2014



Disease Burden in Uganda

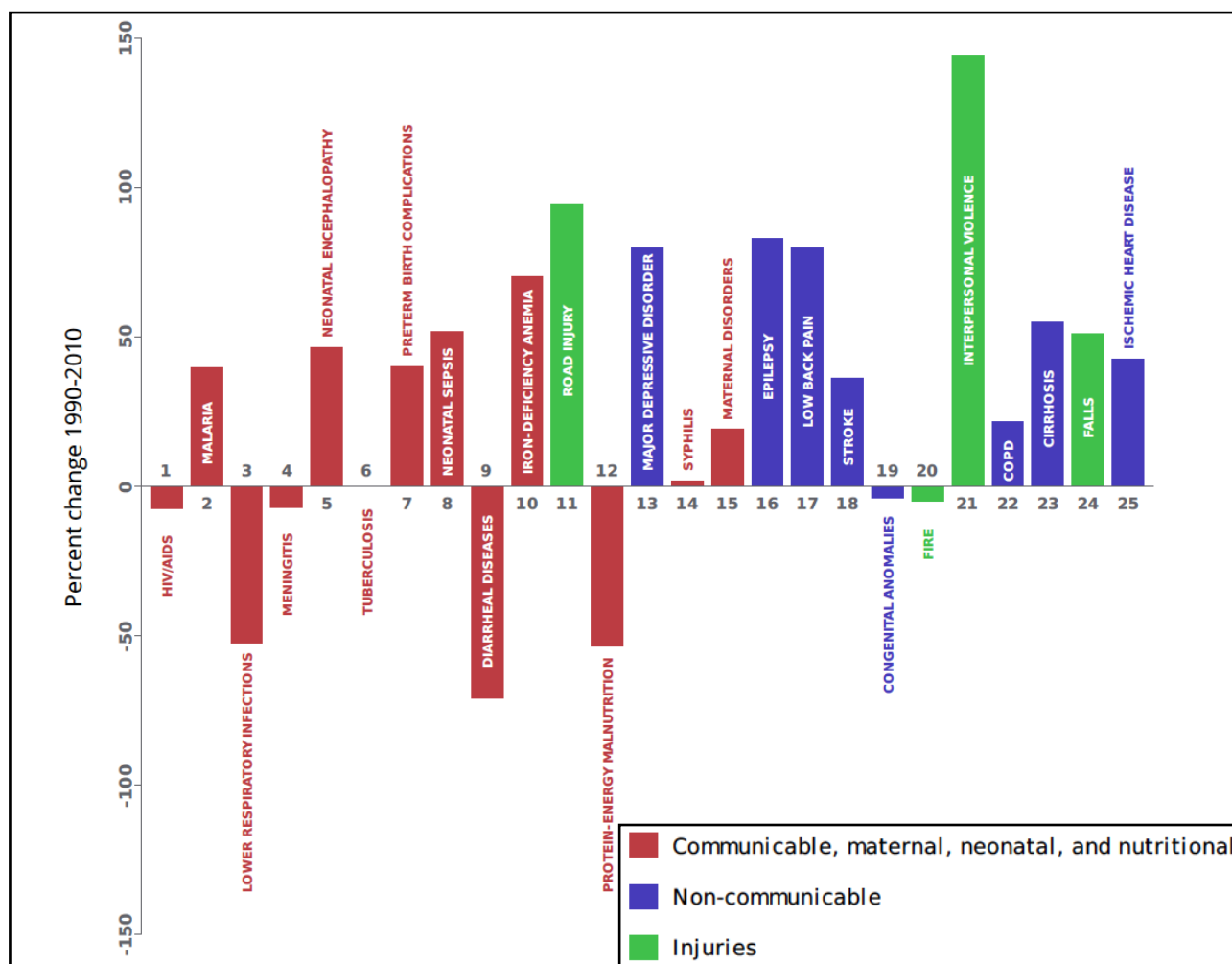
Disability-adjusted life years (DALYs) quantify both premature mortality (YLLs) and disability (YLDs) within a population. In Uganda, the top three causes of DALYs in 2010 were HIV/AIDS, malaria, and lower respiratory infections, but shared the increase in prevalence with non-communicable diseases compared to the past 10 years. Fig. 3 shows the leading causes of DALYs and percent change in 1990 to 2010 for Uganda. The top 25 causes of DALYs are ranked from left to right in order of the number of DALYs they contributed in 2010. Bars going up show the percent by which DALYs have increased since 1990. Bars going down show the percent by which DALYs have decreased. This trend has continued to be reported by the Ministry of Health, Uganda Government.

Fig. 2. Map of Uganda showing regions, October 2014.



Indeed, globally, non-communicable diseases and injuries are generally on the rise, while communicable, maternal, neonatal, and nutritional causes of DALYs are generally on the decline [3]. This underscores the need for population based studies on non-communicable diseases so as to generate data required for health planners in the management and prevention of non-communicable diseases.

Fig. 3. Leading causes of DALYs and percent change in 1990 to 2010 for Uganda



CONDUCT OF THE UGANDA NCD RISK FACTORS SURVEY

JUSTIFICATION OF THE SURVEY

Despite the reported increase in the prevalence of non-communicable diseases in Uganda, and their likely negative impact on the health of individuals, health services and the economy of the country, not sufficient studies have examined risk factors for non-communicable diseases in the Ugandan population. Data on risk factors for non-communicable diseases in the Ugandan population is still scanty [10]. This data is essential to inform planners and policy makers during the process of formulation of policy and framework for the prevention and management of non-communicable diseases, and hence the urgent need for a survey on the risk factors for non-communicable diseases. The main objective of addressing the NCD burden is both to postpone mortality and, for a given mortality profile, postpone morbidity i.e. healthy ageing or compression of morbidity. Prevention of non-communicable diseases essentially involves identification of putative risk factors for non-communicable diseases and engaging the community in behavioural change. This is best achieved through appropriate social mobilisation to increase the awareness of the population about the problem that in turn translates into behavioural change.

The results of the survey will make possible evidence based planning, and development of policy and guidelines for implementation of interventions in the prevention and management of non-communicable diseases at national and sub-national levels. The survey has established benchmarks against which future studies will be based.

General Objectives

To determine the magnitude of non-communicable diseases and their risk factors in Uganda.

Specific Objectives

To assess the distribution of life-style factors (physical activity, tobacco and alcohol use), and anthropometric measurements (body mass index and central obesity) which may impact on diabetes and cardiovascular risk factors.

To determine the prevalence and determinants of hypertension, diabetes and abnormal lipid levels.

To explore determinants of life-style factors through interviews and focus group discussions.

ORGANIZATION OF THE SURVEY

National NCD Survey Steering Committee

The National NCD Survey Steering Committee was constituted and chaired by the Director of Health Services (DG), Ministry of Health (MoH), Uganda Government. The National NCD Survey Steering Committee guided the survey and constituted members into a technical working group to implement the survey protocol. The members of the technical working group included the DG, as the Chair, the Principal Medical Officer NCD Desk, MoH, and the support team, representatives from the Uganda Bureau of Statistics (UBOS), representatives from School of Public Health Makerere University (MUK), representatives from the School of Social Sciences, Makerere University (MUK), representative from the School of Statistics, Makerere University (MUK), representatives from the World Health Organization (WHO) Uganda Office, Senior Consultant Clinicians in the field of Cancer, Diabetes and Endocrinology, Uganda Cancer Institute, St. Francis

Nsambya Teaching Hospital and Mother Kevina Postgraduate Medical School, Uganda Martyrs University (UMU). The members of the team jointly developed the research proposal, conducted the adaptation of the survey tools, approached stakeholders for awareness and resource mobilization and participated in the training of the data collectors and their supervision of data collection in the field. The survey was co-ordinated from Ministry of Health Headquarters, Plot 6 Lourdel Rd, P.O. Box 7272, Kampala, Uganda

METHODOLOGY

The Uganda NCD survey employed the WHO STEPwise (STEPS) approach.

STEPwise (STEPS) approach

STEPS is a sequential process starting with gathering information on key risk factors by the use of questionnaires (STEP 1), then moving to simple physical measurement (STEP 2) and then collection of blood samples for biochemical assessment (STEP 3) [12, 13]. In addition to the three STEPS used in risk factor assessment, the conceptual framework of STEPS also includes three modules in the assessment of each risk factor, namely core, expanded and optional.

Adaptation of survey tools and training

Work on the National NCD Survey commenced in 2006 and many meetings and workshops were held to adapt the generic WHO STEPS survey protocol and tools to suit the Uganda situation. The final workshop was held just before the commencement of the field work in March 2014. The objectives of these workshops were to: (a) adopt the WHO STEPwise approach and training manuals (b) map out fieldwork activities (c) review the translated tools into six commonly spoken local languages in Uganda namely Runyoro-Rutoro, Luo, Ateso, Luganda, Lugbara and Runyankore-Rukiga (these languages have previously been successfully used by UBOS in Uganda National surveys with excellent national coverage) and (d) arrange for the appropriate training of interviewers / data collectors.

Furthermore, a qualitative study to explore factors that may portend the existing prevalence of risk factors for non-communicable diseases was included in the protocol for the survey. This component aimed at capturing community concerns, beliefs, perceptions and misconceptions, including prejudices, which could be shaping behaviour during the development of a non-communicable disease.

Ethical clearance

Ethical clearance was granted by St. Francis Hospital, Nsambya Institutional Review Board in 2006 and renewed in 2013.

Survey participants

Eligible participants for the survey were all adult males and females aged 18 - 69 years

Survey Population

This was a cross-sectional population-based study conducted to measure prevalence of blood pressure and diabetes, prevalence of risk factors, physical activity, alcohol consumption, smoking and tobacco use among respondents aged 18-69 years (adult population) sampled countrywide.

Sample Design

The study methodology followed the World Health Organization's (WHO) STEP wise approach to surveillance (STEPS) which provides a standardized method for analyzing and disseminating data

on risk factors for non-communicable diseases (NCDs). The sample for the Uganda NCDs was designed to provide Cardiovascular Diseases (CVD) prevalence's, smoking and tobacco use and alcohol consumption estimates for the country as a whole and for urban and rural areas separately.

A two stage sampling design was used to draw the sample. At the first stage, Enumeration Areas (EAs) were drawn with Probability Proportional to Size (PPS), and at the second stage, households which were the ultimate sampling units were drawn using Simple Random Sampling (SRS). A total of 350EAs were selected from 2014 Uganda Population and Housing Census Mapping Frame. At the EA level, the target was 14 households.

Sample frame

The 2014 Uganda NCD survey used a sampling frame of the 2014 Population Census Mapping listing provided by the Uganda Bureau of Statistics (UBOS). The UBOS has an electronic file consisting of 78,950 Enumeration Areas (EAs) created for the 2014 Population and Housing Census. An EA is a geographic area consisting of a convenient number of dwelling units that serve as counting units for the census. Tables A.1 provides information on the distribution of EAs and households in the sampling frame by region and residence. The table shows that among the 78,950 EAs, 13,087 (22%) are in urban areas and 65,863 (78%) are in rural areas. The average size of an EA, measured in number of households, is 95 in an urban EA and 77 in a rural EA, with an overall average of 79.

Table A.1 Enumeration areas and households

	Number of enumeration areas in frame			Number of households in frame		
	Rural	Urban	total	Rural	Urban	total
Kampala	0	3,199	3,199	0	336,995	336,995
central	13,785	3,022	16,807	1,203,952	295,352	1,499,304
Eastern	19,652	2,302	21,954	1,400,659	194,032	1,594,691
Northern	15,790	1,651	17,441	1,162,984	141,889	1,304,873
Western	16,636	2,913	19,549	1,260,573	239,141	1,499,714
Uganda	65,863	13,087	78,950	5,028,168	870,414	6,235,577

Sample Size

The size required for the sample was determined by taking into consideration several factors:- the three most important being (i) the degree of precision (reliability) desired for the survey estimates, (ii) the cost and operational limitations, and (iii) the efficiency of the design. The Uganda NCD STEP 1 and 2 complete with completed information were 3987 and 3720 with all the three STEPS 1,2 & 3.

Listing

The listing was performed by trained and experienced staff from the UBOS. Supervision teams were dispatched to the listing teams to crosscheck the listing exercise. New listing was undertaken in all the sampled EAs from which 14 households were selected.

Pretesting

Before the start of fieldwork, the questionnaires were piloted in English to make sure that the questions were clear and could be understood by the respondents. This was done during the finalization of the draft questionnaire

Field Team

A survey team was formulated at the level of an EA. There were 10 teams and each team comprised of 7 people as follows: 1 trained supervisor (co-ordinating the data collection, planning and checking the completeness of questionnaires), 3 trained interviewers (for STEP 1 and STEP 2), 1 trained health worker (STEPS 3- dry chemistry), 1 politically elected local community leader (LC 1 Chairman) (notifying the village households of the selected villages about the survey, day and time when the survey team would be coming to the village and also guided the survey team to the selected villages) and 1 driver (transport).

Training of interviewers

In collaboration with WHO headquarters and Ministry of Health, Uganda, a 5-day training workshop for data collectors and supervisors was held from the 24 through 28 March 2014. The objectives of this final training workshop were: (a) identify field team members (b) go through the check list for the equipment and supplies for the survey (c) overview of the study and what the study was all about (d) how to gain entry into the study areas and households (e) how to conduct interviews (f) how to observe research ethics (g) how to collect data using personal digital assistant (PDA) (g) how to collect blood samples (h) how to keep records and (i) how to ensure quality control of all field processes. Interviewers conducted mock interviews and practiced taking both physical measurements and collection of blood samples. Team supervisors were further trained on: (a) checking and correcting interview data (b) editing questionnaires in the PDA and (c) problem solving in the field. A mock pilot survey was conducted in Mukono District on the 28 March 2014. Pilot feed back was done and final session with the Uganda survey team held and the questionnaires finalized.

Data collection

Data was collected using personal digital assistants (PDAs). Each survey team had two PDAs programmed for interviews and physical measurements (STEPS 1 & 2) and one PDA for data on biochemical measurements (STEP 3).

Field Activities

Immediately after training, data collectors went into their teams. Each member of the research team was identified by a unique code and a was given a project bag. Each team was provided with a field kit containing: a carrier bag, letters to the relevant authorities (DHOs and local leaders), referral letter for those with abnormal results, consent forms, checklist, list of the selected EAs, EA maps, team field log book, operational manual, pens, pencils, clipboards, notebooks, tapes for measuring girth (and could also be used for measuring height in case the digital height meter failed), scales for weight and height, blood pressure machines, lancets for finger pricks, sharp containers, gloves and PDAs. All teams had mobile cell phones with access to the co-ordinating centre at MoH, 24 hrs 7 days a week during the survey period time.

Survey period

Data was collected during the month of April through June 2014. A “verbal audit” on the survey was done with all the data collectors in a workshop on the 25 July 2014.

Quality Assurance

Members of the field team met with the team leader every evening after the day's work and reviewed the progress of data collection in their respective areas. The members of the national team met and reviewed the progress of the survey on a weekly basis either by telephone or face to face meeting. The members of the national team conducted field visits during the survey period and filed reports to the co-ordinator at the MoH for action where necessary. A meeting with the survey teams was held half way the field activities to review any difficulties encountered in the data collection. These steps ensured that data collectors adhered to protocol to ensure the quality of data collected.

Survey flow: STEP 1, 2, 3

The survey flow took a systematic format as follows:

Identification of the household

After identifying the household, triage was done in the Ugandan custom with greetings followed by introduction of the team leader to the household by the LC Chairman. The team leader then briefly explained the reasons for the survey and how it was going to be carried out.

Obtaining informed written consent

Informed written consent was obtained from eligible selected participant. Consent forms were in English, Runyoro-Rutoro, Luo, Ateso, Luganda, Lugbara and Runyankore-Rukiga and participants answered in the language most convenient to them.

STEP1: Questionnaire-based assessment

The survey questionnaire was programmed on the PDAs. It consisted of core (age, sex and education in years and current exposure to tobacco and alcohol, diet and physical activity), expanded (rural/urban setting, occupation, average household income) and optional (marital status, medical and health history, past history of smoking and alcohol consumption) variables. The medical and health history component included questions on medication, cigarette use, diabetes, hypertension and other cardiovascular conditions.

STEP 2: Physical measurements

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

Blood pressure

Blood pressure measurements were taken on the left arm with the participant in the sitting position using battery powered digital blood pressure machine (Boso Medicus Uno[®]). Three readings were taken 3-5 minutes apart. Heart rate reading was recorded. During the analysis the average of the last two readings was as the final blood pressure reading and heart rate respectively.

Waist and Hip Circumference

Waist and hip circumferences (to the nearest 0.5 cm) were measured using a non-stretchable standard tape measure. The waist measurement was taken mid-way between the lowest rib and the iliac crest with the subject standing at the end of gentle expiration, and hip measurement at the greater trochanters.

Weight and Height

Standing height was measured with a laser stadiometer incorporated in the compact SECA 877 that includes a pre-calibrated digital weighing scale. In case of laser stadiometer failure height was

manually measured with the participant standing upright against a wall on which a height mark was made and a tape measure used to derive the height. Measurements were taken with the participant in barefoot, standing with the back against the wall and head in the Frankfort position with heels together. The participant was asked to stretch to the fullest. Height measurements were taken to the nearest 0.5 cm. Weight measurements were taken on a pre-calibrated weighing scale (SECA 877).

STEP 3: Biochemical measurements

Participants were informed that STEP 1 and STEP 2 would be done on day 1 and STEP 3 would be done on day 2. Participants were requested to fast overnight after STEP 1 and STEP 2 and not to indulge in exercise or smoking in the morning of the STEP 3.

Participants in the selected EA converged at the agreed place in the EA where finger blood samples for biochemistry tests were taken. Most of the participants had a very short distance to walk, and if substantial distance was envisaged, they came on a motorcycle (Boda-Boda) or were collected by the survey team vehicle. Only those who reported compliance with the procedures for STEP 3 (overnight 8-hr fast, no exercise in the morning of the study and smoking) were eligible for finger prick blood sample collection. Total cholesterol, High Density Lipoprotein Cholesterol (HDL-C) and fasting blood glucose were measured using CardioChek® PA meter.

DEFINITIONS

BODY MASS INDEX

Body Mass Index (BMI) was computed by dividing the weight (kg) by the height in metres squared (m^2). BMI was classified as in Table A: 2 below [14]

Table A: 2 Classification of weight using BMI (kg/m²) [14]

Category of weight	BMI (kg/m ²)
Underweight	< 18.5
Normal weight	18.5 - 24.9
Overweight	25.0 - 29.9
Obesity (Class 1)	30.0 - 34.9
Obesity (Class 2)	35.0 - 39.9
Obesity (Class 3)	> 40.0

CENTRAL OBESITY

Central obesity was defined as waist hip ratio (waist circumference/hip circumference):
>0.85 in women and >0.95 in men.

HYPERTENSION

Hypertension was defined as summarized in Table A.3 below [15]. Participants on regular antihypertensive (documented) treatment were regarded as having hypertension regardless of their blood pressure readings.

Table A.3 Classification of Hypertension

Grading	Category Systolic (mmHg)	Category Diastolic (mmHg)
Optimal	<120	<80
Normal	<130	<85
High-Normal	130 - 139	85 - 89
Sugroup: Borderline	140 - 149	90 - 94
Grade 1 Hypertension (Mild)	140 - 159	90 - 99
Grade 2 Hypertension (Moderate)	160 - 179	100 - 109
Grade 3 Hypertension (Severe)	≥ 180	≥ 110
Isolated Systolic Hypertension	≥ 140	< 90

DYSLIPIDAEMIA

Dyslipidaemia was conservatively defined as total cholesterol ≥ 5.0 mmol/l with more detailed definitions as outlined below for total cholesterol and HDL -C respectively [16]. Table A:5 shows the classification of HDL cholesterol dyslipidaemia.

Table A: 4 Definition of dyslipidaemia using total cholesterol [16]

Category	Level of Total Cholesterol (mmol/l)
Total Cholesterol	
Level A Hypercholestromia	≥ 5.0
Level B Hypercholestromia	> 6.2

Table A: 5 Definition of dyslipidaemia using HDL-C

Category	HDL -C Men (mmol/l)	HDL - Cholesterol Women (mmol/l)
Poor	< 1.0	< 1.3
Better	$1.3 - 1.5$	$1.3 - 1.5$
Best	> 1.5	> 1.5

Non-HDL cholesterol was defined as the product of Total Cholesterol - HDL-C.

IMPAIRED FASTING GLUCOSE (IFG) AND DIABETES

Diabetes and Impaired Fasting Glucose (IFG) were defined as in the table below [17]

Table A: 6 Classification of impaired fasting glucose and diabetes

Category of blood glucose	Mmol/L
Impaired Fasting Glucose (capillary blood)	≥ 6.1 and < 7.0
Raised fasting glucose including diabetes (capillary blood)	≥ 7.0
Diabetes (fasting venous blood)	≥ 7.0

METABOLIC EQUIVALENT OF TASK (MET)

The Metabolic Equivalent of Task (MET), or simply metabolic equivalent, is a physiological measure expressing the energy cost of physical activities and is defined as the ratio of metabolic rate (and therefore the rate of energy consumption) during a specific physical activity to a reference metabolic rate, set by convention to $3.5 \text{ ml O}_2 \cdot \text{kg}^{-1} \cdot \text{min}^{-1}$ or equivalently [20].

DATA MANAGEMENT

DOWNLOADING AND MERGING DATA

Data was collected using PDAs. There were two groups of PDAs used to collect data: one set of PDAs was used to collect data for STEP 1 (questionnaire) and STEP 2 (height, weight, waist and hip circumference) and another set of PDAs was used to collect STEP 3 (biochemical measurements). A total of 30 PDAs were used. Data on the PDAs were downloaded into the computer installed with WHO NCD STEPS software. The files of each participant (questionnaire, body measurements, biochemistry tests and Kish data) were then merged using the participant identity (PID) number cross checked with participant name, EA number or village/township name and other particulars where necessary.

DATA CLEANING

After merging, data was cleaned. Common variables in the dataset were matched and inconsistencies corrected.

WEIGHTING OF DATA

In order for the sample estimates from the Uganda NCD survey to be representative of the population, it was necessary to multiply the data by a sampling weight. Sample weights were calculated for all records using the probability of selection at each stage of sampling. Thus, for each participant his/her weight was calculated by first multiplying the probability of EA selection, the probability of household selection, the probability of selection within their household and age-sex distribution of the population in Uganda. Design weights were adjusted for household non response and also for individual non response to get the sampling weights. The individual probability was based on the number of eligible persons found in the household during the interview. Eligibility for the individual interview was for persons aged 18-69years. The participant's weight would then be equal to the inverse of this product. It was not possible to determine the size of the household for each person due to difficulties with the participant IDs in the Kish Method data. Thus, the mean household size across all participants was used in calculating the weight for each participant.

DATA ANALYSIS

Data analysis in this report was conducted in Epi Info, version 3.5.1. The analysis employed simple descriptive statistics with means, proportions and frequency distributions.

95% Confidence Intervals (CI) were used as a measure of precision on the estimated population parameters. Further appropriate analyses will be done to take into consideration the complex sample design of the survey and will be provided in future reports.

QUALITATIVE STUDY

INTRODUCTION

A qualitative study was part of the Uganda NCD Survey Protocol. The objective of the qualitative component was to determine the knowledge, attitudes, perceptions and practices of Ugandan communities regarding non-communicable diseases and their risk factors. A total of 14 research assistants were recruited and trained based on the local language proficiency and skills in conducting qualitative research. Training of research assistants took three days from 26th to 28th March 2014. Data collection took place between 6th to 17th April 2014.

CONDUCT OF THE QUALITATIVE STUDY

Sampling of districts

Based on the regions of Uganda, two districts were purposively selected from each region for the qualitative component of the NCD study. In total 9 districts were selected: Arua, Lira, Gulu, Mbarara, Hoima, Masaka, Kampala, Jinja, and Mbale. See Fig. 1 above.

Methods of qualitative data collection

Focus group discussions

Focus group discussions were conducted with groups of men and women separately to explore their knowledge, beliefs, perceptions and behavioural practices regarding Non-communicable diseases (NCDs). In total 36 focus group discussions were conducted (four per district). A focus group discussion guide with the relevant thematic areas was constructed and used to guide the discussion. All the focus group discussions were tape recorded in addition to notes taken by the note taker during the focus group sessions.

In depth Interviews with subjects having risk factors for NCDs

In-depth interviews were conducted with purposively selected people with NCD risk factors (obesity, diabetes, hypertension) and they were intended to provide a deeper understanding and more insights on broader issues related to NCDs such as experiences lived, changes in lifestyle brought about by their new condition, health care seeking behaviour and patterns, support provided (facility, family, community), difficulties encountered as a patient suffering from NCD etc. In total 41 in depth interviews were conducted - about 4-5 per district. All the in-depth interviews were tape-recorded in addition to note taking done by the interviewer.

Key Informant Interviews

Key Informant Interviews were conducted with health workers and some opinion leaders in the districts visited. In total 121 Key informant interviews were conducted. A key informant guide was constructed to guide the interviews. Notes were taken during the interviews.

Qualitative data management and analysis

All the focus group discussions, in-depth interviews and key informant interviews were transcribed by the research assistant and later typed in Microsoft® Word ready for entry into Microsoft® Excel. The responses were logged into a mastersheet/logbook for analysis. Data findings were further analyzed for commonalities, variations, and disagreements across the focus group discussions, in-depth interviews, and key informant interviews within the different districts. Summative content analysis was used in data analysis with the aid of ATLAS.ti® version 6.1[18, 19]

FUNDING FOR THE UGANDA NCD SURVEY

The survey was co-funded by Ministry of Health of the Uganda Government and the World Health Organization. Funding was also received from the World Diabetes Foundation (WDF) and United Nations Development Program (UNDP).

RESULTS

DEMOGRAPHIC CHARACTERISTICS

The social-demographic characteristics of the respondents are presented in Table 1. Of the 3987 respondents, 40.2 percent were males and 59.8 percent were females. By age group; 41 percent were in the younger age group (18-29), 42 percent in the middle age group (30-44) and 17 percent were aged between 45-69 years.

Looking at the highest education levels, 16 percent had no formal education, while those with primary, secondary and university/tertiary constituted 41 percent, 33 percent and 9 percent respectively.

With regard to marital status, about 16 percent were never married, 64 percent were married, 8 percent were separated or divorced and about two percent were cohabiting.

About three percent of the participants were employed by government, seven percent by non-government, and the majority (55%) reported that they were self-employed.

By region of residence, 34% of the respondents were from the Central region, 26% from the Eastern Region, 22% from the Western region and 18% from the Northern region. By rural-urban stratifications, majority of the respondents (73%) resided in the rural areas with those in urban areas constituting 27% .

Table 1: General sample characteristics of respondents

Characteristic	Categories	Number (N=3987)	Percentage (%)
Region	Northern	707	17.7
	Eastern	1,036	26.0
	Central	1,359	34.1
	Western	885	22.2
Residence	Urban	1,084	27.2
	Rural	2,903	72.8
Sex	Men	1,604	40.2
	Women	2,383	59.8
Age	18-29	1,616	40.5
	30-49	1,680	42.2
	50-69	691	17.3
Marital status	Never married	627	15.7
	Currently married	2,550	64.0
	Separated	317	8.9
	Divorced	89	2.2
	Windowed	306	7.7
	Cohabiting	94	2.4
	Refused	4	0.1
Highest education level	No formal school	654	16.4
	Primary school completed	1,626	40.8
	O-level completed	976	24.5
	Junior Secondary completed	328	8.2
	A-level completed	13	0.3
	University/Higher institutions complete	116	2.9
	Post graduate degree	258	6.5
	Refused	16	0.4
Employment status	Government employee	106	2.7
	Non-government employee	297	7.4
	Self-employed	2,198	55.1
	Non-paid	45	1.1
	Student	182	4.6
	Unpaid family worker/Homemaker	918	23.0
	Retired/Pensioner	22	0.6
	Unemployed(able to work)	181	4.5
	Unemployed(Unable to work)	36	0.9
	Refused	2	0.1

PHYSICAL MEASUREMENTS

Height, Weight and Body Mass Index

On average, men were 167cms tall while women were 157cms. Within sex, the average heights did not differ between age groups. Considering their weights, on average men had 61kgs as compared to 59kgs for women. Women had a relatively higher Body Mass Index than men (women=23, men=22) – Table 2. Overall, about five percent of the study participants (excluding pregnant women) were obese with 7.5 percent of the women and 1.8 percent men. The proportion of the participants who were over-weight was 14.5 percent with 19.5 percent women and 9.5 percent of the men.

Table 2: Height and Weight Measurements

		Men			Women		
	Age Group (years)	n	Mean	95% CI	n	Mean	95% CI
Mean height (cm)	18-29	641	166.3	165.6-167.1	793	157.3	156.6-158.1
	30-49	665	167.4	166.6-168.2	915	158.6	158.0-159.2
	50-69	259	167.4	166.0-168.8	414	157.2	156.1-158.4
	Total	1565	166.9	166.4-167.5	2122	157.8	157.3-158.3
Mean weight (kg)	18-29	641	60.7	59.0-62.5	793	56.8	55.7-57.9
	30-49	664	61.7	60.5-62.9	916	60.2	59.1-61.4
	50-69	258	59.6	57.5-61.7	414	58.8	56.7-60.9
	Total	1563	60.9	59.9-61.9	2123	58.5	57.6-59.3
Mean BMI (kg/m ²)	18-29	638	21.7	21.4-22.0	792	22.9	22.5-23.2
	30-49	661	22	21.7-22.4	912	23.9	23.5-24.4
	50-69	254	21.2	20.6-21.8	413	23.7	23.0-24.4
	Total	1553	21.7	21.5-22.0	2117	23.4	23.1-23.7

The differences in BMI distribution by gender and urbunicity are displayed in the tables 3a to 3g. The trend was obesity was more prevalent in the urban than in the rural area.

Table 3a: BMI (kg/m²) Classification in both sexes , men and women

Both Sexes - BMI (kg/m ²)									
Age Range	n	1) Underweight <18.5	95% CI	2) Normal weight 18.5-24.9	95% CI	3) BMI 25.0-29.9	95% CI	4) Obese ≥30	95% CI
18-29	1430	5.2	3.5-6.8	80.7	78.0-83.3	11.4	9.4-13.5	2.7	1.9-3.6
30-49	1573	8.8	6.7-10.8	67.7	64.7-70.7	17.1	14.8-19.4	6.5	4.6-8.3
50-69	667	16.5	12.6-20.4	61.7	56.2-67.3	16.4	12.0-20.7	5.4	3.2-7.6
TOTAL	3670	8.5	7.0-10.0	72.4	70.4-74.4	14.5	12.9-16.1	4.6	3.7-5.6

Table 3b. BMI (kg/m²) Classification, both sexes in urban areas

Urban Both Sexes - BMI (kg/m ²)									
Age Range	n	1) Underweight <18.5	95% CI	2) Normal weight 18.5-24.9	95% CI	3) BMI 25.0-29.9	95% CI	4) Obese ≥30	95% CI
18-29	462	2.7	0.9-4.5	72.8	68.1-77.6	18.9	14.4-23.4	5.6	3.1-8.1
30-49	408	5.3	2.9-7.8	55.6	48.3-62.8	23.3	18.3-28.3	15.8	9.5-22.1
50-69	122	8.4	4.0-12.8	44.7	29.7-59.7	38.7	21.6-55.7	8.3	2.9-13.7
TOTAL	992	4.3	2.8-5.7	63.5	59.5-67.5	22.6	18.9-26.3	9.6	6.9-12.3

Table 3c. BMI (kg/m²) Classification, both sexes in rural areas

Rural Both Sexes - BMI (kg/m ²)									
Age Range	n	1) Underweight <18.5	95% CI	2) Normal weight 18.5-24.9	95% CI	3) BMI 25.0-29.9	95% CI	4) Obese ≥30	95% CI
18-29	968	5.9	3.9-8.0	83.0	79.8-86.1	9.2	6.9-11.5	1.9	1.1-2.7
30-49	1165	9.5	7.0-12.0	70.3	67.0-73.6	15.7	13.1-18.4	4.4	2.7-6.1
50-69	545	17.6	13.1-22.0	64.0	58.2-69.8	13.4	9.4-17.3	5.1	2.7-7.4
TOTAL	2678	9.5	7.7-11.3	74.5	72.2-76.8	12.6	10.8-14.3	3.5	2.5-4.5

Table 3d. BMI (kg/m²) Classification, urban women

Urban Women - BMI (kg/m ²)									
Age Range	n	Underweight <18.5	95% CI	Normal weight 18.5-24.9	95% CI	BMI 25.0-29.9	95% CI	Obese ≥30	95% CI
18-29	253	2.2	0.2-4.2	61.0	54.1-68.0	27.0	19.6-34.4	9.8	5.2-14.4
30-49	235	4.9	1.5-8.2	44.0	35.7-52.2	26.8	20.7-33.0	24.4	15.0-33.7
50-69	68	7.1	2.1-12.1	36.5	17.2-55.9	43.8	18.3-69.3	12.6	2.9-22.3
TOTAL	556	3.7	1.9-5.5	51.9	47.0-56.9	28.8	22.8-34.7	15.6	11.1-20.0

Table 3e. BMI (kg/m²) Classification, urban men

Urban Men - BMI (kg/m ²)									
Age Range	n	Underweight <18.5	95% CI	Normal weight 18.5-24.9	95% CI	BMI 25.0-29.9	95% CI	Obese ≥30	95% CI
18-29	209	3.2	0.2-6.2	85.3	79.7-90.9	10.3	5.3-15.4	1.2	0.0-2.9
30-49	173	5.9	1.8-10.0	68.8	60.5-77.1	19.3	12.8-25.9	6.0	1.4-10.5
50-69	54	9.9	1.6-18.3	54.5	35.8-73.2	32.4	14.5-50.4	3.1	0.0-7.7
TOTAL	436	4.9	2.3-7.4	76.2	71.1-81.4	15.8	11.5-20.1	3.1	1.2-5.0

Table 3f. BMI (kg/m²) Classification, rural women

Rural Women - BMI (kg/m ²)									
Age Range	n	Underweight <18.5	95% CI	Normal weight 18.5-24.9	95% CI	BMI 25.0-29.9	95% CI	Obese ≥30	95% CI
18-29	539	5.6	3.0-8.2	79.1	75.0-83.1	12.4	9.1-15.7	2.9	1.5-4.4
30-49	677	7.3	4.7-9.8	64.9	60.5-69.3	21.1	17.4-24.8	6.8	3.9-9.6
50-69	345	12.9	8.2-17.6	58.8	52.1-65.4	19.6	14.3-25.0	8.7	4.8-12.7
TOTAL	1561	7.6	5.6-9.6	69.7	66.7-72.7	17.2	14.6-19.7	5.5	4.0-7.1

Table 3g. BMI (kg/m²) Classification, rural men

Rural Men - BMI (kg/m ²)									
Age Range	n	Underweight <18.5	95% CI	Normal weight 18.5-24.9	95% CI	BMI 25.0-29.9	95% CI	Obese ≥30	95% CI
18-29	429	6.2	3.7-8.8	86.7	82.8-90.7	6.2	2.8-9.5	0.9	0.0-1.8
30-49	488	11.7	7.9-15.4	75.5	70.8-80.2	10.7	7.4-13.9	2.2	0.3-4.2
50-69	200	22.2	14.5-29.8	69.2	60.3-78.1	7.2	2.1-12.3	1.4	0.0-3.6
TOTAL	1117	11.3	8.8-13.8	79.0	76.1-82.0	8.1	6.1-10.2	1.5	0.6-2.5

Table 4 summarizes the pattern of the risk factors by gender and in the rural and urban areas.

Table 4: Summary of Uganda NCDS STEPs Survey (2014)

NCD RISK FACTOR	Total			Male			Female			Urban			Rural		
	N	%	95%CI	N	%	95%CI	N	%	95%CI	N	%	95% CI	N	%	95%CI
Raised BP or currently on Medication	3906	24.3	22.3-26.4	1570	25.8	22.8-28.9	2336	22.9	20.5-25.3	1057	26.0	22.6-29.5	2849	23.9	21.5-26.3
Raised fasting blood glucose > 6.1 mmol	3689	1.8	1.3-2.4	1467	1.3	0.7-2.0	2222	2.4	1.5-3.2	976	4.4	2.7-6.0	2713	3.1	2.2-3.9
Raised total Cholesterol >= 5.0 mmol	3715	6.7	5.6-7.8	1478	4.4	3.1-5.6	2237	8.9	7.2-10.5	988	11.5	8.8-14.3	2727	5.6	4.3-6.8
Overweight > 25kg/m2	3670	14.5	12.9-16.1	1553	9.5	7.7-11.4	2117	19.5	17.1-21.9	992	22.6	18.9-26.3	2678	12.6	10.8-14.3
Obesity > 30 kg/m2	3670	4.6	3.7-5.6	1553	1.8	1.0-2.6	2117	7.5	6.0-9.1	992	9.6	6.9-12.3	2678	3.5	2.5-4.5
Tobacco smokers (daily smoker)	3983	8.3	6.9-9.8	1601	14.5	12.0-17.1	2382	2.6	1.5-3.7	1084	5.6	4.0-7.1	2899	9.0	7.2-10.8
Smokeless tobacco users	3982	3.7	2.5-4.9	1600	4.6	3.0-6.1	2382	2.9	1.5-4.4	1084	1.1	0.5-1.7	2898	4.3	2.8-5.8
Alcohol current drinkers	3982	28.5	26.2-30.8	1600	40.1	36.5-43.6	2382	17.9	15.3-20.5	1084	22.8	19.1-26.6	2898	29.9	27.2-32.6
Excessive Alcohol drinkers	3914	3.0	1.8-4.2	1555	5.0	2.7-7.2	2359	1.2	0.3-2.1	1071	1.3	0.4-2.2	2843	3.4	2.0-4.9
Physical inactivity	3847	4.3	3.4-5.3	1541	3.7	2.1-5.4	2306	4.9	3.8-6.0	1037	7.9	5.5-10.4	2810	3.5	2.4-4.6
Three or more risk factors	3540	9.8	8.1-11.4	1493	8.5	6.3-10.7	2047	11.0	9.0-13.0	949	15.8	12.1-19.6	2591	8.4	6.5-10.2

History of Raised Blood Pressure

Respondents were asked on whether they had ever had their blood pressure measured by a doctor or other health worker, whether they had ever been informed by a doctor or other health worker that they had raised blood pressure or hypertension. Over 70 percent of the respondents had never had their blood pressure measured. About 9 percent of those diagnosed with raised blood pressure used traditional medicines.

Overall, results presented in Figure 4 show that only seven percent reported to have been diagnosed, of whom only five percent were diagnosed within the past twelve months prior to the survey date while the other two percent had been diagnosed in a period exceeding twelve months that preceded the survey. About seven out of any ten respondents had never had their blood pressure measured, with the proportion highest among the 18-29 years (77%) and lowest in the age groups 30-49 (67%) and 50-59 years (61%).

About one in four (24%) of those with raised blood pressure were taking medications prescribed by a doctor or health worker and 9 percent were taking traditional medicines- Table 5.

Fig 4: Blood pressure measurement and diagnosis by sex and age groups

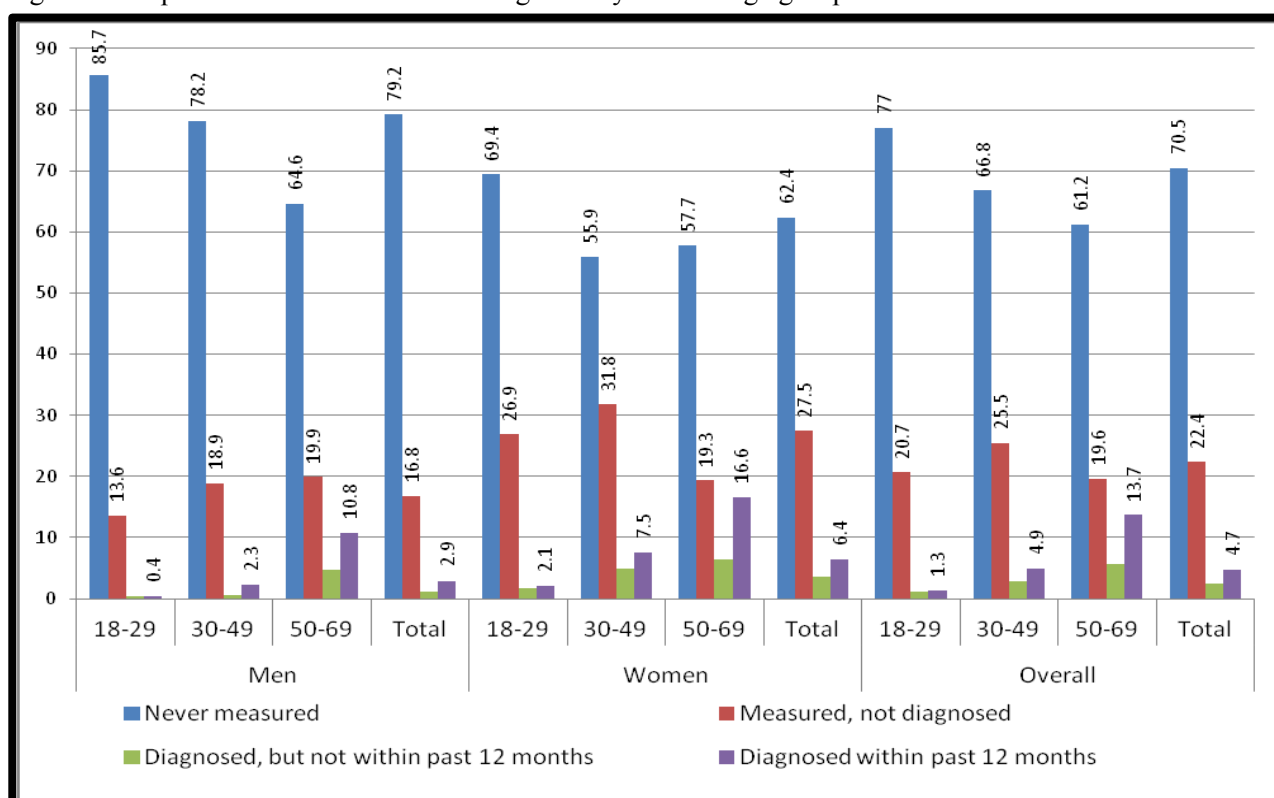


Table 5: Proportion of Participants diagnosed with raised blood pressure on drugs

	Taking drugs prescribed by doctor or health worker			Seen a traditional healer			Taking traditional. medicines		
	Men (n=67)	Women (n=252)	Total (n=319)	Men (n=67)	Women (n=252)	Total (n=319)	Men (n=67)	Women (n=252)	Total (n=319)
18-29	5.3	8.7	8.2	0	0	0	0	0.5	0.4
30-49	23.8	25.6	25.3	7.4	18.2	16.2	6.7	10.6	9.9
50-69	12.2	38.4	27.8	11.8	16.8	14.8	5.4	15.1	11.2
18-69	14.8	27.3	23.9	9.7	14.6	13.3	5.3	10.5	9.1

Systolic and Diastolic Blood Pressure

Three blood pressure measurements were made on each participant. The averages of the last two readings were used for analysis. Results summarized in Table 6 are as follows:-

The mean systolic blood pressure for men was 126.6 mmHg (95%CI=125.5-127.7) and 122.5 mmHg (95%CI=121.5-123.5) for women while the overall average systolic blood pressure was 124.5 mmHg (95%CI=123.6-125.3) for both sexes. It was generally observed that the mean systolic pressure for both men and women increased with age.

The mean diastolic blood pressure for men was 80.2 mmHg (95%CI=79.3-81.2), 80.9 mmHg (95%CI=80.2-81.6) for women with an overall average of 80.6 mmHg (95%CI=79.9-81.2). The mean systolic pressure for both men and women increased with age.

Table 6: Average systolic blood pressure and diastolic blood pressure Measurements

Age Group (years)	Men		Women		Both Sexes	
	n	Mean	n	Mean	n	Mean
Mean systolic blood pressure (mmHg)						
18-29	643	124.7	939	116.5	1582	120.3
30-49	666	126.3	980	122.9	1646	124.6
50-69	261	132.1	417	139.3	678	135.7
18-69	1570	126.6	2336	122.5	3906	124.5
Mean diastolic blood pressure (mmHg)						
18-29	643	78.0	939	78.1	1582	78.1
30-49	666	82.0	980	82.5	1646	82.3
50-69	261	81.9	417	85.2	678	83.6
18-69	1570	80.2	2336	80.9	3906	80.6

Participants who had systolic blood pressure greater or equal to 140 mmHg (SBP \geq 140 mmHg) and/or the diastolic blood pressure greater or equal to 90 mmHg (DBP \geq 90 mmHg) were considered to be having high blood pressure. Overall 24 percent of the respondents were either found to have SBP \geq 140 and/or DBP \geq 90 mmHg (23%) or were already on medication for raised blood pressure. Excluding those who were already on medication for raised blood pressure; findings showed that about seven percent of men and women had SBP \geq 160 and/or DBP \geq 100 mmHg. About eight percent of the respondents had SBP \geq 160 and/or DBP \geq 100 mmHg or were on medication for raised blood pressure, as shown in Table 7.

Table 7: Systolic Blood Pressure Measurements

Age Group (years)	SBP \geq 140 and/or DBP \geq 90 mmHg, excluding those on medication for raised blood pressure		SBP \geq 140 and/or DBP \geq 90 mmHg or currently on medication for raised blood pressure		SBP \geq 160 and/or DBP \geq 100 mmHg, excluding those on medication for raised blood pressure		SBP \geq 160 and/or DBP \geq 100 mmHg or currently on medication for raised blood pressure	
	Both Sex		Both Sex		Both Sex		Both Sex	
	N	%	N	%	N	%	N	%
18-29	1571	14.8	1582	15.2	1571	2.1	1582	2.5
30-49	1617	24.5	1646	25.6	1617	6.9	1646	8.2
50-69	638	43.9	678	46.7	638	19.2	678	23.3
18-69	3826	23.1	3906	24.3	3826	6.6	3906	8.1

Summary of blood pressure measurements

Over 70 percent of the respondents had never taken blood pressure measurements. Measurements taken on the survey date however showed that the mean systolic blood pressure for men was 126.6 mmHg (CI=125.5-127.7) and 122.5 mmHg (CI=121.5-123.5), with an overall average of 124.5 mmHg (CI=123.6-125.3) for men and women combined.

The mean diastolic blood pressure for men was 80.2 mmHg (CI=79.3-81.2), 80.9 mmHg (CI=80.2-81.6) for women with an overall average of 80.6 mmHg (CI=79.9-81.2). The mean systolic and diastolic pressure for both men and women increased with age. During the survey period, about 24.3 percent were found to have raised blood pressure; with about eight percent having SBP \geq 160 and/or DBP \geq 100 mmHg or were on medication for raised blood pressure. Findings show further that 76.1 percent of those with raised blood pressure are untreated.

History of Diabetes

Respondents were asked whether they had ever had their blood sugar measured by a doctor or other health worker – 94.9% had never been measured. Overall, less than 1 percent reported to have ever been diagnosed for diabetes. Those diagnosed with diabetes were mainly in the age group of 50-69 years of age—see Table 8.

Table 8: Blood sugar measurement and diagnosis by sex and age groups

	Men	Women	Overall
Age group (years)	Total	Total	Total
Number	1599	2374	3973
Never measured	95.3	94.5	94.9
Measured, not diagnosed	4	4.3	4.2
Diagnosed, but not within past 12 months	0	0.4	0.2
Diagnosed within past 12 months	0.6	0.9	0.7

Among the participants on medication for diabetes, 36 percent were taking insulin while 18% were taking herbal or traditional treatment during the survey time – Table 9.

Table 9: Proportion diagnosed with diabetes on medication

	Currently taking insulin			Seen a traditional healer for diabetes			Currently taking herbal or traditional treatment		
	Men (n=13)	Women (n=33)	Total (n=46)	Men (n=13)	Women (n=33)	Total (n=46)	Men (n=13)	Women (n=33)	Total (n=46)
18-29	18.7	0	10.2	58.5	0	31.9	18.7	0	10.2
30-49	86.9	28.1	42.6	86.9	0	21.5	57.6	4.7	17.8
50-69	45.2	41	42.1	45.2	20.2	26.6	28.4	15.3	18.7
18-69	44.4	32.2	36	57.9	12.1	26.4	30.9	10.5	16.8

BIOCHEMICAL MEASUREMENTS

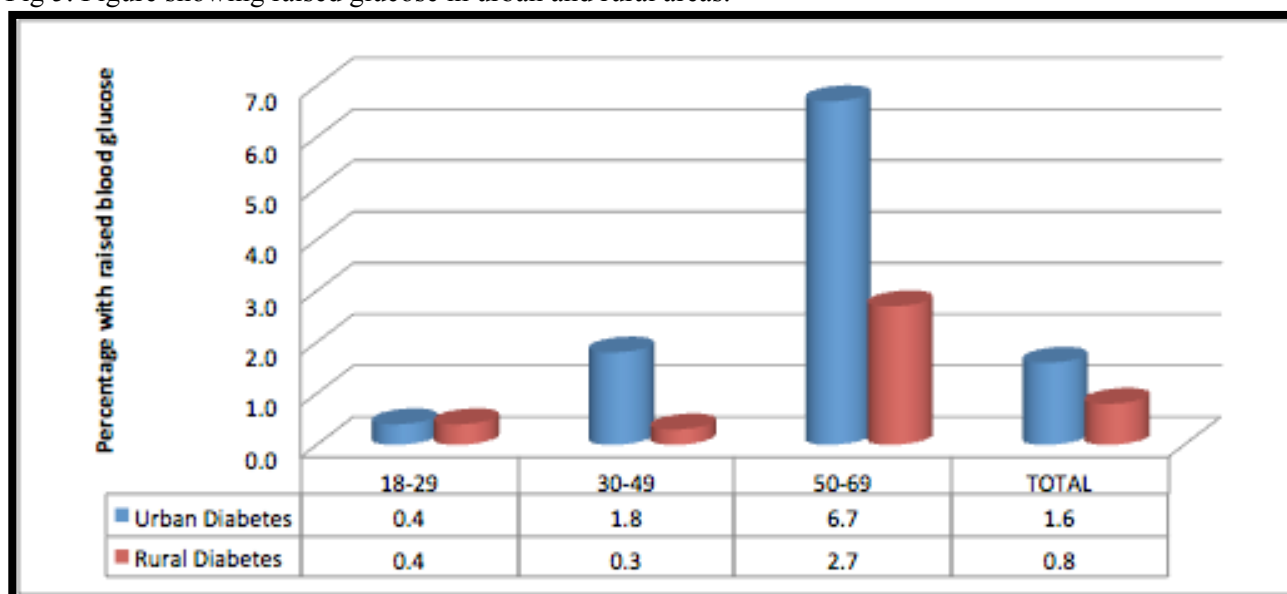
Overall, 1.3 percent of the respondents had raised blood glucose or were on medication for diabetes with the highest being 2.2 percent in the age-group of 50-69 years. There was some variation between men (1.7 percent) and women (1.0 percent) and an overall increase of raised blood glucose or on medication for diabetes with age group among respondents (see Table 10).

Table 10: Respondents with raised blood glucose or currently on medication for diabetes.

Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	601	0.7	0.0-0.6	893	0.3	0.0-0.7	1494	0.3	0.0-0.5
30-49	622	2.8	0.3-5.3	936	1.6	0.6-2.7	1558	2.2	0.9-3.5
50-69	244	2.9	0.0-5.9	393	1.5	0.2-2.9	637	2.2	0.5-3.9
18-69	1467	1.7	0.6-2.8	2222	1.0	0.5-1.5	3689	1.3	0.7-1.9

There was a raised prevalence of blood glucose among the urban than the rural participants. This is displayed in Fig. 5

Fig 5. Figure showing raised glucose in urban and rural areas.



History of Raised Total Cholesterol

Results presented in Table 11 show that overall, about 98.8 percent of the study participants had never had their cholesterol measured.

Table 11: Proportion of Study Participants that had taken cholesterol measurements

	18-29	30-49	50-69	Overall
Number	1614	1673	686	3973
Never measured	99.2	98.4	98.5	98.8
Measured, not diagnosed	0.4	0.9	1.5	0.8
Diagnosed, but not within past 12 months	0.0	0.2	0.0	0.1
Diagnosed within past 12 months	0.4	0.5	0.0	0.4
Total	100	100	100	100

Table 12a shows that 6.7 percent of the respondents had at least total cholesterol ≥ 5.0 mmol/L or ≥ 190 mg/dl or currently on medication for raised cholesterol with about 11.4 percent in the age-group of 50-69 years. There was some variation between men (4.4 percent) and women (8.9 percent) and an overall increase of total cholesterol (≥ 5.0 mmol/L or ≥ 190 mg/dl) or currently on medication for raised cholesterol with age group among respondents. The pattern of prevalence of total cholesterol and HDL-Cholesterol in the urban and rural areas is shown in tables 12b - 12g.

Table 12a: Total cholesterol ≥ 5.0 mmol/L or currently on medication for raised cholesterol

Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	602	1.0	0.1-2.0	898	6.3	4.1-8.4	1500	3.8	2.5-5.1
30-49	628	5.9	3.7-8.2	942	10.2	7.7-12.7	1570	8.1	6.4-9.8
50-69	248	9.3	5.1-13.6	397	13.4	9.0-17.8	645	11.4	8.1-14.6
18-69	1478	4.4	3.1-5.6	2237	8.9	7.2-10.5	3715	6.7	5.6-7.8

Table 12b. Prevalence of total cholesterol in urban areas, both sexes.

Urban Both Sexes - Total Cholesterol (mmol/l)					
Age Range	n	total cholesterol < 5.0	95% CI	total cholesterol ≥ 5.0 or on meds	95% CI
18-29	476	91.5	88.2-94.8	8.5	5.2-11.8
30-49	392	85.2	79.9-90.5	14.8	9.5-20.1
50-69	120	84.3	77.4-91.2	15.7	8.8-22.6
TOTAL	988	88.5	85.7-91.2	11.5	8.8-14.3

Table 12c. Prevalence of total cholesterol in rural areas, both sexes.

Rural Both Sexes - Total Cholesterol (mmol/l)					
Age Range	n	total cholesterol < 5.0	95% CI	total cholesterol >= 5.0 or on meds	95% CI
18-29	1024	97.5	96.2-98.9	2.5	1.1-3.8
30-49	1178	93.3	91.6-95.1	6.7	4.9-8.4
50-69	525	89.2	85.7-92.8	10.8	7.2-14.3
TOTAL	2727	94.4	93.2-95.7	5.6	4.3-6.8

Table 12d. Prevalence of HDL-Cholesterol in urban areas, men.

Urban Men - HDL -Cholesterol (mmol/l)					
Age Range	n	HDL <1.03mmol/L	95% CI	HDL >=1.03 mmol/L	95% CI
18-29	193	59.9	50.7-69.2	40.1	30.8-49.3
30-49	155	51.9	40.0-63.8	48.1	36.2-60.0
50-69	54	48.5	31.9-65.2	51.5	34.8-68.1
TOTAL	402	55.8	48.9-62.7	44.2	37.3-51.1

Table 12e. Prevalence of HDL-Cholesterol in urban areas, women.

Urban Women - HDL Cholesterol (mmol/l)					
Age Range	n	HDL <1.29mmol/L	95% CI	HDL >=1.29 mmol/L	95% CI
18-29	282	58.1	49.2-67.1	41.9	32.9-50.8
30-49	237	66.9	58.3-75.6	33.1	24.4-41.7
50-69	66	71.8	56.3-87.3	28.2	12.7-43.7
TOTAL	585	62.7	56.6-68.9	37.3	31.1-43.4

Table 12f. Prevalence of HDL-Cholesterol in rural areas, men.

Rural Men - HDL-Cholesterol (mmol/l)					
Age Range	n	HDL <1.03mmol/L	95% CI	HDL >=1.03 mmol/L	95% CI
18-29	409	72.9	67.2-78.5	27.1	21.5-32.8
30-49	473	55.3	49.3-61.3	44.7	38.7-50.7
50-69	194	44.8	33.5-56.0	55.2	44.0-66.5
TOTAL	1076	60.7	56.4-65.1	39.3	34.9-43.6

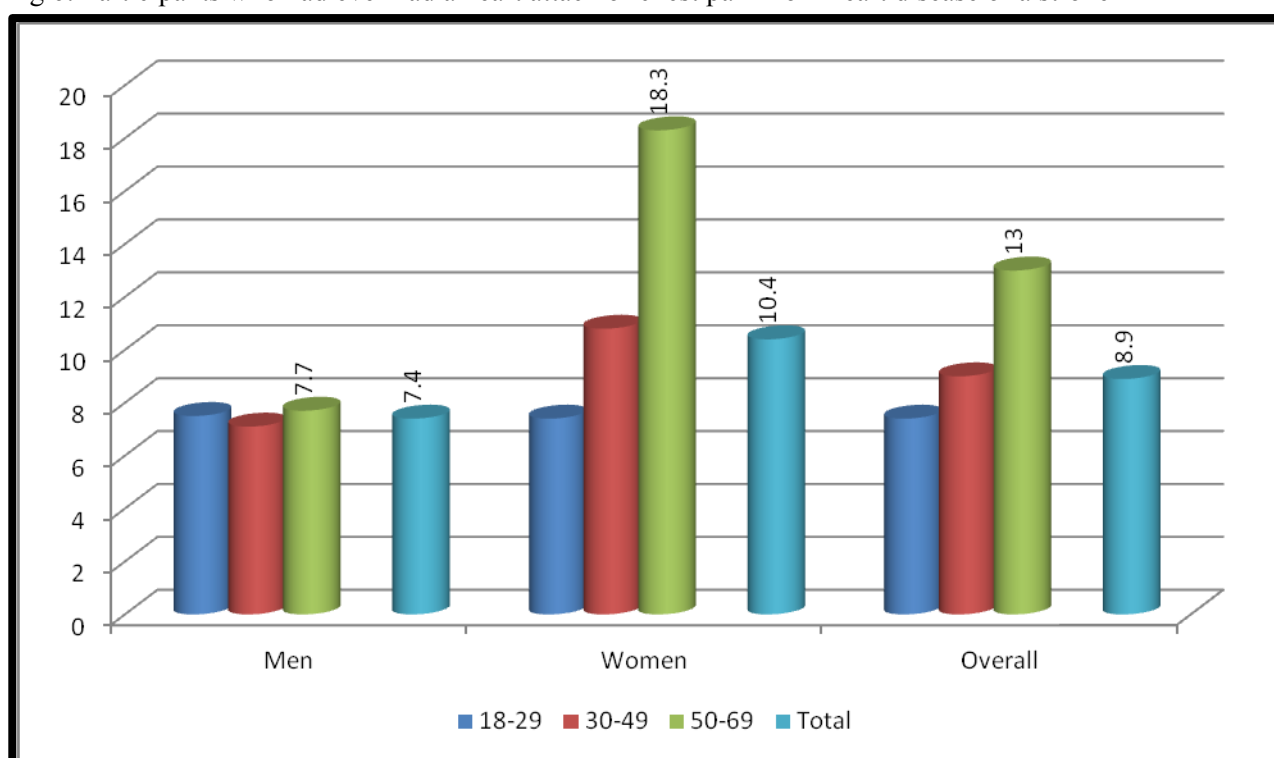
Table 12g. Prevalence of HDL-Cholesterol in rural areas, women.

Rural Women - HDL-Cholesterol (mmol/l)					
Age Range	n	HDL <1.29mmol/L	95% CI	HDL ≥1.29 mmol/L	95% CI
18-29	612	70.4	65.0-75.7	29.6	24.3-35.0
30-49	704	68.0	64.0-72.0	32.0	28.0-36.0
50-69	330	71.8	65.5-78.1	28.2	21.9-34.5
TOTAL	1646	69.7	66.4-73.0	30.3	27.0-33.6

History of Cardiovascular Diseases (CVD)

About nine percent of the study participants reported to have suffered from either a heart attack, chest pain from a heart disease or a stroke. However, this proportion was relatively higher among women, especially those in the age group of 50-69 year of age than in the men. About 18 percent of the women 50 years and above had history of cardiovascular disease – Figure 6.

Fig 6: Participants who had ever had a heart attack or chest pain from heart disease or a stroke

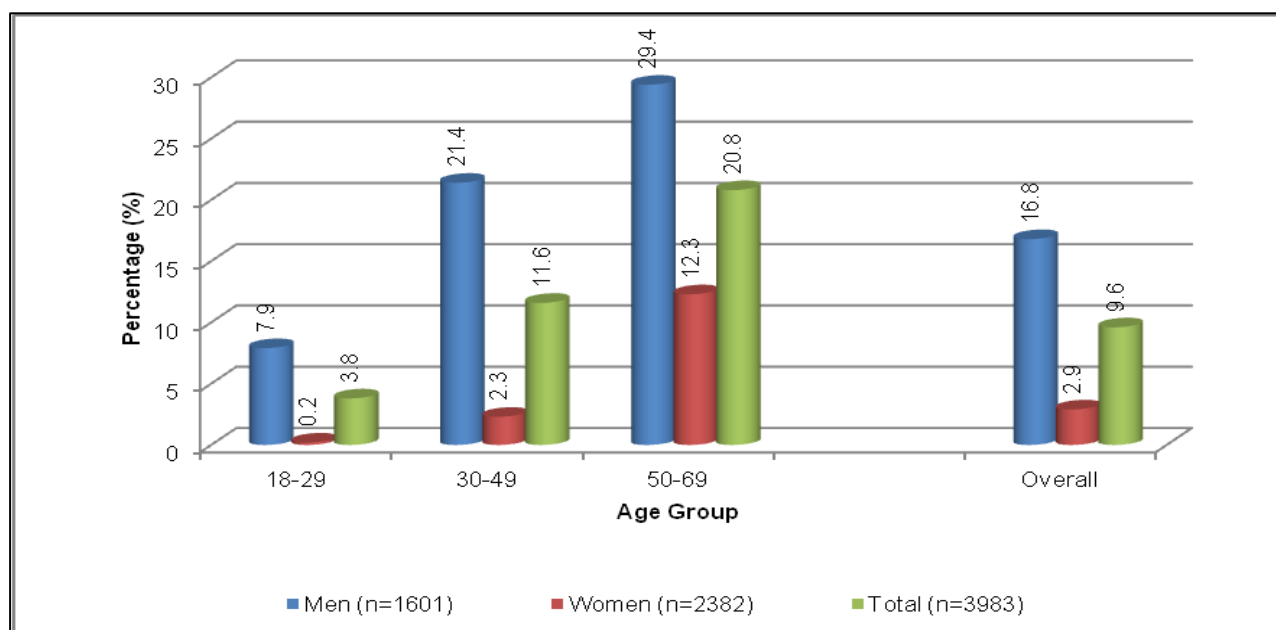


TOBACCO USE

Prevalence of smoking

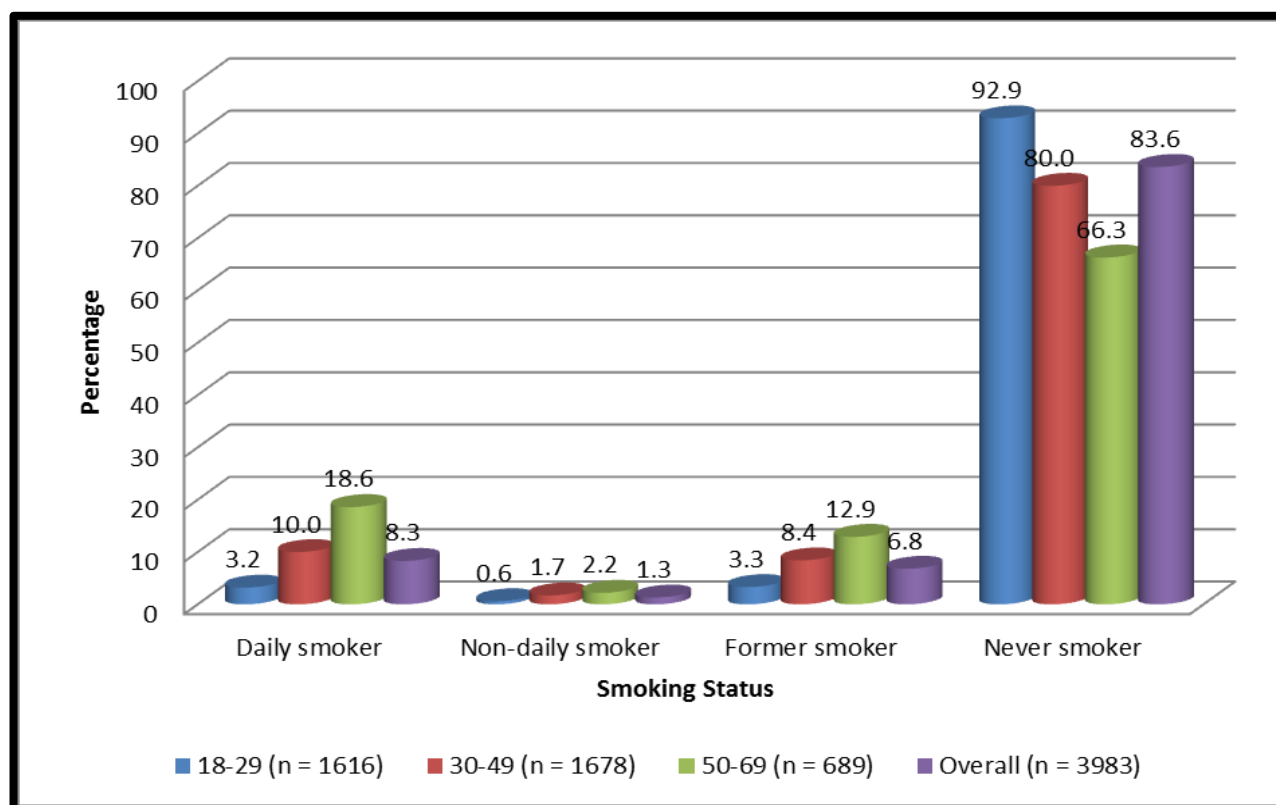
Overall, 10 percent of the sampled respondents were currently smoking with the proportion of 17 percent among the males and 3 percent among females. The results presented in Figure 7 also show that regardless of sex, the proportion of persons currently smoking increased with age group.

Fig. 7. Proportion of currently smoking by Age Group and Sex



About 7 percent had ever smoked but had stopped as at the time of the survey – Figure 8.

Fig. 8 Smoking status by age group



On the frequency of smoking, 8.3 percent of the respondents were daily smokers while 1.3 percent smoked but not on a daily basis. Figure 8 shows that 3.2 (CI = 2.1-4.4) percent of those aged 18-29 years smoked daily as compared to 10.0 (CI = 8.0-11.9) percent and 18.6 (CI = 13.2-24.0) percent of their counterparts in the age groups 30-49 and 50-69 years respectively. Overall, the average age

of initiation to smoking is 22.1 years (male at 22.2, female at 21.5 years); some variations with age groups were observed as 18.4, 21.1 and 25.3 years for the age groups of 18-29, 30-49 and 50-69 respectively.

Prevalence of smokeless tobacco

Smokeless tobacco mainly takes the form of snuffing by mouth, snuffing by nose and chewing. Figure 9 shows the proportion of study participants who used smokeless tobacco while Table 13 shows the frequency of usability of smokeless tobacco among those who smoked by method. Overall, about four percent of the respondents used smokeless tobacco. The daily mean times per day were highest by those who snuffed by mouth (3 times per day), while those who snuffed by nose and chewing was about once a day each.

There were no significant variations in the average number of times between age-groups among those who snuff by mouth. However, there were higher frequencies of snuffing by nose among the elderly (50-69) as compared to the young ones. On contrary, the frequency of chewing tobacco was highest among the age bracket 30-49 years – see Table 13.

Figure 9: Proportion of participants who used Smokeless tobacco

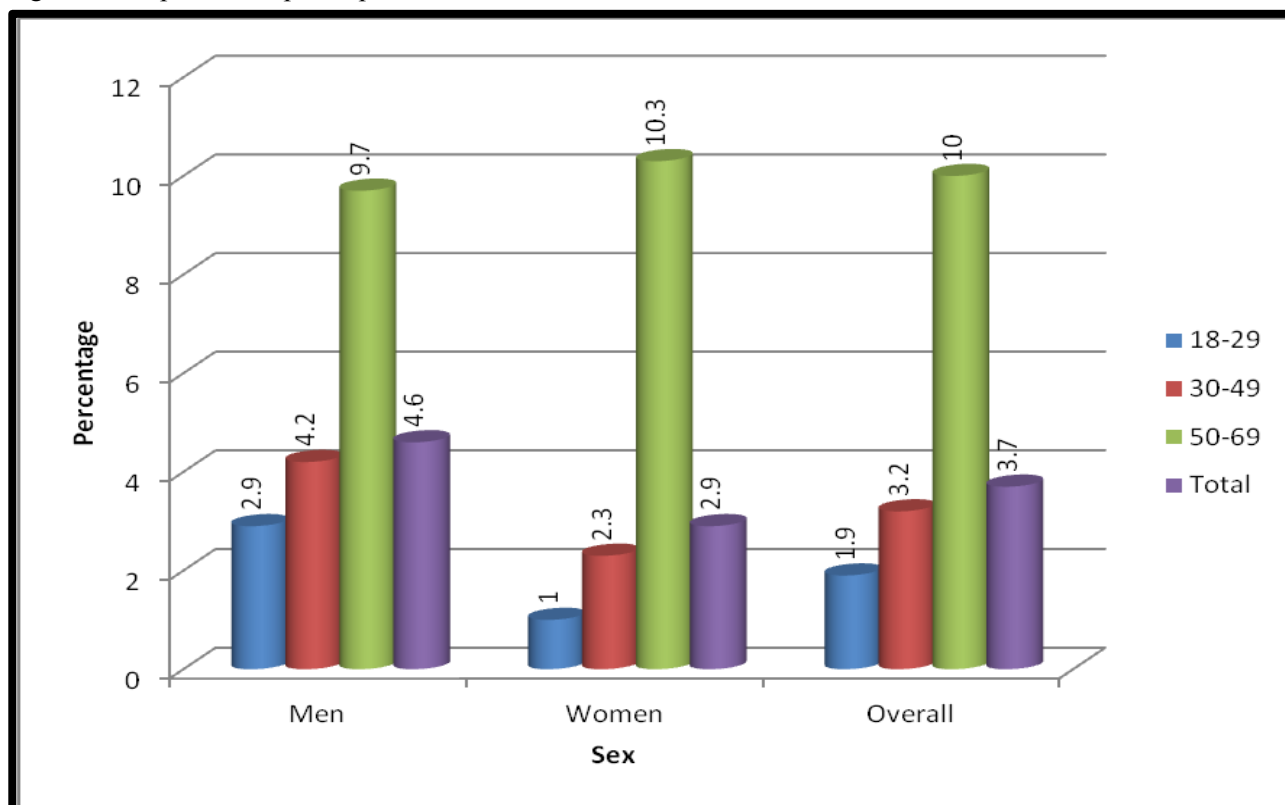


Table 13: Mean times per day for use of smokeless tobacco by type

Age Group (years)	Both Sex								
	n	Snuff by mouth	95% CI	n	Snuff by nose	95% CI	n	Chewing tobacco	95% CI
18-29	25	3.5	2.0-5.0	25	0.7	0.0-1.4	25	0.4	0.0-0.9
30-49	42	2.8	1.8-3.8	43	0.3	0.0-0.5	43	1.2	0.0-2.3
50-69	46	3.2	1.6-4.7	47	1.0	0.1-2.0	47	0.6	0.1-1.1
18-69	113	3.2	2.3-4.1	115	0.7	0.2-1.2	115	0.7	0.3-1.1

Prevalence of tobacco use

About 11 percent of the respondents were tobacco users including smokers and smokeless tobacco users as at the survey time, with the proportion relatively higher among the males (18%) than females (5%). The proportion of respondents using tobacco increased with age of the respondents and increased more for women (1, 4 and 16 percent) than men (9, 23 and 32 percent) across the three age-groups.

Overall, 24 percent of those aged 50-69 years were using tobacco as compared to 13 percent in the age-group of 30-49 and five percent in the age-group of 18-29 years. Factors explaining this positive correlation of smoking patterns by age shall be explored in the multivariate statistical analyses.

Table 14: Current tobacco users by sex and age group

Age Group (years)	Men			Women			Both Sexes		
	n	% Current users	95% CI	n	% Current users	95% CI	n	% Current users	95% CI
18-29	660	9.3	6.5-12.1	956	1.1	0.3-2.0	1616	5.0	3.5-6.4
30-49	676	22.8	18.6-26.9	1001	3.8	2.3-5.2	1677	13.0	10.8-15.3
50-69	264	32.1	23.8-40.3	425	16.2	9.5-23.0	689	24.1	18.6-29.7
18-69	1600	18.4	15.7-21.2	2382	4.5	2.9-6.1	3982	11.2	9.4-12.9

Table 15 shows that 9.8 percent of the respondents used smokeless tobacco daily; 16.0 percent of the male and 4.1 percent of the female respondents. The proportion of daily tobacco users was 4.3, 11.2 and 22.1 percent for the age-groups of 18-29, 30-49 and 50-69 respectively.

Table 15: Daily tobacco users by sex and age group

Age Group (years)	Men			Women			Both Sexes		
	n	% Daily users	95% CI	n	% Daily users	95% CI	n	% Daily users	95% CI
18-29	660	8.0	5.4-10.7	956	1.0	0.1-1.8	1616	4.3	2.9-5.7
30-49	676	19.3	15.4-23.3	1001	3.4	2.0-4.9	1677	11.2	9.0-13.3
50-69	264	29.3	20.8-37.7	425	15.1	8.3-21.8	689	22.1	16.5-27.8
18-69	1600	16.0	13.3-18.7	2382	4.1	2.5-5.7	3982	9.8	8.1-11.5

Passive smoking

Exposure at home

Overall, more than a third of the respondents (34.8 percent) reported to have been exposed to second-hand smoking at home during the past 30 days prior to the survey dates – Table 16a. By gender, the proportion that was exposed constituted about 37.5 percent for men and 32.3 percent among women. By age groups, the proportion was 31.6, 36.5 and 39.6 percent for the age-groups of 18-29, 30-49 and 50-69 respectively.

Exposure at workplace

More than half of the male respondents (51.4 percent) and 35.6 percent of the female (36%) reported to have been exposed to second-hand smoking at their workplaces during the past 30 days prior to the survey dates – Table 16. Overall, at least two out of any five respondents were exposed to second hand smoking within the reference period of one month prior to the survey date.

Table 16a: Exposure to second-hand smoking at workplace in the past 30 days by sex and age group

	Men			Women			Overall		
	n	% Exposed	95% CI	n	% Exposed	95% CI	n	% Exposed	95% CI
At Home									
18-29	660	33.1	28.4-37.9	956	30.2	26.1-34.3	1616	31.6	28.1-35.1
30-49	676	39.7	34.7-44.8	1001	33.5	29.1-37.8	1677	36.5	33.0-40.0
50-69	264	43.7	35.7-51.7	425	35.5	28.3-42.7	689	39.6	33.8-45.4
18-69	1600	37.5	34.1-40.9	2382	32.3	29.0-35.6	3982	34.8	32.1-37.4
At workplace									
18-29	580	50.5	44.8-56.2	805	33	28.2-37.8	1385	41.3	37.4-45.2
30-49	603	52.4	47.1-57.6	859	38.1	33.5-42.7	1462	45.1	41.5-48.8
50-69	232	51.4	42.5-60.3	355	37.2	28.5-45.8	587	44.5	38.2-50.8
18-69	1415	51.4	47.5-55.3	2019	35.6	31.8-39.4	3434	43.3	40.4-46.3

The trend was more males smoking in the rural area than in the urban. This trend is displayed in Tables 16b - 16g.

Table 16b. Smoking status of Urban men.

Urban Men - Smoking Status									
Age Range	n	Daily smoker	95% CI	Current smoker (non-daily)	95% CI	Former smoker	95% CI	Never smoked	95% CI
18-29	219	5.2	1.6-8.7	1.4	0.0-3.0	4.2	1.3-7.2	89.2	84.9-93.5
30-49	176	18.7	11.9-25.5	0.0	0.0-0.0	9.9	4.8-15.0	71.4	62.1-80.7
50-69	56	17.0	6.6-27.4	5.4	0.0-13.8	11.7	0.2-23.3	65.8	51.0-80.6
TOTAL	451	11.3	7.8-14.7	1.3	0.2-2.5	7.0	4.5-9.6	80.4	75.9-84.8

Table 16c. Smoking status of rural men.

Rural Men - Smoking Status									
Age Range	n	Daily smoker	95% CI	Current smoker (non-daily)	95% CI	Former smoker	95% CI	Never smoked	95% CI
18-29	441	7.2	4.4-10.1	1.1	0.2-1.9	6.7	3.7-9.7	85.0	80.9-89.1
30-49	501	18.3	13.9-22.7	3.7	1.6-5.8	11.8	8.1-15.5	66.2	61.0-71.3
50-69	208	26.9	17.7-36.1	3.3	0.5-6.1	18.1	12.2-24.0	51.6	41.2-62.0
TOTAL	1150	15.2	12.2-18.3	2.5	1.5-3.6	10.8	8.6-13.0	71.4	68.0-74.8

Table 16d. Smoking status of urban women

Urban Women - Smoking Status									
Age Range	n	Daily smoker	95% CI	Current smoker (non-daily)	95% CI	Former smoker	95% CI	Never smoked	95% CI
18-29	304	0.1	0.0-0.2	0.0	0.0-0.0	1.8	0.2-3.3	98.2	96.6-99.7
30-49	258	1.9	0.1-3.6	0.3	0.0-0.7	3.4	0.4-6.4	94.5	91.2-97.7
50-69	71	2.4	0.0-6.2	0.3	0.0-1.0	4.6	0.0-9.4	92.7	85.8-99.5
TOTAL	633	0.9	0.2-1.7	0.1	0.0-0.3	2.6	1.0-4.3	96.3	94.4-98.2

Table 16e. Smoking status of rural women

Rural Women - Smoking Status

Age Range	n	Daily smoker	95% CI	Current smoker (non-daily)	95% CI	Former smoker	95% CI	Never smoked	95% CI
18-29	652	0.2	0.0-0.4	0.1	0.0-0.3	0.5	0.0-1.0	99.2	98.6-99.8
30-49	743	2.0	0.9-3.2	0.3	0.0-0.6	5.8	3.6-8.0	91.9	89.2-94.5
50-69	354	12.8	5.9-19.6	1.0	0.0-2.3	9.0	5.1-12.8	77.3	69.5-85.1
TOTAL	1749	3.0	1.7-4.4	0.3	0.1-0.6	4.0	2.8-5.2	92.7	90.7-94.6

Table 16f. Smoking status of urban areas, both sexes

Urban Both Sexes - Smoking Status

Age Range	n	Daily smoker	95% CI	Current smoker (non-daily)	95% CI	Former smoker	95% CI	Never smoked	95% CI
18-29	523	2.3	0.8-3.9	0.6	0.0-1.3	2.9	1.3-4.4	94.2	92.0-96.3
30-49	434	9.5	6.3-12.6	0.2	0.0-0.4	6.3	3.4-9.3	84.0	79.4-88.7
50-69	127	9.1	3.7-14.4	2.7	0.0-6.6	7.9	1.7-14.0	80.4	71.6-89.2
TOTAL	1084	5.6	4.0-7.1	0.7	0.1-1.2	4.6	3.2-6.0	89.2	87.0-91.3

Table 16g. Smoking status of rural areas, both sexes

Rural Both Sexes - Smoking Status

Age Range	n	Daily smoker	95% CI	Current smoker (non-daily)	95% CI	Former smoker	95% CI	Never smoked	95% CI
18-29	1093	3.5	2.1-4.9	0.6	0.1-1.0	3.4	2.0-4.9	92.5	90.5-94.5
30-49	1244	10.1	7.8-12.4	2.0	0.9-3.1	8.8	6.7-10.9	79.1	76.1-82.2
50-69	562	19.9	13.9-25.9	2.2	0.7-3.7	13.6	10.1-17.1	64.3	57.6-71.1
TOTAL	2899	9.0	7.2-10.8	1.4	0.9-1.9	7.3	6.1-8.6	82.3	80.2-84.4

Summary of tobacco use

Regardless of gender or age group, the survey shows that respondents either directly use or are exposed to tobacco both within their homes and at work places

- a) At the time of the survey, 10 percent of the respondents were currently smoking tobacco products, such as cigarettes, cigars, or pipes with the male and female composition constituting 17 percent and 3 percent respectively. Only about 4 percent were current users of smokeless products such as snuffing, chewing tobacco and betel.
- b) Overall, 11 percent of the respondents were classified as current tobacco users, including smokers and users of smokeless tobacco with the proportion relatively higher among the males (18%) than females (5%).
- c) The mean age of starting to smoke was 18, 21 and 25 years for the age groups of 18-29, 30-49 and 50-69 years respectively. Overall, the mean age at which people start smoking in Uganda is 22 years.
- d) Smoking tendency increased with age, with older respondents having a higher likelihood of smoking, and subsequently smoking on a daily basis. About 8 percent of respondents reported to be daily smokers.
- e) The daily frequency of smokeless tobacco use was highest among those who snuffed by mouth (3 times per day) as compared to once among those who snuffed by nose and chewing.
- f) Regardless of the sex or age group, at least one out of every three of the respondents reported to have been exposed to second-hand smoking at home during the past 30 days prior to the survey dates. On the other hand, about 43 percent were exposed second-hand smoking at workplaces.
- g) Smoking was more prevalent among men in the rural areas.

ALCOHOL CONSUMPTION

Prevalence of Alcohol consumption

Findings presented in Table 17 show that 29 percent of the respondents were current drinkers; i.e they had consumed alcohol in the past 30 days preceding the survey. Three percent are considered high-end drinkers that consume at least an equivalent of 60 grams of pure alcohol on average per occasion among men or at least an equivalent of 40 grams of pure alcohol on average per occasion among women.

About 8 percent had taken alcohol within the preceding reference period of 12 months from the survey date but they had not drunk in past 30 days. Fifty two percent (62 percent females and 40 percent males) of the respondents had never taken alcohol in their life time, whereas 12 percent used to consume but had taken more than 12 months without taking it prior to the survey.

About twenty percent of those who stopped taking alcohol attributed it to health reasons, and this proportion did not differ between males and females – Table 17.

Table 17: Alcohol current drinker status by age group

Age group	Men	Female	Overall
	% Current drinker (past 30 days)	% Current drinker (past 30 days)	% Current drinker (past 30 days)
18-29	29.3	13.2	20.7
30-49	46.3	21.1	33.4
50-69	53.8	24.3	39
Overall (18-69)	40.1	17.9	28.5

Table 18: Percentage of former drinkers who stopped drinking due to health reasons by sex and age group

Age Group (years)	Men			Women			Both Sexes		
	n	% stopping due to health reasons	95% CI	n	% stopping due to health reasons	95% CI	n	% stopping due to health reasons	95% CI
18-29	65	16.5	4.7-28.3	88	15.5	6.8-24.2	153	16.0	9.2-22.9
30-49	88	15.5	6.4-24.6	135	13.9	7.2-20.5	223	14.7	8.8-20.6
50-69	45	35.9	18.7-53.2	82	32.5	19.1-45.9	127	34.1	23.5-44.8
18-69	198	20.5	13.5-27.4	305	19.0	13.2-24.7	503	19.7	15.2-24.2

Volumes of Alcohol consumed

The section classifies the alcohol consumers as either high-end, intermediate or lower-end. The classifications are as follows:-

- High-end level: one was considered to be at the high end if consumed an equivalent of ≥ 60 g of pure alcohol on average per occasion among men and an equivalent of ≥ 40 g of pure alcohol on average per occasion among women. Overall, three percent of the respondents were categorised as high-end level drinkers of alcohol (5% of men, 1 percent of women). The tendency for high-end level drinking increased with the age of the respondent with the prevalence of 1.5, 3.8 and 5.4 percent for the age-groups of 18-29, 30-49 and 50-69 respectively (see Table 19).
- Intermediate level: If consumed 40-59.9g of pure alcohol on average per occasion among men and 20-39.9g of pure alcohol on average per occasion among women. Findings presented in Table 8 show that about two percent men drink 40-59.9 grams of pure alcohol per occasion while about one percent of the women drink 20-39.9 grams of pure alcohol per occasion and overall one percent of the respondents are categorised as intermediate level drinkers of alcohol. The proportion of intermediate level drinking increased with age of the respondent with the prevalence of 0.7, 1.6 and 2.5 percent for the age-groups of 18-29, 30-49 and 50-69 respectively.

- c) Lower-end level: If consumed <40g of pure alcohol on average per occasion among men and <20g of pure alcohol on average per occasion among women. About 32 percent of the men and 15 percent of the women were categorized as low level consumers. Overall 23 percent of the respondents were categorised as low level alcohol consumers

Table 19: Average volume drinking levels by sex and age group

	Men		Women		Both Sexes	
High-end level	n	% ≥60g	n	% ≥40g	n	%
18-29	653	1.9	948	1.2	1601	1.5
30-49	651	6.6	996	1.2	1647	3.8
50-69	251	9.3	415	1.5	666	5.4
18-69	1555	5.0	2359	1.2	3914	3.0
Intermediate level	n	% 40-59.9g	n	% 20-39.9g	n	%
18-29	653	1.1	948	0.3	1601	0.7
30-49	651	1.9	996	1.3	1647	1.6
50-69	251	2.3	415	2.7	666	2.5
18-69	1555	1.6	2359	1.0	3914	1.3
Low end	n	% <40g	n	% <20g	n	%
18-29	653	25.5	948	11.1	1601	17.8
30-49	651	35.8	996	18.2	1647	26.6
50-69	251	40.3	415	18.1	666	29.1
18-69	1555	32.0	2359	14.9	3914	23.0

Frequency of alcohol consumption

In reference to the last 7 days prior to the survey date, respondents were asked the number of days on which they had had a standard drink of alcohol. Findings in Table 20 show that 45.6 percent of those taking alcohol had taken the drink for one to two days, while 20.2 percent had taken the drink for 3-4 days, 6.6 percent took the drink for 5-6 days and 12.1 percent consumed on all days of the week. On average, 2.5 standard drinks were consumed in a week; with the mean number for male and female being 3.2 and 1.0 respectively (see Table 20).

The respondents in the age group of 50-69 years were more likely to have taken alcohol on a higher number of days.

Table 20: Frequency of alcohol consumption in past 7 days by age group

	Male	Female	Overall
Number	633	425	1058
Daily	14.8	6.7	12.1
5-6 days	9.2	1.2	6.6
3-4 days	23.1	14.3	20.2
1-2 days	43.4	50	45.6
0 days	9.5	27.8	15.5

Table 21: Average number of standard drinks taken

Age Group (years)	Men			Women			Both Sexes		
	n	Mean number	95% CI	n	Mean number	95% CI	n	Mean number	95% CI
18-29	199	2.0	1.5-2.5	127	0.6	0.4-0.9	326	1.5	1.2-1.9
30-49	292	3.8	2.9-4.7	205	1.0	0.6-1.4	497	2.9	2.2-3.5
50-69	142	3.6	1.4-5.8	93	1.6	0.9-2.3	235	3.0	1.4-4.6
18-69	633	3.2	2.5-3.8	425	1.0	0.7-1.3	1058	2.5	2.0-2.9

There was more alcohol consumption in rural than in urban, 29.9% vs 22.8% moderate alcohol consumption and 3.4% vs 1.3 high end alcohol consumption. These are summarized in Table 4.

Summary of alcohol consumption

About 29 percent of the respondents were consuming alcohol as at the survey time, with three percent, one percent and 23 percent considered as high-end, intermediate and low level consumers. About 8 percent had taken alcohol within the reference period of 12 months from the survey date but they had stopped as at the survey date, 52 percent had never taken alcohol in their life time while 12 percent used to consume but had taken more than 12 months without taking it prior to the survey dates.

DIET

Respondents had fruits and vegetables averaging 3 and 4 days respectively in a typical week – Table 22. The majority of respondents (87.8 percent) less than 5 servings of fruits and vegetables per day, with only 11.6 percent and 12.7 percent of the male and female respondents consuming 5 or more servings.

Table 22: Mean number of days in a week of consumption of fruit by sex and age group

Age Group	Men			Women			Both Sexes		
Fruits	N	Mean (days)	95% CI	N	Mean (days)	95% CI	N	Mean (days)	95% CI
18-29	654	3	2.8-3.3	946	3.1	2.9-0.0	1600	3.1	2.9-3.3
30-49	663	2.7	2.4-2.9	990	2.8	2.6-0.0	1653	2.8	2.6-2.9
50-69	258	2.6	2.1-3.0	419	2.5	2.2-0.0	677	2.5	2.3-2.8
18-69	1575	2.8	2.6-3.0	2355	2.9	2.8-0.0	3930	2.9	2.7-3.0
Vegetables	N	Mean (days)	95% CI	N	Mean (days)	95% CI	N	Mean (days)	95% CI
18-29	658	3	2.7-3.2	952	3.5	3.3-3.7	1610	3.3	3.1-3.4
30-49	674	3.3	3.0-3.5	997	4.0	3.7-4.2	1671	3.6	3.4-3.8
50-69	263	3.7	3.2-4.2	423	4.2	3.9-4.6	686	4.0	3.6-4.3
18-69	1595	3.2	3.0-3.4	2372	3.8	3.6-4.0	3967	3.5	3.4-3.7

Salt consumption

Consumption of processed foods high in salt

Findings in Table 23 show that about 5 percent of the respondents consumed processed food which is high in salt. However, the proportion that consumed processed foods high in salt tended to reduce with the increasing age groups. A lower proportion of older respondents consumed processed food that is high in salt as compared to their young counterparts.

Consumption of too much salt

Majority of those who thought they took too much salt were in the age bracket 30-49 years. The findings are displayed in Table 23.

Table 23. Respondents consuming high salt by sex and age group

Age Group	Men		Women		Both Sexes	
(years)	n	%	n	%	n	%
Always or often consume processed food high in salt						
18-29	649	6.8	932	5.2	1581	6
30-49	662	5.0	969	4.4	1631	4.7
50-69	255	2.3	413	1.2	668	1.7
18-69	1566	5.3	2314	4.3	3880	4.8
Think they consume far too much or too much salt						
18-29	654	11.9	945	10.4	1599	11.1
30-49	670	19.8	996	9.8	1666	14.7
50-69	263	13.6	418	9.1	681	11.4
18-69	1587	15.3	2359	10	3946	12.5

Knowledge levels on the effects of taking too much salt

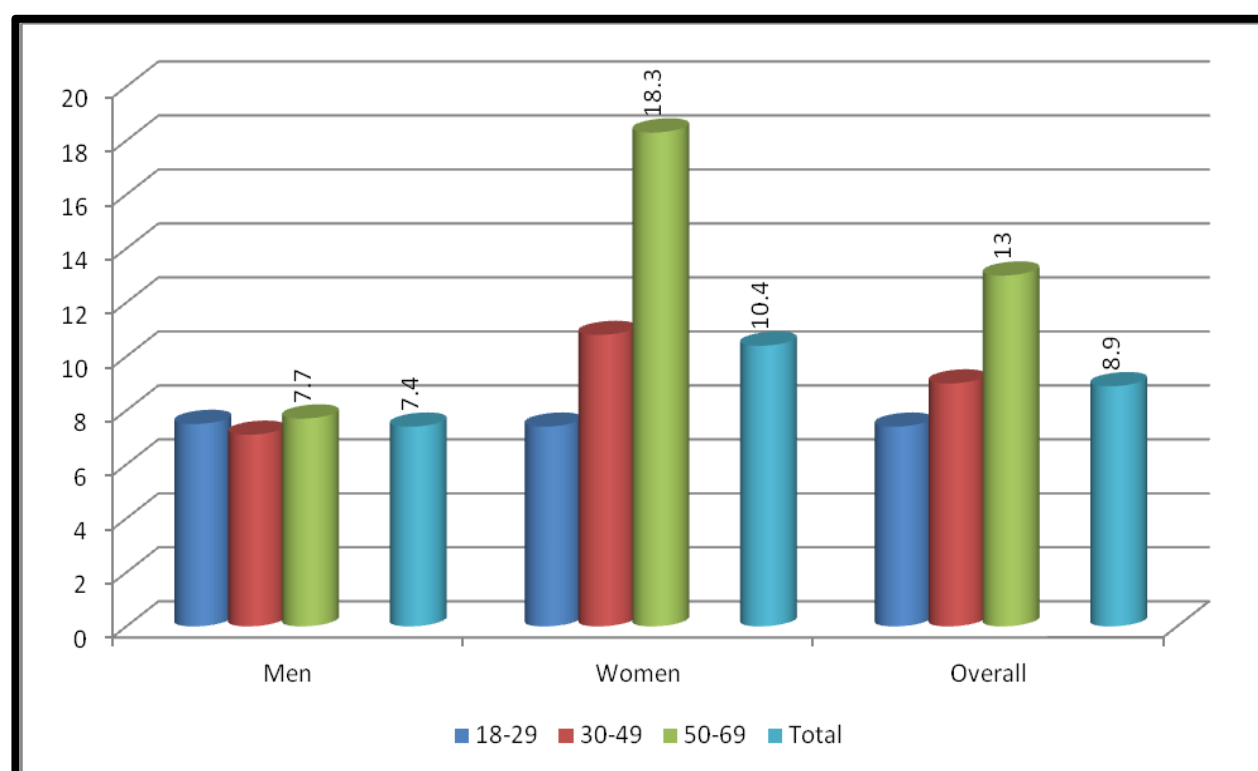
On the extent to which it was important to reduce consumption of too much salt, majority (60%) observed that it was very important, 30 percent felt it was somewhat important while 10 percent thought reducing on the consumption of too much salt was not important at all. The findings are presented in Table 24.

Table 24: Importance of lowering salt in diet by age group

	Men	Women	Overall
Age group	18-69	18-69	18-69
Number	1258	1853	3111
Very important	59.1	60.8	60
Somewhat important	28.2	31	29.6
Not at all important	12.8	8.2	10.4
Total	100	100	100

Specifically, respondents were asked whether they thought too much salt or salty sauce in their diet could cause a health problem. Regardless of the sex or age group, at least four out of any five respondents observed that too much salt could cause effect on health – Figure 10.

Fig 10: Knowledge of too much salt effect on health by sex and age groups



Summary of diet consumption

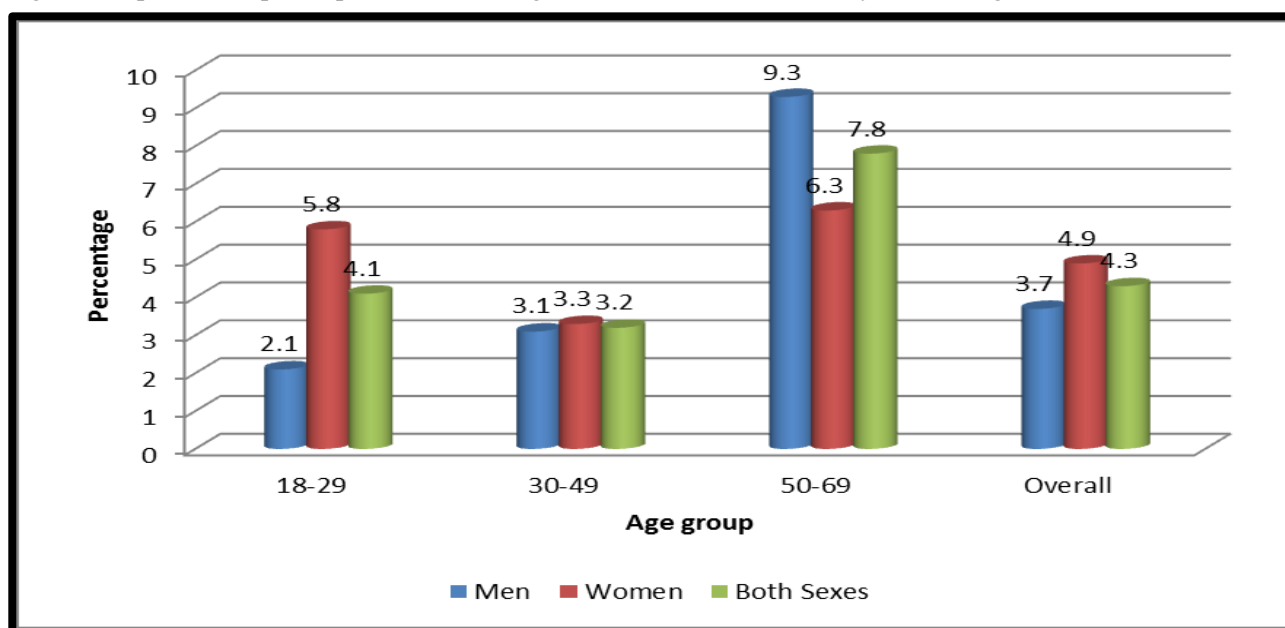
Within a period of seven days, respondent had fruits and vegetables for an average of 3 and 4 days respectively. The young respondents were more likely to have consumed fruits. On contrary, the elderly were more likely to have consumed vegetables than their young counterparts. About five percent of the respondents consumed processed food which is high in salt with the proportion dwindling with increasing age groups. Furthermore, about 13 percent of the respondents felt they took too much salt. However, at least four out of any five respondents observed that too much salt had a negative affect on one one's health.

PHYSICAL ACTIVITY

Physical inactivity refers to an activity level that is insufficient to meet current WHO recommendations. Strong evidence shows that physical inactivity increases the risk of many adverse health conditions, including major non-communicable diseases such as coronary heart disease, Type 2 diabetes, and breast and colon cancers and shortens life expectancy.

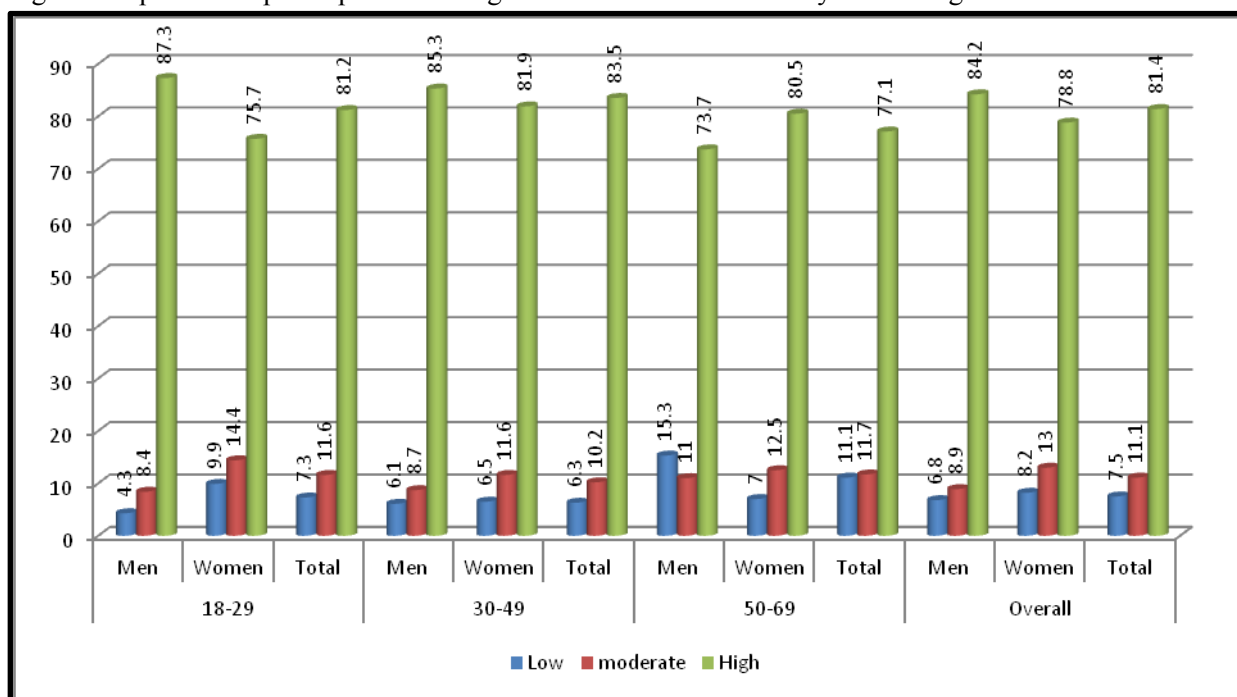
WHO recommends that throughout a week, including activity for work, during transport and leisure time, adults should do at least 150 minutes of moderate-intensity physical activity or; 75 minutes of vigorous-intensity physical activity or an equivalent combination of moderate and vigorous intensity physical activity achieving at least 600 MET-minutes. Findings presented in Figure 11 show that about 3.7 percent of the men and 4.9 percent of the women were not meeting the WHO recommendations on physical activity for health.

Fig 11: Proportion of participants not meeting WHO recommendations by sex and age



Classifying the physical activity according to the previous WHO recommendations, about 81 percent were considered to have high level of physical activity with 11 percent rated as having moderate and 8 percent with low – Figure 12.

Fig 12: Proportion of participants meeting WHO recommendations by sex and age



On average, men had physical activity for 370 minutes while women had 330 minutes of total activity per day with the overall being 350 minutes. The physical activity level was highest for the middle aged 30-49 years of age and least for the elderly, 50-69 years of age – Table 25. The subsections below present the average physical time at work, recreation and movements.

Time on work related physical activity per day

The average number of minutes of work-related physical activity per day was 270 for men and 250 for women. Those aged 50 and above had the least average time on work-related physical activities and highest among those 30 – 49 years – Table 25.

Transport-related physical activity on average per day

On average men take 78 minutes and women 68 minutes per day of transport related physical activities. These tend to decrease with an increase in age.

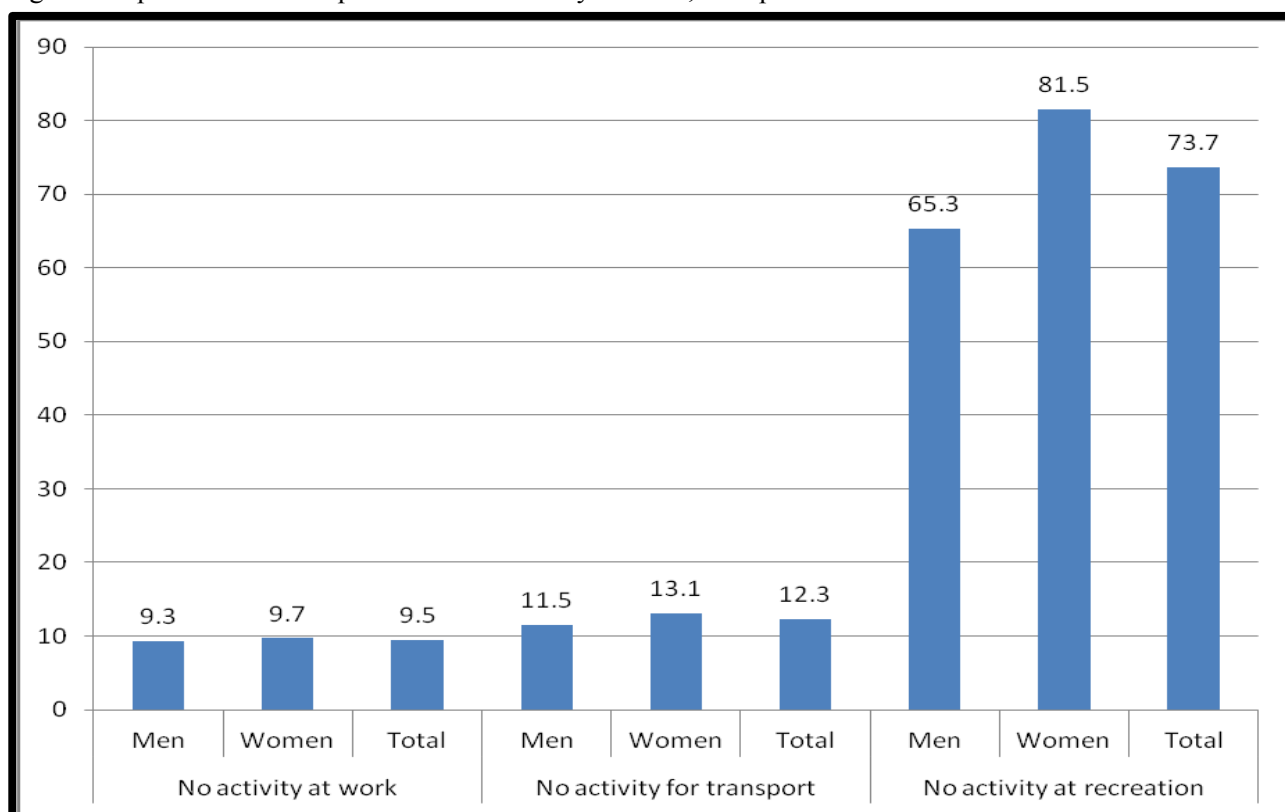
Recreation-related physical activity on average per day

For recreation related physical activity per day, on average men take 26 minutes and women 15 minutes per day of recreation related physical activities. These tend to decrease with an increase in age. Overall, about 74 percent of the study participants were rated as having no recreation related physical activity – Figure 13.

Table 25: Mean minutes of total physical activity per day by sex and age group

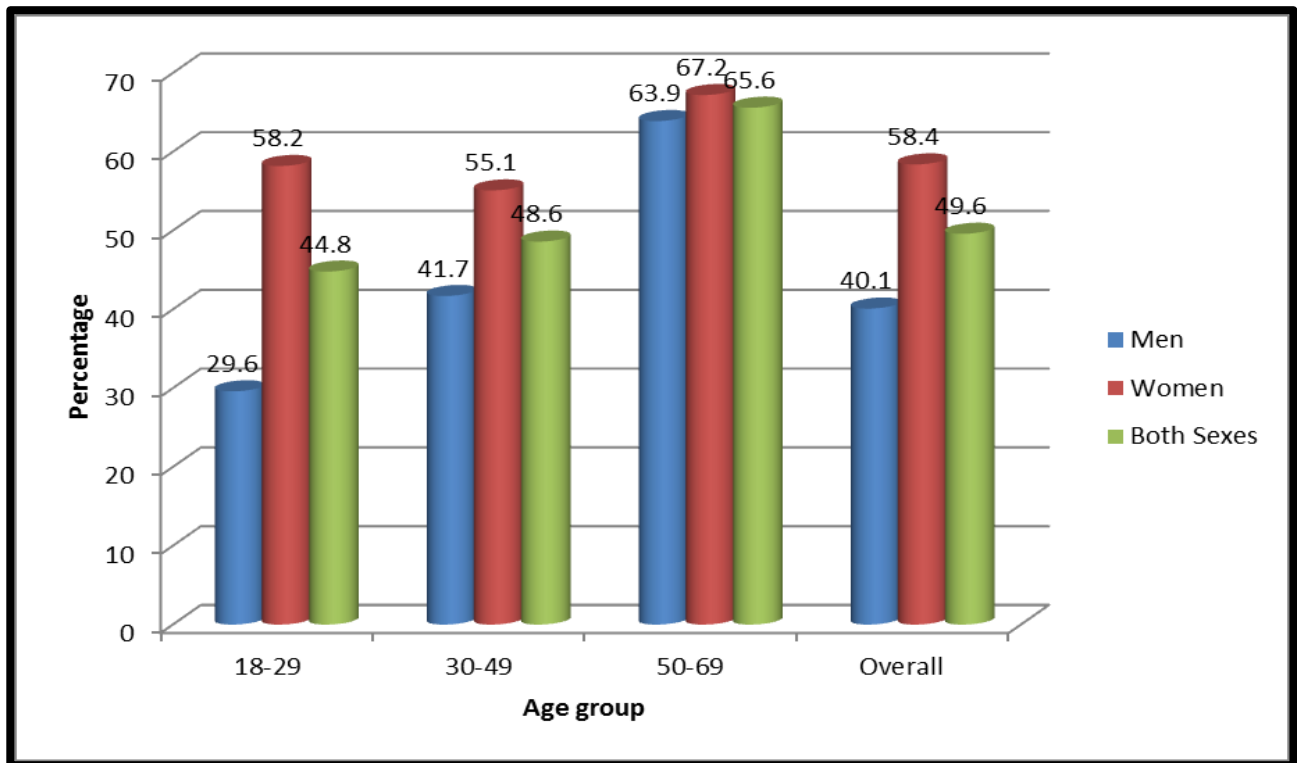
Age Group	Men		Women		Both Sexes	
Mean minutes of total physical activity on average per day	n	Mean (minutes)	n	Mean (minutes)	n	Mean (minutes)
18-29	637	372.1	919	314	1556	341.3
30-49	651	392.8	977	361.5	1628	376.7
50-69	253	314.4	410	297.2	663	305.8
18-69	1541	370.6	2306	329.6	3847	349.3
Mean minutes of transport-related physical activity on average per day	n	Mean (minutes)	n	Mean (minutes)	n	Mean (minutes)
18-29	637	80.8	919	69.1	1556	74.6
30-49	651	78.1	977	67.5	1628	72.7
50-69	253	72.3	410	63.8	663	68
18-69	1541	78.3	2306	67.7	3847	72.8
Mean minutes of recreation-related physical activity on average per day	n	Mean (minutes)	n	Mean (minutes)	n	Mean (minutes)
18-29	637	34.6	919	16.2	1556	24.9
30-49	651	18.5	977	14.8	1628	16.6
50-69	253	18.8	410	12.9	663	15.9
18-69	1541	25.6	2306	15.2	3847	20.2

Fig 13: Proportion of Participants with no activity at work, transport and Recreation



About 49.6 percent of respondents were not engaged in vigorous activities, but with the proportion higher among women (58.4 percent) than among men (40.1 percent). Overall, findings presented in Figure 14 show that proportions of respondents not engaged in vigorous activities increasing with age groups, a pattern still reflected among men. However, the lowest proportion of women not involved in vigorous work was among those aged 30-49 years.

Fig 14: Proportion Not Engaged in Vigorous Physical Activities



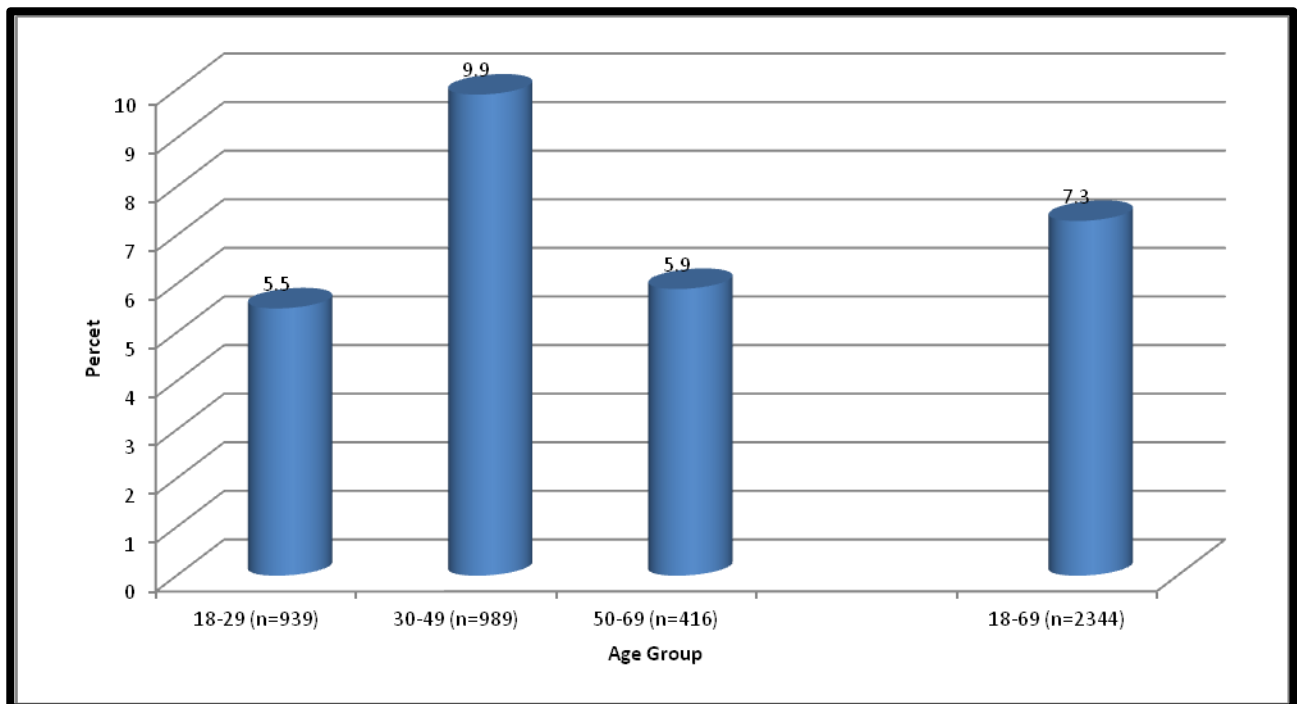
Summary of physical activity

About four percent of the participants were considered physically inactive by the WHO recommendations. On average, men had physical activity for 370 minutes while women had 330 minutes of total activity per day with the overall being 350 minutes

About half of respondents were considered to be engaged in vigorous activities, but with the proportion lowest among women (42%) and highest among men (60%). Generally, proportions of respondents engaged in vigorous activities declined with increasing age groups, especially among men. Women expressed a rather different pattern with majority of those engaged in vigorous work in the age bracket 30-49 years as compared to those 18-29 years and above 50 years. This could be attributed to the fact that this is age at which women fetch for their families most.

Findings show that less than 10 percent of the women had ever been screened for cervical cancer – Figure 15.

Fig 15: Proportion of women ever screened against cervical cancer



LIFE STYLE ADVICE

Results presented in Table 26 show the proportion of study participants who had received advice on; - a) quitting tobacco -16%; b) reducing salt in a diet – 18%; c) eating at least five servings of fruit and/or vegetables each day – 22%; d) reducing fat in the diet – 19%, e) doing more physical activity – 18%, and f) maintain a healthy body weight or to lose weight – 13%. Overall, findings demonstrate that regardless of the gender or age group, there was no single lifestyle area to which more than a quarter of the study respondents reported to have received advice from doctors or health workers.

Table 26: Proportion of Study Participants who have received Lifestyle Advice

Advised by doctor or health worker to quit using tobacco or don't start						
Age Group ((years)	Men		Women		Both Sexes	
	n	% advised	n	% advised	n	% advised
18-29	660	15.8	954	13.2	1614	14.4
30-49	675	16.1	998	16.6	1673	16.3
50-69	264	26.3	422	12.5	686	19.4
Total	1599	17.7	2374	14.4	3973	15.9
Advised by doctor or health worker to reduce salt in the diet						
18-29	660	15.8	954	16.5	1614	16.2
30-49	675	14.2	998	21.7	1673	18
50-69	264	16.6	422	25.7	686	21.1
Total	1599	15.3	2374	19.9	3973	17.7
Advised by doctor or health worker to eat at least five servings of fruit and/or vegetables each day						
18-29	660	19.5	954	22.7	1614	21.2
30-49	675	21.2	998	24.6	1673	22.9
50-69	264	19.3	422	20.8	686	20.1
Total	1599	20.1	2374	23.1	3973	21.7
Advised by doctor or health worker to reduce fat in the diet						
18-29	660	19.4	954	19.5	1614	19.4
30-49	675	16.1	998	21.4	1673	18.8
50-69	264	18.6	422	20.2	686	19.4
Total	1599	18	2374	20.3	3973	19.2
Advised by doctor or health worker to start or do more physical activity						
18-29	660	21.3	954	18.2	1614	19.6
30-49	675	16.6	998	16.4	1673	16.5
50-69	264	19.5	422	12.1	686	15.8
Total	1599	19.1	2374	16.5	3973	17.8
Advised by doctor or health worker to maintain a healthy body weight or to lose weight						
18-29	660	16.4	954	11.1	1614	13.6
30-49	675	11.7	998	13.3	1673	12.5
50-69	264	15.3	422	11.4	686	13.3
Total	1599	14.4	2374	12	3973	13.1

SUMMARY OF COMBINED RISK FACTORS

Assessment of risk factors was made by sex of the respondent as shown in Table 27. The following five risk factors were considered;

- Current daily smoking
 - Less than five servings of fruit and/or vegetables per day
 - Not meeting WHO recommendations on physical activity for health (<150 minutes of moderate activity per week, or equivalent)
 - Overweight or obese (BMI ≥ 25 kg/m²)
 - Raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP).
- a) About nine percent of the men had 3-5 risk factors; 85 percent had 1-2 risk factors and only 6 percent did not have any risk factor at all.
- b) About 11 percent of the women had 3-5 risk factors; 82 percent had 1-2 risk factors and only 7 percent did not have any risk factor at all.
- c) Overall, about 10 percent of the respondents had 3-5 risk factors; 84 percent had 1-2 risk factors and only about 7 percent did not have any risk factor at all. Regardless of the gender, the number of risk factors a respondent had was highly correlated with age.

Table 27: Summary of Combined Risk Factors

	Men			Women			Overall		
Age group in years	18-44	45-69	18-69	18-44	45-69	18-69	18-44	45-69	18-69
Number	1151	342	1493	1481	566	2047	2632	908	3540
With 0 risk factors (%)	6	6.3	6	7.9	5.1	7.3	6.9	5.7	6.6
with 1-2 risk factors (%)	88.3	75.1	85.4	84.7	71.9	81.7	86.5	73.4	83.6
with 3-5 risk factors (%)	5.8	18.6	8.5	7.4	23	11	6.6	20.9	9.8

ORAL HEALTH

Findings show that 40.0 percent of the respondents reported having oral pain or discomfort with the proportions increasing with increase in the age groups. Disaggregation by sex shows that 37.4 percent were men while women were 42.4 percent. Overall, about 57.3 percent had never received dental care with about 59.8 percent men and 55.0 percent women (see Table 28).

Table 28: Percentage of the population having oral pain or discomfort

Age Group (years)	Men			Women			Both Sexes		
	n	% Having oral pain or discomfort	95% CI	n	% Having oral pain or discomfort	95% CI	n	% Having oral pain or discomfort	95% CI
18-29	660	31.8	27.1-36.5	954	39.5	35.3-43.7	1614	35.9	32.6-39.2
30-49	675	39.7	35.2-44.3	998	42.4	37.8-47.0	1673	41.1	37.6-44.6
50-69	264	46.7	37.3-56.1	422	51.0	44.3-57.6	686	48.8	43.2-54.5
18-69	1599	37.4	34.0-40.8	2374	42.4	39.1-45.7	3973	40.0	37.4-42.6

RESULTS - QUALITATIVE STUDY

KNOWLEDGE AND PERCEPTIONS OF NCDs

This study established that people in Uganda have heard and some have seen people in their community with NCDs, though their knowledge is not comprehensive. Some of the FGD participants who reported awareness of NCDs, had a lot of misperceptions and myths about the causes and prevention of NCDs. However, all FGDs participants and key informants noted that NCDs were serious, life threatening and very expensive to manage and treat. By ranking the NCDs, all the groups reported that high blood pressure (hypertension) was the most common of all the NCDs followed by diabetes. This they attributed to the fact that diabetes and high blood pressure tended to co-exist. Most reported risk factors associated with NCDs such as smoking, alcohol abuse, lack of exercise and diet, but noted some NCDs were hereditary. Cancer was reported third among the NCD affecting people and it was more prevalent among the women because they tended to have breast cancer, cervical cancer and other cancers. Cancer was reported also to be on the increase even affecting children. Many did not know the causes of cancer but knew it was incurable. Given the chronic nature of NCDs, health and help seeking regarding NCDs was mainly hierarchical whereby the patients first sought one type of care if it failed resorted to another type of care. People mentioned that with NCDs, some of the people affected used traditional medicine but most people used the biomedical care.

BEHAVIOURAL RISK FACTORS

Tobacco Use

Majority reported tobacco smoking to be high especially cigarette smoking. By district, Kampala reported more tobacco use followed by Mbarara, Arua and Mbale in that order. The least reported tobacco use was in Masaka. By gender, Kampala reported more males using tobacco compared to the rest. By and large, most respondents were ignorant of the dangers of tobacco smoking.

Reasons for smoking tobacco

Most respondent reported that tobacco was refreshing and could give appetite to the smokers because it took away nausea; made others feel satisfied after smoking; gave relief and warmth during the cold spells especially for people who worked at night; it could give people strength to dig in gardens. Peer pressure commonly mentioned as a reason to start smoking. It was also alluded to that tobacco was used as a home remedy to treat stomach ailments and worms; and to drive away evil spirits (for instance in Arua).

What can be done to reduce the rate of tobacco consumption: Most mentioned the government to put up strict laws to control smoking by for instance stopping smoking in public places; gazetted some smoking areas; massive sensitization and education about the dangers of tobacco smoking to discourage smokers and would be smokers; growing of tobacco be stopped by discouraging farmers from growing it, so that factories did not have leaves to manufacture cigarettes. Also, the sale of cigarettes should be discouraged by increasing the taxes in manufacture of cigarettes.

Harmful use of alcohol

Consumption of alcohol was reported to be quite high as it is easily accessible through the sachets and local brews in the community. Alcohol consumption was relatively high also due to peer pressure, redundancy and addiction. Some perceived NCDs like diabetes and high blood pressure to

be caused by beer, which made people gain weight leading to their onset. Others reported that there was no relationship, that in actual fact, alcohol helped people lose weight; and that alcohol has been consumed for ages as a “social drink” and that people did not die of NCDs due to alcohol intake.

Quitting alcohol consumption

Most FGD participants and key informants mentioned that having bylaws to regulate alcohol consumption would help to regulate the drinking hours.

Unhealthy Diet

The main diet of persons that were sampled varied more especially on the type of staple foods but the main ones were: Maize, sweet- and Irish- potatoes, Matooke, Millet and Cassava. Rice was also reported to be more common especially in urban areas. These staple foods were served mainly with beans, peas, groundnuts, fish, meat and variety of green vegetables. However, not all people would afford these foods. Some poor households were food insecure, but also some foods were easily seasonally. Most FGD participants and key informants were of the view that there has been changes in people's dietary habits over the years as people especially in the urban and peri-urban areas were eating more of fried fast foods, and less vegetables and fruits. They had resorted to frying foods instead of boiling/steaming, which used to be the tradition. Eating fried fatty foods, sweet and sugary foods and drinks, and those who added raw salt to their foods risked getting diabetes and hypertension. They also mentioned that those who used maize flour (for food) and groundnuts (for sauce) processed by machines were risking to get cancer from the metallic pieces which mixed with the flour. There were some misconception regarding foods and NCDs, a few mentioned that eating a poor diet which was not balanced could easily cause NCDs.

Salt Intake and NCD

Most did not associate salt with NCDs. They did not know of any diseases, which were caused by eating salt. So they wanted to be enlightened on that. A few reported however that salt caused hypertension because those who had it were told to reduce the salt intake.

Physical inactivity

The lay understanding of physical activity varied. Generally it was reported that most people were engaged in all sorts of physical activities such as digging, walking, running, fetching water, and carrying food from the garden, bicycle riding, carrying firewood, slashing the compound, fetching, water, washing clothes and brick making. So to them they were already doing the physical activity given their kind of work or livelihood they engage in. This was most common in the rural areas. However, most were affirmative that physical activity helped one to stay physically fit.

Physical inactivity

Laziness was reported as the most common reason but equally important was the type of work people engaged in. People who worked in offices and markets or shops spent most of the time seated hence became inactive not by choice. The increase in the use of *boda-boda* as means of transport has reduced physical activity of people who previously used to walk long distances.

Obesity/overweight

Regarding Obesity/overweight, most FGD participants and key informants mentioned that considerable number of people in their community were not obese or overweight. They reported that most overweight people resided in urban areas. In rural areas not many people were overweight

as they thought that people in the rural communities hardly eat fatty foods like meat to make them obese. Most of the people in the rural communities were lean.

“We do not have people who are fat in this community. People here drink a lot of alcohol” FGD-Women-Group-Manibe-Migoro-Arua,

But they reported more women to be overweight than men and that the number of overweight people are increasing as people are eating carelessly.

“There is a big number right now because people are eating carelessly. Pork all the time” FGD-Women-Nyamitanga-Mbarara

Risks associated with obesity reported were high chances of getting hypertension, heart problems, kidney problems and diabetes and could not do active work like digging, could not walk easily and were in bad shape most of the time. Women tended to develop swollen legs. Overweight people could easily get fats around the heart which caused heart disease. Despite these risks some participants thought that being obese was synonymous to being rich, prestigious and looking good. Some people thought that being fat was good because it gave status and self recognition to such a person. Some thought fat people were doing well financially and health-wise. People have gone to extent of enlarging some parts of their bodies to look fat.

“There is even Chinese medicine now that helps people to enlarge buttocks and hips. That’s how popular overweight is.” FGD-Women-Nyamitanga-Mbarara,

The negative perception was that thin people were thought to be poor, had problems and that they were not respected compared to the fat ones.

“Thin people are not respected like fat people. When we go to parties, thin people were given ‘ekitumba’, a banana stem to sit on in case seats are not enough. The fat person will be the one to get a chair” FGD-Men-Bushenyi-Rugando-Mbarara

Extremely thin women were thought to be sick of HIV/AIDS as illustrated by the quote below.

“Some women feel they are on market if they become obese. Some slim woman could be living with HIV/AIDS” FGD-Men-Entebbe-Road-Nakaloke-Town-Council-Mbale

Over eating was thought to cause obesity and that there were people who were ignorant about the consequences of being fat on their health. They also said there were those who inherited obesity from their parents – a generational problem.

A few however, mentioned that some people fear being obese because they knew this caused diseases such as diabetes and hypertension. Some thought it was not healthy to be fat because overweight people fell sick easily.

On what should be done to prevent NCDs the respondents mentioned the need for sensitization and awareness creation among the population. This could be done using different access channels such as Radios, TVs, Posters, and going to communities for health talks about NCDs prevention and routine check ups. Outreaches and mobile clinics could be established where experts can be taken to give health talks and afterwards carry out screening for those who are willing.

CONCLUSION

This survey demonstrates that NCDs and their risk factors are a public health problem in Uganda. The study further reveals that there is a high prevalence of hypertension in the Ugandan population and that the majority of people with hypertension are not aware of the hypertension status. Furthermore, the survey demonstrated that approximately one in ten have a more than three risk factors for NCDs and that a similar number of persons aged 40 - 69 years have a 10-year CVD risk $\geq 30\%$, or with existing CVD. This is a relatively young age group, which still forms the core of the work force and a vital economic investment very difficult to replace.

RECOMMENDATION

There is a need to strengthen the existing efforts towards the prevention and management of NCDs in Uganda and to change the trends of persons being affected by NCDs:- from not being aware of risk factors for NCDs and therefore likelihood of presenting late with NCDs and their complications to innovative trends of prevention, early detection and early treatment of NCDs. This may require a multi-sectoral action plan.

The Uganda national baseline survey data provides a rich dataset that can be used to explore and understand different nationally representative indicators for informing decisions and policy on the non-communicable diseases in Uganda. Further analysis especially at multivariate level is highly recommended to attempt exploring the inter-relationships between various indicators and risk factors of non-communicable diseases in Uganda.

REFERENCES

1. Adeyi O., Smith O. and Robles S (2007) Public Policy and the Challenge of Chronic Noncommunicable Diseases. The World Bank, Washington D.C
2. Kengne AP, Amoah AGB and Mbanya JC (2005) Cardiovascular complications of diabetes mellitus in Sub-Saharan Africa. *Circulation*, 112, 3592 – 3601
3. Greenberg H, Raymond SU and Leeder SR (2005) Cardiovascular disease and global health: threat and opportunity. *Health Affairs*, 24, 31 – 41.
4. Strong K, Mathers C, Leeder S and Beaglehole R (2005) Preventing chronic diseases: how many lives can we save? *Lancet*, 366, 1578 – 1582. Uganda Bureau of Statistics. Available from <http://www.ubos.ug>. Accessed May 2014.
5. Ministry of Health. (2008). National health accounts financial year 2006/07 . Kampala: Ministry of Health.
6. GBD Profile: Uganda. Available from <http://www.healthmetricsandevaluation.org>
7. Cook, A.R. (1901) Notes on the diseases met with in Uganda, Central Africa. *Journal of Tropical Medicine*, 4, 175 – 178
8. IDF. Diabetes Atlas. International Diabetes Federation, Brussels, 2003 (2nd Edition).
9. WHO 2005. Preventing Chronic Diseases: A vital investment. www.who.int/chp/chronic_disease_report/contents/en/index.html. Accessed: 12 December 2006. National Institutes of Health (2000).
10. Maher D. Waswa L. Kathy K. Karabarinde. A. Unwin N and Grosskurth H (2011) Distribution of hyperglycaemia and related cardiovascular disease risk factors in low-income countries: a cross-sectional population-based survey in rural Uganda. *International Journal of Epidemiology* 40:160–171
11. World Health Organisation (2004) 57th World Health Assembly, Geneva, 17 to 22 May 2004
12. Bonita R, de Courten M, Dwyer T, Jamrozik K, Winkelmann R. Surveillance of risk factors for noncommunicable disease: The WHO STEPwise approach. Geneva, World Health Organization, 2002.
13. Bonita R, de Courten M, Dwyer T, Jamrozik K, Winkelmann T. Surveillance of risk factors for noncommunicable diseases: The WHO STEPwise approach. Summary. Geneva, World Health Organization. 2001.

14. The practical guide identification, evaluation, and treatment of overweight and obesity in adults. NIH Publication No. 00-4084. Available from <http://www.nih.gov>. Accessed December 2006.
15. Guidelines for the management of hypertension. Available from <http://www-clinpharm.medschl.cam.ac.uk>. Accessed March 2014.
16. American Diabetes Association. Standards of medical care in diabetes—2014. *Diabetes Care*. 2014;37(suppl 1):S14-S80.
17. Definition, diagnosis and classification of diabetes mellitus and its complications. Part 1: Diagnosis and classification of diabetes mellitus. Geneva, World Health Organization, 1999 (WHO/NCD/NCS/99.2).
18. Hsieh H F and Shannon S E (2005) Three approaches to qualitative content analysis. *Qual Health Res* 2005 15: 1277. Available from <http://qhr.sagepub.com/content/15/9/1277>. Accessed May 2015.
19. Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24, 105–112.
20. Ainsworth B E.; et al (1993) Compendium of Physical Activities: Classification of energy costs of human physical activities. *Medicine & Science in Sports & Exercise* 25 (1): 71–80

APPENDIX A: ENUMERATION AREAS

Appendix 1. List of Enumeration Areas

	District	No of Eas	Luguage
1	Kampala	34	
		34	Luganda 1
2	Wakiso	24	
10	Kiboga	1	
11	Luwero	5	
13	Nakasongala	2	
14	Kyankwanzi	3	
16	Nakaseke	3	
		38	Luganda 2
1	Kalangala	1	
2	Masaka	4	
3	Mpigi	1	
4	Rakai	6	
5	Sembabule	3	
6	Bukomansinbi	3	
7	Gomba	2	Luganda 3
8	Kalungu	2	
9	Lwengo	4	
10	Mityana	3	
11	Mubende	7	
		36	
1	Mukono	7	
2	Kayunga	4	

3	Buikwe	4	
4	Buvuma	1	
5	Bugiri	3	
6	Busia	3	
7	Iganga	4	
8	Jinja	6	Luganda 4
		32	
9	Kamuli	3	
10	Mayuge	5	
11	Kaliro	1	
12	Namutumba	2	
13	Buyende	3	
14	Luuka	2	
15	Namayingo	2	
16	Mbale	5	
17	Budaka	3	
18	Bududa	1	
19	Bukedea	2	
20	Manafwa	4	
21	Bulamburi	2	
22	Kibuku	1	
		36	Luganda/Lusoga
1	Kapchorwa	1	
2	Katakwi	1	
3	Kumi	2	
4	Pallisa	4	

5	Soroti	2	
6	Tororo	5	
7	Kaberaido	2	
8	Sironko	2	
9	Amuria	2	Atesot
10	Butaleja	2	
11	Kween	1	
12	Ngora	2	
13	Serere	2	
14	Kotido	3	
15	Moroto	1	
16	Nakapiripirit	1	
17	Abim	1	
18	Kabong	2	
19	Amudat	1	
20	Napak	1	
		38	
1	Apac	3	
2	Gulu	4	
3	Kitgum	2	
4	Lira	4	Luo
5	Pader	1	
6	Amolatar	1	
7	Amuru	3	
8	Dokolo	1	
9	Oyam	3	
10	Agago	3	

11	Alebtong	2	
12	Kole	2	
13	Lamwo	1	
14	Nwoya	1	
15	Otuke	1	
		32	
1	Adjumani	2	
2	Arua	6	
3	Moyo	2	
4	Nebbi	3	Lugbara
5	Yumbe	4	
6	Koboko	1	
7	Maracha	2	
8	Zombo	2	
9	Kiryandongo	3	
		25	
1	Bundibugyo	1	
2	Hoima	5	
3	Kabarole	5	
4	Kasese	6	
5	Kibaale	2	
6	Masindi	2	Runyoro/Rutooro
7	Kamwenge	3	
8	Kyenjojo	5	
10	Kyegegwa	2	
11	kagadi	3	

12	kakumiro	2	
		36	
1	Bushenyi	2	
2	Kabale	6	
3	Kisoro	3	
4	Mbarara	6	
5	Ntungamo	4	
6	Rukungiri	3	Runyankole/Rukiga
7	Kanungu	2	
8	Ibanda	4	
9	Isingiro	4	
10	Kirihura	2	
11	Buhwezu	1	
12	Mitooma	2	
13	Rubirizi	1	
14	Sheema	3	
		43	
	Total EAS	384	384

APPENDIX B: INFORMED CONSENT

Appendix 2: Consent Form (English)

INFORMED CONSENT FORM

(Translated into Local Languages)

Project:

Ministry of Health Uganda Government, Non-Communicable Diseases (NCD) Risk Factor Survey

Investigator:(Print Name).....

BACKGROUND:

The number of people affected by diabetes, hypertension, and other related non-communicable diseases is increasing. The exact causes are not known, but the diseases have some degree of inheritance and are associated with being overweight, particularly if one does not do much physical exercise. The best way to manage these diseases would be to prevent them, but we do not know exactly how and when they attack the individual. This study aims to increase the knowledge on risk factors for non-communicable diseases among Ugandans. This is an activity of the Ministry of Health of the Uganda Government. The contact of coordinator of this Survey in the Ministry of Health is Dr. Gerald Mutungi, PMO, NCDs Desk, Tel:- +256 (0) 414 252 726 and that of the Principle investigator is Dr. Silver Bahendeka, Tel:- +256 (0) 772 098 864

Statement:

I am volunteering to participate in the survey of non-communicable disease risk factors among Ugandans.

Procedures:

I will be asked about age, where I was born, education, food and social activities questions related to diseases that are described as non-communicable, such as diabetes and hypertension.

My height, weight, hip and waist circumference will be measured.

After an overnight fast, a spot blood sample will be taken from my finger by means of a needle prick. This will be used to measure concentration of Total Cholesterol, High Density Lipoprotein (HDL-C) and Fasting Plasma Glucose in my blood.

DECLARATION:

I have read, or had read to me, this consent form. I have had the opportunity to ask questions and all my questions have been answered to my satisfaction. I freely and voluntarily agree to be part of this survey, though without prejudice to my legal and ethical rights. I have received a copy of this agreement.

I understand I may withdraw from the study at any time.

PARTICIPANT'S NAME:

CONTACT DETAILS:

PARTICIPANT'S SIGNATURE:

Date:.....

Statement of investigator's responsibility:

I have explained the nature and purpose of this Survey, the procedures to be undertaken and any risks that may be involved. I have offered to answer any questions and fully answered such questions. I believe that the participant understands my explanation and has freely given informed consent.

INVESTIGATOR'S SIGNATURE:..... **Date:**.....

Telephone Contact

(Keep the original of this form in the Questionnaire file, give one copy to the participant)

APPENDIX C: WHO STEPS Instrument

WHO STEPS Instrument

for Noncommunicable Disease
Risk Factor Surveillance

<UGANDA/AFRO>

Survey Information

Location and Date	Response	Code
Cluster/Centre/ Village ID	<input type="text"/>	I1
Cluster/Centre /village Name	<input type="text"/>	I2
District	<input type="text"/>	X1
Enumeration Area Name	<input type="text"/>	X2
Household Serial No	<input type="text"/>	X3
Interviewer ID	<input type="text"/>	I3
Interviewer name:	<input type="text"/>	X3
Name and ID of Supervisor	<input type="text"/>	X4
Date of completion of the instrument	dd mm year <input type="text"/>	I4

Consent, Interview Language and Name	Response	Code
Consent has been read and obtained	Yes1 No2 If NO, END	I5
Interview Language <i>[Insert Language]</i>	English1 Ateso/Karamajong2 Luganda3	I6

	Lugbara Luo ⁴ Runyankole/Rukiga ⁵ Runyoro/Rutoro ⁶ Other ⁸ (Specify)	
Time of interview (24 hour clock)	<div> <div>hrs</div> <div>mins</div> </div>	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)	Male ¹ Female ²	C1
What is your date of birth? Don't Know 77 77 7777	If known, Go to C4 dd mm year	C2
How old are you?	Years	C3
In total, how many years have you spent at school and in full-time study (excluding pre-school)?	Years	C4

EXPANDED: Demographic Information		
What is the highest level of education you have completed?	No formal schooling ¹ Less than primary school ² Primary School not completed Primary school completed ³ O-Level not completed O-level completed ⁴ A-Level not completed A-level completed ⁵ University /Higher institutions completed ⁶ Post graduate degree ⁷ Refused ⁸	C5
What is your [insert relevant ethnic group / racial group / cultural subgroup / others] background ? What is your tribe?	[Locally defined] ¹ [Locally defined] ² [Locally defined] ³ Refused ⁸	C6
What is your marital status ?	Never married ¹ Currently married ²	C7

	Separated3 Divorced4 Widowed5 Cohabiting6 Refused88	
Which of the following best describes your main work status over the past 12 months? [INSERT COUNTRY-SPECIFIC CATEGORIES] (USE SHOWCARD)	Government employee1 Non-government employee2 Self-employed3 Non-paid4 Student5 Unpaid family worker /Homemaker6 Retired7 Unemployed (able to work)8 Unemployed (unable to work)9 Refused88	C8
How many people older than 18 years, including yourself, live in your household?	Number of people <input type="text"/>	C9

EXPANDED: Demographic Information, Continued		
Question	Response	Code
Taking the past year , can you tell me what the average earnings of the household have been? [Ugandan shilling] (RECORD ONLY ONE, NOT ALL 3)	Per week <input type="text"/> Go to T1	C10a
	OR per month <input type="text"/> Go to T1	C10b
	OR per year <input type="text"/> Go to T1	C10c
	Refused88	C10d
If you don't know the amount, can you give an estimate of the annual household income if I read some options to you? Is it [INSERT QUINTILE VALUES IN Ugandan shilling] (READ OPTIONS)	" Quintile (Q) 11	C11
	More than Q 1, " Q 22	
	More than Q 2, " Q 33	
	More than Q 3, " Q 44	
	More than Q 45	
	Don't Know77	
	Refused88	

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 ,shisha or pipes? (USE SHOWCARD)	Yes1	T1
	No2 If No, go to T8	
Do you currently smoke tobacco products daily ?	Yes1 No2	T2
How old were you when you first started smoking?	Age (years) <input type="text"/> 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	In Years <input type="text"/> <input type="text"/> If Known, go to T5a/T5aw	T4a
	OR in Months <input type="text"/> <input type="text"/> If Known, go to T5a/T5aw	T4b
	OR in Weeks <input type="text"/> <input type="text"/>	T4c
On average, how many of the following products do you smoke each day/week ? (IF LESS THAN DAILY, RECORD WEEKLY) (RECORD FOR EACH TYPE, USE SHOWCARD) Don't Know 7777	DAILY↓ WEEKLY⇐	
	Manufactured cigarettes <input type="text"/> <input type="text"/>	T5a/T5aw
	Hand-rolled cigarettes <input type="text"/> <input type="text"/>	T5b/T5bw
	Pipes full of tobacco <input type="text"/> <input type="text"/>	T5c/T5cw
	Cigars, cheroots, cigarillos <input type="text"/> <input type="text"/>	T5d/T5dw
	Number of Shisha sessions <input type="text"/> <input type="text"/>	T5e/T5ew
	Other <input type="text"/> <input type="text"/> If Other, go to T5other, else go to T6	T5f/T5fw
	Other (please specify): <input type="text"/>	T5other/ T5otherw
During the past 12 months, have you tried to stop smoking ?	Yes1 No2	T6
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 T12; if T2=No, go to T9 No ² If T2=Yes, go to T12; if T2=No, go to T9 No visit during the past 12 months T9	T7
In the past, did you ever smoke any tobacco products? (USE SHOWCARD)	Yes1 No2 If No, go to T12	T8
In the past, did you ever smoke daily ?	Yes1 If T1=Yes, go to T12, else go to T10 No ² If T1=Yes, go to T12, else go to T10	T9
EXPANDED: Tobacco Use		
Question	Response	Code
How old were you when you stopped smoking?	Age (years) Don't Know 77 <input type="text"/> <input type="text"/> If Known, go to T12	T10
How long ago did you stop smoking? (RECORD ONLY 1, NOT ALL 3) Don't Know 77	Years ago <input type="text"/> <input type="text"/> If Known, go to T12	T11a
	OR Months ago <input type="text"/> <input type="text"/> If Known, go to T12	T11b
	OR Weeks ago <input type="text"/> <input type="text"/>	T11c
Do you currently use any smokeless tobacco products such as [snuff, chewing tobacco, betel]? (USE SHOWCARD)	Yes1 No2 If No, go to T15	T12
Do you currently use smokeless tobacco products daily ?	Yes1 No2 If No, go to T14aw	T13

	DAILY↓	WEEKLY↑
On average, how many times a day/week do you use (IF LESS THAN DAILY, RECORD WEEKLY) (RECORD FOR EACH TYPE, USE SHOWCARD) Don't Know 7777	Snuff, by mouth	T14a/ T14aw
	Snuff, by nose	T14b/ T14bw
	Chewing tobacco	T14c/ T14cw
	Betel, quid	T14d/ T14dw
	Other <i>If Other, go to T14other, if T13=No, go to T16, else go to T17</i>	T14e/ T14ew
	Other (please specify): <i>If T13=No, go to T16, else go to T17</i>	T14other/ T14otherw
In the past , did you ever use smokeless tobacco products such as [snuff, chewing tobacco, or betel]?	Yes1 No2 <i>If No, go to T17</i>	T15
In the past , did you ever use smokeless tobacco products such as [snuff, chewing tobacco, or betel] daily ?	Yes1 No2	T16
During the past 30 days, did someone smoke in your home ?	Yes1 No2	T17
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)?	Yes1 No2 Don't work in a closed area3	T18

CORE: Alcohol Consumption

The next questions ask about the consumption of alcohol. A standard drink of is 250ml of beer and wine or a tot of whisky, waragi gin are served in tots.

Question	Response	Code
Have you ever consumed any alcohol such as beer, wine, spirits or ,waragi, malwa or any other local brews? (USE SHOWCARD OR SHOW EXAMPLES)	Yes1 No2 <i>If No, go to A16</i>	A1
Have you consumed any alcohol within the past 12 months ?	Yes1 <i>If Yes, go to A4</i> No2	A2
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?	Yes1 <i>If Yes, go to A16</i> No2 <i>If No, go to A16</i>	A3
During the past 12 months, how frequently have you had at least one standard alcoholic drink? (READ RESPONSES, USE SHOWCARD)	Daily1 5-6 days per week2 3-4 days per week3 1-2 days per week4 1-3 days per month5 Less than once a month6	A4
Have you consumed any alcohol within the past 30 days ?	Yes1 No2 <i>If No, go to A13</i>	A5

During the past 30 days, on how many occasions did you have at least one standard alcoholic drink (beer, wine, whisky, vodka, rum, gin) drinks	Number Don't know 77 <input type="text"/>	A6
During the past 30 days, when you drank alcohol, how many standard drinks on average did you have during one drinking occasion? (USE SHOWCARD)	Number Don't know 77 <input type="text"/>	A7
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?	Largest number Don't know 77 <input type="text"/>	A8
During the past 30 days, how many times did you have six or more standard drinks in a single drinking occasion?	Number of times Don't know 77 <input type="text"/>	A9
During each of the past 7 days , how many standard drinks did you have each day? (USE SHOWCARD) Don't know 77	Monday <input type="text"/>	A10a
	Tuesday <input type="text"/>	A10b
	Wednesday <input type="text"/>	A10c
	Thursday <input type="text"/>	A10d
	Friday <input type="text"/>	A10e
	Saturday <input type="text"/>	A10f
	Sunday <input type="text"/>	A10g
CORE: Alcohol Consumption, continued		
I have just asked you about your consumption of alcohol during the past 7 days. 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 ACCORDING TO LOCAL CONTEXT] (USE SHOWCARD)	Yes1 No2 If No, go to A13	A11
On average, how many standard drinks of the following did you consume during the past 7 days ? [INSERT COUNTRY-SPECIFIC EXAMPLES] (USE SHOWCARD) Don't know 77	Homebrewed spirits, e.g. moonshine <input type="text"/>	A12a
	Homebrewed beer or wine, e.g. beer, palm or fruit wine <input type="text"/>	A12b
	Alcohol brought over the border/from another country <input type="text"/>	A12c
	Alcohol not intended for drinking, e.g. alcohol-based medicines, perfumes, after shaves <input type="text"/>	A12d
	Other untaxed alcohol in the country <input type="text"/>	A12e
EXPANDED: Alcohol Consumption		
During the past 12 months , how often have you found that you were not able to stop drinking once you had started?	Daily or almost daily1 Weekly2 Monthly3	A13

	Rarely 4 Never 5 Don't know 77	D7
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, salty foods prepared in quick-service, chips, crisps, boiled eggs, avocado, boiled cassava, sausage, cornflakes, salted nuts. [INSERT EXAMPLES] (USE SHOWCARD)	Always 1 Often 2 Sometimes 3 Rarely 4 Never 5 Don't know 77	
How much salt or salty sauce do you think you consume?	Far too much 1 Too much 2 Just the right amount 3 Too little 4 Far too little 5 Don't know 77	

EXPANDED: Diet

Question	Response	Code
How important to you is lowering the salt in your diet?	Very important 1 Somewhat important 2 Not at all important 3 Don't know 77	D9
Do you think that too much salt or salty sauce in your diet could cause a health problem ?	Yes 1 [go to D10a] No 2 Don't know 77	D10
If yes in D10 what health problem can too much salt cause	High blood pressure1 Osteoporosis (thinning of the bones)2 Stomach cancer3 Kidney stones4 Don't know77	D10a
Do you do any of the following on a regular basis to control your salt intake ? (RECORD FOR EACH)		
Limit consumption of processed foods	Yes1 No2	D11a
Look at the salt or sodium content on food labels	Yes1 No2	D11b
Buy low salt/sodium alternatives	Yes1	D11c

	No2	D11d
Use spices other than salt when cooking	Yes1 No2	
Avoid eating foods prepared outside of a home	Yes1 No2	D11e
Do other things specifically to control your salt intake	Yes ¹ If Yes, go to DS7other No2	D11f
Other (please specify) []		D11other

The next questions ask about the oil or fat that is most often used for meal preparation in your household, and about meals that you eat outside a home.

What type of oil or fat is most often used for meal preparation in your household? (USE SHOWCARD) (SELECT ONLY ONE)	Vegetable oil1 Lard or suet2 Butter or ghee3 Margarine4 Other5 If Other, go to D5 other None in particular6 None used7 Don't know77	D12
	Other []	D12other
On average, how many meals per week do you eat that were not prepared at a home? By meal, I mean breakfast, lunch and dinner.	Number Don't know 77 []	D13

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. Think first about the time you spend doing work. Think of work as the things that you have to do such as paid or unpaid work, study/training, household chores, harvesting food/crops, fishing or hunting for food, seeking employment. <i>[Insert other examples if needed]</i> . In answering the following questions 'vigorous-intensity activities' are activities that require hard physical effort and cause large increases in breathing or heart rate, 'moderate-intensity activities' are activities that require moderate physical effort and cause small increases in breathing or heart rate.		
Question	Response	Code
Work		
Does your work involve vigorous-intensity activity that causes large increases in breathing or heart rate like <i>[carrying or</i>	Yes1	P1

lifting heavy loads, digging or construction work] for at least 10 minutes continuously? [running, brisk walking uphill, fast bicycling,, carrying heavy loada>20kg] .	No2 If No, go to P 4	
In a typical week, on how many days do you do vigorous-intensity activities as part of your work?	Number of days []	P2
How much time do you spend doing vigorous-intensity activities at work on a typical day?	Hours : minutes []: [] hrs mins	P3 (a-b)
Does your work involve moderate-intensity activity, that causes small increases in breathing or heart rate such as brisk walking [or carrying light loads] for at least 10 minutes continuously? [brisk walking, dancing, digging, housework/domestic chores, building tasks, carrying food items r cooking wood/charcoal><20kg	Yes1 No2 If No, go to P 7	P4
In a typical week, on how many days do you do moderate-intensity activities as part of your work?	Number of days []	P5
How much time do you spend doing moderate-intensity activities at work on a typical day?	Hours : minutes []: [] hrs mins	P6 (a-b)
Travel to and from places		
The next questions exclude the physical activities at work that you have already mentioned. Now I would like to ask you about the usual way you travel to and from places. For example to work, for shopping, to market, to place of worship. [Insert other examples if needed]		
Do you walk or use a bicycle (pedal cycle) for at least 10 minutes continuously to get to and from places?	Yes1	P7
	No2 If No, go to P 10	
In a typical week, on how many days do you walk or bicycle for at least 10 minutes continuously to get to and from places?	Number of days []	P8
How much time do you spend walking or bicycling for travel on a typical day?	Hours : minutes []: [] hrs mins	P9 (a-b)
CORE: Physical Activity, Continued		
Question	Response	Code
Recreational activities		
The next questions exclude the work and transport activities that you have already mentioned. Now I would like to ask you about sports, fitness and recreational activities (leisure), [Insert relevant terms].		
Do you do any vigorous-intensity sports, fitness or recreational (leisure) activities that cause large increases in breathing or heart rate like [running or football] for at least 10 minutes continuously? [running, ask cycling, fast swimming, net ball, basket ball, foot ball hockey etc. (Yes1	P10
	No2 If No, go to P 13	
In a typical week, on how many days do you do vigorous-intensity sports, fitness or recreational (leisure) activities?	Number of days []	P11
How much time do you spend doing vigorous-intensity sports, fitness or recreational activities on a typical day?	Hours : minutes []: [] hrs mins	P12 (a-b)

Do you do any moderate-intensity sports, fitness or recreational (<i>leisure</i>) activities that cause a small increase in breathing or heart rate such as brisk walking, [<i>cycling, swimming, volleyball</i>] for at least 10 minutes continuously? [INSERT EXAMPLES] (USE SHOWCARD)	Yes1 No2 If No, go to P16	P13
In a typical week, on how many days do you do moderate-intensity sports, fitness or recreational (<i>leisure</i>) activities?	Number of days []	P14
How much time do you spend doing moderate-intensity sports, fitness or recreational (<i>leisure</i>) activities on a typical day?	Hours : minutes [] : [] hrs mins	P15 (a-b)

EXPANDED: Physical Activity		
Sedentary behaviour		
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?	Hours : minutes [] : [] hrs mins	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?	Yes1 No2 If No, go to H6	H1
Have you ever been told by a doctor or other health worker that you have raised blood pressure or hypertension?	Yes1 No2 If No, go to H6	H2a
Have you been told in the past 12 months?	Yes1 No2	H2b
In the past two weeks, have you taken any drugs (medication) for raised blood pressure prescribed by a doctor or other health worker?	Yes1 No2	H3
Have you ever seen a traditional healer for raised blood pressure or hypertension?	Yes1 No2	H4
Are you currently taking any herbal or traditional remedy for your raised blood pressure?	Yes1 No2	H5

CORE: History of Diabetes		
Have you ever had your blood sugar measured by a doctor or other health worker?	Yes1 No2 If No, go to H12	H6
Have you ever been told by a doctor or other health worker that you have raised blood sugar or diabetes?	Yes1 No2 If No, go to H12	H7a
Have you been told in the past 12 months?	Yes1	H7b

	No2	
In the past two weeks, have you taken any drugs (medication) for diabetes prescribed by a doctor or other health worker?	Yes1 No2	H8
Are you currently taking insulin/ oral drugs for diabetes prescribed by a doctor or other health worker?	Yes1 No2	H9
Have you ever seen a traditional healer for diabetes or raised blood sugar?	Yes1 No2	H10
Are you currently taking any herbal or traditional remedy for your diabetes?	Yes1 No2	H11

CORE: History of Raised Total Cholesterol

Cholesterol is a fatty substance found in blood. High levels of total cholesterol are associated with abnormal heart function and blood vessels.

Question	Response	Code
Have you ever had your cholesterol (fat levels in your blood) measured by a doctor or other health worker?	Yes1 No2 <i>If No, go to H17</i>	H12
Have you ever been told by a doctor or other health worker that you have raised cholesterol?	Yes1 No2 <i>If No, go to H17</i>	H13a
Have you been told in the past 12 months?	Yes1 No2	H13b
In the past two weeks, have you taken any oral treatment (medication) for raised total cholesterol prescribed by a doctor or other health worker?	Yes1 No2	H14
Have you ever seen a traditional healer for raised cholesterol?	Yes1 No2	H15
Are you currently taking any herbal or traditional remedy for your raised cholesterol?	Yes1 No2	H16

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)?	Yes1 No2	H17
Are you currently taking aspirin regularly to prevent or treat heart disease?	Yes1 No2	H18
Are you currently taking statins (Lovastatin/Simvastatin/Atorvastatin or any other statin) regularly to prevent or treat heart disease?	Yes1 No2	H19

CORE: Lifestyle Advice

During the past three years, has a doctor or other health worker advised you to do any of the following?
(RECORD FOR EACH)

Quit using tobacco or don't start	Yes1	H20a
	No2	
Reduce salt in your diet	Yes1	H20b
	No2	
Eat at least five servings of fruit and/or vegetables each day	Yes1	H20c
	No2	
Reduce fat in your diet	Yes1	H20d
	No2	
Start or do more physical activity	Yes1	H20e
	No2	
Maintain a healthy body weight or lose weight	Yes1 If C1=1 go to M1	H20f
	No2 If C1=1 go to M1	

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.

Question	Response	Code
Have you ever had a screening test for cervical cancer, using any of these methods described above?	Yes1	CX1
	No2	
	Don't know77	

Oral Health

Oral Health		
The next questions ask about your oral health status and related behaviours.		
Question	Response	Code
How many natural teeth do you have?	No natural teeth 1 <i>If no natural teeth, go to O4</i> 1 to 9 teeth 2 10 to 19 teeth 3 20 teeth or more 4 Don't know 77	O1
How would you describe the state of your teeth ?	Excellent 1 Very Good 2 Good 3 Average 4 Poor 5 Very Poor 6 Don't Know 77	O2
How would you describe the state of your gums ?	Excellent 1 Very Good 2 Good 3 Average 4 Poor 5 Very Poor 6 Don't know 77	O3
Do you have any removable dentures ?	Yes 1 No 2 <i>If No, go to O6</i>	O4
Which of the following removable dentures do you have? (RECORD FOR EACH)		
An upper jaw denture	Yes 1 No 2	O5a
A lower jaw denture	Yes 1 No 2	O5b
During the past 12 months, did your teeth or mouth cause any pain or discomfort ?	Yes 1 No 2	O6
How long has it been since you last saw a dentist ?	Less than 6 months 1 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 5 Never received dental care 6 <i>If Never, go to O9</i>	O7
What was the main reason for your last visit to the dentist?	Consultation / advice 1 Pain or trouble with teeth, gums or mouth 2 Treatment / Follow-up treatment 3 Routine check-up treatment 4 Other 5 <i>If Other, go to O8other</i>	O8
	Other (please specify) _____	O8other
How often do you clean your teeth?	Never 1 <i>If Never, go to O13a</i> 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	O9

Oral Health, Continued		
Question	Response	Code
Do you use toothpaste to clean your teeth?	Yes1 No2 <i>If No, go to O12a</i>	O10
Do you use toothpaste containing fluoride ?	Yes1 No2 Don't know77	O11

Do you use any of the following to clean your teeth ? (RECORD FOR EACH)		
Toothbrush	Yes1 No2	O12a
Wooden toothpicks	Yes1 No2	O12b
Plastic toothpicks	Yes1 No2	O12c
Thread (dental floss)	Yes1 No2	O12d
Charcoal	Yes1 No2	O12e
Chewstick / miswak	Yes1 No2	O12f
Other	Yes ¹ <i>If Yes, go to O12other</i> No2	O12g
Other (please specify) <input type="text"/>		O12other
Have you experienced any of the following problems during the past 12 months because of the state of your teeth ? (RECORD FOR EACH)		
Difficulty in chewing foods	Yes1 No2	O13a

Difficulty with speech/trouble pronouncing words	Yes1 No2	O13b
Felt tense because of problems with teeth or mouth	Yes1 No2	O13c
Embarrassed about appearance of teeth	Yes1 No2	O13d
Avoid smiling because of teeth	Yes1 No2	O13e
Sleep is often interrupted	Yes1 No2	O13f
Days not at work because of teeth or mouth	Yes1 No2	O13g
Difficulty doing usual activities	Yes1 No2	O13h
Less tolerant of spouse or people close to you	Yes1 No2	O13i
Reduced participation in social activities	Yes1 No2	O13j

Step 2 Physical Measurements

CORE: Blood Pressure		
Question	Response	Code
Interviewer ID	□□□□□□	M1
Device ID for blood pressure	□□□□	M2
Cuff size used	Small1 Medium2 Large3	M3
Reading 1	Systolic (mmHg) □□□□□□	M4a
	Diastolic (mmHg) □□□□□□	M4b
Reading 2	Systolic (mmHg) □□□□□□	M5a
	Diastolic (mmHg) □□□□□□	M5b
Reading 3	Systolic (mmHg) □□□□□□	M6a
	Diastolic (mmHg) □□□□□□	M6b
During the past two weeks, have you been treated for raised blood pressure with drugs (medication) prescribed by a doctor or other health worker?	Yes1 No2	M7
CORE: Height and Weight		
For women: Are you pregnant?	Yes1 <i>If Yes, go to M 16</i> No2	M8
Interviewer ID	□□□□□□	M9
Device IDs for height and weight	Height□□□□	M10a
	Weight□□□□	M10b
Height	in Centimetres (cm) □□□□□□. □□	M11
Weight <i>If too large for scale 666.6</i>	in Kilograms (kg) □□□□□□.□□	M12
CORE: Waist		
Device ID for waist	□□□□	M13
Waist circumference	in Centimetres (cm) □□□□□□.□□	M14

EXPANDED: Hip Circumference and Heart Rate

Hip circumference	in Centimeters (cm) [000000.00]	M15
Heart Rate		
Reading 1	Beats per minute [00000]	M16a
Reading 2	Beats per minute [00000]	M16b
Reading 3	Beats per minute [00000]	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?	Yes1 No2	B1
Technician ID	[00000]	B2
Device ID	[0000]	B3
Time of day blood specimen taken (24 hour clock)	Hours : minutes [0000] : [0000] hrs mins	B4
Fasting blood glucose [CHOOSE ACCORDINGLY: MMOL/L OR MG/DL]	mmol/l [0000]. [0000] mg/dl [000000.00]	B5
Today, have you taken insulin or other drugs (medication) that have been prescribed by a doctor or other health worker for raised blood glucose?	Yes1 No2	B6
CORE: Blood Lipids		
Device ID	[0000]	B7
Total cholesterol [CHOOSE ACCORDINGLY: MMOL/L OR MG/DL]	mmol/l [0000]. [0000] mg/dl [000000.00]	B8
During the past two weeks, have you been treated for raised cholesterol with drugs (medication) prescribed by a doctor or other health worker?	Yes1 No2	B9

APPENDIX D: SHOW CARDS

Tobacco Show Cards



Manufactured cigarettes.



Roll-your-own (RYO) cigarettes.



Snuff, available in wet and dry form.



Cigars, e.g., cigarillos, double coronas, cheroots, stumpe, chutts and dhumtis.




Pipe.



Alcohol - Standard drink

1 standard drink =


1 standard bottle
of regular beer
(285ml)


1 single measure
of spirits (30ml)


1 medium size
glass of wine
(120ml)


1 measure of
aperitif (60ml)

Note: net alcohol content of a standard drink is approximately 10 g of ethanol





(a) 330 ml Bottle is available in some places approximates to a standard beer drink



- (a) Beer Bottle of 330 ml and Common full glass approximates 1 beer drink
- (b) Marwa drunk from a pot – a session of drink would be equivalent to 7 standard drinks
- (c) Bottle of wine and standard medium size wine glass
- (d) Factory distilled spirits – whisky and gin with a single measure of whisky (30 ml)
- (e) Beer bottles and canned beer of 500 ml. One regular beer is approximately 2 standard drinks (1.75)
- (f) Calabash of locally brewed beer – 1 medium calabash is equivalent to 7 - standard drinks
- (g-d; g-gl) Waragi locally distilled and a glass. A glass is equivalent to 10 standard drinks

Typical Fruit and Vegetables and Serving Sizes

VEGETABLES are considered to be:	1 Serving =	Examples
Raw green leafy vegetables	1 cup	Spinach, salad, etc.
Other vegetables, cooked or chopped raw	½ cup	Tomatoes, carrots, pumpkin, corn, Chinese cabbage, fresh beans, onion, etc. 
Vegetable juice	½ cup	

FRUIT Is considered to be:	1 Serving =	Examples
Apple, banana, orange	1 medium size piece	
Chopped, cooked, canned fruit	½ cup	
Fruit juice	½ cup	Juice from fruit, not artificially flavoured

Serving size One standard serving = 80 grams (translated into different units of cups depending on type of vegetable and standard cup measures available in the country).

Note: Tubers such as potatoes and cassava should not be included.

Physical Activity

Vigorous Physical Activity at Work

Examples for
vigorous
activities at
WORK

VIGOROUS Intensity Activities
Make you breathe much harder than normal



Other examples
for
VIGOROUS
activities at
WORK

- Forestry (cutting, chopping, carrying wood)
 - Sawing hardwood
 - Ploughing
 - Cutting crops (sugar cane)
 - Gardening (digging)
 - Grinding (with pestle)
 - Labouring (shovelling sand)
 - Loading furniture (stoves, fridge)
 - Instructing spinning (fitness)
 - Instructing sports aerobics
 - Sorting postal parcels (fast pace)
 - Cycle rickshaw driving
-

Moderate Physical Activity at Work

Examples for
MODERATE
activities at
work

MODERATE Intensity Activities

Make you breathe somewhat harder than normal



Other examples
for
MODERATE
activities at
WORK

- Cleaning (vacuuming, mopping, polishing, scrubbing, sweeping, ironing)
 - Washing (beating and brushing carpets, wringing clothes (by hand))
 - Gardening
 - Milking cows (by hand)
 - Planting and harvesting crops
 - Digging dry soil (with spade)
 - Weaving
 - Woodwork (chiselling, sawing softwood)
 - Mixing cement (with shovel)
 - Labouring (pushing loaded wheelbarrow, operating jackhammer)
 - Walking with load on head
 - Drawing water
 - Tending animals
-

Vigorous Physical Activity during Leisure Time

Examples for
VIGOROUS
activities
during
LEISURE
TIME

VIGOROUS Intensity Activities

Make you breathe much harder than normal



Other examples
for
VIGOROUS
activities
during
LEISURE
TIME

- Soccer
 - Rugby
 - Tennis
 - High-impact aerobics
 - Aqua aerobics
 - Ballet dancing
 - Fast swimming
-

Moderate Physical Activity during Leisure Time

Examples for
MODERATE
activities
during
LEISURE
TIME

MODERATE Intensity Activities

Make you breathe somewhat harder than normal



Other examples
for
MODERATE
activities at
WORK

- Cycling
 - Jogging
 - Dancing
 - Horse-riding
 - Tai chi
 - Yoga
 - Pilates
 - Low-impact aerobics
 - Cricket
-

WHO STEPS

**Non-communicable Disease
Risk Factor Surveillance**

DATA BOOK FOR

UGANDA 2014

6MARCH, 2016

Demographic Information Results

Age group by sex Description: Summary information by age group and sex of the respondents.

Instrument question:

- Sex
- What is your date of birth?

Age group and sex of respondents								
Age Group (years)	Men			Women			Both Sexes	
	n	%		n	%		n	%
18-29	660	40.8		956	59.2		1616	40.5
30-49	679	40.4		1001	59.6		1680	42.1
50-69	265	38.4		426	61.6		691	17.3
18-69	1604	40.2		2383	59.8		3987	100

Education Description: Mean number of years of education among respondents.

Instrument question:

- In total, how many years have you spent at school or in full-time study (excluding pre-school)?

Mean number of years of education								
Age Group (years)	Men			Women			Both Sexes	
	n	Mean		n	Mean		n	Mean
18-29	660	8.5		955	7.6		1615	8.0
30-49	679	7.2		999	5.1		1678	5.9
50-69	264	6.2		421	3.2		685	4.4
18-69	1603	7.6		2375	5.8		3978	6.5

Highest level of education Description: Highest level of education achieved by the survey respondents.

Instrument question:

- What is the highest level of education you have completed?

Highest level of education								
Men								
Age Group (years)	n	% No formal schooling	% Less than primary school	% Primary school completed	% Secondary school completed	% High school completed	% College/ University completed	% Post graduate degree completed
18-29	660	3.8	34.4	31.2	13.2	0.2	9.1	8.2
30-49	671	8.8	44.1	26.4	9.2	0.3	3.0	8.2
50-69	261	14.9	46.0	19.9	5.7	1.5	1.1	10.7
18-69	1592	7.7	40.4	27.3	10.3	0.4	5.2	8.6

Highest level of education								
Women								
Age Group (years)	n	% No formal schooling	% Less than primary school	% Primary school completed	% Secondary school completed	% High school completed	% College/ University completed	% Post graduate degree completed
18-29	955	8.3	39.6	31.8	11.2	0.0	2.5	6.6
30-49	999	25.9	45.7	17.9	4.6	0.1	0.8	4.9
50-69	425	45.4	34.8	13.6	2.6	1.2	0.2	2.1
18-69	2379	22.3	41.3	22.7	6.9	0.3	1.4	5.1

Highest level of education								
Both Sexes								
Age Group (years)	n	% No formal schooling	% Less than primary school	% Primary school completed	% Secondary school completed	% High school completed	% College/ University completed	% Post graduate degree completed
18-29	1615	6.4	37.5	31.6	12.0	0.1	5.2	7.2
30-49	1670	19.0	45.1	21.3	6.5	0.2	1.7	6.2
50-69	686	33.8	39.1	16.0	3.8	1.3	0.6	5.4
18-69	3971	16.5	40.9	24.6	8.3	0.3	2.9	6.5

Description: Summary results for the ethnicity of the respondents.

Ethnicity

Instrument Question:

- What is your [insert relevant ethnic group/racial group/cultural subgroup/others] background?

Ethnic group of respondents					
Age Group (years)	Both Sexes				
	n	% Baganda	% Banyankole	% Iteso	% Lugbara/Madi
18-29	1615	20.7	13.2	7.1	6.8
30-49	1680	19.5	14.0	6.2	7.1
50-69	690	16.7	13.3	7.8	4.5
18-69	3985	19.5	13.6	6.9	6.5

Ethnic group of respondents						
Age Group						
(years) Both Sexes						
n	% Basoga	% Langi	% Bakiga	% Karimojong		
18-29	1615	12.1	4.9	7.7	2.5	
30-49	1680	9.9	5.3	9.6	2.5	
50-69	690	10.6	6.1	9.7	3.6	
18-69	3985	10.9	5.3	8.9	2.7	

Ethnic group of respondents						
Age Group						
(years) Both Sexes						
n	% Acholi	% Bagisu/Sabiny		% Alur/ Japadhola		% Banyoro
18-29	1615	4.1	6.1	4.0	4.0	
30-49	1680	4.9	6.9	4.0	3.6	
50-69	690	5.7	9.1	6.4	2.2	
18-69	3985	4.7	7.0	4.4	3.5	

Ethnic group of respondents				
Age Group				
(years) Both Sexes				
n	% Batoro		% Other	
18-29	1615	5.7	1.0	
30-49	1680	5.2	1.2	
50-69	690	3.3	1.0	
18-69	3985	5.1	1.1	

Description: Marital status of survey respondents.

**Marital
status**

Instrument question:

- What is your marital status?

Marital status							
Men							
Age Group (years)	n	% Never married	% Currently married	% Separated	% Divorced	% Widowed	% Cohabiting
18-29	660	51.1	41.7	3.5	0.3	0.2	3.3
30-49	679	8.0	80.0	8.2	1.5	0.6	1.8
50-69	265	1.5	79.2	10.2	3.4	4.9	0.8
18-69	1604	24.6	64.1	6.6	1.3	1.1	2.2

Marital status							
Women							
Age Group (years)	n	% Never married	% Currently married	% Separated	% Divorced	% Widowed	% Cohabiting
18-29	954	21.3	67.1	6.6	0.7	0.5	3.8
30-49	1000	2.4	69.5	11.2	4.0	10.7	2.2
50-69	425	1.2	44.0	8.5	4.9	41.4	0.0
18-69	2379	9.8	64.0	8.9	2.9	12.1	2.4

Marital status							
Both Sexes							
Age Group (years)	n	% Never married	% Currently married	% Separated	% Divorced	% Widowed	% Cohabiting
18-29	1614	33.5	56.7	5.3	0.6	0.4	3.6
30-49	1679	4.6	73.7	10.0	3.0	6.6	2.0
50-69	690	1.3	57.5	9.1	4.3	27.4	0.3
18-69	3983	15.7	64.0	8.0	2.2	7.7	2.4

Employment status Description: Proportion of respondents in paid employment and those who are unpaid. Unpaid includes persons who are non-paid, students, homemakers, retired, and unemployed.

Instrument question:

- Which of the following best describes your main work status over the past 12 months?

Employment status					
Men					
Age Group (years)	n	% Government employee	% Non-government employee	% Self-employed	% Unpaid
18-29	660	1.1	13.6	54.1	31.2
30-49	679	3.7	9.6	70.4	16.3
50-69	265	4.5	6.0	62.6	26.8
18-69	1604	2.7	10.7	62.4	24.2

Employment status					
Women					
Age Group (years)	n	% Government employee	% Non-government employee	% Self-employed	% Unpaid
18-29	956	2.0	6.3	43.9	47.8
30-49	1000	3.8	5.4	56.4	34.4
50-69	425	1.2	2.8	50.1	45.9
18-69	2381	2.6	5.3	50.3	41.8

Employment status					
Both Sexes					
Age Group (years)	n	% Government employee	% Non-government employee	% Self-employed	% Unpaid
18-29	1616	1.6	9.3	48.1	41.0
30-49	1679	3.8	7.1	62.1	27.1
50-69	690	2.5	4.1	54.9	38.6
18-69	3985	2.7	7.5	55.2	34.7

Unpaid work and unemployed Description: Proportion of respondents in unpaid work.

Instrument question:

- Which of the following best describes your main work status over the past 12 months?

Unpaid work and unemployed							
Men							
Age Group (years)	n	% Non-paid	% Student	% Home-maker	% Retired	Unemployed	
						% Able to work	% Not able to work
18-29	206	4.4	51.0	28.6	0.0	15.5	0.5
30-49	111	5.4	1.8	76.6	0.9	13.5	1.8
50-69	71	2.8	0.0	63.4	11.3	11.3	11.3
18-69	388	4.4	27.6	48.7	2.3	14.2	2.8

Unpaid work and unemployed							
Women							
Age Group (years)	n	% Non-paid	% Student	% Home-maker	% Retired	Unemployed	
						% Able to work	% Not able to work
18-29	457	2.4	16.4	63.9	0.9	15.3	1.1
30-49	344	2.0	0.0	85.2	0.6	11.6	0.6
50-69	195	5.1	0.0	73.8	3.6	8.2	9.2
18-69	996	2.8	7.5	73.2	1.3	12.7	2.5

Unpaid work and unemployed							
Both Sexes							
Age Group (years)	n	% Non-paid	% Student	% Home-maker	% Retired	Unemployed	
						% Able to work	% Not able to work
18-29	663	3.0	27.1	52.9	0.6	15.4	0.9
30-49	455	2.9	0.4	83.1	0.7	12.1	0.9
50-69	266	4.5	0.0	71.1	5.6	9.0	9.8
18-69	1384	3.3	13.2	66.3	1.6	13.1	2.6

Per capita annual income Description: Mean reported per capita annual income of respondents in local currency.

Instrument questions:

- How many people older than 18 years, including yourself, live in your household?
- Taking the past year, can you tell me what the average earning of the household has been?

Mean annual per capita income	
n	Mean (UGX)
3184	1,311,671.4

Estimated household earnings Description: summary of participant household earnings by quintile.

Instrument question:

- If you don't know the amount, can you give an estimate of the annual household income if I read some options to you?

Estimated household earnings					
n	% Quintile 1: Under UGX.1,000,000	% Quintile 2: 1,000,000- 9,999,999	% Quintile 3: 10,000,000- 29,999,999	% Quintile 4: 30,000,000- 59,999,999	% Quintile 5: 60,000,000 and Over
342	19.9	75.1	4.7	0.3	0.0

Tobacco Use

Current smoking Description: Current smokers among all respondents.

Instrument question:

- Do you currently smoke any tobacco products, such as cigarettes, cigars, or pipes?

Percentage of current smokers									
Age Group (years)	Men			Women			Both Sexes		
	n	% Current smoker	95% CI	n	% Current smoker	95% CI	n	% Current smoker	95% CI
18-29	660	7.9	5.4-10.4	956	0.2	0.0-0.5	1616	3.8	2.6-5.0
30-49	677	21.4	17.4-25.5	1001	2.3	1.3-3.3	1678	11.6	9.5-13.7
50-69	264	29.4	21.2-37.6	425	12.3	6.2-18.4	689	20.8	15.5-26.2
18-69	1601	16.8	14.2-19.5	2382	2.9	1.8-4.0	3983	9.6	8.1-11.1

Smoking Status Description: Smoking status of all respondents.

Instrument questions:

- Do you currently smoke any tobacco products, such as cigarettes, cigars, or pipes?
- Do you currently smoke tobacco products daily?
- In the past, did you ever smoke any tobacco products?

Smoking status									
Men									
Age Group (years)	n	Current smoker				Non-smokers			
		% Daily	95% CI	% Non-daily	95% CI	% Former smoker	95% CI	% Never smoker	95% CI
18-29	660	6.8	4.4-9.1	1.1	0.4-1.9	6.2	3.7-8.6	85.9	82.6-89.3
30-49	677	18.4	14.5-22.2	3.1	1.3-4.9	11.5	8.3-14.7	67.0	62.5-71.6
50-69	264	25.8	17.5-34.2	3.6	0.9-6.2	17.4	12.0-22.8	53.2	43.7-62.6
18-69	1601	14.5	12.0-17.1	2.3	1.4-3.2	10.2	8.3-12.0	73.0	70.1-75.9

Smoking status									
Women									
Age Group (years)	n	Current smoker				Non-smokers			
		% Daily	95% CI	% Non-daily	95% CI	% Former smoker	95% CI	% Never smoker	95% CI
18-29	956	0.2	0.0-0.3	0.1	0.0-0.2	0.8	0.3-1.3	99.0	98.4-99.6
30-49	1001	2.0	1.0-3.0	0.3	0.0-0.6	5.3	3.5-7.2	92.4	90.1-94.6
50-69	425	11.4	5.3-17.5	0.9	0.0-2.0	8.4	5.0-11.8	79.3	72.3-86.3
18-69	2382	2.6	1.5-3.7	0.3	0.1-0.5	3.7	2.7-4.7	93.4	91.8-95.0

Smoking status									
Both Sexes									
Age Group (years)	n	Current smoker				Non-smokers			
		% Daily	95% CI	% Non-daily	95% CI	% Former smoker	95% CI	% Never smoker	95% CI
18-29	1616	3.2	2.1-4.4	0.6	0.2-0.9	3.3	2.1-4.5	92.9	91.3-94.5
30-49	1678	10.0	8.0-11.9	1.7	0.8-2.6	8.4	6.5-10.2	80.0	77.4-82.7
50-69	689	18.6	13.2-24.0	2.2	0.8-3.7	12.9	9.7-16.1	66.3	60.1-72.4
18-69	3983	8.3	6.9-9.8	1.3	0.8-1.7	6.8	5.7-7.9	83.6	81.8-85.4

Daily smoking

Description: Percentage of current daily smokers among smokers.

Instrument questions:

- Do you currently smoke any tobacco products, such as cigarettes, cigars, or pipes?
- Do you currently smoke tobacco products daily?

Current daily smokers among smokers											
Age Group (years)	Men				Women				Both Sexes		
	n	% Daily smokers	95% CI		n	% Daily smokers	95% CI		n	% Daily smokers	95% CI
18-29	52	85.6	76.6-94.6		4	66.4	12.7-100.0		56	85.0	76.1-93.9
30-49	144	85.6	77.8-93.5		30	86.6	74.4-98.9		174	85.7	78.6-92.9
50-69	77	87.9	78.6-97.2		38	92.5	83.0-100.0		115	89.3	82.1-96.4
18-69	273	86.3	81.2-91.4		72	89.8	81.8-97.8		345	86.9	82.3-91.4

Initiation and duration of smoking

Description: Mean age of initiation and mean duration of smoking, in years, among smokers (no total age group for mean duration of smoking as age influences these values).

Instrument questions:

- Do you currently smoke any tobacco products, such as cigarettes, cigars, or pipes?
- How old were you when you first started smoking?
- Do you remember how long ago it was?

Mean age started smoking											
Age Group (years)	Men				Women				Both Sexes		
	n	Mean age	95% CI		n	Mean age	95% CI		n	Mean age	95% CI
18-29	52	18.5	17.7-19.2		1	14.0	--		53	18.4	17.7-19.1
30-49	143	21.0	19.7-22.3		30	21.9	17.0-26.7		173	21.1	19.9-22.3
50-69	76	26.8	23.1-30.5		37	21.5	17.0-25.9		113	25.3	22.4-28.2
18-69	271	22.2	20.8-23.6		68	21.5	18.1-24.8		339	22.1	20.9-23.3

Mean duration of smoking											
Age Group (years)	Men				Women				Both Sexes		
	n	Mean duration	95% CI		n	Mean duration	95% CI		n	Mean duration	95% CI
18-29	52	5.7	4.6-6.7		1	14.0	--		53	5.7	4.7-6.8
30-49	143	17.2	15.7-18.8		30	18.6	12.3-24.9		173	17.4	15.8-18.9
50-69	76	32.7	28.3-37.2		37	39.5	32.3-46.7		113	34.7	31.1-38.3
18-69	271	19.4	16.7-22.1		68	32.5	26.7-38.2		339	21.4	19.0-23.7

Manufactured cigarette smokers

Description: Percentage of smokers who use manufactured cigarettes among daily smokers and among current smokers.

Instrument questions:

- Do you currently smoke any tobacco products, such as cigarettes, cigars, or pipes?
- Do you currently smoke tobacco products daily?
- On average, how many of the following products do you smoke each day?

Manufactured cigarette smokers among daily smokers											
Age Group (years)	Men				Women				Both Sexes		
	n	% Manu- factured cigarette smoker	95% CI		n	% Manu- factured cigarette smoker	95% CI		n	% Manu- factured cigarette smoker	95% CI
18-29	41	84.8	70.2-99.4		3	0.0	0.0-0.0		44	82.7	68.3-97.1
30-49	124	71.4	60.7-82.2		24	21.2	1.8-40.5		148	66.2	55.9-76.5
50-69	64	53.4	31.5-75.2		34	26.8	9.0-44.7		98	45.2	29.3-61.0
18-69	229	68.8	59.5-78.1		61	24.5	11.3-37.6		290	61.5	53.1-70.0

Manufactured cigarette smokers among current smokers											
Age Group (years)	Men				Women				Both Sexes		
	n	% Manu- factured cigarette smoker	95% CI		n	% Manu- factured cigarette smoker	95% CI		n	% Manu- factured cigarette smoker	95% CI
18-29	52	86.0	73.5-98.6		4	0.0	0.0-0.0		56	83.3	70.8-95.8
30-49	141	72.8	63.0-82.7		30	21.1	4.0-38.3		171	67.5	58.0-77.0
50-69	76	54.5	34.7-74.3		38	28.1	10.6-45.6		114	46.6	31.9-61.4
18-69	269	70.2	61.5-78.8		72	25.0	12.5-37.5		341	63.0	55.1-70.9

Amount of tobacco Description: Mean amount of tobacco used by daily smokers per day, by type.

used among daily smokers by type Instrument questions:

- Do you currently smoke any tobacco products, such as cigarettes, cigars, or pipes?
- Do you currently smoke tobacco products daily?
- On average, how many of the following products do you smoke each day?

Mean amount of tobacco used by daily smokers by type									
Age Group (years)	Men								
	n	Mean # of manufactured cig.	95% CI	n	Mean # of hand-rolled cig.	95% CI	n	Mean # of pipes of tobacco	95% CI
18-29	41	3.9	2.1-5.8	40	2.5	1.2-3.8	41	0.0	0.0-0.1
30-49	124	3.2	2.3-4.0	126	1.8	1.2-2.5	126	0.2	0.1-0.3
50-69	64	2.2	1.1-3.3	65	4.2	2.0-6.5	65	0.4	0.0-0.8
18-69	229	3.0	2.4-3.6	231	2.7	1.8-3.6	232	0.2	0.1-0.4

Mean amount of tobacco used by daily smokers by type									
Age Group (years)	Men								
	n	Mean # of cigars, cheerots, cigarillos	95% CI	n	Mean # of shisha sessions	95% CI	n	Mean # of other type of tobacco	95% CI
18-29	39	0.1	0.0-0.2	41	0.0	--	39	0.1	0.0-0.2
30-49	126	0.2	0.0-0.5	125	0.0	0.0-0.0	122	0.0	0.0-0.1
50-69	65	0.0	--	65	0.0	--	65	0.1	0.0-0.2
18-69	230	0.1	0.0-0.3	231	0.0	0.0-0.0	226	0.1	0.0-0.1

Mean amount of tobacco used by daily smokers by type									
Age Group (years)	Women								
	n	Mean # of manufactured cig.	95% CI	n	Mean # of hand-rolled cig.	95% CI	n	Mean # of pipes of tobacco	95% CI
18-29	3	0.0	--	3	1.9	0.0-5.0	3	0.3	0.0-1.1
30-49	24	0.6	0.0-1.1	24	1.0	0.2-1.8	24	1.1	0.0-2.3
50-69	34	1.1	0.1-2.2	34	1.9	0.7-3.0	34	1.2	0.0-2.6
18-69	61	0.9	0.2-1.7	61	1.6	0.8-2.5	61	1.2	0.1-2.2

Mean amount of tobacco used by daily smokers by type									
Age Group (years)	Women								
	n	Mean # of cigars, cheerots, cigarillos	95% CI	n	Mean # of shisha sessions	95% CI	n	Mean # of other type of tobacco	95% CI
18-29	3	0.0	--	3	0.0	--	2	2.5	1.2-3.7
30-49	24	0.0	--	24	0.0	--	23	0.0	0.0-0.1
50-69	34	0.3	0.0-0.7	34	0.0	--	33	0.5	0.0-1.4
18-69	61	0.2	0.0-0.5	61	0.0	--	58	0.4	0.0-1.0

Mean amount of tobacco used by daily smokers by type									
Age Group (years)	Both Sexes								
	n	Mean # of manufactured cig.	95% CI	n	Mean # of hand-rolled cig.	95% CI	n	Mean # of pipes of tobacco	95% CI
18-29	44	3.8	2.1-5.6	43	2.5	1.2-3.7	44	0.0	0.0-0.1
30-49	148	2.9	2.1-3.6	150	1.8	1.2-2.3	150	0.3	0.1-0.5
50-69	98	1.9	1.1-2.7	99	3.5	1.7-5.3	99	0.6	0.1-1.2
18-69	290	2.7	2.1-3.2	292	2.5	1.7-3.3	293	0.4	0.2-0.6

Mean amount of tobacco used by daily smokers by type									
Age Group (years)	Both Sexes								
	n	Mean # of cigars, cheerots, cigarillos	95% CI	n	Mean # of shisha sessions	95% CI	n	Mean # of other type of tobacco	95% CI
18-29	42	0.1	0.0-0.2	44	0.0	--	41	0.1	0.0-0.2
30-49	150	0.1	0.0-0.4	149	0.0	0.0-0.0	145	0.0	0.0-0.1
50-69	99	0.1	0.0-0.2	99	0.0	--	98	0.2	0.0-0.5
18-69	291	0.1	0.0-0.3	292	0.0	0.0-0.0	284	0.1	0.0-0.2

Smoked tobacco consumption

Description: Percentage of current smokers who smoke each of the following products.

Instrument questions:

- Do you currently smoke any tobacco products, such as cigarettes, cigars, or pipes?
- Do you currently smoke tobacco products daily?
- On average, how many of the following products do you smoke each day/week?

Percentage of current smokers smoking each of the following products							
Age Group (years)	Men						
	n	% Manuf. cigs.	95% CI	% Hand-rolled cigs.	95% CI	% Pipes of tobacco	95% CI
18-29	52	86.0	73.5-98.6	50.2	34.2-66.3	6.3	0.0-13.7
30-49	144	72.1	62.3-82.0	36.4	25.5-47.3	8.8	3.9-13.8
50-69	77	54.1	34.5-73.7	60.0	42.9-77.1	9.7	2.2-17.2
18-69	273	69.7	61.1-78.3	46.2	37.2-55.3	8.5	4.8-12.3

Percentage of current smokers smoking each of the following products							
Age Group (years)	Men						
	n	% Cigars, cheroots, cigarillos	95% CI	% Shisha	95% CI	% Other	95% CI
18-29	52	2.8	0.0-7.1	1.0	0.0-2.9	9.1	0.5-17.6
30-49	144	0.6	0.0-1.7	1.4	0.0-3.4	4.6	0.2-9.1
50-69	77	0.0	0.0-0.0	0.0	0.0-0.0	4.2	0.0-10.7
18-69	273	0.9	0.0-1.9	0.9	0.0-2.0	5.4	1.9-9.0

Percentage of current smokers smoking each of the following products							
Age Group (years)	Women						
	n	% Manuf. cigs.	95% CI	% Hand-rolled cigs.	95% CI	% Pipes of tobacco	95% CI
18-29	4	0.0	0.0-0.0	25.0	0.0-70.2	41.0	0.0-95.0
30-49	30	21.1	4.0-38.3	36.9	14.6-59.3	50.5	26.4-74.6
50-69	38	28.1	10.6-45.6	61.4	40.2-82.6	27.8	7.0-48.7
18-69	72	25.0	12.5-37.5	52.7	35.2-70.2	35.1	19.3-51.0

Percentage of current smokers smoking each of the following products							
Age Group (years)	Women						
	n	% Cigars, cheroots, cigarillos	95% CI	% Shisha	95% CI	% Other	95% CI
18-29	4	0.0	0.0-0.0	0.0	0.0-0.0	67.5	20.0-100.0
30-49	30	0.0	0.0-0.0	0.0	0.0-0.0	4.3	0.0-10.3
50-69	38	5.0	0.0-13.8	0.0	0.0-0.0	11.1	0.0-22.3
18-69	72	3.3	0.0-9.4	0.0	0.0-0.0	11.1	2.6-19.7

Percentage of current smokers smoking each of the following products							
Age Group (years)	Both Sexes						
	n	% Manuf. cigs.	95% CI	% Hand-rolled cigs.	95% CI	% Pipes of tobacco	95% CI
18-29	56	83.3	70.8-95.8	49.4	33.7-65.1	7.4	0.0-14.8
30-49	174	67.0	57.5-76.5	36.5	26.4-46.6	13.0	7.5-18.6
50-69	115	46.4	31.8-61.0	60.4	46.5-74.3	15.1	6.3-23.8
18-69	345	62.7	54.8-70.5	47.2	39.0-55.4	12.7	8.6-16.8

Percentage of current smokers smoking each of the following products							
Age Group (years)	Both Sexes						
	n	% Cigars, cheroots, cigarillos	95% CI	% Shisha	95% CI	% Other	95% CI
18-29	56	2.7	0.0-6.9	0.9	0.0-2.8	10.9	2.3-19.6
30-49	174	0.5	0.0-1.6	1.3	0.0-3.1	4.6	0.5-8.7
50-69	115	1.5	0.0-4.3	0.0	0.0-0.0	6.3	0.7-11.8
18-69	345	1.3	0.0-2.6	0.8	0.0-1.7	6.3	3.1-9.6

Frequency of daily cigarette smoking Description: Percentage of daily cigarette smokers smoking given quantities of manufactured or hand-rolled cigarettes per day.

Instrument questions:

- Do you currently smoke any tobacco products, such as cigarettes, cigars, or pipes?
- Do you currently smoke tobacco products daily?
- On average, how many of the following products do you smoke each day?

Percentage of daily smokers smoking given quantities of manufactured or hand-rolled cigarettes per day											
Men											
Age Group (years)	n	% <5 Cigs.	95% CI	% 5-9 Cigs.	95% CI	% 10-14 Cigs.	95% CI	% 15-24 Cigs.	95% CI	% ≥ 25 Cigs.	95% CI
18-29	37	49.1	29.1-69.0	34.5	14.8-54.2	6.1	0.0-13.5	5.2	0.0-13.7	5.1	0.0-15.1
30-49	117	59.1	48.0-70.2	26.3	16.2-36.5	10.9	4.3-17.5	3.2	0.8-5.6	0.5	0.0-1.4
50-69	59	38.9	19.2-58.7	22.7	7.2-38.3	31.1	4.9-57.3	7.3	0.1-14.4	0.0	0.0-0.0
18-69	213	51.1	41.2-60.9	26.9	19.0-34.8	15.9	5.9-26.0	4.8	1.8-7.9	1.3	0.0-3.4

Percentage of daily smokers smoking given quantities of manufactured or hand-rolled cigarettes per day											
Women											
Age Group (years)	n	% <5 Cigs.	95% CI	% 5-9 Cigs.	95% CI	% 10-14 Cigs.	95% CI	% 15-24 Cigs.	95% CI	% ≥ 25 Cigs.	95% CI
18-29	1	0.0	0.0-0.0	100.0	100.0-100.0	0.0	0.0-0.0	0.0	0.0-0.0	0.0	0.0-0.0
30-49	15	96.2	88.3-100.0	0.0	0.0-0.0	3.8	0.0-11.7	0.0	0.0-0.0	0.0	0.0-0.0
50-69	24	67.2	40.8-93.6	31.1	4.9-57.3	0.0	0.0-0.0	0.0	0.0-0.0	1.7	0.0-5.4
18-69	40	72.9	52.6-93.2	24.9	4.7-45.2	0.9	0.0-2.7	0.0	0.0-0.0	1.3	0.0-4.1

Percentage of daily smokers smoking given quantities of manufactured or hand-rolled cigarettes per day											
Both Sexes											
Age Group (years)	n	% <5 Cigs.	95% CI	% 5-9 Cigs.	95% CI	% 10-14 Cigs.	95% CI	% 15-24 Cigs.	95% CI	% ≥ 25 Cigs.	95% CI
18-29	38	48.5	28.8-68.3	35.2	15.7-54.6	6.0	0.0-13.3	5.2	0.0-13.5	5.1	0.0-14.9
30-49	132	61.6	51.2-72.1	24.5	15.0-34.0	10.4	4.3-16.6	3.0	0.7-5.2	0.4	0.0-1.3
50-69	83	47.1	29.2-65.0	25.2	11.9-38.4	22.1	1.2-42.9	5.2	0.0-10.3	0.5	0.0-1.5
18-69	253	54.1	44.7-63.4	26.6	19.3-34.0	13.9	4.9-22.8	4.2	1.5-6.8	1.3	0.0-3.1

Former daily smokers and former smokers Description: Percentage of former daily smokers among all respondents and among ever daily smokers, and the mean duration, in years, since former smokers quit smoking.

Instrument questions:

- Do you currently smoke any tobacco products, such as cigarettes, cigars, or pipes?
- Do you currently smoke tobacco products daily?
- In the past did you ever smoke any tobacco products?
- In the past, did you ever smoke daily?
- How old were you when you stopped smoking?

Former daily smokers (who don't smoke currently) among all respondents									
Age Group (years)	Men			Women			Both Sexes		
	n	% Former daily smokers	95% CI	n	% Former daily smokers	95% CI	n	% Former daily smokers	95% CI
18-29	660	2.5	1.2-3.7	956	0.4	0.0-0.8	1616	1.4	0.7-2.0
30-49	677	9.5	6.9-12.2	1001	2.9	1.5-4.4	1678	6.2	4.6-7.7
50-69	264	14.7	9.6-19.8	425	6.4	3.4-9.5	689	10.5	7.6-13.5
18-69	1601	7.3	5.9-8.7	2382	2.3	1.5-3.2	3983	4.7	3.9-5.5

Former daily smokers (who don't smoke currently) among ever daily smokers									
Age Group (years)	Men			Women			Both Sexes		
	n	% Former daily smokers	95% CI	n	% Former daily smokers	95% CI	n	% Former daily smokers	95% CI
18-29	59	26.7	14.6-38.8	8	73.2	40.5-100.0	67	29.7	17.8-41.7
30-49	190	34.2	25.6-42.7	52	59.7	42.2-77.1	242	38.2	30.3-46.1
50-69	104	36.2	25.1-47.4	66	36.0	18.9-53.1	170	36.2	26.8-45.6
18-69	353	33.4	27.4-39.5	126	47.0	32.9-61.1	479	36.1	30.2-42.0

Mean years since cessation									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean years	95% CI	n	Mean years	95% CI	n	Mean years	95% CI
18-29	38	4.6	3.4-5.8	12	7.4	3.3-11.5	50	5.0	3.7-6.2
30-49	78	12.8	10.0-15.6	44	12.4	9.9-15.0	122	12.7	10.6-14.7
50-69	42	22.0	17.0-26.9	35	24.5	17.4-31.5	77	22.8	18.7-26.8
18-69	158	13.3	11.0-15.5	91	16.2	12.5-19.8	249	14.1	12.3-15.9

Cessation Description: Percentage of current smokers who have tried to stop smoking during the past 12 months.

Instrument questions:

- Do you currently smoke any tobacco products, such as cigarettes, cigars, or pipes?
- During the past 12 months, have you tried to stop smoking?

Current smokers who have tried to stop smoking									
Age Group (years)	Men			Women			Both Sexes		
	n	% Tried to stop smoking	95% CI	n	% Tried to stop smoking	95% CI	n	% Tried to stop smoking	95% CI
18-29	52	43.2	27.1-59.2	4	33.9	0.0-87.9	56	42.9	27.3-58.5
30-49	143	44.6	34.6-54.6	30	45.7	25.7-65.7	173	44.7	35.5-54.0
50-69	77	59.4	42.6-76.3	38	58.5	37.0-79.9	115	59.1	45.6-72.7
18-69	272	48.7	40.6-56.8	72	53.7	37.4-70.1	344	49.5	42.1-56.8

Advice to stop smoking Description: Percentage of current smokers who have been advised by a doctor or other health worker to stop smoking, among those smokers who have had a visit to a doctor or other health worker in the past 12 months.

Instrument questions:

- Do you currently smoke any tobacco products, such as cigarettes, cigars, or pipes?
- During any visit to a doctor or other health worker in the past 12 months, were you advised to quit smoking tobacco?

Current smokers who have been advised by doctor to stop smoking									
Age Group (years)	Men			Women			Both Sexes		
	n	% Advised to stop smoking	95% CI	n	% Advised to stop smoking	95% CI	n	% Advised to stop smoking	95% CI
18-29	41	32.1	13.7-50.5	2	0.0	0.0-0.0	43	31.6	13.5-49.7
30-49	108	24.8	15.1-34.6	25	27.0	3.3-50.7	133	25.1	15.9-34.2
50-69	58	53.4	30.9-75.8	27	8.8	0.0-17.8	85	40.2	20.0-60.4
18-69	207	34.7	24.4-45.1	54	14.7	3.4-26.0	261	31.5	22.3-40.8

Current users of smokeless tobacco Description: Percentage of current users of smokeless tobacco among all respondents.

Instrument question:

- Do you currently use any smokeless tobacco such as [snuff, chewing tobacco, betel]?

Current users of smokeless tobacco											
Age Group (years)	Men				Women				Both Sexes		
		%				%			%		
	n	Current users	95% CI		n	% Current users	95% CI		n	Current users	95% CI
18-29	660	2.9	1.1-4.7		956	1.0	0.1-1.8		1616	1.9	0.8-3.0
30-49	676	4.2	2.3-6.0		1001	2.3	1.1-3.4		1677	3.2	2.0-4.4
50-69	264	9.7	4.9-14.5		425	10.3	4.3-16.4		689	10.0	6.0-14.1
18-69	1600	4.6	3.0-6.1		2382	2.9	1.5-4.4		3982	3.7	2.5-4.9

Status of smokeless tobacco use Description: Status of using smokeless tobacco among all respondents.

Instrument questions:

- Do you currently use any smokeless tobacco such as [snuff, chewing tobacco, betel]?
- Do you currently use smokeless tobacco products daily?
- In the past, did you ever use smokeless tobacco such as [snuff, chewing tobacco, betel]?

Smokeless tobacco use									
Men									
Age Group (years)	n	Current user				Non user			
		% Daily	95% CI	% Non-daily	95% CI	% Past user	95% CI	% Never used	95% CI
18-29	660	2.6	0.8-4.3	0.4	0.0-0.8	2.6	0.9-4.3	94.5	92.0-96.9
30-49	676	2.4	0.9-4.0	1.7	0.7-2.7	2.0	0.8-3.2	93.8	91.7-96.0
50-69	264	7.0	2.9-11.2	2.7	0.0-5.4	2.2	0.0-4.6	88.0	82.8-93.2
18-69	1600	3.3	1.9-4.7	1.3	0.7-1.9	2.3	1.3-3.3	93.1	91.3-95.0

Smokeless tobacco use									
Women									
Age Group (years)	n	Current user				Non user			
		% Daily	95% CI	% Non-daily	95% CI	% Past user	95% CI	% Never used	95% CI
18-29	956	0.9	0.1-1.7	0.1	0.0-0.2	0.3	0.0-0.7	98.7	97.8-99.6
30-49	1001	1.8	0.7-2.9	0.5	0.1-0.9	2.9	1.3-4.5	94.8	92.8-96.9
50-69	425	8.5	3.8-13.2	1.8	0.0-4.1	4.7	1.7-7.6	85.0	77.9-92.1
18-69	2382	2.4	1.1-3.7	0.5	0.1-0.9	2.0	1.2-2.8	95.1	93.4-96.8

Smokeless tobacco use									
Both Sexes									
Age Group (years)	n	Current user				Non user			
		% Daily	95% CI	% Non-daily	95% CI	% Past user	95% CI	% Never used	95% CI
18-29	1616	1.7	0.6-2.8	0.2	0.0-0.4	1.4	0.6-2.2	96.7	95.4-98.1
30-49	1677	2.1	1.0-3.2	1.1	0.6-1.6	2.5	1.4-3.5	94.3	92.7-96.0
50-69	689	7.8	4.5-11.1	2.3	0.5-4.0	3.5	1.6-5.3	86.5	82.0-91.0
18-69	3982	2.8	1.7-4.0	0.9	0.5-1.2	2.1	1.5-2.8	94.2	92.8-95.5

Former daily users of smokeless tobacco Description: Percentage of former daily users of smokeless tobacco among all respondents and among ever daily users.

Instrument questions:

- Do you currently use any smokeless tobacco such as [snuff, chewing tobacco, betel]?
- Do you currently use smokeless tobacco products daily?
- In the past, did you ever use smokeless tobacco such as [snuff, chewing tobacco, betel]?
- In the past, did you ever use smokeless tobacco such as [snuff, chewing tobacco, betel] daily?

Former daily smokeless tobacco users (who don't use tobacco currently) among all respondents											
Age Group (years)	Men				Women				Both Sexes		
	n	% Former daily users	95% CI		n	% Former daily users	95% CI		n	% Former daily users	95% CI
18-29	660	2.4	0.9-4.0		956	0.3	0.0-0.7		1616	1.3	0.5-2.1
30-49	676	3.1	1.6-4.5		1000	3.0	1.5-4.6		1676	3.1	1.9-4.2
50-69	264	4.8	1.2-8.3		425	6.4	2.6-10.1		689	5.6	3.0-8.1
18-69	1600	3.1	2.0-4.1		2381	2.3	1.4-3.2		3981	2.7	2.0-3.4

Former daily smokeless tobacco users (who don't use tobacco currently) among ever daily users											
Age Group (years)	Men				Women				Both Sexes		
	n	% Former daily users	95% CI		n	% Former daily users	95% CI		n	% Former daily users	95% CI
18-29	32	48.8	24.6-72.9		15	25.5	0.0-57.0		47	43.7	22.0-65.3
30-49	40	55.7	34.7-76.8		53	63.9	45.0-82.9		93	59.6	43.9-75.4
50-69	25	40.3	16.2-64.4		50	42.8	27.3-58.2		75	41.7	27.9-55.4
18-69	97	48.5	34.7-62.3		118	48.8	33.3-64.3		215	48.6	37.0-60.2

Amount of smokeless tobacco used among daily users by type Description: Mean times per day smokeless tobacco used by daily smokeless tobacco users per day, by type.

Instrument questions:

- Do you currently use any smokeless tobacco such as [snuff, chewing tobacco, betel]?
- Do you currently use smokeless tobacco products daily?
- On average, how many times a day do you use...?

Mean times per day smokeless tobacco used by daily smokeless tobacco users by type									
Age Group (years)	Men								
	n	Snuff by mouth	95% CI	n	Snuff by nose	95% CI	n	Chewing tobacco	95% CI
18-29	14	3.0	1.2-4.8	14	0.5	0.0-1.4	14	0.1	0.0-0.3
30-49	18	3.0	1.4-4.6	18	0.0	--	18	1.6	0.0-3.4
50-69	16	2.4	0.6-4.2	16	1.3	0.0-2.7	16	0.1	0.0-0.3
18-69	48	2.8	1.8-3.8	48	0.7	0.0-1.3	48	0.5	0.0-1.2

Mean times per day smokeless tobacco used by daily smokeless tobacco users by type						
Age Group (years)	Men					
	n	Betel, quid	95% CI	n	Other	95% CI
18-29	14	0.0	--	14	0.0	--
30-49	18	0.0	--	17	0.0	--
50-69	16	0.0	--	16	0.1	0.0-0.2
18-69	48	0.0	--	47	0.0	0.0-0.1

Mean times per day smokeless tobacco used by daily smokeless tobacco users by type									
Age Group (years)	Women								
	n	Snuff by mouth	95% CI	n	Snuff by nose	95% CI	n	Chewing tobacco	95% CI
18-29	11	4.7	2.8-6.6	11	1.0	0.0-2.4	11	1.1	0.0-2.7
30-49	24	2.5	1.4-3.7	25	0.6	0.0-1.2	25	0.6	0.0-1.3
50-69	30	3.8	1.5-6.1	31	0.8	0.0-2.0	31	1.0	0.2-1.9
18-69	65	3.6	2.1-5.1	67	0.8	0.0-1.5	67	0.9	0.3-1.5

Mean times per day smokeless tobacco used by daily smokeless tobacco users by type						
Age Group (years)	Women					
	n	Betel, quid	95% CI	n	Other	95% CI
18-29	11	0.3	0.0-0.8	11	0.0	--
30-49	25	0.0	--	24	0.4	0.0-1.1
50-69	31	0.0	0.0-0.0	31	0.0	--
18-69	67	0.1	0.0-0.1	66	0.1	0.0-0.3

Mean times per day smokeless tobacco used by daily smokeless tobacco users by type									
Age Group (years)	Both Sexes								
	n	Snuff by mouth	95% CI	n	Snuff by nose	95% CI	n	Chewing tobacco	95% CI
18-29	25	3.5	2.0-5.0	25	0.7	0.0-1.4	25	0.4	0.0-0.9
30-49	42	2.8	1.8-3.8	43	0.3	0.0-0.5	43	1.2	0.0-2.3
50-69	46	3.2	1.6-4.7	47	1.0	0.1-2.0	47	0.6	0.1-1.1
18-69	113	3.2	2.3-4.1	115	0.7	0.2-1.2	115	0.7	0.3-1.1

Mean times per day smokeless tobacco used by daily smokeless tobacco users by type						
Age Group (years)	Both Sexes					
	n	Betel, quid	95% CI	n	Other	95% CI
18-29	25	0.1	0.0-0.2	25	0.0	--
30-49	43	0.0	--	41	0.2	0.0-0.5
50-69	47	0.0	0.0-0.0	47	0.0	0.0-0.1
18-69	115	0.0	0.0-0.1	113	0.1	0.0-0.2

Smokeless tobacco consumption

Description: Percentage of current users of smokeless tobacco who use each of the following products.

Instrument questions:

- Do you currently use any smokeless tobacco such as [snuff, chewing tobacco, betel]?
- Do you currently use smokeless tobacco products daily?
- On average, how many times a day/week do you use...?

Percentage of current users of smokeless tobacco using each of the following products							
Age Group (years)	Men						
	n	% Snuff by mouth	95% CI	% Snuff by nose	95% CI	% Chewing tobacco	95% CI
18-29	18	66.7	40.3-93.2	10.0	0.0-24.4	16.5	0.8-32.3
30-49	31	78.8	60.2-97.4	12.7	0.0-27.1	22.0	3.9-40.1
50-69	23	70.1	44.6-95.5	22.5	0.0-47.5	3.5	0.0-8.6
18-69	72	72.3	57.8-86.7	15.5	3.5-27.4	13.8	5.1-22.5

Percentage of current users of smokeless tobacco using each of the following products					
Age Group (years)	Men				
	n	% Betel, quid	95% CI	% Other	95% CI
18-29	18	0.0	0.0-0.0	9.5	0.0-27.8
30-49	31	10.1	0.0-24.1	4.2	0.0-12.7
50-69	23	0.0	0.0-0.0	6.9	0.0-16.8
18-69	72	3.6	0.0-8.9	6.7	0.0-13.8

Percentage of current users of smokeless tobacco using each of the following products							
Age Group (years)	Women						
	n	% Snuff by mouth	95% CI	% Snuff by nose	95% CI	% Chewing tobacco	95% CI
18-29	13	60.7	35.4-86.1	30.2	7.9-52.5	28.8	0.0-60.6
30-49	32	68.7	49.2-88.2	27.5	6.4-48.6	18.5	2.8-34.3
50-69	35	80.5	64.3-96.6	16.3	0.7-31.8	27.7	7.1-48.2
18-69	80	73.9	60.6-87.2	21.7	9.6-33.9	25.2	10.9-39.5

Percentage of current users of smokeless tobacco using each of the following products					
Age Group (years)	Women				
	n	% Betel, quid	95% CI	% Other	95% CI
18-29	13	7.9	0.0-24.4	0.0	0.0-0.0
30-49	32	0.0	0.0-0.0	5.4	0.0-14.7
50-69	35	0.8	0.0-2.5	0.0	0.0-0.0
18-69	80	1.7	0.0-4.4	1.6	0.0-4.5

Percentage of current users of smokeless tobacco using each of the following products							
Age Group (years)	Both Sexes						
	n	% Snuff by mouth	95% CI	% Snuff by nose	95% CI	% Chewing tobacco	95% CI
18-29	31	65.1	43.1-87.0	15.6	2.4-28.8	19.9	4.3-35.6
30-49	63	75.2	61.7-88.6	18.0	5.7-30.4	20.7	8.2-33.3
50-69	58	75.4	60.3-90.6	19.3	4.5-34.0	16.0	3.0-28.9
18-69	152	73.0	62.6-83.3	18.0	9.0-27.0	18.5	10.3-26.7

Percentage of current users of smokeless tobacco using each of the following products					
Age Group (years)	Both Sexes				
	n	% Betel, quid	95% CI	% Other	95% CI
18-29	31	2.2	0.0-6.7	6.9	0.0-20.3
30-49	63	6.5	0.0-15.5	4.6	0.0-11.0
50-69	58	0.4	0.0-1.3	3.3	0.0-8.1
18-69	152	2.8	0.0-6.1	4.6	0.2-8.9

Description: Percentage of daily and current (daily plus non-daily) tobacco users, includes smoking and smokeless, among all respondents.

Current tobacco users

Instrument questions:

- Do you currently smoke any tobacco products, such as cigarettes, cigars, or pipes?
- Do you currently smoke tobacco products daily?
- Do you currently use any smokeless tobacco such as [snuff, chewing tobacco, betel]?
- Do you currently use smokeless tobacco products daily?

Current tobacco users									
Age Group (years)	Men			Women			Both Sexes		
	n	% Current users	95% CI	n	% Current users	95% CI	n	% Current users	95% CI
18-29	660	9.3	6.5-12.1	956	1.1	0.3-2.0	1616	5.0	3.5-6.4
30-49	676	22.8	18.6-26.9	1001	3.8	2.3-5.2	1677	13.0	10.8-15.3
50-69	264	32.1	23.8-40.3	425	16.2	9.5-23.0	689	24.1	18.6-29.7
18-69	1600	18.4	15.7-21.2	2382	4.5	2.9-6.1	3982	11.2	9.4-12.9

Daily tobacco users									
Age Group (years)	Men			Women			Both Sexes		
	n	% Daily users	95% CI	n	% Daily users	95% CI	n	% Daily users	95% CI
18-29	660	8.0	5.4-10.7	956	1.0	0.1-1.8	1616	4.3	2.9-5.7
30-49	676	19.3	15.4-23.3	1001	3.4	2.0-4.9	1677	11.2	9.0-13.3
50-69	264	29.3	20.8-37.7	425	15.1	8.3-21.8	689	22.1	16.5-27.8
18-69	1600	16.0	13.3-18.7	2382	4.1	2.5-5.7	3982	9.8	8.1-11.5

Exposure to second-hand smoke in home in past 30 days Description: Percentage of respondents exposed second-hand smoke in the home in the past 30 days.
Instrument question:
· In the past 30 days, did someone smoke in your home?

Exposed to second-hand smoke in home during the past 30 days									
Age Group (years)	Men			Women			Both Sexes		
	n	% Exposed	95% CI	n	% Exposed	95% CI	n	% Exposed	95% CI
18-29	660	33.1	28.4-37.9	956	30.2	26.1-34.3	1616	31.6	28.1-35.1
30-49	676	39.7	34.7-44.8	1001	33.5	29.1-37.8	1677	36.5	33.0-40.0
50-69	264	43.7	35.7-51.7	425	35.5	28.3-42.7	689	39.6	33.8-45.4
18-69	1600	37.5	34.1-40.9	2382	32.3	29.0-35.6	3982	34.8	32.1-37.4

Exposure to second-hand smoke in the workplace in past 30 days Description: Percentage of respondents exposed to second-hand smoke in the workplace in the past 30 days.
Instrument question:
· 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)?

Exposed to second-hand smoke in the workplace during the past 30 days									
Age Group (years)	Men			Women			Both Sexes		
	n	% Exposed	95% CI	n	% Exposed	95% CI	n	% Exposed	95% CI
18-29	580	50.5	44.8-56.2	805	33.0	28.2-37.8	1385	41.3	37.4-45.2
30-49	603	52.4	47.1-57.6	859	38.1	33.5-42.7	1462	45.1	41.5-48.8
50-69	232	51.4	42.5-60.3	355	37.2	28.5-45.8	587	44.5	38.2-50.8
18-69	1415	51.4	47.5-55.3	2019	35.6	31.8-39.4	3434	43.3	40.4-46.3

Alcohol Consumption

Alcohol consumption status

Description: Alcohol consumption status of all respondents.

Instrument questions:

- Have you ever consumed any alcohol such as ...?
- Have you consumed any alcohol in the past 12 months?
- Have you consumed any alcohol in the past 30 days?

Alcohol consumption status									
Men									
Age Group (years)	n	% Current drinker (past 30 days)	95% CI	% Drank in past 12 months, not current	95% CI	% Past 12 months abstainer	95% CI	% Lifetime abstainer	95% CI
18-29	660	29.3	24.6-33.9	8.6	5.5-11.7	9.6	6.5-12.7	52.6	47.3-57.8
30-49	676	46.3	41.2-51.4	5.5	3.6-7.5	13.8	10.6-17.1	34.4	29.7-39.0
50-69	264	53.8	45.5-62.0	7.0	2.4-11.6	16.7	10.4-23.0	22.5	15.5-29.5
18-69	1600	40.1	36.5-43.6	7.1	5.4-8.9	12.5	10.4-14.5	40.4	36.9-43.8

Alcohol consumption status									
Women									
Age Group (years)	n	% Current drinker (past 30 days)	95% CI	% Drank in past 12 months, not current	95% CI	% Past 12 months abstainer	95% CI	% Lifetime abstainer	95% CI
18-29	956	13.2	9.6-16.7	8.1	5.7-10.4	8.6	6.2-11.0	70.2	65.8-74.6
30-49	1001	21.1	17.6-24.6	6.9	5.0-8.7	13.0	10.4-15.6	59.0	54.6-63.5
50-69	425	24.3	19.2-29.5	9.9	5.7-14.1	18.4	13.5-23.4	47.3	40.3-54.4
18-69	2382	17.9	15.3-20.5	7.9	6.3-9.5	11.8	10.2-13.4	62.4	59.2-65.5

Alcohol consumption status									
Both Sexes									
Age Group (years)	n	% Current drinker (past 30 days)	95% CI	% Drank in past 12 months, not current	95% CI	% Past 12 months abstainer	95% CI	% Lifetime abstainer	95% CI
18-29	1616	20.7	17.6-23.7	8.3	6.4-10.2	9.1	7.1-11.1	62.0	58.4-65.5
30-49	1677	33.4	30.1-36.7	6.2	4.9-7.5	13.4	11.2-15.6	47.0	43.6-50.4
50-69	689	39.0	33.7-44.4	8.4	5.4-11.5	17.6	13.7-21.5	34.9	29.7-40.2
18-69	3982	28.5	26.2-30.8	7.5	6.4-8.7	12.1	10.8-13.4	51.8	49.3-54.3

Stopping drinking due to health reasons

Description: Percentage of former drinkers (those who did not drink during the past 12 months) who stopped drinking due to health reasons, such as a negative impact of drinking on your health or as per advice of a doctor or other health worker among those respondents who drank in their lifetime, but not in the last 12 months.

Instrument questions:

- Have you consumed any alcohol in the past 12 months?
- Did you stop drinking due to health reasons, such as a negative impact of drinking on your health or as per advice of your doctor or other health worker?

Stopping drinking due to health reasons									
Age Group (years)	Men			Women			Both Sexes		
	n	% stopping due to health reasons	95% CI	n	% stopping due to health reasons	95% CI	n	% stopping due to health reasons	95% CI
18-29	65	16.5	4.7-28.3	88	15.5	6.8-24.2	153	16.0	9.2-22.9
30-49	88	15.5	6.4-24.6	135	13.9	7.2-20.5	223	14.7	8.8-20.6
50-69	45	35.9	18.7-53.2	82	32.5	19.1-45.9	127	34.1	23.5-44.8
18-69	198	20.5	13.5-27.4	305	19.0	13.2-24.7	503	19.7	15.2-24.2

Frequency of alcohol consumption Description: Frequency of alcohol consumption in the past 12 months among those respondents who drank in the last 12 months.

Instrument question:

- During the past 12 months, how frequently have you had at least one alcoholic drink?

Frequency of alcohol consumption in the past 12 months													
Age Group (years)	Men												
	n	% Daily	95% CI	% 5-6 days/ week	95% CI	% 3-4 days/ week	95% CI	% 1-2 days/ week	95% CI	% 1-3 days/ month	95% CI	% < once a month	95% CI
18-29	249	10.4	6.2-14.6	2.3	0.3-4.2	9.2	4.0-14.4	33.3	25.6-41.0	15.0	9.8-20.2	29.8	21.9-37.8
30-49	345	16.5	11.4-21.6	6.8	3.8-9.9	16.0	10.8-21.2	30.6	24.4-36.8	13.5	9.3-17.7	16.5	11.1-22.0
50-69	159	15.3	8.4-22.2	5.8	0.0-12.2	18.0	2.7-33.2	32.8	22.1-43.5	19.6	10.7-28.5	8.6	3.0-14.1
18-69	753	14.1	10.9-17.3	5.0	3.0-7.0	14.1	9.0-19.2	32.0	27.7-36.3	15.4	11.9-18.8	19.4	15.2-23.7

Frequency of alcohol consumption in the past 12 months													
Age Group (years)	Women												
	n	% Daily	95% CI	% 5-6 days/ week	95% CI	% 3-4 days/ week	95% CI	% 1-2 days/ week	95% CI	% 1-3 days/ month	95% CI	% < once a month	95% CI
18-29	209	6.2	0.0-15.0	1.3	0.0-3.2	1.8	0.0-3.9	16.9	11.3-22.5	26.0	16.5-35.5	47.9	37.0-58.7
30-49	280	4.3	1.5-7.0	1.2	0.1-2.4	6.2	2.3-10.0	28.4	21.0-35.8	20.5	14.8-26.1	39.5	31.1-47.9
50-69	132	11.8	5.2-18.5	3.2	0.0-7.2	6.0	0.0-13.0	26.2	16.1-36.2	13.2	6.7-19.8	39.6	28.9-50.2
18-69	621	6.6	2.9-10.3	1.7	0.5-2.8	4.4	1.8-7.1	23.6	19.0-28.1	21.1	16.6-25.5	42.7	37.2-48.2

Frequency of alcohol consumption in the past 12 months													
Age Group (years)	Both Sexes												
	n	% Daily	95% CI	% 5-6 days/ week	95% CI	% 3-4 days/ week	95% CI	% 1-2 days/ week	95% CI	% 1-3 days/ month	95% CI	% < once a month	95% CI
18-29	458	8.8	4.5-13.0	1.9	0.5-3.2	6.3	3.1-9.6	26.9	21.9-31.9	19.3	14.7-23.8	36.9	30.3-43.5
30-49	625	12.1	8.7-15.5	4.8	2.8-6.8	12.4	8.9-16.0	29.8	25.4-34.2	16.0	12.9-19.2	24.8	19.9-29.8
50-69	291	14.1	9.0-19.1	4.9	0.6-9.1	13.6	3.1-24.2	30.4	23.1-37.7	17.3	11.2-23.4	19.7	13.5-26.0
18-69	1374	11.3	8.9-13.7	3.8	2.4-5.1	10.5	7.1-13.9	28.9	25.9-31.9	17.5	14.9-20.1	28.1	24.3-31.9

Drinking occasions in the past 30 days Description: Mean number of occasions with at least one drink in the past 30 days among current (past 30 days) drinkers.

Instrument question:

- During the past 30 days, on how many occasions did you have at least one alcoholic drink?

Mean number of drinking occasions in the past 30 days among current (past 30 days) drinkers									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
18-29	198	5.3	4.1-6.5	124	4.6	0.6-8.5	322	5.1	3.5-6.6
30-49	284	8.1	6.6-9.6	203	3.8	2.9-4.6	487	6.7	5.6-7.8
50-69	131	8.1	6.1-10.0	89	5.0	3.1-6.9	220	7.1	5.6-8.7
18-69	613	7.2	6.2-8.1	416	4.3	2.7-5.8	1029	6.2	5.4-7.1

Standard drinks per drinking occasion Description: Mean number of standard drinks consumed on a drinking occasion among current (past 30 days) drinkers.

Instrument question:

- During the past 30 days, when you drank alcohol, on average, how many standard alcoholic drinks did you have during one occasion?

Mean number of standard drinks per drinking occasion among current (past 30 days) drinkers									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
18-29	200	6.8	5.4-8.1	126	3.9	2.8-5.0	326	5.8	4.8-6.8
30-49	291	9.5	7.5-11.5	206	5.7	4.6-6.8	497	8.2	6.8-9.7
50-69	142	10.4	5.5-15.3	93	5.8	3.1-8.4	235	9.0	5.4-12.6
18-69	633	8.8	7.0-10.7	425	5.1	4.2-6.0	1058	7.6	6.3-8.9

Average volume drinking levels among all respondents Description: Percentage of respondents with different drinking levels. A standard drink contains approximately 10g of pure alcohol.

Instrument questions:

- During the past 30 days, on how many occasions did you have at least one alcoholic drink?
- During the past 30 days, when you drank alcohol, on average, how many standard alcoholic drinks did you have during one occasion?

Drinking at high-end level among all respondents (≥ 60 g of pure alcohol on average per occasion among men and ≥ 40 g of pure alcohol on average per occasion among women)									
Age Group (years)	Men			Women			Both Sexes		
	n	% ≥ 60 g	95% CI	n	% ≥ 40 g	95% CI	n	% high-end level	95% CI
18-29	653	1.9	0.7-3.2	948	1.2	0.0-3.0	1601	1.5	0.4-2.7
30-49	651	6.6	3.6-9.6	996	1.2	0.5-1.8	1647	3.8	2.3-5.3
50-69	251	9.3	1.1-17.6	415	1.5	0.0-3.0	666	5.4	1.0-9.8
18-69	1555	5.0	2.7-7.2	2359	1.2	0.3-2.1	3914	3.0	1.8-4.2

Drinking at intermediate level among all respondents (40-59.9g of pure alcohol on average per occasion among men and 20-39.9g of pure alcohol on average per occasion among women)									
Age Group (years)	Men			Women			Both Sexes		
	n	% 40-59.9g	95% CI	n	% 20-39.9g	95% CI	n	% intermediate level	95% CI
18-29	653	1.1	0.2-2.1	948	0.3	0.0-0.7	1601	0.7	0.2-1.2
30-49	651	1.9	0.6-3.2	996	1.3	0.3-2.3	1647	1.6	0.8-2.4
50-69	251	2.3	0.6-3.9	415	2.7	0.1-5.2	666	2.5	0.9-4.0
18-69	1555	1.6	0.9-2.4	2359	1.0	0.4-1.6	3914	1.3	0.8-1.8

Drinking at lower-end level among all respondents (< 40 g of pure alcohol on average per occasion among men and < 20 g of pure alcohol on average per occasion among women)									
Age Group (years)	Men			Women			Both Sexes		
	n	% < 40 g	95% CI	n	% < 20 g	95% CI	n	% lower-end level	95% CI
18-29	653	25.5	21.2-29.9	948	11.1	8.3-14.0	1601	17.8	15.0-20.7
30-49	651	35.8	30.8-40.7	996	18.2	14.9-21.5	1647	26.6	23.5-29.7
50-69	251	40.3	31.1-49.6	415	18.1	13.1-23.0	666	29.1	24.0-34.2
18-69	1555	32.0	28.9-35.0	2359	14.9	12.7-17.1	3914	23.0	21.0-25.0

Average volume drinking levels among current (past 30 days) drinkers

Description: Percentage of current (past 30 days) drinkers with different drinking levels.
A standard drink contains approximately 10g of pure alcohol.

Instrument questions:

- During the past 30 days, on how many occasions did you have at least one alcoholic drink?
- During the past 30 days, when you drank alcohol, on average, how many standard alcoholic drinks did you have during one occasion?

High-end, intermediate, and lower-end level drinking among current (past 30 days) drinkers							
Age Group (years)	Men						
	n	% high-end (≥60g)	95% CI	% intermediate (40-59.9g)	95% CI	% lower-end (<40g)	95% CI
18-29	196	6.8	2.5-11.1	4.0	0.9-7.1	89.2	84.1-94.3
30-49	279	15.0	8.5-21.4	4.3	1.3-7.3	80.7	73.8-87.6
50-69	131	18.0	3.0-32.9	4.4	1.2-7.6	77.7	62.9-92.4
18-69	606	12.9	7.6-18.2	4.2	2.3-6.1	82.9	77.4-88.3

High-end, intermediate, and lower-end level drinking among current (past 30 days) drinkers							
Age Group (years)	Women						
	n	% high-end (≥40g)	95% CI	% intermediate (20-39.9g)	95% CI	% lower-end (<20g)	95% CI
18-29	123	9.4	0.0-22.5	2.3	0.0-5.5	88.3	72.3-100.0
30-49	203	5.7	2.5-8.8	6.3	1.7-10.9	88.0	82.6-93.4
50-69	88	6.6	0.0-13.3	12.0	0.9-23.1	81.4	69.1-93.7
18-69	414	7.1	2.2-12.1	6.1	2.7-9.4	86.8	80.2-93.4

High-end, intermediate, and lower-end level drinking among current (past 30 days) drinkers							
Age Group (years)	Both sexes						
	n	% high-end	95% CI	% intermediate	95% CI	% lower-end	95% CI
18-29	319	7.7	2.3-13.0	3.4	1.1-5.8	88.9	82.5-95.3
30-49	482	11.8	7.4-16.3	5.0	2.5-7.5	83.2	78.2-88.2
50-69	219	14.5	3.5-25.5	6.7	2.5-10.9	78.8	67.9-89.7
18-69	1020	11.0	7.0-15.0	4.8	3.1-6.5	84.2	79.7-88.6

Largest number of drinks in the past 30 days Description: Largest number of drinks consumed during a single occasion in the past 30 days among current (past 30 days) drinkers.

Instrument question:

- During the past 30 days, what was the largest number of standard alcoholic drinks you had on a single occasion, counting all types of alcoholic drinks together?

Mean maximum number of standard drinks consumed on one occasion in the past 30 days									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean maximum number	95% CI	n	Mean maximum number	95% CI	n	Mean maximum number	95% CI
18-29	197	8.5	6.8-10.1	126	4.6	3.3-5.8	323	7.2	6.0-8.4
30-49	291	11.6	9.4-13.7	206	5.5	4.6-6.3	497	9.6	8.0-11.1
50-69	140	12.0	5.8-18.3	93	7.8	4.7-11.0	233	10.7	6.2-15.2
18-69	628	10.7	9.0-12.4	425	5.7	4.8-6.6	1053	9.1	7.8-10.4

Description: Percentage of respondents who had six or more drinks on any occasion in the past 30 days during a single occasion among the total population.

Six or more drinks on a single occasion Instrument question:

- During the past 30 days, how many times did you have **six or more** standard alcoholic drinks in a single drinking occasion?

Six or more drinks on a single occasion at least once during the past 30 days among total population									
Age Group (years)	Men			Women			Both Sexes		
	n	% ≥ 6 drinks	95% CI	n	% ≥ 6 drinks	95% CI	n	% ≥ 6 drinks	95% CI
18-29	660	17.6	14.0-21.2	956	4.4	2.7-6.1	1616	10.5	8.5-12.6
30-49	676	32.4	27.6-37.2	1001	10.3	7.6-12.9	1677	21.1	18.2-23.9
50-69	264	34.3	25.4-43.1	425	12.9	8.7-17.0	689	23.6	18.1-29.0
18-69	1600	26.2	23.1-29.4	2382	7.9	6.3-9.6	3982	16.7	14.9-18.5

Description: Mean number of times in the past 30 days on which current (past 30 days) **Six or more** drinkers consumed six or more drinks during a single occasion.

**drinks on a
single
occasion**

Instrument question:

- During the past 30 days, how many times did you have **six or more** standard alcoholic drinks in a single drinking occasion?

Mean number of times with six or more drinks during a single occasion in the past 30 days among current drinkers									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean number of times	95% CI	n	Mean number of times	95% CI	n	Mean number of times	95% CI
18-29	199	2.4	1.8-3.1	127	0.8	0.4-1.3	326	1.9	1.4-2.4
30-49	291	4.5	3.3-5.7	205	1.4	0.9-1.9	496	3.5	2.7-4.3
50-69	138	3.6	2.5-4.7	94	1.6	0.9-2.3	232	3.0	2.2-3.8
18-69	628	3.6	3.0-4.3	426	1.3	0.9-1.6	1054	2.9	2.4-3.3

Past 7 days drinking Description: Frequency of alcohol consumption in the past 7 days by current (past 30 days) drinkers.

Instrument question:

- During each of the past 7 days, how many standard drinks of any alcoholic drink did you have each day?

Frequency of alcohol consumption in the past 7 days											
Age Group (years)	Men										
	n	% Daily	95% CI	% 5-6 days	95% CI	% 3-4 days	95% CI	% 1-2 days	95% CI	% 0 days	95% CI
18-29	199	11.0	5.8-16.3	6.2	2.1-10.3	15.8	9.8-21.9	52.3	43.9-60.7	14.7	8.4-20.9
30-49	292	17.6	12.6-22.5	10.7	6.1-15.3	25.0	18.6-31.4	38.4	30.7-46.2	8.3	4.4-12.2
50-69	142	14.7	7.7-21.6	10.7	4.2-17.2	29.3	15.1-43.6	40.8	29.8-51.9	4.5	0.8-8.2
18-69	633	14.8	11.4-18.2	9.2	6.1-12.4	23.1	17.7-28.5	43.4	38.1-48.7	9.5	6.6-12.3

Frequency of alcohol consumption in the past 7 days											
Age Group (years)	Women										
	n	% Daily	95% CI	% 5-6 days	95% CI	% 3-4 days	95% CI	% 1-2 days	95% CI	% 0 days	95% CI
18-29	127	3.5	0.4-6.6	0.1	0.0-0.3	4.7	0.8-8.6	55.2	41.0-69.5	36.4	22.2-50.6
30-49	205	4.3	1.7-6.9	1.2	0.0-2.7	16.2	9.9-22.5	54.2	45.1-63.2	24.1	15.6-32.7
50-69	93	16.8	6.4-27.3	3.1	0.0-7.3	25.5	13.0-37.9	32.7	20.9-44.4	21.9	10.0-33.8
18-69	425	6.7	3.8-9.5	1.2	0.1-2.3	14.3	9.8-18.7	50.0	43.6-56.4	27.8	21.3-34.4

Frequency of alcohol consumption in the past 7 days											
Age Group (years)	Both Sexes										
	n	% Daily	95% CI	% 5-6 days	95% CI	% 3-4 days	95% CI	% 1-2 days	95% CI	% 0 days	95% CI
18-29	326	8.5	4.7-12.2	4.1	1.3-6.9	12.1	7.7-16.4	53.3	46.1-60.5	22.1	15.0-29.1
30-49	497	13.2	9.7-16.8	7.6	4.4-10.8	22.1	17.4-26.8	43.6	37.8-49.4	13.5	9.9-17.1
50-69	235	15.3	9.3-21.3	8.4	3.7-13.0	28.2	17.6-38.7	38.4	30.1-46.6	9.8	4.9-14.7
18-69	1058	12.1	9.4-14.8	6.6	4.4-8.8	20.2	16.4-24.0	45.6	41.5-49.6	15.5	12.3-18.6

Standard drinks per day in the past 7 days Description: Mean number of standard drinks consumed on average per day in the past 7 days among current (past 30 days) drinkers.

Instrument question:

- During each of the past 7 days, how many standard drinks of any alcoholic drink did you have each day?

Mean number of standard drinks consumed on average per day in the past 7 days among current drinkers									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean number	95% CI	n	Mean number	95% CI	n	Mean number	95% CI
18-29	199	2.0	1.5-2.5	127	0.6	0.4-0.9	326	1.5	1.2-1.9
30-49	292	3.8	2.9-4.7	205	1.0	0.6-1.4	497	2.9	2.2-3.5
50-69	142	3.6	1.4-5.8	93	1.6	0.9-2.3	235	3.0	1.4-4.6
18-69	633	3.2	2.5-3.8	425	1.0	0.7-1.3	1058	2.5	2.0-2.9

Consumption of unrecorded alcohol Description: Percentage of respondents that consumed unrecorded alcohol (homebrewed alcohol, alcohol brought over the border, not intended for drinking or other untaxed alcohol) during the past 7 days among current (past 30 days) drinkers.

Instrument questions:

- Have you consumed any alcohol within the past 30 days?
- During the past 7 days, did you consume any homebrewed alcohol, any alcohol brought over the border, not intended for drinking or other untaxed alcohol?

Consumption of unrecorded alcohol									
Age Group (years)	Men			Women			Both Sexes		
	n	% consuming unrecorded alcohol	95% CI	n	% consuming unrecorded alcohol	95% CI	n	% consuming unrecorded alcohol	95% CI
18-29	202	54.3	45.7-62.8	128	40.4	25.4-55.4	330	49.6	41.9-57.4
30-49	299	56.3	48.4-64.1	202	48.4	38.7-58.2	501	53.8	47.0-60.5
50-69	143	65.9	55.2-76.7	92	60.6	47.2-73.9	235	64.3	55.7-73.0
18-69	644	57.8	52.0-63.7	422	48.2	40.1-56.4	1066	54.7	49.5-60.0

Standard drinks of unrecorded alcohol per day in the past 7 days

Description: Mean number of standard drinks of unrecorded alcohol consumed on average per day in the past 7 days among current (past 30 days) drinkers.

Instrument question:

- On average, how many standard drinks of the following did you consume during the past 7 days?

Mean number of standard drinks of unrecorded alcohol consumed on average per day in the past 7 days among current drinkers									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean number	95% CI	n	Mean number	95% CI	n	Mean number	95% CI
18-29	84	1.8	1.1-2.4	39	0.6	0.4-0.9	123	1.5	0.9-2.0
30-49	132	2.1	1.6-2.6	82	1.3	0.8-1.7	214	1.8	1.5-2.2
50-69	82	2.6	1.3-3.9	53	1.3	0.7-1.9	135	2.2	1.2-3.2
18-69	298	2.1	1.7-2.5	174	1.1	0.8-1.4	472	1.8	1.5-2.2

Percent of unrecorded alcohol from all alcohol consumed Description: Percentage of unrecorded alcohol from all alcohol consumed during the past 7 days among current (past 30 days) drinkers.

Instrument questions:

- During each of the past 7 days, how many standard drinks did you have each day?
- During the past 7 days, did you consume any homebrewed alcohol, any alcohol brought over the border, not intended for drinking or other untaxed alcohol?
- On average, how many standard drinks of the following did you consume during the past 7 days?

Percentage of unrecorded alcohol from all alcohol consumed during past 7 days						
Age Group (years)	Men		Women		Both Sexes	
	n	% unrecorded alcohol of all alcohol	n	% unrecorded alcohol of all alcohol	n	% unrecorded alcohol of all alcohol
18-29	142	40.3	77	34.5	219	39.5
30-49	218	26.6	134	42.9	352	28.5
50-69	116	45.0	66	50.5	182	46.4
18-69	476	33.0	277	44.0	753	34.7

Types of unrecorded alcohol Description: Percentage of each type of unrecorded alcohol of all unrecorded alcohol consumed in the past 7 days among current (past 30 days) drinkers.

Instrument questions:

- During the past 7 days, did you consume any homebrewed alcohol, any alcohol brought over the border, not intended for drinking or other untaxed alcohol?
- On average, how many standard drinks of the following did you consume during the past 7 days?

Unrecorded alcohol consumption during the past 7 days by type									
Age Group (years)	Men			Women			Both Sexes		
	n	% Locally brewed spirits	% Homebrewed beer or wine	n	% Locally brewed spirits	% Homebrewed beer or wine	n	% Locally brewed spirits	% Homebrewed beer or wine
18-29	79	41.0	59.0	36	19.4	80.6	115	38.3	61.7
30-49	120	61.5	38.5	75	50.4	49.6	195	59.5	40.5
50-69	76	50.3	49.7	51	37.4	62.6	127	46.8	53.2
18-69	275	53.3	46.7	162	40.5	59.5	437	50.9	49.1

Frequency of impaired control over drinking Description: Frequency of not being able to stop drinking once started during the past 12 months among past 12 month drinkers.

Instrument questions:

- Have you consumed any alcohol within the past 12 months?
- How often during the past 12 months have you found that you were not able to stop drinking once you had started?

Frequency of not being able to stop drinking once started during the past 12 months among past 12 month drinkers							
Men							
Age Group (years)	n	% monthly or more frequently	95% CI	% less than monthly	95% CI	% never	95% CI
18-29	254	19.7	13.2-26.1	6.6	2.9-10.2	73.8	67.1-80.4
30-49	347	28.5	22.4-34.7	7.2	4.1-10.4	64.3	57.8-70.7
50-69	159	29.0	17.4-40.6	8.0	3.2-12.8	63.0	51.9-74.1
18-69	760	25.5	21.3-29.7	7.2	4.8-9.5	67.3	63.2-71.5

Frequency of not being able to stop drinking once started during the past 12 months among past 12 month drinkers							
Women							
Age Group (years)	n	% monthly or more frequently	95% CI	% less than monthly	95% CI	% never	95% CI
18-29	213	12.0	3.4-20.6	6.9	2.3-11.5	81.1	72.3-89.9
30-49	281	9.0	5.3-12.6	7.6	2.1-13.1	83.5	77.2-89.7
50-69	132	18.1	9.4-26.7	12.9	6.2-19.5	69.1	59.3-78.8
18-69	626	12.0	7.6-16.4	8.4	5.2-11.6	79.6	74.7-84.4

Frequency of not being able to stop drinking once started during the past 12 months among past 12 month drinkers							
Both Sexes							
Age Group (years)	n	% monthly or more frequently	95% CI	% less than monthly	95% CI	% never	95% CI
18-29	467	16.7	11.7-21.7	6.7	3.8-9.6	76.6	71.3-82.0
30-49	628	21.4	17.0-25.9	7.4	4.6-10.1	71.2	66.5-76.0
50-69	291	25.1	16.8-33.4	9.8	5.7-13.8	65.2	57.3-73.0
18-69	1386	20.5	17.3-23.6	7.6	5.9-9.4	71.9	68.7-75.1

Frequency of failing to do what was normally expected because of drinking Description: Frequency of failing to do what was normally expected from you because of drinking during the past 12 months among past 12 month drinkers.

Instrument questions:

- Have you consumed any alcohol within the past 12 months?
- How often during the past 12 months have you failed to do what was normally expected from you because of drinking?

Frequency of failing to do what was normally expected from you during the past 12 months among past 12 month drinkers							
Men							
Age Group (years)	n	% monthly or more frequently	95% CI	% less than monthly	95% CI	% never	95% CI
18-29	254	13.4	8.3-18.4	11.5	6.3-16.8	75.1	68.3-81.9
30-49	347	17.7	12.1-23.3	10.4	6.8-13.9	72.0	65.3-78.6
50-69	159	13.9	7.7-20.0	8.8	3.9-13.7	77.4	69.9-84.8
18-69	760	15.3	12.0-18.7	10.4	7.7-13.2	74.3	69.9-78.6

Frequency of failing to do what was normally expected from you during the past 12 months among past 12 month drinkers							
Women							
Age Group (years)	n	% monthly or more frequently	95% CI	% less than monthly	95% CI	% never	95% CI
18-29	213	4.3	0.9-7.7	9.0	0.1-17.9	86.7	75.5-97.8
30-49	281	5.9	3.0-8.9	5.0	2.0-7.9	89.1	84.8-93.4
50-69	132	10.6	5.2-16.1	8.8	3.1-14.6	80.5	73.4-87.6
18-69	626	6.3	4.0-8.6	7.3	3.1-11.5	86.4	80.9-91.9

Frequency of failing to do what was normally expected from you during the past 12 months among past 12 month drinkers							
Both Sexes							
Age Group (years)	n	% monthly or more frequently	95% CI	% less than monthly	95% CI	% never	95% CI
18-29	467	9.8	6.6-13.0	10.5	5.9-15.2	79.6	73.9-85.4
30-49	628	13.4	9.6-17.2	8.4	5.9-10.9	78.2	73.5-82.8
50-69	291	12.7	8.4-17.1	8.8	5.0-12.5	78.5	73.0-84.0
18-69	1386	12.0	9.7-14.2	9.3	7.0-11.5	78.8	75.4-82.2

Frequency of morning drinking Description: Frequency of needing a first drink in the morning to get going after a heavy drinking session during the past 12 months among past 12 month drinkers.

Instrument questions:

- Have you consumed any alcohol within the past 12 months?
- How often during the past 12 months have you needed a first drink in the morning to get yourself going after a heavy drinking session?

Frequency of needing a first drink in the morning to get going during the past 12 months among past 12 month drinkers							
Men							
Age Group (years)	n	% monthly or more frequently	95% CI	% less than monthly	95% CI	% never	95% CI
18-29	254	4.9	2.4-7.4	3.7	1.0-6.4	91.5	87.6-95.3
30-49	347	10.0	6.3-13.8	4.9	1.7-8.0	85.1	80.0-90.3
50-69	159	8.0	3.0-12.9	4.3	0.4-8.2	87.7	81.4-94.1
18-69	760	7.8	5.5-10.0	4.3	2.4-6.2	87.9	84.8-91.0

Frequency of needing a first drink in the morning to get going during the past 12 months among past 12 month drinkers							
Women							
Age Group (years)	n	% monthly or more frequently	95% CI	% less than monthly	95% CI	% never	95% CI
18-29	213	11.3	1.5-21.2	1.8	0.0-3.9	86.9	75.6-98.2
30-49	281	6.3	3.0-9.6	2.7	0.6-4.9	90.9	87.1-94.8
50-69	132	16.7	8.4-25.0	3.5	0.0-7.1	79.8	70.5-89.1
18-69	626	10.4	5.8-14.9	2.5	1.0-4.1	87.1	81.7-92.5

Frequency of needing a first drink in the morning to get going during the past 12 months among past 12 month drinkers							
Both Sexes							
Age Group (years)	n	% monthly or more frequently	95% CI	% less than monthly	95% CI	% never	95% CI
18-29	467	7.4	3.2-11.6	2.9	1.1-4.8	89.7	84.7-94.7
30-49	628	8.7	6.1-11.3	4.1	2.0-6.2	87.2	83.6-90.8
50-69	291	11.1	6.6-15.6	4.0	1.3-6.7	84.9	79.4-90.4
18-69	1386	8.7	6.5-10.9	3.7	2.4-4.9	87.6	84.9-90.4

Frequency of problems with family/ partner due to someone else's drinking

Description: Frequency of having had problems with family or partner due to someone else's drinking in the past 12 months among all respondents.

Instrument question:

- Have you had family problems or problems with your partner due to someone else's drinking within the past 12 months?

Frequency of family/partner problems due to someone else's drinking during the past 12 months among all respondents							
Men							
Age Group (years)	n	% monthly or more frequently	95% CI	% less than monthly	95% CI	% never	95% CI
18-29	660	2.2	0.8-3.7	4.9	3.0-6.8	92.9	90.5-95.2
30-49	676	3.6	2.0-5.3	12.1	8.8-15.5	84.2	80.7-87.7
50-69	264	2.9	0.3-5.6	14.2	9.4-19.1	82.9	77.6-88.1
18-69	1600	2.9	1.7-4.1	9.3	7.4-11.2	87.8	85.7-89.9

Frequency of family/partner problems due to someone else's drinking during the past 12 months among all respondents							
Women							
Age Group (years)	n	% monthly or more frequently	95% CI	% less than monthly	95% CI	% never	95% CI
18-29	956	2.0	1.0-3.1	6.8	4.3-9.2	91.2	88.2-94.2
30-49	1001	2.6	1.5-3.7	10.1	7.9-12.4	87.3	84.7-89.9
50-69	424	1.5	0.3-2.7	10.8	6.8-14.9	87.6	83.4-91.8
18-69	2381	2.2	1.4-2.9	8.7	7.0-10.4	89.2	87.2-91.1

Frequency of family/partner problems due to someone else's drinking during the past 12 months among all respondents							
Both Sexes							
Age Group (years)	n	% monthly or more frequently	95% CI	% less than monthly	95% CI	% never	95% CI
18-29	1616	2.1	1.2-3.1	5.9	4.3-7.5	92.0	90.1-93.9
30-49	1677	3.1	2.1-4.1	11.1	9.1-13.1	85.8	83.6-88.0
50-69	688	2.2	0.8-3.7	12.5	9.3-15.7	85.2	81.9-88.6
18-69	3981	2.5	1.8-3.3	9.0	7.7-10.3	88.5	87.0-90.0

Diet

Mean number of days of fruit and vegetable consumption Description: mean number of days fruit and vegetables consumed.

Instrument questions:

- In a typical week, on how many days do you eat fruit?
- In a typical week, on how many days do you eat vegetables?

Mean number of days fruit consumed in a typical week									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean number of days	95% CI	n	Mean number of days	95% CI	n	Mean number of days	95% CI
18-29	654	3.0	2.8-3.3	946	3.1	2.9-0.0	1600	3.1	2.9-3.3
30-49	663	2.7	2.4-2.9	990	2.8	2.6-0.0	1653	2.8	2.6-2.9
50-69	258	2.6	2.1-3.0	419	2.5	2.2-0.0	677	2.5	2.3-2.8
18-69	1575	2.8	2.6-3.0	2355	2.9	2.8-0.0	3930	2.9	2.7-3.0

Mean number of days vegetables consumed in a typical week									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean number of days	95% CI	n	Mean number of days	95% CI	n	Mean number of days	95% CI
18-29	658	3.0	2.7-3.2	952	3.5	3.3-3.7	1610	3.3	3.1-3.4
30-49	674	3.3	3.0-3.5	997	4.0	3.7-4.2	1671	3.6	3.4-3.8
50-69	263	3.7	3.2-4.2	423	4.2	3.9-4.6	686	4.0	3.6-4.3
18-69	1595	3.2	3.0-3.4	2372	3.8	3.6-4.0	3967	3.5	3.4-3.7

Mean number of servings of fruit and vegetable consumption Description: mean number of fruit, vegetable, and combined fruit and vegetable servings on average per day.

Instrument questions:

- In a typical week, on how many days do you eat fruit?
- How many servings of fruit do you eat on one of those days?
- In a typical week, on how many days do you eat vegetables?
- How many servings of vegetables do you eat on one of those days?

Mean number of servings of fruit on average per day									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean number of servings	95% CI	n	Mean number of servings	95% CI	n	Mean number of servings	95% CI
18-29	654	1.4	1.2-1.6	944	1.5	1.2-1.7	1598	1.4	1.2-1.6
30-49	662	1.3	1.0-1.5	989	1.3	1.1-1.5	1651	1.3	1.1-1.5
50-69	258	1.1	0.8-1.4	419	1.4	0.9-1.8	677	1.2	1.0-1.5
18-69	1574	1.3	1.1-1.5	2352	1.4	1.2-1.6	3926	1.4	1.2-1.5

Mean number of servings of vegetables on average per day									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean number of servings	95% CI	n	Mean number of servings	95% CI	n	Mean number of servings	95% CI
18-29	658	1.0	0.9-1.2	952	1.2	1.1-1.3	1610	1.1	1.0-1.2
30-49	674	1.2	1.0-1.3	997	1.5	1.3-1.6	1671	1.3	1.2-1.5
50-69	263	1.5	1.2-1.9	423	1.6	1.2-2.0	686	1.6	1.3-1.8
18-69	1595	1.2	1.1-1.3	2372	1.4	1.3-1.5	3967	1.3	1.2-1.4

Mean number of servings of fruit and/or vegetables on average per day									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean number of servings	95% CI	n	Mean number of servings	95% CI	n	Mean number of servings	95% CI
18-29	659	2.4	2.1-2.7	954	2.7	2.4-2.9	1613	2.5	2.3-2.8
30-49	676	2.4	2.1-2.7	999	2.8	2.5-3.1	1675	2.6	2.4-2.8
50-69	263	2.6	2.1-3.1	423	3.0	2.3-3.7	686	2.8	2.4-3.2
18-69	1598	2.4	2.2-2.7	2376	2.8	2.5-3.0	3974	2.6	2.4-2.8

Fruit and vegetable consumption per day

Description: Frequency of fruit and/or vegetable consumption.

Instrument questions:

- In a typical week, on how many days do you eat fruit?
- How many servings of fruit do you eat on one of those days?
- In a typical week, on how many days do you eat vegetables?
- How many servings of vegetables do you eat on one of those days?

Number of servings of fruit and/or vegetables on average per day									
Men									
Age Group (years)	n	% no fruit and/or vegetables	95% CI	% 1-2 servings	95% CI	% 3-4 servings	95% CI	% ≥5 servings	95% CI
18-29	659	26.8	22.4-31.2	49.4	44.3-54.4	12.4	9.4-15.4	11.4	8.1-14.8
30-49	676	31.8	27.1-36.6	43.6	39.1-48.1	14.3	10.9-17.8	10.2	7.1-13.3
50-69	263	31.6	21.6-41.6	38.9	30.3-47.4	14.1	9.1-19.2	15.4	10.0-20.8
18-69	1598	29.6	26.0-33.2	45.3	41.9-48.8	13.4	11.3-15.6	11.6	9.2-14.1

Number of servings of fruit and/or vegetables on average per day									
Women									
Age Group (years)	n	% no fruit and/or vegetables	95% CI	% 1-2 servings	95% CI	% 3-4 servings	95% CI	% ≥5 servings	95% CI
18-29	954	22.5	18.5-26.5	45.4	41.1-49.8	20.3	16.5-24.1	11.8	9.0-14.6
30-49	999	24.5	20.5-28.4	44.7	39.9-49.4	17.0	13.6-20.5	13.8	10.9-16.8
50-69	423	24.4	17.9-30.9	46.7	40.0-53.4	16.3	12.0-20.6	12.5	8.0-17.1
18-69	2376	23.5	20.7-26.4	45.3	42.1-48.6	18.4	15.7-21.1	12.7	10.5-14.8

Number of servings of fruit and/or vegetables on average per day									
Both Sexes									
Age Group (years)	n	% no fruit and/or vegetables	95% CI	% 1-2 servings	95% CI	% 3-4 servings	95% CI	% ≥5 servings	95% CI
18-29	1613	24.5	21.3-27.7	47.3	43.9-50.6	16.6	14.2-19.0	11.6	9.1-14.1
30-49	1675	28.1	24.7-31.4	44.2	40.8-47.5	15.7	13.1-18.3	12.1	9.6-14.5
50-69	686	28.0	21.9-34.2	42.8	37.6-48.0	15.2	12.0-18.4	14.0	10.2-17.8
18-69	3974	26.5	23.8-29.1	45.3	42.8-47.9	16.0	14.3-17.8	12.2	10.2-14.1

Fruit and vegetable consumption per day

Description: Percentage of those eating less than five servings of fruit and/or vegetables on average per day.

Instrument questions:

- In a typical week, on how many days do you eat fruit?
- How many servings of fruit do you eat on one of those days?
- In a typical week, on how many days do you eat vegetables?
- How many servings of vegetables do you eat on one of those days?

Less than five servings of fruit and/or vegetables on average per day									
Age Group (years)	Men			Women			Both Sexes		
	n	% < five servings per day	95% CI	n	% < five servings per day	95% CI	n	% < five servings per day	95% CI
18-29	659	88.6	85.2-91.9	954	88.2	85.4-91.0	1613	88.4	85.9-90.9
30-49	676	89.8	86.7-92.9	999	86.2	83.2-89.1	1675	87.9	85.5-90.4
50-69	263	84.6	79.2-90.0	423	87.5	82.9-92.0	686	86.0	82.2-89.8
18-69	1598	88.4	85.9-90.8	2376	87.3	85.2-89.5	3974	87.8	85.9-89.8

Adding salt at meal Description: Percentage of all respondents who always or often add salt or salty sauce to their food before eating or as they are eating.

Instrument question:

- How often do you add salt or a salty sauce such as soya sauce to your food right before you eat it or as you are eating it?

Add salt always or often before eating or when eating									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	660	24.6	19.9-29.3	955	22.9	18.9-26.8	1615	23.7	20.6-26.7
30-49	677	24.9	20.7-29.1	1001	17.5	14.6-20.5	1678	21.1	18.5-23.8
50-69	264	21.6	14.9-28.3	424	17.1	11.1-23.1	688	19.4	14.9-23.9
18-69	1601	24.2	21.2-27.3	2380	19.9	17.4-22.5	3981	22.0	19.9-24.1

Adding salt when cooking Description: Percentage of all respondents who always or often add salt to their food when cooking or preparing foods at home.

Instrument question:

- How often is salt, salty seasoning or a salty sauce added in cooking or preparing foods in your household?

Add salt always or often when cooking or preparing food at home									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	633	43.8	38.4-49.1	954	44.1	39.5-48.7	1587	43.9	40.2-47.6
30-49	666	44.4	39.3-49.5	1000	37.9	33.5-42.2	1666	41.0	37.4-44.7
50-69	257	31.8	23.5-40.2	423	31.5	25.7-37.3	680	31.7	26.5-36.9
18-69	1556	42.0	38.0-46.0	2377	39.8	36.5-43.1	3933	40.8	37.9-43.8

Salty processed food consumption Description: Percentage of all respondents who always or often eat processed foods high in salt.

Instrument question:

- How often do you eat processed food high in salt?

Always or often consume processed food high in salt									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	649	6.8	4.8-8.8	932	5.2	3.5-6.9	1581	6.0	4.6-7.3
30-49	662	5.0	3.0-6.9	969	4.4	2.7-6.0	1631	4.7	3.4-5.9
50-69	255	2.3	0.0-4.7	413	1.2	0.0-2.7	668	1.7	0.3-3.1
18-69	1566	5.3	4.1-6.6	2314	4.3	3.2-5.3	3880	4.8	3.9-5.7

Salt consumption Description: Percentage of all respondents who think they consume far too much or too much salt.

Instrument question:

- How much salt or salty sauce do you think you consume?

Think they consume far too much or too much salt									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	654	11.9	9.2-14.5	945	10.4	7.7-13.0	1599	11.1	9.2-12.9
30-49	670	19.8	14.9-24.8	996	9.8	7.5-12.1	1666	14.7	11.9-17.6
50-69	263	13.6	7.9-19.2	418	9.1	4.7-13.6	681	11.4	7.8-14.9
18-69	1587	15.3	12.5-18.0	2359	10.0	8.4-11.6	3946	12.5	10.9-14.2

Self-reported quantity of salt consumed											
Men											
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
18-29	654	1.4	0.2-2.6	10.5	8.0-13.0	77.4	73.6-81.2	10.4	7.4-13.4	0.4	0.0-0.9
30-49	670	1.3	0.1-2.6	18.5	13.9-23.1	66.5	61.4-71.6	13.6	10.3-16.8	0.1	0.0-0.2
50-69	263	1.7	0.0-4.0	11.9	6.6-17.2	75.2	68.0-82.4	11.0	5.7-16.3	0.3	0.0-0.8
18-69	1587	1.4	0.4-2.4	13.9	11.4-16.3	72.8	69.7-75.8	11.7	9.7-13.8	0.2	0.0-0.5

Self-reported quantity of salt consumed											
Women											
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
18-29	945	0.7	0.0-1.4	9.7	7.2-12.2	77.8	74.3-81.3	11.4	8.9-14.0	0.4	0.0-0.9
30-49	996	1.0	0.2-1.8	8.8	6.6-11.0	75.0	71.5-78.6	14.5	11.6-17.4	0.7	0.1-1.2
50-69	418	1.7	0.0-4.0	7.5	3.8-11.1	65.7	59.9-71.4	23.8	18.8-28.7	1.4	0.2-2.6
18-69	2359	0.9	0.4-1.5	9.0	7.5-10.5	74.9	72.6-77.1	14.5	12.6-16.3	0.7	0.3-1.0

Self-reported quantity of salt consumed											
Both Sexes											
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
18-29	1599	1.0	0.3-1.7	10.1	8.3-11.8	77.6	75.1-80.1	10.9	9.0-12.9	0.4	0.0-0.8
30-49	1666	1.2	0.4-1.9	13.6	10.9-16.2	70.9	67.6-74.2	14.0	11.6-16.4	0.4	0.1-0.7
50-69	681	1.7	0.1-3.3	9.7	6.5-12.9	70.5	65.9-75.0	17.3	13.8-20.9	0.8	0.2-1.5
18-69	3946	1.2	0.6-1.8	11.3	9.9-12.8	73.9	71.9-75.8	13.2	11.7-14.6	0.5	0.2-0.7

Lowering salt Description: Percentage of respondents who think lowering salt in diet is very, somewhat or not at all important.

Instrument question:

- How important to you is lowering the salt in your diet?

Importance of lowering salt in diet							
Men							
Age Group (years)	n	% Very important	95% CI	% Somewhat important	95% CI	% Not at all important	95% CI
18-29	540	63.2	57.4-69.0	24.6	19.6-29.6	12.2	8.4-15.9
30-49	517	54.4	48.3-60.4	33.7	27.7-39.6	12.0	8.0-16.0
50-69	201	58.6	48.9-68.2	25.1	16.6-33.6	16.3	8.6-24.1
18-69	1258	59.1	54.9-63.2	28.2	24.2-32.1	12.8	10.2-15.3

Importance of lowering salt in diet							
Age Group (years)	Women						
	n	% Very important	95% CI	% Somewhat important	95% CI	% Not at all important	95% CI
18-29	750	61.2	56.2-66.2	31.7	26.7-36.7	7.1	4.9-9.4
30-49	776	58.5	53.2-63.8	31.8	26.5-37.1	9.8	7.0-12.5
50-69	327	65.0	58.2-71.8	27.1	20.7-33.5	7.9	4.5-11.2
18-69	1853	60.8	57.0-64.6	31.0	27.1-34.8	8.2	6.6-9.9

Importance of lowering salt in diet							
Age Group (years)	Both Sexes						
	n	% Very important	95% CI	% Somewhat important	95% CI	% Not at all important	95% CI
18-29	1290	62.2	57.9-66.5	28.3	24.3-32.3	9.5	7.4-11.7
30-49	1293	56.5	52.3-60.7	32.7	28.3-37.0	10.8	8.5-13.2
50-69	528	62.0	56.2-67.7	26.1	20.7-31.6	11.9	7.7-16.1
18-69	3111	60.0	56.8-63.2	29.6	26.4-32.8	10.4	8.9-11.9

Salt knowledge Description: Percentage of respondents who think consuming too much salt could cause a serious health problem.

Instrument question:

- Do you think that too much salt or salty sauce in your diet could cause a health problem?

Think consuming too much salt could cause serious health problem									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	660	71.6	67.0-76.2	956	69.9	65.9-73.9	1616	70.7	67.6-73.8
30-49	676	62.8	58.0-67.6	1001	68.8	64.7-72.9	1677	65.9	62.5-69.3
50-69	264	53.2	45.0-61.3	424	66.7	60.0-73.3	688	59.9	54.2-65.6
18-69	1600	65.1	61.9-68.2	2381	69.0	65.9-72.1	3981	67.1	64.8-69.5

Controlling salt intake Description: Percentage of respondents who take specific action on a regular basis to control salt intake.

Instrument question:

- Do you do any of the following on a regular basis to control your salt intake?

Limit consumption of processed foods									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	660	27.7	22.7-32.7	956	27.2	23.4-30.9	1616	27.4	24.2-30.6
30-49	676	29.4	24.9-33.9	1001	29.4	25.6-33.2	1677	29.4	26.2-32.5
50-69	264	32.8	25.7-39.9	424	39.6	32.3-47.0	688	36.2	30.9-41.6
18-69	1600	29.2	25.9-32.5	2381	29.9	27.0-32.8	3981	29.6	27.2-32.0

Look at the salt or sodium content on food labels									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	660	9.0	6.1-11.9	956	7.8	5.5-10.0	1616	8.4	6.5-10.2
30-49	676	8.2	5.7-10.7	1001	5.3	3.7-6.9	1677	6.7	5.2-8.2
50-69	264	7.6	3.0-12.1	424	3.6	1.7-5.5	688	5.6	3.1-8.1
18-69	1600	8.4	6.5-10.3	2381	6.2	4.8-7.6	3981	7.3	6.0-8.5

Buy low salt/sodium alternatives									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	660	8.6	5.6-11.6	956	6.9	4.9-9.0	1616	7.7	5.9-9.6
30-49	676	8.9	6.1-11.7	1001	7.3	5.3-9.3	1677	8.1	6.2-10.0
50-69	264	11.4	5.7-17.2	424	8.2	4.8-11.7	688	9.8	6.3-13.3
18-69	1600	9.2	7.0-11.4	2381	7.3	5.8-8.8	3981	8.2	6.7-9.7

Use spices other than salt when cooking									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	660	11.4	8.2-14.6	956	12.2	9.0-15.5	1616	11.9	9.4-14.3
30-49	676	8.0	5.4-10.5	1001	9.9	6.6-13.2	1677	9.0	6.9-11.1
50-69	264	6.4	3.0-9.7	424	8.4	4.6-12.1	688	7.4	4.8-9.9
18-69	1600	9.2	7.2-11.2	2381	10.8	8.4-13.1	3981	10.0	8.3-11.8

Avoid eating foods prepared outside of a home									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	660	23.9	18.5-29.3	956	22.7	18.6-26.9	1616	23.3	19.7-26.9
30-49	676	23.2	19.1-27.2	1001	28.4	24.9-32.0	1677	25.9	22.9-28.9
50-69	264	24.6	17.3-31.9	424	30.1	23.0-37.2	688	27.4	22.1-32.6
18-69	1600	23.7	20.1-27.3	2381	26.0	22.9-29.2	3981	24.9	22.1-27.7

Do other things specifically to control your salt intake									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	660	7.6	4.4-10.7	956	5.5	3.6-7.4	1616	6.5	4.5-8.4
30-49	676	5.5	3.2-7.8	1001	7.3	4.8-9.8	1677	6.4	4.4-8.4
50-69	264	9.8	4.7-14.8	424	7.2	2.6-11.7	688	8.5	5.1-11.8
18-69	1600	7.1	5.0-9.2	2381	6.4	4.6-8.2	3981	6.8	5.2-8.4

Type of oil used most frequently Description: Type of oil or fat most often used for meal preparation in households (presented only for both sexes because results are for the household not individuals).

Instrument question:

- What type of oil or fat is most often used for meal preparation in your household?

Type of Oil Most Frequently Consumed									
Age Group (years)	Both Sexes								
	n	% Vegetable oil	95% CI	% Lard	95% CI	% Butter or Ghee	95% CI	% Margarine	95% CI
18-69	3885	77.9	74.9-80.9	2.1	1.5-2.6	4.7	3.2-6.3	4.3	3.0-5.6

Type of Oil Most Frequently Consumed					
Age Group (years)	Both Sexes				
	n	% Vegetable oil	95% CI	% Lard	95% CI
18-69	3885	6.6	5.0-8.1	4.4	3.3-5.5

Eating outside home

Description: Mean number of meals per week eaten outside a home.

Instrument question:

- On average, how many meals per week do you eat that were not prepared at a home? By meal, I mean breakfast, lunch and dinner.

Mean number of meals eaten outside a home									
Age Group (years)	Men			Women			Both Sexes		
	n	mean	95% CI	n	mean	95% CI	n	mean	95% CI
18-29	647	2.4	2.1-2.8	939	1.3	1.0-1.5	1586	1.8	1.6-2.0
30-49	661	2.3	1.9-2.6	980	0.8	0.6-1.1	1641	1.5	1.3-1.8
50-69	256	1.2	0.8-1.5	415	0.6	0.4-0.8	671	0.9	0.7-1.1
18-69	1564	2.2	1.9-2.4	2334	1.0	0.8-1.2	3898	1.5	1.4-1.7

Physical Activity

Introduction A population's physical activity (or inactivity) can be described in different ways. The two most common ways are

- (1) to estimate a population's mean or median physical activity using a continuous indicator such as MET-minutes per week or time spent in physical activity, and
- (2) to classify certain percentages of a population in specific groups by setting up cut-points for a specific amount of physical activity.

When analyzing GPAQ data, both continuous as well as categorical indicators are used.

Metabolic Equivalent (MET)

METs (Metabolic Equivalents) are commonly used to express the intensity of physical activities, and are also used for the analysis of GPAQ data.

Applying MET values to activity levels allows us to calculate total physical activity. MET is the ratio of a person's working metabolic rate relative to the resting metabolic rate. One MET is defined as the energy cost of sitting quietly, and is equivalent to a caloric consumption of 1 kcal/kg/hour. For the analysis of GPAQ data, existing guidelines have been adopted: 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.

Therefore, for the calculation of a person's total physical activity using GPAQ data, the following MET values are used:

Domain	MET value
Work	• Moderate MET value = 4.0 · Vigorous MET value = 8.0
Transport	Cycling and walking MET value = 4.0
Recreation	• Moderate MET value = 4.0 · Vigorous MET value = 8.0

WHO global recommendations on physical activity for health For the calculation of the categorical indicator on the recommended amount of physical activity for health, the total time spent in physical activity during a typical week and the intensity of the physical activity are taken into account.

Throughout a week, including activity for work, during transport and leisure time, adults should do at least

- 150 minutes of moderate-intensity physical activity OR
- 75 minutes of vigorous-intensity physical activity OR
- An equivalent combination of moderate- and vigorous-intensity physical activity achieving at least 600 MET-minutes.

Former recommendations for comparison purposes For comparison purposes, tables presenting cut-offs from former recommendations are also included in GPAQ data analysis.

The three levels of physical activity suggested for classifying populations were low, moderate, and high. The criteria for these levels are shown below.

- **High**

A person reaching any of the following criteria is classified in this category:

- Vigorous-intensity activity on at least 3 days achieving a minimum of at least 1,500 MET-minutes/week OR
- 7 or more days of any combination of walking, moderate- or vigorous-intensity activities achieving a minimum of at least 3,000 MET-minutes per week.

- **Moderate**

A person not meeting the criteria for the "high" category, but meeting any of the following criteria is classified in this category:

- 3 or more days of vigorous-intensity activity of at least 20 minutes per day OR
- 5 or more days of moderate-intensity activity or walking of at least 30 minutes per day OR
- 5 or more days of any combination of walking, moderate- or vigorous-intensity activities achieving a minimum of at least 600 MET-minutes per week.

- **Low**

A person not meeting any of the above mentioned criteria falls in this category.

Not meeting WHO recommendations on physical activity for health

Description: Percentage of respondents not meeting WHO recommendations on physical activity for health (respondents doing less than 150 minutes of moderate-intensity physical activity per week, or equivalent).

Instrument questions

- activity at work
- travel to and from places
- recreational activities

Not meeting WHO recommendations on physical activity for health									
Age Group (years)	Men			Women			Both Sexes		
	n	% not meeting recs	95% CI	n	% not meeting recs	95% CI	n	% not meeting recs	95% CI
18-29	637	2.1	0.7-3.5	919	5.8	4.0-7.7	1556	4.1	2.9-5.3
30-49	651	3.1	1.7-4.6	977	3.3	1.9-4.6	1628	3.2	2.2-4.2
50-69	253	9.3	1.1-17.5	410	6.3	3.6-9.0	663	7.8	3.5-12.2
18-69	1541	3.7	2.1-5.4	2306	4.9	3.8-6.0	3847	4.3	3.4-5.3

Levels of total physical activity according to former recommendations Description: Percentage of respondents classified into three categories of total physical activity according to former recommendations.

Instrument questions:

- activity at work
- travel to and from places
- recreational activities

Level of total physical activity according to former recommendations							
Age Group (years)	Men						
	n	% Low	95% CI	% Moderate	95% CI	% High	95% CI
18-29	637	4.3	2.4-6.2	8.4	5.8-10.9	87.3	84.0-90.7
30-49	651	6.1	4.1-8.1	8.7	5.5-11.8	85.3	81.7-88.8
50-69	253	15.3	6.4-24.2	11.0	6.1-15.9	73.7	64.8-82.7
18-69	1541	6.8	4.9-8.8	8.9	7.0-10.8	84.2	81.6-86.9

Level of total physical activity according to former recommendations							
Age Group (years)	Women						
	n	% Low	95% CI	% Moderate	95% CI	% High	95% CI
18-29	919	9.9	7.4-12.4	14.4	11.3-17.6	75.7	71.6-79.7
30-49	977	6.5	4.5-8.6	11.6	9.0-14.2	81.9	78.4-85.4
50-69	410	7.0	4.2-9.8	12.5	8.6-16.4	80.5	75.6-85.4
18-69	2306	8.2	6.7-9.6	13.0	10.9-15.1	78.8	76.1-81.6

Level of total physical activity according to former recommendations							
Age Group (years)	Both Sexes						
	n	% Low	95% CI	% Moderate	95% CI	% High	95% CI
18-29	1556	7.3	5.7-8.9	11.6	9.4-13.7	81.2	78.5-83.9
30-49	1628	6.3	4.9-7.7	10.2	8.3-12.1	83.5	81.2-85.9
50-69	663	11.1	6.3-15.9	11.7	8.7-14.8	77.1	71.8-82.4
18-69	3847	7.5	6.3-8.7	11.1	9.6-12.5	81.4	79.5-83.4

Total physical activity-mean	Description: Mean minutes of total physical activity on average per day.
	Instrument questions
	<ul style="list-style-type: none"> • activity at work • travel to and from places • recreational activities

Mean minutes of total physical activity on average per day									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean minutes	95% CI	n	Mean minutes	95% CI	n	Mean minutes	95% CI
18-29	637	372.1	343.5-400.8	919	314.0	291.5-336.4	1556	341.3	322.7-359.9
30-49	651	392.8	365.5-420.1	977	361.5	337.1-385.9	1628	376.7	356.7-396.7
50-69	253	314.4	270.3-358.5	410	297.2	251.7-342.7	663	305.8	274.7-336.8
18-69	1541	370.6	352.5-388.8	2306	329.6	312.1-347.2	3847	349.3	335.8-362.9

Total physical activity-median	Description: Median minutes of total physical activity on average per day.
	Instrument questions
	<ul style="list-style-type: none"> • activity at work • travel to and from places • recreational activities

Median minutes of total physical activity on average per day									
Age Group (years)	Men			Women			Both Sexes		
	n	Median minutes	Inter-quartile range (P25-P75)	n	Median minutes	Inter-quartile range (P25-P75)	n	Median minutes	Inter-quartile range (P25-P75)
18-29	637	325.7	188.6-480.0	919	265.7	145.7-428.6	1556	294.3	171.4-450.0
30-49	651	352.9	205.0-531.4	977	317.1	180.0-480.0	1628	328.7	192.9-505.7
50-69	253	274.3	154.3-394.3	410	242.1	132.9-377.1	663	257.1	137.1-390.0
18-69	1541	325.7	184.3-497.1	2306	285.0	155.7-441.4	3847	308.6	171.4-471.4

Domain-specific physical activity-mean	Description: Mean minutes spent in work-, transport- and recreation-related physical activity on average per day.
	Instrument questions: <ul style="list-style-type: none"> • activity at work • travel to and from places • recreational activities

Mean minutes of work-related physical activity on average per day									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean minutes	95% CI	n	Mean minutes	95% CI	n	Mean minutes	95% CI
18-29	637	256.7	235.5-278.0	919	228.6	210.7-246.5	1556	241.8	227.9-255.8
30-49	651	296.1	274.5-317.8	977	279.1	260.5-297.7	1628	287.4	272.4-302.4
50-69	253	223.3	193.3-253.3	410	220.5	190.0-250.9	663	221.9	200.2-243.5
18-69	1541	266.6	252.5-280.8	2306	246.8	233.0-260.5	3847	256.3	245.7-266.9

Mean minutes of transport-related physical activity on average per day									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean minutes	95% CI	n	Mean minutes	95% CI	n	Mean minutes	95% CI
18-29	637	80.8	71.0-90.6	919	69.1	59.1-79.1	1556	74.6	67.5-81.7
30-49	651	78.1	69.0-87.2	977	67.5	57.9-77.2	1628	72.7	65.7-79.7
50-69	253	72.3	55.8-88.7	410	63.8	50.7-76.8	663	68.0	57.6-78.4
18-69	1541	78.3	71.9-84.8	2306	67.7	61.0-74.3	3847	72.8	68.0-77.6

Mean minutes of recreation-related physical activity on average per day									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean minutes	95% CI	n	Mean minutes	95% CI	n	Mean minutes	95% CI
18-29	637	34.6	28.3-40.9	919	16.2	11.8-20.7	1556	24.9	20.9-28.8
30-49	651	18.5	13.7-23.3	977	14.8	10.1-19.6	1628	16.6	13.0-20.2
50-69	253	18.8	6.1-31.5	410	12.9	3.8-22.1	663	15.9	8.0-23.7
18-69	1541	25.6	21.4-29.9	2306	15.2	11.7-18.6	3847	20.2	17.3-23.1

Domain-specific physical activity - median

Description: Median minutes spent on average per day in work-, transport- and recreation-related physical activity.

Instrument questions:

- activity at work
- travel to and from places
- recreational activities

Median minutes of work-related physical activity on average per day									
Age Group (years)	Men			Women			Both Sexes		
	n	Median minutes	Inter-quartile range (P25-P75)	n	Median minutes	Inter-quartile range (P25-P75)	n	Median minutes	Inter-quartile range (P25-P75)
18-29	637	231.4	120.0-360.0	919	205.7	77.1-308.6	1556	205.7	102.9-342.9
30-49	651	257.1	150.0-411.4	977	257.1	150.0-372.9	1628	257.1	150.0-411.4
50-69	253	205.7	68.6-308.6	410	205.7	90.0-308.6	663	205.7	77.1-308.6
18-69	1541	257.1	120.0-364.3	2306	214.3	102.9-342.9	3847	231.4	107.1-360.0

Median minutes of transport-related physical activity on average per day									
Age Group (years)	Men			Women			Both Sexes		
	n	Median minutes	Inter-quartile range (P25-P75)	n	Median minutes	Inter-quartile range (P25-P75)	n	Median minutes	Inter-quartile range (P25-P75)
18-29	637	42.9	17.1-102.9	919	42.9	11.4-90.0	1556	42.9	12.9-90.0
30-49	651	50.0	17.1-102.9	977	38.6	12.9-102.9	1628	42.9	15.0-102.9
50-69	253	30.0	11.4-90.0	410	34.3	10.0-70.0	663	30.0	10.7-80.0
18-69	1541	42.9	17.1-102.9	2306	38.6	10.7-90.0	3847	42.9	12.9-94.3

Median minutes of recreation-related physical activity on average per day									
Age Group (years)	Men			Women			Both Sexes		
	n	Median minutes	Inter-quartile range (P25-P75)	n	Median minutes	Inter-quartile range (P25-P75)	n	Median minutes	Inter-quartile range (P25-P75)
18-29	637	4.3	0.0-42.9	919	0.0	0.0-0.0	1556	0.0	0.0-17.1
30-49	651	0.0	0.0-0.0	977	0.0	0.0-0.0	1628	0.0	0.0-0.0
50-69	253	0.0	0.0-0.0	410	0.0	0.0-0.0	663	0.0	0.0-0.0
18-69	1541	0.0	0.0-17.1	2306	0.0	0.0-0.0	3847	0.0	0.0-4.3

No physical activity by domain Description: Percentage of respondents classified as doing no work-, transport- or recreational-related physical activity.

Instrument questions:

- activity at work
- travel to and from places
- recreational activities

No work-related physical activity									
Age Group (years)	Men			Women			Both Sexes		
	n	% no activity at work	95% CI	n	% no activity at work	95% CI	n	% no activity at work	95% CI
18-29	637	8.9	6.2-11.6	919	11.2	8.3-14.1	1556	10.1	8.1-12.1
30-49	651	7.5	4.7-10.2	977	7.8	5.6-10.0	1628	7.6	5.9-9.4
50-69	253	14.8	6.3-23.4	410	10.2	6.6-13.7	663	12.5	7.8-17.2
18-69	1541	9.3	7.0-11.7	2306	9.7	7.9-11.5	3847	9.5	8.1-11.0

No transport-related physical activity									
Age Group (years)	Men			Women			Both Sexes		
	n	% no activity for transport	95% CI	n	% no activity for transport	95% CI	n	% no activity for transport	95% CI
18-29	637	10.1	7.2-13.1	919	12.5	9.7-15.2	1556	11.4	9.3-13.4
30-49	651	11.2	8.5-13.9	977	12.9	10.1-15.7	1628	12.1	10.0-14.1
50-69	253	15.7	7.0-24.4	410	15.6	11.1-20.0	663	15.6	10.6-20.7
18-69	1541	11.5	9.2-13.8	2306	13.1	11.1-15.1	3847	12.3	10.7-14.0

No recreation-related physical activity									
Age Group (years)	Men			Women			Both Sexes		
	n	% no activity at recreation	95% CI	n	% no activity at recreation	95% CI	n	% no activity at recreation	95% CI
18-29	637	48.5	42.9-54.1	919	77.1	73.1-81.1	1556	63.6	60.0-67.2
30-49	651	76.0	71.9-80.2	977	83.7	80.2-87.2	1628	80.0	77.1-82.9
50-69	253	84.4	78.7-90.2	410	89.3	83.7-94.8	663	86.8	82.9-90.8
18-69	1541	65.3	61.7-68.9	2306	81.5	78.8-84.2	3847	73.7	71.4-76.1

Composition of total physical activity Description: Percentage of work, transport and recreational activity contributing to total activity.

Instrument questions:

- activity at work
- travel to and from places
- recreational activities

Composition of total physical activity							
Men							
Age Group (years)	n	% Activity from work	95% CI	% Activity for transport	95% CI	% Activity during leisure time	95% CI
18-29	630	65.5	62.5-68.4	23.3	21.2-25.5	11.2	9.3-13.1
30-49	639	71.7	68.9-74.4	23.5	21.0-26.1	4.8	3.5-6.0
50-69	242	69.4	64.4-74.3	27.4	22.4-32.3	3.3	1.6-4.9
18-69	1511	68.5	66.5-70.6	24.0	22.3-25.8	7.4	6.3-8.5

Composition of total physical activity							
Women							
Age Group (years)	n	% Activity from work	95% CI	% Activity for transport	95% CI	% Activity during leisure time	95% CI
18-29	887	67.9	64.9-70.9	27.4	24.6-30.2	4.7	3.5-5.9
30-49	954	75.0	72.6-77.3	22.3	20.0-24.5	2.7	2.0-3.5
50-69	387	72.6	69.1-76.1	25.1	21.6-28.5	2.3	1.1-3.5
18-69	2228	71.4	69.4-73.4	25.0	23.2-26.9	3.6	2.9-4.3

Composition of total physical activity							
Both Sexes							
Age Group (years)	n	% Activity from work	95% CI	% Activity for transport	95% CI	% Activity during leisure time	95% CI
18-29	1517	66.8	64.8-68.7	25.4	23.7-27.2	7.8	6.7-8.9
30-49	1593	73.4	71.5-75.2	22.9	21.1-24.6	3.7	3.0-4.5
50-69	629	71.0	68.1-74.0	26.2	23.3-29.1	2.8	1.8-3.8
18-69	3739	70.0	68.6-71.5	24.6	23.2-25.9	5.4	4.8-6.1

No vigorous physical activity Description: Percentage of respondents not engaging in vigorous physical activity.

Instrument questions:

- activity at work
- recreational activities

No vigorous physical activity									
Age Group (years)	Men			Women			Both Sexes		
	n	% no vigorous activity	95% CI	n	% no vigorous activity	95% CI	n	% no vigorous activity	95% CI
18-29	637	29.6	24.8-34.5	919	58.2	53.4-63.1	1556	44.8	41.0-48.6
30-49	651	41.7	36.0-47.5	977	55.1	50.4-59.8	1628	48.6	44.5-52.7
50-69	253	63.9	56.2-71.7	410	67.2	60.3-74.2	663	65.6	60.1-71.0
18-69	1541	40.1	36.3-43.9	2306	58.4	54.7-62.1	3847	49.6	46.5-52.7

Sedentary Description: Minutes spent in sedentary activities on a typical day.

Instrument question:

- sedentary behaviour

Minutes spent in sedentary activities on average per day					
Age Group (years)	Men				
	n	Mean minutes	95% CI	Median minutes	Inter-quartile range (P25-P75)
18-29	660	157.3	146.8-167.7	120.0	60.0-180.0
30-49	675	165.0	152.7-177.2	120.0	60.0-240.0
50-69	264	202.5	153.8-251.2	150.0	60.0-240.0
18-69	1599	167.9	155.5-180.3	120.0	60.0-240.0

Minutes spent in sedentary activities on average per day					
Age Group (years)	Women				
	n	Mean minutes	95% CI	Median minutes	Inter-quartile range (P25-P75)
18-29	955	175.4	161.0-189.9	120.0	60.0-240.0
30-49	998	146.2	135.7-156.7	120.0	60.0-180.0
50-69	422	173.9	158.5-189.2	140.0	60.0-240.0
18-69	2375	164.1	155.2-173.1	120.0	60.0-240.0

Minutes spent in sedentary activities on average per day					
Age Group (years)	Both Sexes				
	n	Mean minutes	95% CI	Median minutes	Inter-quartile range (P25-P75)
18-29	1615	167.0	157.2-176.8	120.0	60.0-215.0
30-49	1673	155.4	147.0-163.8	120.0	60.0-230.0
50-69	686	188.2	161.8-214.6	150.0	60.0-240.0
18-69	3974	165.9	157.7-174.2	120.0	60.0-240.0

History of Raised Blood Pressure

Blood pressure measurement and diagnosis Description: Blood pressure measurement and diagnosis among all respondents.
Instrument questions:

- Have you ever had your blood pressure measured by a doctor or other health worker?
- Have you ever been told by a doctor or other health worker that you have raised blood pressure or hypertension?
- Have you been told in the past 12 months?

Blood pressure measurement and diagnosis									
Men									
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
18-29	660	85.7	82.0-89.4	13.6	9.9-17.3	0.3	0.0-0.7	0.4	0.0-0.8
30-49	675	78.2	73.3-83.2	18.9	14.1-23.8	0.6	0.1-1.0	2.3	0.9-3.6
50-69	264	64.6	56.3-73.0	19.9	12.8-27.0	4.7	1.6-7.7	10.8	2.8-18.8
18-69	1599	79.2	76.3-82.1	16.8	14.0-19.5	1.2	0.6-1.7	2.9	1.3-4.5

Blood pressure measurement and diagnosis									
Women									
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
18-29	955	69.4	64.9-73.8	26.9	22.8-30.9	1.7	0.7-2.7	2.1	1.0-3.1
30-49	998	55.9	51.4-60.4	31.8	27.6-35.9	4.9	2.8-6.9	7.5	5.1-9.8
50-69	422	57.7	50.3-65.1	19.3	13.4-25.1	6.4	3.4-9.4	16.6	11.9-21.3
18-69	2375	62.4	58.9-65.9	27.5	24.5-30.6	3.6	2.5-4.7	6.4	5.1-7.6

Blood pressure measurement and diagnosis									
Both sexes									
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
18-29	1615	77.0	74.0-80.0	20.7	17.9-23.5	1.1	0.5-1.6	1.3	0.7-1.9
30-49	1673	66.8	63.0-70.6	25.5	22.2-28.8	2.8	1.7-3.9	4.9	3.6-6.3
50-69	686	61.2	55.4-66.9	19.6	15.0-24.2	5.6	3.5-7.6	13.7	9.1-18.3
18-69	3974	70.5	68.1-72.9	22.4	20.2-24.5	2.4	1.8-3.1	4.7	3.7-5.7

Blood pressure treatment among those diagnosed	Description: Raised blood pressure treatment results among those previously diagnosed with raised blood pressure.
	Instrument questions: <ul style="list-style-type: none"> • Have you ever had your blood pressure measured by a doctor or other health worker? • Have you ever been told by a doctor or other health worker that you have raised blood pressure or hypertension? • In the past two weeks, have you taken any drugs (medication) for raised blood pressure prescribed by a doctor or other health worker?

Currently taking drugs (medication) for raised blood pressure prescribed by doctor or health worker among those diagnosed									
Age Group (years)	Men			Women			Both Sexes		
	n	% taking meds	95% CI	n	% taking meds	95% CI	n	% taking meds	95% CI
18-29	9	5.3	0.0-16.2	38	8.7	0.7-16.8	47	8.2	1.2-15.2
30-49	25	23.8	5.2-42.4	117	25.6	14.3-36.9	142	25.3	15.1-35.4
50-69	33	12.2	0.8-23.6	97	38.4	25.4-51.3	130	27.8	17.3-38.3
18-69	67	14.8	5.6-24.1	252	27.3	19.8-34.9	319	23.9	17.5-30.4

Blood pressure advice by a traditional healer

Description: Percentage of respondents who have sought advice or received treatment from a traditional healer for raised blood pressure among those previously diagnosed with raised blood pressure.

Instrument questions:

- Have you ever had your blood pressure measured by a doctor or other health worker?
- Have you ever been told by a doctor or other health worker that you have raised blood pressure or hypertension?
- Have you ever seen a traditional healer for raised blood pressure?
- Are you currently taking any herbal or traditional remedy for your high blood pressure?

Seen a traditional healer among those previously diagnosed											
Age Group (years)	Men				Women				Both Sexes		
	n	% seen trad. healer	95% CI		n	% seen trad. healer	95% CI		n	% seen trad. healer	95% CI
18-29	9	0.0	0.0-0.0		38	0.0	0.0-0.0		47	0.0	0.0-0.0
30-49	25	7.4	0.0-16.3		117	18.2	6.8-29.5		142	16.2	6.6-25.9
50-69	33	11.8	0.0-24.3		97	16.8	7.2-26.5		130	14.8	7.0-22.6
18-69	67	9.7	1.6-17.8		252	14.6	8.1-21.2		319	13.3	7.9-18.6

Currently taking herbal or traditional remedy for raised blood pressure among those previously diagnosed											
Age Group (years)	Men				Women				Both Sexes		
	n	% taking trad. meds	95% CI		n	% taking trad. meds	95% CI		n	% taking trad. meds	95% CI
18-29	9	0.0	0.0-0.0		38	0.5	0.0-1.4		47	0.4	0.0-1.2
30-49	25	6.7	0.0-15.4		117	10.6	0.2-21.0		142	9.9	1.1-18.6
50-69	33	5.4	0.0-12.3		97	15.1	5.8-24.3		130	11.2	4.7-17.6
18-69	67	5.3	0.4-10.3		252	10.5	4.5-16.5		319	9.1	4.5-13.6

History of Diabetes

Blood sugar measurement and diagnosis

Description: Blood sugar measurement and diagnosis among all respondents.

Instrument questions:

- Have you ever had your blood sugar measured by a doctor or other health worker?
- Have you ever been told by a doctor or other health worker that you have raised blood sugar or diabetes?
- Have you been told in the past 12 months?

Blood sugar measurement and diagnosis									
Age Group (years)	Men								
	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
18-29	660	95.8	93.9-97.6	3.7	2.0-5.5	0.0	0.0-0.0	0.5	0.0-1.0
30-49	675	96.3	94.7-97.9	3.4	1.8-4.9	0.0	0.0-0.1	0.3	0.0-0.7
50-69	264	92.0	87.5-96.5	6.3	2.0-10.6	0.2	0.0-0.5	1.5	0.0-2.9
18-69	1599	95.3	94.1-96.6	4.0	2.8-5.3	0.0	0.0-0.1	0.6	0.2-0.9

Blood sugar measurement and diagnosis									
Age Group (years)	Women								
	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
18-29	954	96.9	95.7-98.1	2.8	1.7-3.9	0.2	0.0-0.5	0.2	0.0-0.4
30-49	998	94.6	93.2-96.0	4.5	3.2-5.9	0.3	0.0-0.5	0.6	0.0-1.3
50-69	422	87.1	82.4-91.7	8.2	4.7-11.6	1.1	0.0-2.2	3.7	1.4-6.0
18-69	2374	94.5	93.4-95.6	4.3	3.4-5.2	0.4	0.1-0.6	0.9	0.4-1.3

Blood sugar measurement and diagnosis									
Age Group (years)	Both sexes								
	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
18-29	1614	96.4	95.3-97.4	3.2	2.2-4.2	0.1	0.0-0.3	0.3	0.0-0.6
30-49	1673	95.4	94.3-96.6	4.0	2.9-5.1	0.1	0.0-0.3	0.5	0.1-0.8
50-69	686	89.5	86.3-92.7	7.2	4.5-10.0	0.6	0.1-1.2	2.6	1.2-3.9
18-69	3973	94.9	94.1-95.7	4.2	3.4-4.9	0.2	0.1-0.3	0.7	0.4-1.0

Diabetes treatment among those diagnosed	Description: Diabetes treatment results among those previously diagnosed with raised blood sugar or diabetes.
	Instrument questions: <ul style="list-style-type: none"> • Have you ever had your blood sugar measured by a doctor or other health worker? • Have you ever been told by a doctor or other health worker that you have raised blood sugar or diabetes? • In the past two weeks, have you taken any drugs (medication) for diabetes prescribed by a doctor or other health worker? • Are you currently taking insulin for diabetes prescribed by a doctor or other health worker?

Currently taking drugs (medication) prescribed for diabetes among those previously diagnosed									
Age Group (years)	Men			Women			Both Sexes		
	n	% taking meds	95% CI	n	% taking meds	95% CI	n	% taking meds	95% CI
18-29	3	18.7	0.0-63.0	3	0.0	0.0-0.0	6	10.2	0.0-31.1
30-49	4	86.9	56.7-100.0	12	28.1	0.0-56.5	16	42.6	11.4-73.9
50-69	6	45.2	0.0-95.1	18	41.0	15.2-66.8	24	42.1	20.4-63.8
18-69	13	44.4	15.6-73.1	33	32.2	14.2-50.3	46	36.0	20.7-51.4

Currently taking insulin prescribed for diabetes among those previously diagnosed									
Age Group (years)	Men			Women			Both Sexes		
	n	% taking insulin	95% CI	n	% taking insulin	95% CI	n	% taking insulin	95% CI
18-29	3	0.0	0.0-0.0	3	0.0	0.0-0.0	6	0.0	0.0-0.0
30-49	4	86.9	56.7-100.0	12	0.0	0.0-0.0	16	21.5	0.0-50.0
50-69	6	28.4	0.0-71.1	18	19.9	0.0-40.8	24	22.1	3.1-41.1
18-69	13	30.3	13.3-47.2	33	12.0	0.0-24.9	46	17.7	4.9-30.4

Diabetes advice by traditional healer

Description: Percentage of respondents who have sought advice or treatment from a traditional healer for diabetes among those previously diagnosed.

Instrument questions:

- Have you ever had your blood sugar measured by a doctor or other health worker?
- Have you ever been told by a doctor or other health worker that you have raised blood sugar or diabetes?
- Have you ever seen a traditional healer for diabetes or raised blood sugar?
- Are you currently taking any herbal or traditional remedy for your diabetes?

Seen a traditional healer for diabetes among those previously diagnosed											
Age Group (years)	Men				Women				Both Sexes		
	n	% seen trad. healer	95% CI		n	% seen trad. healer	95% CI		n	% seen trad. healer	95% CI
18-29	3	58.5	0.0-100.0		3	0.0	0.0-0.0		6	31.9	0.0-73.2
30-49	4	86.9	56.7-100.0		12	0.0	0.0-0.0		16	21.5	0.0-50.0
50-69	6	45.2	0.0-95.1		18	20.2	0.0-41.6		24	26.6	6.2-47.1
18-69	13	57.9	24.6-91.3		33	12.1	0.0-25.4		46	26.4	10.9-41.9

Currently taking herbal or traditional treatment for diabetes among those previously diagnosed											
Age Group (years)	Men				Women				Both Sexes		
	n	% taking trad. meds	95% CI		n	% taking trad. meds	95% CI		n	% taking trad. meds	95% CI
18-29	3	18.7	0.0-63.0		3	0.0	0.0-0.0		6	10.2	0.0-31.1
30-49	4	57.6	0.0-100.0		12	4.7	0.0-14.5		16	17.8	0.0-45.1
50-69	6	28.4	0.0-71.1		18	15.3	0.0-34.1		24	18.7	0.6-36.8
18-69	13	30.9	2.6-59.2		33	10.5	0.0-22.2		46	16.8	3.9-29.8

History of Raised Total Cholesterol

Cholesterol measurement and diagnosis Description: Total cholesterol measurement and diagnosis among all respondents.

Instrument questions:

- Have you ever had your cholesterol (fat levels in your blood) measured by a doctor or other health worker?
- Have you ever been told by a doctor or other health worker that you have raised cholesterol?
- Have you been told in the past 12 months?

Total cholesterol measurement and diagnosis									
Men									
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
18-29	660	98.3	96.5-100.0	0.8	0.1-1.5	0.0	0.0-0.0	0.9	0.0-2.6
30-49	675	98.2	96.9-99.5	1.3	0.1-2.4	0.2	0.0-0.6	0.3	0.0-0.7
50-69	264	99.0	97.2-100.0	0.9	0.0-2.7	0.0	0.0-0.1	0.0	0.0-0.0
18-69	1599	98.4	97.4-99.4	1.0	0.4-1.6	0.1	0.0-0.2	0.5	0.0-1.3

Total cholesterol measurement and diagnosis									
Women									
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
18-29	954	99.9	99.7-100.0	0.1	0.0-0.3	0.0	0.0-0.0	0.0	0.0-0.0
30-49	998	98.6	97.3-100.0	0.5	0.0-0.9	0.2	0.0-0.6	0.6	0.0-1.9
50-69	422	97.9	96.1-99.7	2.0	0.2-3.8	0.0	0.0-0.0	0.1	0.0-0.3
18-69	2374	99.1	98.5-99.7	0.5	0.2-0.9	0.1	0.0-0.2	0.3	0.0-0.7

Total cholesterol measurement and diagnosis									
Both sexes									
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
18-29	1614	99.2	98.3-100.0	0.4	0.1-0.8	0.0	0.0-0.0	0.4	0.0-1.2
30-49	1673	98.4	97.2-99.6	0.9	0.3-1.5	0.2	0.0-0.5	0.5	0.0-1.1
50-69	686	98.5	97.2-99.7	1.5	0.2-2.7	0.0	0.0-0.1	0.0	0.0-0.1
18-69	3973	98.8	98.1-99.4	0.8	0.4-1.1	0.1	0.0-0.2	0.4	0.0-0.8

Cholesterol treatment among those diagnosed

Description: Cholesterol treatment results among those previously diagnosed with raised cholesterol.

Instrument questions:

- Have you ever had your cholesterol (fat levels in your blood) measured by a doctor or other health worker?
- Have you ever been told by a doctor or other health worker that you have raised cholesterol?
- In the past two weeks, have you taken oral treatment (medication) for raised total cholesterol prescribed by a doctor or other health worker?

Currently taking oral treatment (medication) prescribed for raised total cholesterol among those previously diagnosed											
Age Group (years)	Men				Women				Both Sexes		
	n	% taking meds	95% CI		n	% taking meds	95% CI		n	% taking meds	95% CI
18-29	1	0.0	0.0-0.0		0	--	--		1	0.0	0.0-0.0
30-49	6	22.1	0.0-67.8		3	73.4	31.0-100.0		9	55.0	0.0-100.0
50-69	1	0.0	0.0-0.0		1	100.0	100.0-100.0		2	72.3	3.8-100.0
18-69	8	7.4	0.0-23.0		4	74.5	28.8-100.0		12	33.1	0.0-96.5

Cholesterol advice by traditional healer

Description: Percentage of respondents who have sought advice or treatment from a traditional healer for raised cholesterol among those previously diagnosed.

Instrument questions:

- Have you ever had your cholesterol (fat levels in your blood) measured by a doctor or other health worker?
- Have you ever been told by a doctor or other health worker that you have raised cholesterol?
- Have you ever seen a traditional healer for raised cholesterol?
- Are you currently taking any herbal or traditional remedy for your raised cholesterol?

Seen a traditional healer for raised cholesterol among those previously diagnosed											
Age Group (years)	Men				Women				Both Sexes		
	n	% seen trad. healer	95% CI		n	% seen trad. healer	95% CI		n	% seen trad. healer	95% CI
18-29	1	0.0	0.0-0.0		0	--	--		1	0.0	0.0-0.0
30-49	6	0.0	0.0-0.0		3	73.4	31.0-100.0		9	47.1	0.0-100.0
50-69	1	0.0	0.0-0.0		1	0.0	0.0-0.0		2	0.0	0.0-0.0
18-69	8	0.0	0.0-0.0		4	70.4	43.8-96.9		12	27.0	0.0-88.9

Currently taking herbal or traditional treatment for raised cholesterol among those previously diagnosed											
Age Group (years)	Men				Women				Both Sexes		
	n	% taking trad. meds	95% CI		n	% taking trad. meds	95% CI		n	% taking trad. meds	95% CI
18-29	1	0.0	0.0-0.0		0	--	--		1	0.0	0.0-0.0
30-49	6	0.0	0.0-0.0		3	0.0	0.0-0.0		9	0.0	0.0-0.0
50-69	1	0.0	0.0-0.0		1	100.0	100.0-100.0		2	72.3	3.8-100.0
18-69	8	0.0	0.0-0.0		4	4.1	0.0-23.5		12	1.6	0.0-5.4

History of Cardiovascular Diseases

History of cardio-vascular diseases Description: Percentage of respondents who have ever had a heart attack or chest pain from heart disease (angina) or a stroke among all respondents.

Instrument questions:

- Have you ever had a heart attack or chest pain from heart disease (angina) or a stroke (cerebrovascular accident or incident)?

Having ever had a heart attack or chest pain from heart disease or a stroke											
Age Group (years)	Men				Women				Both Sexes		
	n	% CVD history	95% CI		n	% CVD history	95% CI		n	% CVD history	95% CI
18-29	660	7.5	4.2-10.7		954	7.4	5.1-9.8		1614	7.4	5.5-9.4
30-49	675	7.1	4.7-9.5		998	10.8	8.2-13.4		1673	9.0	7.1-10.8
50-69	264	7.7	4.3-11.2		422	18.3	12.9-23.7		686	13.0	9.6-16.4
18-69	1599	7.4	5.5-9.2		2374	10.4	8.5-12.3		3973	8.9	7.4-10.4

Prevention and treatment of heart disease Description: Percentage of respondents who are currently taking aspirin or statins regularly to prevent or treat heart disease.

Instrument questions:

- Are you currently taking aspirin regularly to prevent or treat heart disease?
- Are you currently taking statins (Lovostatin/Simvastatin/Atorvastatin or any other statin) regularly to prevent or treat heart disease?

Currently taking aspirin regularly to prevent or treat heart disease											
Age Group (years)	Men				Women				Both Sexes		
	n	% taking aspirin	95% CI		n	% taking aspirin	95% CI		n	% taking aspirin	95% CI
18-29	660	0.4	0.0-0.9		954	0.9	0.2-1.6		1614	0.6	0.2-1.1
30-49	675	1.3	0.3-2.3		998	0.6	0.0-1.3		1673	1.0	0.4-1.5
50-69	264	0.1	0.0-0.4		422	1.8	0.0-3.6		686	1.0	0.0-1.9
18-69	1599	0.7	0.2-1.1		2374	0.9	0.4-1.4		3973	0.8	0.5-1.2

Currently taking statins regularly to prevent or treat heart disease											
Age Group (years)	Men				Women				Both Sexes		
	n	% taking statins	95% CI		n	% taking statins	95% CI		n	% taking statins	95% CI
18-29	660	0.0	0.0-0.0		954	0.0	0.0-0.0		1614	0.0	0.0-0.0
30-49	675	0.9	0.0-1.8		998	0.2	0.0-0.5		1673	0.5	0.1-1.0
50-69	264	0.5	0.0-1.1		422	0.3	0.0-0.8		686	0.4	0.0-0.8
18-69	1599	0.4	0.1-0.8		2374	0.1	0.0-0.2		3973	0.3	0.1-0.5

Lifestyle Advice

Lifestyle advice

Description: Percentage of respondents who received lifestyle advice from a doctor or health worker during the past three years among all respondents.

Instrument question:

- During the past three years, has a doctor or other health worker advised you to do any of the following?

Advised by doctor or health worker to quit using tobacco or don't start									
Age Group (years)	Men			Women			Both Sexes		
	n	% advised	95% CI	n	% advised	95% CI	n	% advised	95% CI
18-29	660	15.8	11.9-19.6	954	13.2	10.0-16.4	1614	14.4	11.7-17.0
30-49	675	16.1	12.6-19.5	998	16.6	13.4-19.8	1673	16.3	13.6-19.0
50-69	264	26.3	16.2-36.4	422	12.5	8.3-16.8	686	19.4	13.7-25.2
18-69	1599	17.7	14.5-20.8	2374	14.4	12.0-16.7	3973	15.9	13.7-18.2

Advised by doctor or health worker to reduce salt in the diet									
Age Group (years)	Men			Women			Both Sexes		
	n	% advised	95% CI	n	% advised	95% CI	n	% advised	95% CI
18-29	660	15.8	12.2-19.4	954	16.5	13.2-19.8	1614	16.2	13.6-18.7
30-49	675	14.2	11.0-17.4	998	21.7	18.2-25.2	1673	18.0	15.4-20.6
50-69	264	16.6	10.6-22.6	422	25.7	19.1-32.3	686	21.1	16.3-25.9
18-69	1599	15.3	12.9-17.8	2374	19.9	17.3-22.5	3973	17.7	15.6-19.7

Advised by doctor or health worker to eat at least five servings of fruit and/or vegetables each day									
Age Group (years)	Men			Women			Both Sexes		
	n	% advised	95% CI	n	% advised	95% CI	n	% advised	95% CI
18-29	660	19.5	15.6-23.4	954	22.7	18.6-26.9	1614	21.2	18.1-24.3
30-49	675	21.2	16.9-25.5	998	24.6	20.8-28.3	1673	22.9	19.7-26.2
50-69	264	19.3	13.3-25.3	422	20.8	15.4-26.2	686	20.1	15.7-24.4
18-69	1599	20.1	17.2-23.0	2374	23.1	20.1-26.2	3973	21.7	19.2-24.2

Advised by doctor or health worker to reduce fat in the diet									
Age Group (years)	Men			Women			Both Sexes		
	n	% advised	95% CI	n	% advised	95% CI	n	% advised	95% CI
18-29	660	19.4	15.1-23.7	954	19.5	15.3-23.6	1614	19.4	16.4-22.5
30-49	675	16.1	12.6-19.6	998	21.4	18.0-24.8	1673	18.8	16.3-21.4
50-69	264	18.6	12.2-25.0	422	20.2	15.2-25.3	686	19.4	15.2-23.6
18-69	1599	18.0	15.3-20.7	2374	20.3	17.5-23.2	3973	19.2	17.0-21.4

Advised by doctor or health worker to start or do more physical activity									
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Age Group (years)	Men			Women			Both Sexes		
	n	% advised	95% CI	n	% advised	95% CI	n	% advised	95% CI
18-29	660	21.3	16.7-25.8	954	18.2	14.8-21.5	1614	19.6	16.6-22.6
30-49	675	16.6	12.9-20.3	998	16.4	13.3-19.4	1673	16.5	13.8-19.1
50-69	264	19.5	12.9-26.1	422	12.1	7.9-16.2	686	15.8	11.6-20.0
18-69	1599	19.1	16.1-22.1	2374	16.5	14.1-19.0	3973	17.8	15.5-20.0

Advised by doctor or health worker to maintain a healthy body weight or to lose weight									
Age Group (years)	Men			Women			Both Sexes		
	n	% advised	95% CI	n	% advised	95% CI	n	% advised	95% CI
18-29	660	16.4	12.6-20.3	954	11.1	8.7-13.6	1614	13.6	11.3-15.9
30-49	675	11.7	8.7-14.7	998	13.3	10.3-16.3	1673	12.5	10.1-14.8
50-69	264	15.3	9.6-20.9	422	11.4	7.3-15.5	686	13.3	9.5-17.1
18-69	1599	14.4	11.9-16.8	2374	12.0	10.0-14.0	3973	13.1	11.4-14.9

Cervical Cancer Screening

Cervical cancer screening Description: Percentage of female respondents who have ever had a screening test for cervical cancer among all female respondents.

Instrument question:

- Have you ever had a screening test for cervical cancer, using any of these methods described above?

Age Group (years)	Women		
	n	% ever tested	95% CI
18-29	939	5.5	3.6-7.5
30-49	989	9.9	6.9-12.8
50-69	416	5.9	3.2-8.7
18-69	2344	7.3	5.7-8.8

Cervical cancer screening among women aged 30-49 years Description: Percentage of female respondents aged 30-49 years who have ever had a screening test for cervical cancer among all female respondents aged 30-49 years.

Instrument question:

- Have you ever had a screening test for cervical cancer, using any of these methods described above?

Age Group (years)	Women		
	n	% ever tested	95% CI
30-49	989	9.9	6.9-12.8

Physical Measurements

Blood pressure Description: Mean blood pressure among all respondents, including those currently on medication for raised blood pressure.

Instrument question:

- Reading 1-3 systolic and diastolic blood pressure

Mean systolic blood pressure (mmHg)											
Age Group (years)	Men				Women				Both Sexes		
	n	Mean	95% CI		n	Mean	95% CI		n	Mean	95% CI
18-29	643	124.7	123.5-125.8		939	116.5	115.3-117.8		1582	120.3	119.4-121.3
30-49	666	126.3	124.7-127.9		980	122.9	121.6-124.3		1646	124.6	123.5-125.7
50-69	261	132.1	128.0-136.2		417	139.3	136.3-142.2		678	135.7	133.0-138.3
18-69	1570	126.6	125.5-127.7		2336	122.5	121.5-123.5		3906	124.5	123.6-125.3

Mean diastolic blood pressure (mmHg)											
Age Group (years)	Men				Women				Both Sexes		
	n	Mean	95% CI		n	Mean	95% CI		n	Mean	95% CI
18-29	643	78.0	76.8-79.2		939	78.1	77.1-79.1		1582	78.1	77.3-78.9
30-49	666	82.0	80.9-83.1		980	82.5	81.5-83.4		1646	82.3	81.5-83.1
50-69	261	81.9	78.5-85.2		417	85.2	83.6-86.9		678	83.6	81.6-85.5
18-69	1570	80.2	79.3-81.2		2336	80.9	80.2-81.6		3906	80.6	79.9-81.2

Raised blood pressure Description: Percentage of respondents with raised blood pressure.

Instrument question:

- Reading 1-3 systolic and diastolic blood pressure
- During the past two weeks, have you been treated for raised blood pressure with drugs (medication) prescribed by a doctor or other health worker?

SBP \geq 140 and/or DBP \geq 90 mmHg, excluding those on medication for raised blood pressure									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	638	18.2	14.2-22.1	933	11.9	9.0-14.8	1571	14.8	12.4-17.3
30-49	659	26.1	21.7-30.5	958	22.9	19.7-26.1	1617	24.5	21.7-27.3
50-69	254	41.7	33.6-49.8	384	46.2	39.7-52.8	638	43.9	38.7-49.0
18-69	1551	25.2	22.2-28.3	2275	21.1	18.7-23.6	3826	23.1	21.1-25.2

SBP \geq 140 and/or DBP \geq 90 mmHg or currently on medication for raised blood pressure									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	643	18.5	14.6-22.5	939	12.2	9.3-15.2	1582	15.2	12.7-17.7
30-49	666	26.7	22.4-31.1	980	24.4	21.2-27.7	1646	25.6	22.8-28.3
50-69	261	42.7	34.7-50.7	417	50.7	44.4-57.0	678	46.7	41.6-51.8
18-69	1570	25.8	22.8-28.9	2336	22.9	20.5-25.3	3906	24.3	22.3-26.4

SBP \geq 160 and/or DBP \geq 100 mmHg, excluding those on medication for raised blood pressure									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	638	2.7	1.0-4.4	933	1.5	0.7-2.3	1571	2.1	1.2-3.0
30-49	659	6.8	4.3-9.4	958	7.0	5.0-9.0	1617	6.9	5.2-8.6
50-69	254	16.7	10.1-23.3	384	21.9	16.7-27.2	638	19.2	14.9-23.5
18-69	1551	6.7	5.0-8.4	2275	6.6	5.4-7.8	3826	6.6	5.6-7.7

SBP \geq 160 and/or DBP \geq 100 mmHg or currently on medication for raised blood pressure									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	643	3.2	1.4-4.9	939	1.9	1.0-2.8	1582	2.5	1.5-3.5
30-49	666	7.6	5.0-10.2	980	8.8	6.7-11.0	1646	8.2	6.5-10.0
50-69	261	18.1	11.6-24.7	417	28.5	23.0-34.0	678	23.3	19.0-27.6
18-69	1570	7.4	5.7-9.1	2336	8.7	7.4-10.0	3906	8.1	7.0-9.2

Treatment and control of raised blood pressure Description: Percentage of respondents with treated and/or controlled of raised blood pressure among those with raised blood pressure (SBP \geq 140 and/or DBP \geq 90 mmHg) or currently on medication for raised blood pressure.

Instrument questions:

- During the past two weeks, have you been treated for raised blood pressure with drugs (medication) prescribed by a doctor or other health worker?
- Reading 1-3 systolic and diastolic blood pressure

Respondents with treated and/or controlled raised blood pressure							
Men							
Age Group (years)	n	% On medication and SBP<140 and DBP<90	95% CI	% On medication and SBP \geq 140 and/or DBP \geq 90	95% CI	% Not on medication and SBP \geq 140 and/or DBP \geq 90	95% CI
18-29	138	2.3	0.2-4.5	0.0	0.0-0.0	97.7	95.5-99.8
30-49	176	1.5	0.0-3.3	1.6	0.0-3.2	96.9	94.5-99.3
50-69	105	1.3	0.0-3.4	2.8	0.1-5.5	95.9	92.5-99.3
18-69	419	1.7	0.6-2.9	1.4	0.4-2.4	96.9	95.4-98.4

Respondents with treated and/or controlled raised blood pressure							
Women							
Age Group (years)	n	% On medication and SBP<140 and DBP<90	95% CI	% On medication and SBP \geq 140 and/or DBP \geq 90	95% CI	% Not on medication and SBP \geq 140 and/or DBP \geq 90	95% CI
18-29	122	2.8	0.0-6.0	0.6	0.0-1.5	96.5	93.2-99.8
30-49	243	2.3	0.4-4.2	5.9	2.5-9.2	91.8	88.0-95.6
50-69	204	2.9	0.6-5.1	13.6	7.3-20.0	83.5	76.9-90.1
18-69	569	2.6	1.3-4.0	7.3	4.5-10.0	90.1	87.0-93.2

Respondents with treated and/or controlled raised blood pressure							
Both Sexes							
Age Group (years)	n	% On medication and SBP<140 and DBP<90	95% CI	% On medication and SBP \geq 140 and/or DBP \geq 90	95% CI	% Not on medication and SBP \geq 140 and/or DBP \geq 90	95% CI
18-29	260	2.5	0.7-4.4	0.3	0.0-0.7	97.2	95.3-99.0
30-49	419	1.9	0.6-3.2	3.7	1.8-5.5	94.4	92.1-96.7
50-69	309	2.2	0.7-3.7	8.7	5.0-12.5	89.1	85.0-93.1
18-69	988	2.2	1.3-3.0	4.3	2.8-5.7	93.5	91.8-95.3

Mean heart rate Description: Mean heart rate (beats per minute).

Instrument question:

- Reading 1-3 heart rate

Mean heart rate (beats per minute)									
Age Group (years)	Men			Women			Both Sexes		
	n	mean	95% CI	n	mean	95% CI	n	mean	95% CI
18-29	643	68.6	67.3-70.0	939	80.2	78.8-81.5	1582	74.8	73.7-75.8
30-49	666	70.1	68.8-71.5	980	77.8	76.7-78.9	1646	74.0	73.1-75.0
50-69	261	72.1	70.3-73.9	417	75.7	74.4-76.9	678	73.9	72.7-75.1
18-69	1570	69.8	68.9-70.7	2336	78.6	77.7-79.4	3906	74.4	73.7-75.0

Height, weight and BMI Description: Mean height, weight, and body mass index among all respondents (excluding pregnant women).

Instrument questions:

- For women: Are you pregnant?
- Height
- Weight

Mean height (cm)						
Age Group (years)	Men			Women		
	n	Mean	95% CI	n	Mean	95% CI
18-29	641	166.3	165.6-167.1	793	157.3	156.6-158.1
30-49	665	167.4	166.6-168.2	915	158.6	158.0-159.2
50-69	259	167.4	166.0-168.8	414	157.2	156.1-158.4
18-69	1565	166.9	166.4-167.5	2122	157.8	157.3-158.3

Mean weight (kg)						
Age Group (years)	Men			Women		
	n	Mean	95% CI	n	Mean	95% CI
18-29	641	60.7	59.0-62.5	793	56.8	55.7-57.9
30-49	664	61.7	60.5-62.9	916	60.2	59.1-61.4
50-69	258	59.6	57.5-61.7	414	58.8	56.7-60.9
18-69	1563	60.9	59.9-61.9	2123	58.5	57.6-59.3

Mean BMI (kg/m ²)									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
18-29	638	21.7	21.4-22.0	792	22.9	22.5-23.2	1430	22.3	22.0-22.5
30-49	661	22.0	21.7-22.4	912	23.9	23.5-24.4	1573	23.0	22.7-23.3
50-69	254	21.2	20.6-21.8	413	23.7	23.0-24.4	667	22.5	22.0-22.9
18-69	1553	21.7	21.5-22.0	2117	23.4	23.1-23.7	3670	22.6	22.4-22.8

BMI categories Description: Percentage of respondents (excluding pregnant women) in each BMI category.

Instrument questions:

- For women: Are you pregnant?
- Height
- Weight

BMI classifications									
Age Group (years)	Men								
	n	% Under-weight <18.5	95% CI	% Normal weight 18.5-24.9	95% CI	% BMI 25.0-29.9	95% CI	% Obese ≥30.0	95% CI
18-29	638	5.6	3.5-7.7	86.4	83.1-89.7	7.1	4.3-9.9	0.9	0.1-1.7
30-49	661	10.7	7.5-13.9	74.3	70.2-78.5	12.1	9.2-15.0	2.8	1.1-4.6
50-69	254	20.9	14.0-27.7	67.6	59.4-75.9	9.9	4.9-14.9	1.6	0.0-3.6
18-69	1553	10.1	8.0-12.2	78.5	75.9-81.1	9.5	7.7-11.4	1.8	1.0-2.6

BMI classifications									
Age Group (years)	Women								
	n	% Under-weight <18.5	95% CI	% Normal weight 18.5-24.9	95% CI	% BMI 25.0-29.9	95% CI	% Obese ≥30.0	95% CI
18-29	792	4.8	2.8-6.8	74.8	71.1-78.5	15.9	12.6-19.1	4.5	3.0-6.1
30-49	912	6.8	4.7-8.9	60.8	56.9-64.7	22.2	19.0-25.4	10.2	7.2-13.2
50-69	413	12.1	8.0-16.3	55.9	49.2-62.6	22.7	16.4-29.0	9.2	5.6-12.8
18-69	2117	6.8	5.2-8.5	66.1	63.4-68.8	19.5	17.1-21.9	7.5	6.0-9.1

BMI classifications									
Age Group (years)	Both Sexes								
	n	% Under-weight <18.5	95% CI	% Normal weight 18.5-24.9	95% CI	% BMI 25.0-29.9	95% CI	% Obese ≥30.0	95% CI
18-29	1430	5.2	3.5-6.8	80.7	78.0-83.3	11.4	9.4-13.5	2.7	1.9-3.6
30-49	1573	8.8	6.7-10.8	67.7	64.7-70.7	17.1	14.8-19.4	6.5	4.6-8.3
50-69	667	16.5	12.6-20.4	61.7	56.2-67.3	16.4	12.0-20.7	5.4	3.2-7.6
18-69	3670	8.5	7.0-10.0	72.4	70.4-74.4	14.5	12.9-16.1	4.6	3.7-5.6

BMI ≥25 Description: Percentage of respondents (excluding pregnant women) classified as overweight (BMI≥25).

Instrument questions:

- For women: Are you pregnant?
- Height
- Weight

BMI≥25									
Age Group (years)	Men			Women			Both Sexes		
	n	% BMI≥25	95% CI	n	% BMI≥25	95% CI	n	% BMI≥25	95% CI
18-29	638	8.0	5.1-10.9	792	20.4	16.9-23.9	1430	14.1	11.8-16.5
30-49	661	15.0	11.7-18.2	912	32.4	28.4-36.3	1573	23.6	20.8-26.3
50-69	254	11.5	6.2-16.9	413	32.0	25.2-38.7	667	21.8	17.0-26.6
18-69	1553	11.3	9.3-13.3	2117	27.1	24.2-29.9	3670	19.1	17.2-21.0

Waist circumference Description: Mean waist circumference among all respondents (excluding pregnant women).

Instrument questions:

- For women: Are you pregnant?
- Waist circumference measurement

Waist circumference (cm)						
Age Group (years)	Men			Women		
	n	Mean	95% CI	n	Mean	95% CI
18-29	639	75.0	74.4-75.5	789	77.3	76.3-78.2
30-49	664	78.5	77.6-79.4	911	82.0	81.1-82.9
50-69	258	79.4	77.9-80.8	414	84.1	81.8-86.3
18-69	1561	77.1	76.6-77.6	2114	80.3	79.5-81.0

Hip circumference Description: Mean hip circumference among all respondents (excluding pregnant women).

Instrument questions:

- For women: Are you pregnant?
- Hip circumference measurement

Hip circumference (cm)						
Age Group (years)	Men			Women		
	n	Mean	95% CI	n	Mean	95% CI
18-29	639	89.4	88.6-90.3	788	92.9	91.9-93.9
30-49	664	92.0	90.8-93.1	911	95.8	94.7-96.8
50-69	258	89.7	88.2-91.3	414	96.7	94.8-98.5
18-69	1561	90.5	89.8-91.2	2113	94.7	93.9-95.4

Waist / hip ratio Description: Mean waist-to-hip ratio among all respondents (excluding pregnant women).

Instrument questions:

- For women: Are you pregnant?
- Waist circumference measurement
- Hip circumference measurement

Mean waist / hip ratio						
Age Group (years)	Men			Women		
	n	Mean	95% CI	n	Mean	95% CI
18-29	639	0.8	0.8-0.8	788	0.8	0.8-0.8
30-49	664	0.9	0.9-0.9	911	0.9	0.9-0.9
50-69	258	0.9	0.9-0.9	414	0.9	0.9-0.9
18-69	1561	0.9	0.9-0.9	2113	0.8	0.8-0.9

Biochemical Measurements

Mean fasting blood glucose Description: mean fasting blood glucose results including those currently on medication for diabetes (non-fasting recipients excluded).

Instrument questions:

- During the last 12 hours have you had anything to eat or drink, other than water?
- Blood glucose measurement

Mean fasting blood glucose (mmol/L)									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
18-29	601	3.7	3.6-3.8	893	3.8	3.7-3.9	1494	3.8	3.7-3.9
30-49	622	4.0	3.8-4.1	936	4.0	3.9-4.1	1558	4.0	3.9-4.1
50-69	244	3.8	3.6-4.0	393	4.1	3.9-4.3	637	4.0	3.8-4.1
18-69	1467	3.8	3.7-3.9	2222	3.9	3.9-4.0	3689	3.9	3.8-4.0

Mean fasting blood glucose (mg/dl)									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
18-29	601	67.0	64.9-69.0	893	68.9	67.3-70.4	1494	68.0	66.5-69.4
30-49	622	71.5	68.6-74.5	936	71.6	69.5-73.8	1558	71.6	69.7-73.5
50-69	244	68.7	64.8-72.6	393	74.1	71.0-77.1	637	71.4	68.7-74.0
18-69	1467	69.1	67.2-71.0	2222	70.7	69.4-72.1	3689	69.9	68.6-71.3

Raised blood glucose Description: Categorization of respondents into blood glucose level categories and percentage of respondents currently on medication for raised blood glucose (non-fasting recipients excluded).

Instrument questions:

- In the past two weeks, have you taken any drugs (medication) for diabetes prescribed by a doctor or other health worker?
- Are you currently taking insulin for diabetes prescribed by a doctor or other health worker?
- During the last 12 hours have you had anything to eat or drink, other than water?
- Blood glucose measurement
- Today, have you taken insulin or other drugs (medication) that have been prescribed by a doctor or other health worker?

Men: Blood glucose measurements and diagnosis

agerange	n	1) blood glucose <6.1	95% CI	2) blood glucose >=6.1 AND <7.0	95% CI	3) blood glucose >=7.0 or took meds today	95% CI
18-29	601	97.0	95.5-98.6	2.7	1.2-4.2	0.2	0.0-0.6
30-49	622	95.3	92.7-98.0	1.9	0.8-2.9	2.8	0.3-5.3
50-69	244	96.5	93.3-99.6	0.7	0.0-1.4	2.9	0.0-5.9
TOTAL	1467	96.3	94.9-97.6	2.0	1.2-2.8	1.7	0.6-2.8

Women: Blood glucose measurements and diagnosis

agerange	n	1) blood glucose <6.1	95% CI	2) blood glucose >=6.1 AND <7.0	95% CI	3) blood glucose >=7.0 or took meds today	95% CI
18-29	893	97.7	96.7-98.8	2.0	1.0-3.0	0.3	0.0-0.7
30-49	936	97.0	95.6-98.5	1.4	0.5-2.2	1.6	0.6-2.7
50-69	393	95.3	92.7-97.9	3.2	0.9-5.4	1.5	0.2-2.9
TOTAL	2222	97.1	96.2-97.9	1.9	1.2-2.6	1.0	0.5-1.5

Both Sexes: Blood glucose measurements and diagnosis

agerange	n	1) blood glucose <6.1	95% CI	2) blood glucose >=6.1 AND <7.0	95% CI	3) blood glucose >=7.0 or took meds today	95% CI
18-29	1494	97.4	96.5-98.3	2.3	1.5-3.2	0.3	0.0-0.5
30-49	1558	96.2	94.7-97.7	1.6	0.9-2.3	2.2	0.9-3.5
50-69	637	95.9	93.9-97.9	1.9	0.7-3.1	2.2	0.5-3.9
TOTAL	3689	96.7	95.9-97.5	2.0	1.5-2.5	1.3	0.7-1.9

Currently on medication for diabetes									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	602	0.2	0.0-0.5	898	0.0	0.0-0.1	1500	0.1	0.0-0.3
30-49	628	0.5	0.0-1.0	942	0.4	0.1-0.7	1570	0.4	0.1-0.7
50-69	248	2.1	0.0-4.8	397	1.5	0.2-2.8	645	1.8	0.3-3.3
18-69	1478	0.6	0.1-1.2	2237	0.4	0.2-0.6	3715	0.5	0.2-0.8

Total cholesterol

Description: Mean total cholesterol among all respondents including those currently on medication for raised cholesterol.

Instrument question:

- Total cholesterol measurement

Mean total cholesterol (mmol/L)											
Age Group (years)	Men				Women			Both Sexes			
	n	Mean	95% CI		n	Mean	95% CI	n	Mean	95% CI	
18-29	602	3.0	3.0-3.1		898	3.4	3.4-3.5		1500	3.2	3.2-3.3
30-49	628	3.4	3.3-3.5		942	3.7	3.6-3.8		1570	3.5	3.5-3.6
50-69	248	3.5	3.4-3.7		397	3.9	3.8-4.1		645	3.7	3.6-3.9
18-69	1478	3.3	3.2-3.3		2237	3.6	3.5-3.7		3715	3.4	3.4-3.5

Mean total cholesterol (mg/dl)									
Age Group (years)	Men			Women			Both Sexes		
	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
18-29	602	117.4	114.8-120.1	898	132.6	129.6-135.7	1500	125.5	123.2-127.8
30-49	628	131.0	127.3-134.7	942	141.8	138.3-145.4	1570	136.5	133.6-139.4
50-69	248	137.2	130.0-144.4	397	151.9	145.3-158.4	645	144.5	139.3-149.7
18-69	1478	126.1	123.5-128.7	2237	139.1	136.5-141.8	3715	132.8	130.6-135.0

Raised total cholesterol Description: Percentage of respondents with raised total cholesterol and percentage of respondents currently on medication for raised cholesterol.

Instrument questions:

- Total cholesterol measurement
- During the past two weeks, have you been treated for raised cholesterol with drugs (medication) prescribed by a doctor or other health worker?

Total cholesterol ≥ 5.0 mmol/L or ≥ 190 mg/dl or currently on medication for raised cholesterol									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	602	1.0	0.1-2.0	898	6.3	4.1-8.4	1500	3.8	2.5-5.1
30-49	628	5.9	3.7-8.2	942	10.2	7.7-12.7	1570	8.1	6.4-9.8
50-69	248	9.3	5.1-13.6	397	13.4	9.0-17.8	645	11.4	8.1-14.6
18-69	1478	4.4	3.1-5.6	2237	8.9	7.2-10.5	3715	6.7	5.6-7.8

Total cholesterol ≥ 6.2 mmol/L or ≥ 240 mg/dl or currently on medication for raised cholesterol									
Age Group (years)	Men			Women			Both Sexes		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	602	0.0	0.0-0.1	898	1.0	0.3-1.7	1500	0.5	0.2-0.9
30-49	628	1.4	0.4-2.5	942	1.7	0.6-2.8	1570	1.6	0.8-2.3
50-69	248	3.8	0.8-6.8	397	3.6	1.2-6.0	645	3.7	1.7-5.7
18-69	1478	1.2	0.6-1.9	2237	1.7	1.0-2.4	3715	1.5	1.0-1.9

High density lipoprotein (HDL) Description: Mean HDL among all respondents and percentage of respondents with low HDL.

Instrument question:
· HDL cholesterol measurement

Mean HDL (mmol/L)											
Age Group (years)	Men				Women			Both Sexes			
	n	Mean	95% CI		n	Mean	95% CI	n	Mean	95% CI	
18-29	602	0.9	0.9-0.9		894	1.1	1.1-1.2		1496	1.0	1.0-1.0
30-49	628	1.1	1.0-1.1		941	1.2	1.1-1.2		1569	1.1	1.1-1.1
50-69	248	1.2	1.1-1.2		396	1.1	1.1-1.2		644	1.1	1.1-1.2
18-69	1478	1.0	1.0-1.0		2231	1.1	1.1-1.2		3709	1.1	1.0-1.1

Mean HDL (mg/dl)										
Age Group (years)	Men				Women			Both Sexes		
	n	Mean	95% CI		n	Mean	95% CI	n	Mean	95% CI
18-29	602	34.8	33.2-36.5		894	42.9	41.1-44.7	1496	39.1	37.8-40.4
30-49	628	41.1	39.1-43.2		941	44.6	43.2-46.0	1569	42.9	41.5-44.2
50-69	248	45.0	41.9-48.1		396	43.6	41.3-45.9	644	44.3	42.2-46.3
18-69	1478	39.0	37.7-40.4		2231	43.7	42.5-44.8	3709	41.4	40.4-42.4

Percentage of respondents with HDL <1.03mmol/L or <40 mg/dl			
Age Group (years)	Men		
	n	%	95% CI
18-29	602	70.1	65.3-75.0
30-49	628	54.7	49.4-60.1
50-69	248	45.2	35.1-55.3
18-69	1478	59.9	56.1-63.6
Percentage of respondents with HDL <1.29mmol/L or <50 mg/dl			
Age Group (years)	Women		
	n	%	95% CI
18-29	894	67.5	62.9-72.1
30-49	941	67.8	64.2-71.4
50-69	396	71.8	66.0-77.6
18-69	2231	68.3	65.4-71.2

Cardiovascular disease risk

CVD risk of $\geq 30\%$ or existing CVD Description: Percentage of respondents aged 40-69 years with a 10-year cardiovascular disease (CVD) risk* $\geq 30\%$ or with existing CVD

Instrument questions: combined from Step 1, 2 and 3

- Gender, age
- Current and former smoking
- History of diabetes, CVD
- Systolic blood pressure measurements
- Fasting status, glucose and total cholesterol measurements.

Percentage of respondents with a 10-year CVD risk ≥30% or with existing CVD											
Age Group (years)	Men				Women				Both Sexes		
	n	%	95% CI		n	%	95% CI		n	%	95% CI
40-54	344	6.4	3.4-9.4		497	12.4	8.4-16.3		841	9.4	6.8-11.9
55-69	140	7.6	2.7-12.5		237	17.7	11.0-24.3		377	12.5	8.5-16.6
40-69	484	6.9	4.1-9.6		734	14.2	10.6-17.8		1218	10.5	8.1-12.9

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Drug therapy and counseling for those with CVD risk $\geq 30\%$ or existing CVD

Description: Percentage of eligible persons (defined as aged 40-69 years with a 10-year cardiovascular disease (CVD) risk* $\geq 30\%$, including those with existing CVD) receiving drug therapy and counseling** (including glycaemic control) to prevent heart attacks and strokes.

Instrument questions: combined from Step 1, 2 and 3

- Gender, age
- Current and former smoking
- History of diabetes, CVD
- Lifestyle advice
- Systolic blood pressure measurements
- Fasting status, glucose and total cholesterol measurements.

Percentage of eligible persons receiving drug therapy and counseling to prevent heart attacks and strokes										
Age Group (years)	Men				Women			Both Sexes		
	n	%	95% CI		n	%	95% CI	n	%	95% CI
40-54	26	18.7	0.0-38.9		56	14.0	0.6-27.3	82	15.6	4.6-26.6
55-69	15	9.0	0.0-22.4		40	11.6	0.0-25.4	55	10.8	0.4-21.1
40-69	41	14.9	1.1-28.6		96	12.9	3.1-22.7	137	13.6	5.7-21.4

* A 10-year CVD risk of $\geq 30\%$ is defined according to age, sex, blood pressure, smoking status (current smokers OR those who quit smoking less than 1 year before the assessment), total cholesterol, and diabetes (previously diagnosed OR a fasting plasma glucose concentration >7.0 mmol/l (126 mg/dl)).

Summary of Combined Risk Factors

Summary of Combined Risk Factors Description: Percentage of respondents with 0, 1-2, or 3-5 of the following risk factors:

- Current daily smoking
- Less than five servings of fruit and/or vegetables per day
- Not meeting WHO recommendations on physical activity for health (<150 minutes of moderate activity per week, or equivalent)
- Overweight or obese (BMI ≥ 25 kg/m²)
- Raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP).

Instrument questions: combined from Step 1 and Step 2

Summary of Combined Risk Factors							
Age Group (years)	Men						
	n	% with 0 risk factors	95% CI	% with 1-2 risk factors	95% CI	% with 3-5 risk factors	95% CI
18-44	1151	6.0	4.0-7.9	88.3	85.9-90.6	5.8	4.2-7.3
45-69	342	6.3	3.2-9.3	75.1	67.7-82.5	18.6	11.1-26.2
18-69	1493	6.0	4.2-7.8	85.4	82.8-88.0	8.5	6.3-10.7

Summary of Combined Risk Factors							
Age Group (years)	Women						
	n	% with 0 risk factors	95% CI	% with 1-2 risk factors	95% CI	% with 3-5 risk factors	95% CI
18-44	1481	7.9	5.8-10.0	84.7	82.3-87.1	7.4	5.6-9.2
45-69	566	5.1	2.8-7.5	71.9	66.5-77.2	23.0	17.6-28.3
18-69	2047	7.3	5.6-9.0	81.7	79.4-84.1	11.0	9.0-13.0

Summary of Combined Risk Factors							
Age Group (years)	Both Sexes						
	n	% with 0 risk factors	95% CI	% with 1-2 risk factors	95% CI	% with 3-5 risk factors	95% CI
18-44	2632	6.9	5.3-8.5	86.5	84.7-88.4	6.6	5.3-7.8
45-69	908	5.7	3.7-7.7	73.4	68.8-78.1	20.9	16.1-25.6
18-69	3540	6.6	5.2-8.1	83.6	81.7-85.5	9.8	8.1-11.4

Oral Health

Percentage of respondents having natural teeth Description: Percentage of respondents who have no natural teeth, 1-9 natural teeth, 10-19 natural teeth, or 20 or more natural teeth.

Instrument question:
· How many natural teeth do you have?

Percentage of respondents with natural teeth									
Age Group (years)	Men								
	n	% No natural teeth	95% CI	% 1 - 9 natural teeth	95% CI	% 10 - 19 natural teeth	95% CI	% ≥ 20 natural teeth	95% CI
18-29	649	0.1	0.0-0.3	0.0	0.0-0.0	2.2	0.7-3.7	97.7	96.2-99.2
30-49	658	0.0	0.0-0.0	0.0	0.0-0.0	2.6	1.4-3.8	97.4	96.2-98.6
50-69	260	0.0	0.0-0.0	1.0	0.0-2.1	7.0	3.4-10.6	92.0	88.2-95.8
18-69	1567	0.0	0.0-0.1	0.2	0.0-0.4	3.2	2.1-4.3	96.6	95.4-97.7

Percentage of respondents with natural teeth									
Age Group (years)	Women								
	n	% No natural teeth	95% CI	% 1 - 9 natural teeth	95% CI	% 10 - 19 natural teeth	95% CI	% ≥ 20 natural teeth	95% CI
18-29	934	0.0	0.0-0.0	0.0	0.0-0.0	2.1	0.8-3.3	97.9	96.7-99.2
30-49	980	1.0	0.0-2.4	0.0	0.0-0.1	4.3	2.7-5.8	94.7	92.4-97.0
50-69	413	0.4	0.0-0.9	1.0	0.1-1.9	13.4	8.1-18.6	85.3	80.0-90.6
18-69	2327	0.4	0.0-1.0	0.2	0.0-0.3	4.7	3.5-5.9	94.7	93.4-96.1

Percentage of respondents with natural teeth									
Age Group (years)	Both Sexes								
	n	% No natural teeth	95% CI	% 1 - 9 natural teeth	95% CI	% 10 - 19 natural teeth	95% CI	% ≥ 20 natural teeth	95% CI
18-29	1583	0.0	0.0-0.1	0.0	0.0-0.0	2.1	1.1-3.1	97.8	96.8-98.8
30-49	1638	0.5	0.0-1.2	0.0	0.0-0.0	3.5	2.5-4.5	96.0	94.7-97.3
50-69	673	0.2	0.0-0.4	1.0	0.2-1.8	10.1	6.7-13.5	88.7	85.2-92.1
18-69	3894	0.2	0.0-0.5	0.2	0.0-0.3	4.0	3.0-4.9	95.6	94.7-96.6

Percentage of respondents having poor or very poor state of teeth Description: Percentage of respondents having a poor or very poor state of teeth among those having natural teeth.

Instrument question:
· How would you describe the state of your teeth?

Percentage of respondents having poor or very poor state of teeth among those having natural teeth										
Age Group (years)	Men				Women			Both Sexes		
	n	% having poor or very poor state of teeth	95% CI		n	% having poor or very poor state of teeth	95% CI	n	% having poor or very poor state of teeth	95% CI
18-29	653	7.5	5.1-10.0		945	10.3	7.5-13.1	1598	9.0	7.0-11.0
30-49	674	11.9	8.7-15.0		991	14.3	11.5-17.0	1665	13.1	11.1-15.1
50-69	264	17.5	11.6-23.4		419	31.7	25.8-37.6	683	24.6	20.2-29.0
18-69	1591	10.9	9.2-12.7		2355	15.1	13.1-17.2	3946	13.1	11.7-14.5

Percentage of respondents having poor or very poor state of gums Description: Percentage of respondents having a poor or very poor state of gums among those having natural teeth.

Instrument question:
· How would you describe the state of your teeth?

Percentage of respondents having poor or very poor state of gums among those having natural teeth									
Age Group (years)	Men			Women			Both Sexes		
	n	% having poor or very poor state of gums	95% CI	n	% having poor or very poor state of gums	95% CI	n	% having poor or very poor state of gums	95% CI
18-29	653	4.6	2.6-6.6	943	6.1	3.9-8.3	1596	5.4	3.8-7.1
30-49	672	9.4	6.4-12.5	990	8.0	5.9-10.1	1662	8.7	6.9-10.5
50-69	264	17.7	9.5-25.9	420	19.7	14.7-24.6	684	18.7	13.9-23.5
18-69	1589	8.7	6.6-10.8	2353	8.9	7.3-10.6	3942	8.8	7.5-10.2

Percentage of respondents having removable dentures Description: Percentage of respondents having removable dentures.

Instrument question:
· Do you have any removable dentures?

Percentage of respondents having removable dentures									
Age Group (years)	Men			Women			Both Sexes		
	n	% Having removable dentures	95% CI	n	% Having removable dentures	95% CI	n	% Having removable dentures	95% CI
18-29	660	4.9	3.0-6.9	954	7.4	4.8-9.9	1614	6.2	4.5-8.0
30-49	675	7.3	4.9-9.7	998	9.2	6.5-11.9	1673	8.3	6.2-10.3
50-69	264	12.5	6.9-18.2	422	7.9	4.7-11.1	686	10.2	6.9-13.5
18-69	1599	7.1	5.3-9.0	2374	8.2	6.2-10.1	3973	7.7	6.1-9.2

Type of removable dentures among those having removable dentures Description: Percentage of respondents who have an upper jaw denture, a lower jaw denture, or an upper and a lower jaw denture among those having removable dentures.

Instrument questions:
• Do you have any removable dentures?
· Which of the following removable dentures do you have?

Percentage of respondents having an upper jaw denture among those having removable dentures									
Age Group (years)	Men			Women			Both Sexes		
	n	% Having an upper jaw denture	95% CI	n	% Having an upper jaw denture	95% CI	n	% Having an upper jaw denture	95% CI
18-29	41	58.3	39.6-77.0	80	31.6	21.6-41.6	121	41.4	31.2-51.7
30-49	61	65.8	50.9-80.8	102	71.2	59.5-83.0	163	68.9	59.2-78.6
50-69	34	78.9	61.7-96.2	39	63.8	43.9-83.7	73	73.1	59.0-87.2
18-69	136	67.4	57.2-77.6	221	53.4	44.7-62.1	357	59.7	52.6-66.8

Percentage of respondents having a lower jaw denture among those having removable dentures									
Age Group (years)	Men			Women			Both Sexes		
	n	% Having a lower jaw denture	95% CI	n	% Having a lower jaw denture	95% CI	n	% Having a lower jaw denture	95% CI
18-29	41	72.6	56.2-89.0	80	78.5	69.2-87.8	121	76.3	67.3-85.3
30-49	61	63.9	48.0-79.8	102	83.1	74.5-91.7	163	74.9	66.8-83.0
50-69	34	75.4	55.6-95.2	39	91.5	83.9-99.1	73	81.6	69.0-94.2
18-69	136	70.0	59.2-80.7	221	82.4	76.9-88.0	357	76.9	71.2-82.5

Percentage of respondents having an upper and a lower jaw denture among those having removable dentures									
Age Group (years)	Men			Women			Both Sexes		
	n	% Having an upper and a lower jaw denture	95% CI	n	% Having an upper and a lower jaw denture	95% CI	n	% Having an upper and a lower jaw denture	95% CI
18-29	41	30.9	14.4-47.3	80	16.8	8.5-25.0	121	22.0	14.0-29.9
30-49	61	33.1	19.3-46.9	102	54.4	42.7-66.0	163	45.3	36.2-54.3
50-69	34	58.6	35.0-82.2	39	55.3	35.8-74.7	73	57.3	40.9-73.7
18-69	136	40.0	28.5-51.4	221	38.7	30.6-46.7	357	39.2	32.4-46.1

Percentage of respondents having oral pain or discomfort Description: Percentage of respondents who have pain or discomfort caused by their teeth or mouth during the past 12 months.

having oral pain or discomfort

Instrument question:

- During the past 12 months, did your teeth or mouth cause any pain or discomfort?

Percentage having oral pain or discomfort									
Age Group (years)	Men			Women			Both Sexes		
	n	% Having oral pain or discomfort	95% CI	n	% Having oral pain or discomfort	95% CI	n	% Having oral pain or discomfort	95% CI
18-29	660	31.8	27.1-36.5	954	39.5	35.3-43.7	1614	35.9	32.6-39.2
30-49	675	39.7	35.2-44.3	998	42.4	37.8-47.0	1673	41.1	37.6-44.6
50-69	264	46.7	37.3-56.1	422	51.0	44.3-57.6	686	48.8	43.2-54.5
18-69	1599	37.4	34.0-40.8	2374	42.4	39.1-45.7	3973	40.0	37.4-42.6

Percentage of respondents having seen a dentist during the past 12 months Description: Percentage of respondents having seen a dentist during the past 12 months.

Instrument question:
· How long has it been since you last saw a dentist?

Percentage of respondents having seen a dentist during the past 12 months									
Age Group (years)	Men			Women			Both Sexes		
	n	% having seen a dentist during the past 12 months	95% CI	n	% having seen a dentist during the past 12 months	95% CI	n	% having seen a dentist during the past 12 months	95% CI
18-29	660	11.0	7.8-14.2	954	14.6	11.3-18.0	1614	12.9	10.5-15.4
30-49	675	10.7	7.3-14.2	998	14.7	11.8-17.7	1673	12.8	10.6-15.0
50-69	264	9.7	5.9-13.5	422	13.8	9.4-18.1	686	11.7	8.9-14.6
18-69	1599	10.7	8.6-12.7	2374	14.5	12.5-16.6	3973	12.7	11.2-14.2

Percentage of respondents who have never received dental care Description: Percentage of respondents who have never received dental care.

Instrument question:
· How long has it been since you last saw a dentist?

Percentage of respondents who have never received dental care									
Age Group (years)	Men			Women			Both Sexes		
	n	% never received dental care	95% CI	n	% never received dental care	95% CI	n	% never received dental care	95% CI
18-29	660	65.6	60.4-70.9	954	61.1	56.6-65.6	1614	63.2	59.5-66.9
30-49	675	55.4	50.4-60.4	998	50.8	45.9-55.6	1673	53.0	49.4-56.6
50-69	264	54.9	45.2-64.5	422	47.1	40.1-54.0	686	51.0	45.0-56.9
18-69	1599	59.8	55.8-63.8	2374	55.0	51.6-58.4	3973	57.3	54.4-60.2

Main reason for last visit to the dentist among those who ever visited a dentist

Description: Main reason for last visit to the dentist among those who ever visited a dentist.

Instrument question:

- What was the reason for your last visit to the dentist?

Main reason for last visit to the dentist among those who ever visited a dentist									
Age Group (years)	Men								
	n	% Consultation/ advice	95% CI	% Pain or trouble with teeth or gums	95% CI	% Follow-up treatment	95% CI	% Routine check-up treatment	95% CI
18-29	247	4.0	1.4-6.6	74.9	67.7-82.1	20.8	13.8-27.8	0.3	0.0-0.7
30-49	307	3.4	0.7-6.1	71.4	63.7-79.1	25.0	18.3-31.8	0.2	0.0-0.5
50-69	132	2.8	0.0-5.9	83.7	75.5-91.9	13.4	5.9-20.8	0.1	0.0-0.4
18-69	686	3.5	1.8-5.2	75.1	70.3-79.8	21.2	16.8-25.6	0.2	0.1-0.4

Main reason for last visit to the dentist among those who ever visited a dentist									
Age Group (years)	Women								
	n	% Consultation/ advice	95% CI	% Pain or trouble with teeth or gums	95% CI	% Follow-up treatment	95% CI	% Routine check-up treatment	95% CI
18-29	372	5.0	0.3-9.7	79.2	73.2-85.1	13.8	9.7-17.9	2.0	0.4-3.6
30-49	516	1.7	0.4-3.0	84.2	79.8-88.6	13.6	9.4-17.8	0.5	0.0-1.2
50-69	227	3.4	0.0-6.9	78.9	71.1-86.7	17.1	9.6-24.5	0.6	0.0-1.5
18-69	1115	3.3	1.2-5.5	81.2	77.7-84.7	14.3	11.3-17.4	1.2	0.4-1.9

Main reason for last visit to the dentist among those who ever visited a dentist									
Age Group (years)	Both Sexes								
	n	% Consultation/ advice	95% CI	% Pain or trouble with teeth or gums	95% CI	% Follow-up treatment	95% CI	% Routine check-up treatment	95% CI
18-29	619	4.6	1.7-7.5	77.3	72.6-82.0	16.8	12.9-20.8	1.3	0.3-2.2
30-49	823	2.5	1.0-3.9	78.2	73.8-82.7	18.9	14.9-22.9	0.4	0.0-0.8
50-69	359	3.1	0.8-5.4	81.1	75.4-86.9	15.4	10.0-20.8	0.4	0.0-0.9
18-69	1801	3.4	2.0-4.8	78.4	75.3-81.5	17.4	14.6-20.3	0.7	0.3-1.2

Percentage cleaning teeth at least once / at least twice a day

Description: Percentage of respondents cleaning their teeth at least once / at least twice a day.

Instrument question:
· How often do you clean your teeth?

Percentage of respondents cleaning their teeth at least once a day									
Age Group (years)	Men			Women			Both Sexes		
	n	% cleaning teeth at least daily	95% CI	n	% cleaning teeth at least daily	95% CI	n	% cleaning teeth at least daily	95% CI
18-29	660	90.9	87.8-94.0	954	91.5	88.8-94.3	1614	91.3	89.0-93.6
30-49	675	89.7	86.2-93.2	998	93.1	90.8-95.4	1673	91.4	89.3-93.6
50-69	264	83.3	74.8-91.7	422	92.0	88.8-95.2	686	87.6	82.9-92.4
18-69	1599	89.2	86.3-92.0	2374	92.2	90.4-94.0	3973	90.7	88.9-92.6

Percentage of respondents cleaning their teeth at least twice a day									
Age Group (years)	Men			Women			Both Sexes		
	n	% cleaning teeth at least twice a day	95% CI	n	% cleaning teeth at least twice a day	95% CI	n	% cleaning teeth at least twice a day	95% CI
18-29	660	41.2	35.7-46.7	954	49.2	44.1-54.3	1614	45.5	41.4-49.6
30-49	675	35.8	30.2-41.4	998	42.3	37.8-46.8	1673	39.1	35.1-43.2
50-69	264	24.7	17.6-31.7	422	32.1	25.6-38.6	686	28.4	23.3-33.5
18-69	1599	36.3	32.4-40.2	2374	43.9	40.4-47.5	3973	40.3	37.1-43.4

Percentage of respondents using toothpaste Description: Percentage of respondents using toothpaste among those cleaning their teeth.

using

toothpaste

Instrument question:

- Do you use toothpaste to clean your teeth?

Percentage of respondents using toothpaste among those cleaning their teeth									
Age Group (years)	Men			Women			Both Sexes		
	n	% using toothpaste	95% CI	n	% using toothpaste	95% CI	n	% using toothpaste	95% CI
18-29	659	77.2	72.1-82.3	953	71.7	67.0-76.4	1612	74.3	70.6-77.9
30-49	668	63.5	58.0-69.0	997	61.9	57.2-66.5	1665	62.7	58.8-66.5
50-69	259	49.2	40.9-57.6	414	43.8	36.3-51.3	673	46.5	40.6-52.4
18-69	1586	67.2	63.2-71.1	2364	63.7	60.0-67.4	3950	65.4	62.3-68.4

Percentage of respondents using toothpaste containing fluoride Description: Percentage of respondents using toothpaste containing fluoride among those using toothpaste.

using

toothpaste

containing

fluoride

Instrument question:

- Do you use toothpaste containing fluoride?

Percentage of respondents using toothpaste containing fluoride among those using toothpaste									
Age Group (years)	Men			Women			Both Sexes		
	n	% using toothpaste containing fluoride	95% CI	n	% using toothpaste containing fluoride	95% CI	n	% using toothpaste containing fluoride	95% CI
18-29	618	74.7	69.4-80.0	896	67.4	62.5-72.4	1514	70.8	67.0-74.6
30-49	617	59.5	53.7-65.3	928	56.2	51.2-61.1	1545	57.8	53.7-61.8
50-69	248	43.9	35.7-52.2	391	38.0	30.5-45.4	639	41.0	35.3-46.7
18-69	1483	63.5	59.4-67.6	2215	58.7	54.9-62.5	3698	61.0	57.9-64.2

Percentage using a various tools to clean teeth among those cleaning their teeth Description: Percentage of respondents who use a tooth brush, wooden toothpicks, plastic toothpicks, thread (dental floss), charcoal, chewstick/miswak or something else to clean their teeth among those cleaning their teeth.

Instrument question:
· Which of the following do you use to clean your teeth?

Percentage of respondents using various tools to clean teeth									
Age Group (years)	Men								
	n	% Tooth-brush	95% CI	% Wooden tooth-picks	95% CI	% Plastic tooth-picks	95% CI	% Thread (dental floss)	95% CI
18-29	659	79.9	75.1-84.8	29.1	24.4-33.8	2.3	0.1-4.5	0.8	0.3-1.3
30-49	668	69.8	64.7-74.9	32.9	28.2-37.6	1.2	0.0-2.4	2.0	0.6-3.4
50-69	259	55.2	46.8-63.6	39.4	29.6-49.2	0.6	0.0-1.6	1.1	0.0-2.5
18-69	1586	71.8	68.2-75.5	32.3	28.7-36.0	1.6	0.5-2.6	1.3	0.7-2.0

Percentage of respondents using various tools to clean teeth							
Age Group (years)	Men						
	n	% Charcoal	95% CI	% Chewstick/ miswak	95% CI	%Other	95% CI
18-29	659	9.6	6.8-12.3	37.7	32.0-43.5	6.4	4.2-8.6
30-49	668	11.4	8.7-14.0	47.3	41.6-53.1	9.6	6.9-12.4
50-69	259	15.6	10.1-21.2	45.2	35.6-54.8	9.7	5.7-13.6
18-69	1586	11.3	9.3-13.3	42.7	38.3-47.2	8.2	6.4-10.0

Percentage of respondents using various tools to clean teeth									
Age Group (years)	Women								
	n	% Tooth-brush	95% CI	% Wooden tooth-picks	95% CI	% Plastic tooth-picks	95% CI	% Thread (dental floss)	95% CI
18-29	953	76.3	71.8-80.9	29.2	25.1-33.4	1.5	0.2-2.7	0.3	0.0-0.6
30-49	997	68.3	64.1-72.5	32.0	27.6-36.4	1.1	0.3-1.9	1.0	0.4-1.6
50-69	414	50.8	43.6-58.1	31.3	25.2-37.4	0.5	0.0-1.1	0.4	0.0-0.9
18-69	2364	69.4	65.9-72.9	30.6	27.5-33.7	1.2	0.5-1.8	0.6	0.3-0.9

Percentage of respondents using various tools to clean teeth							
Age Group (years)	Women						
	n	% Charcoal	95% CI	% Chewstick/ miswak	95% CI	%Other	95% CI
18-29	953	14.1	11.3-16.9	42.1	37.1-47.1	9.1	6.8-11.5
30-49	997	15.1	12.2-18.0	41.2	36.3-46.2	8.7	6.6-10.9
50-69	414	20.1	14.5-25.7	45.5	39.2-51.9	7.8	4.7-10.9
18-69	2364	15.4	13.3-17.5	42.3	38.4-46.2	8.8	7.1-10.4

Percentage of respondents using various tools to clean teeth									
Age Group (years)	Both Sexes								
	n	% Tooth-brush	95% CI	% Wooden tooth-picks	95% CI	% Plastic tooth-picks	95% CI	% Thread (dental floss)	95% CI
18-29	1612	78.0	74.6-81.4	29.2	25.6-32.7	1.8	0.6-3.0	0.6	0.2-0.9
30-49	1665	69.0	65.4-72.7	32.5	28.9-36.1	1.1	0.4-1.9	1.5	0.7-2.3
50-69	673	53.0	47.3-58.8	35.4	29.4-41.4	0.5	0.0-1.1	0.8	0.0-1.5
18-69	3950	70.6	67.7-73.4	31.4	28.6-34.2	1.4	0.7-2.0	0.9	0.6-1.3

Percentage of respondents using various tools to clean teeth							
Age Group (years)	Both Sexes						
	n	% Charcoal	95% CI	% Chewstick/ miswak	95% CI	% Other	95% CI
18-29	1612	12.0	9.9-14.1	40.1	35.9-44.2	7.9	6.2-9.6
30-49	1665	13.3	11.3-15.4	44.2	39.7-48.7	9.2	7.4-11.0
50-69	673	17.8	13.6-22.1	45.4	39.3-51.5	8.8	6.3-11.2
18-69	3950	13.4	11.8-15.0	42.5	38.9-46.1	8.5	7.2-9.8

Percentage of respondents having difficulty in chewing foods Description: Percentage of respondents having difficulty in chewing foods during the past 12 months.

Instrument questions:

- Have you experienced any of the following problems during the past year because of the state of your teeth?
- Difficulty in chewing foods?

Percentage of respondents having difficulty in chewing foods during the past 12 months									
Age Group (years)	Men			Women			Both Sexes		
	n	% Difficulty in chewing foods	95% CI	n	% Difficulty in chewing foods	95% CI	n	% Difficulty in chewing foods	95% CI
18-29	660	29.2	24.9-33.5	954	35.4	31.3-39.6	1614	32.5	29.5-35.6
30-49	675	31.6	26.7-36.4	998	40.9	36.5-45.2	1673	36.3	33.0-39.7
50-69	264	43.8	34.3-53.4	422	47.0	40.8-53.1	686	45.4	39.8-51.0
18-69	1599	32.6	29.2-36.0	2374	39.3	36.4-42.2	3973	36.1	33.7-38.5

Percentage of respondents having difficulty with speech/trouble pronouncing words Description: Percentage of respondents having difficulty with speech/trouble pronouncing words during the past 12 months.

Instrument questions:

- Have you experienced any of the following problems during the past year because of the state of your teeth?
- Difficulty with speech/trouble pronouncing words?

Percentage of respondents having difficulty with speech/trouble pronouncing words during the past 12 months									
Age Group (years)	Men			Women			Both Sexes		
	n	% Difficulty with speech/ pronouncing words	95% CI	n	% Difficulty with speech/ pronouncing words	95% CI	n	% Difficulty with speech/ pronouncing words	95% CI
18-29	660	10.8	7.9-13.7	954	14.0	10.8-17.2	1614	12.5	10.2-14.7
30-49	675	12.9	9.7-16.1	998	19.7	16.2-23.2	1673	16.4	13.9-18.9
50-69	264	19.7	13.3-26.1	422	26.4	20.7-32.1	686	23.1	18.8-27.3
18-69	1599	13.1	11.0-15.2	2374	18.1	15.8-20.4	3973	15.7	14.0-17.4

Percentage of respondents feeling tense because of problems with teeth or mouth Description: Percentage of respondents feeling tense because of problems with teeth or mouth during the past 12 months.

Instrument questions:

- Have you experienced any of the following problems during the past year because of the state of your teeth?
- Felt tense because of problems with teeth or mouth?

Percentage of respondents feeling tense because of problems with teeth or mouth during the past 12 months									
Age Group (years)	Men			Women			Both Sexes		
	n	% Feeling tense because of problems with teeth or mouth	95% CI	n	% Feeling tense because of problems with teeth or mouth	95% CI	n	% Feeling tense because of problems with teeth or mouth	95% CI
18-29	660	17.7	14.3-21.2	954	24.1	20.2-28.0	1614	21.1	18.4-23.8
30-49	675	18.1	14.5-21.7	998	28.9	24.8-33.1	1673	23.7	20.9-26.4
50-69	264	21.0	14.4-27.5	422	34.5	28.7-40.2	686	27.7	23.3-32.1
18-69	1599	18.4	16.0-20.8	2374	27.6	24.8-30.3	3973	23.2	21.2-25.1

Percentage of respondents being embarrassed about appearance of teeth Description: Percentage of respondents being embarrassed about appearance of teeth during the past 12 months.

Instrument questions:

- Have you experienced any of the following problems during the past year because of the state of your teeth?
- Embarrassed about appearance of teeth?

Percentage of respondents being embarrassed because of appearance of teeth during the past 12 months									
Age Group (years)	Men			Women			Both Sexes		
	n	% Embarrassed because of appearance of teeth	95% CI	n	% Embarrassed because of appearance of teeth	95% CI	n	% Embarrassed because of appearance of teeth	95% CI
18-29	660	6.8	4.3-9.3	954	7.1	5.2-9.0	1614	7.0	5.3-8.7
30-49	675	6.7	4.5-9.0	998	11.7	9.1-14.3	1673	9.3	7.6-10.9
50-69	264	13.5	8.2-18.8	422	12.9	9.1-16.8	686	13.2	10.0-16.5
18-69	1599	7.9	6.2-9.7	2374	9.8	8.3-11.2	3973	8.9	7.7-10.1

Percentage of respondents avoiding smiling because of teeth Description: Percentage of respondents avoiding smiling because of teeth during the past 12 months.

Instrument questions:

- Have you experienced any of the following problems during the past year because of the state of your teeth?
- Avoid smiling because of teeth?

Percentage of respondents avoiding smiling because of teeth during the past 12 months									
Age Group (years)	Men			Women			Both Sexes		
	n	% Avoiding smiling because of teeth	95% CI	n	% Avoiding smiling because of teeth	95% CI	n	% Avoiding smiling because of teeth	95% CI
18-29	660	7.8	5.2-10.3	954	8.6	6.3-10.9	1614	8.2	6.4-10.0
30-49	675	9.1	6.4-11.8	998	14.0	11.0-16.9	1673	11.6	9.6-13.6
50-69	264	12.8	7.6-18.1	422	15.6	11.5-19.8	686	14.2	10.9-17.6
18-69	1599	9.1	7.3-11.0	2374	11.7	10.0-13.4	3973	10.5	9.2-11.8

Percentage of respondents with interruptions in sleep Description: Percentage of respondents whose sleep was often interrupted during the past 12 months.

Instrument questions:

- Have you experienced any of the following problems during the past year because of the state of your teeth?
- Sleep is often interrupted?

Percentage of respondents with interruptions in sleep during the past 12 months									
Age Group (years)	Men			Women			Both Sexes		
	n	% Sleep often interrupted	95% CI	n	% Sleep often interrupted	95% CI	n	% Sleep often interrupted	95% CI
18-29	660	18.3	14.4-22.2	954	21.6	17.7-25.5	1614	20.1	17.2-22.9
30-49	675	15.2	12.0-18.4	998	26.7	22.7-30.7	1673	21.1	18.4-23.8
50-69	264	20.6	14.3-26.8	422	26.4	21.0-31.7	686	23.5	19.2-27.7
18-69	1599	17.5	14.9-20.0	2374	24.3	21.5-27.0	3973	21.0	19.0-23.0

Percentage of respondents with days not at work because of teeth or mouth Description: Percentage of respondents with days not at work because of teeth or mouth during the past 12 months.

Instrument questions:

- Have you experienced any of the following problems during the past year because of the state of your teeth?
- Days not at work because of teeth or mouth?

Percentage of respondents with days not at work because of teeth or mouth during the past 12 months									
Age Group (years)	Men			Women			Both Sexes		
	n	% With days not at work	95% CI	n	% With days not at work	95% CI	n	% With days not at work	95% CI
18-29	660	14.3	11.0-17.7	954	17.9	14.3-21.5	1614	16.3	13.7-18.8
30-49	675	14.6	11.2-18.0	998	22.9	19.3-26.6	1673	18.9	16.3-21.5
50-69	264	16.8	11.2-22.5	422	23.9	18.5-29.3	686	20.3	16.3-24.4
18-69	1599	14.9	12.6-17.2	2374	20.7	18.2-23.3	3973	17.9	16.1-19.8

Percentage of respondents having difficulty doing usual activities Description: Percentage of respondents having difficulty doing usual activities during the past 12 months.

Instrument questions:

- Have you experienced any of the following problems during the past year because of the state of your teeth?
- Difficulty doing usual activities?

Percentage of respondents having difficulty doing usual activities during the past 12 months									
Age Group (years)	Men			Women			Both Sexes		
	n	% Having difficulty doing usual activities	95% CI	n	% Having difficulty doing usual activities	95% CI	n	% Having difficulty doing usual activities	95% CI
18-29	660	14.1	10.9-17.3	954	18.4	14.8-22.1	1614	16.4	13.9-19.0
30-49	675	15.3	11.9-18.8	998	23.7	19.9-27.5	1673	19.6	16.9-22.3
50-69	264	17.3	11.4-23.3	422	25.1	19.8-30.4	686	21.2	17.2-25.2
18-69	1599	15.1	12.8-17.4	2374	21.5	18.8-24.1	3973	18.4	16.5-20.3

Percentage of respondents being less tolerant of spouse or people close to them Description: Percentage of respondents having been less tolerant of spouse or people close to them during the past 12 months.

Instrument questions:

- Have you experienced any of the following problems during the past year because of the state of your teeth?
- Less tolerant of spouse or people close to you?

Percentage of respondents having been less tolerant of spouse or people close to them during the past 12 months									
Age Group (years)	Men			Women			Both Sexes		
	n	% Having been less tolerant	95% CI	n	% Having been less tolerant	95% CI	n	% Having been less tolerant	95% CI
18-29	660	6.4	3.9-8.9	954	7.5	5.4-9.5	1614	7.0	5.3-8.6
30-49	675	5.0	3.2-6.8	998	8.4	6.0-10.7	1673	6.7	5.2-8.2
50-69	264	8.4	3.5-13.2	422	4.6	2.3-6.8	686	6.5	3.8-9.2
18-69	1599	6.2	4.5-7.8	2374	7.4	5.9-8.8	3973	6.8	5.6-8.0

Percentage of respondents having reduced participation in social activities Description: Percentage of respondents having reduced participation in social activities during the past 12 months.

Instrument questions:

- Have you experienced any of the following problems during the past year because of the state of your teeth?
- Reduced participation in social activities?

Percentage of respondents having reduced participation in social activities during the past 12 months									
Age Group (years)	Men			Women			Both Sexes		
	n	% Having reduced participation in social activities	95% CI	n	% Having reduced participation in social activities	95% CI	n	% Having reduced participation in social activities	95% CI
18-29	660	10.6	7.7-13.5	954	13.5	10.0-17.1	1614	12.1	9.7-14.6
30-49	675	10.0	7.2-12.9	998	16.4	13.1-19.7	1673	13.3	10.9-15.6
50-69	264	15.9	9.5-22.2	422	17.6	12.8-22.5	686	16.7	12.7-20.8
18-69	1599	11.3	9.1-13.4	2374	15.3	12.8-17.7	3973	13.3	11.6-15.1

APPENDIX F: FACT SHEET - TOBACCO

UGANDA STEPS Survey 2014 Tobacco Fact Sheet

The WHO STEPwise approach to surveillance (STEPS) is a simple, standardised method for collecting, analysing and disseminating data on noncommunicable diseases (NCDs) and their risk factors. Data were collected on the established risk factors and NCD conditions that determine the major NCD burden, including tobacco use, harmful use of alcohol, unhealthy diet, insufficient physical activity, overweight and obesity, raised blood pressure, raised blood glucose, and abnormal blood lipids. Data from STEPS surveys can be used to help monitor progress in meeting the global voluntary targets related to specific risk factors such as tobacco, alcohol, diet and physical inactivity. The tobacco indicators from STEPS can be used to evaluate and monitor existing tobacco-control policies and programs.

The STEPS survey on NCD risk factors in Uganda was carried out from April, 2014 through June, 2014. The STEPS survey in Uganda was a population-based survey of adults aged 18-69 years. A multi-stage sample design was used to produce representative data for that age range in Uganda. Survey information was collected electronically using handheld devices. The survey was implemented by the Ministry of Health. A total of 3987 adults participated in the Uganda STEPS survey. The overall response rate was 99.0% for STEPS 1 & 2 and 92.2% for STEPS 1, 2 & 3. A repeat survey is planned for 2024 funds permitting.

Highlights

TOBACCO USE

§ 16.8% of men, 2.9% of women, and 9.6% overall were current smokers of tobacco.

§ 4.6% of men, 2.9% of women, and 3.7% overall were current users of smokeless tobacco.

CESSATION

§ 5 in 10 current smokers tried to stop smoking in the last 12 months.

§ 3 in 10 current smokers were advised by a health care provider to stop smoking in the last 12 months

SECONDHAND SMOKE

§ 43.3% of adults were exposed to tobacco smoke at the workplace.

§ 34.8% of adults were exposed to tobacco smoke at home.

COMMENCEMENT

§ On average, men start smoking at 22.2 years; women at 21.5 years and overall at 22.1 years current smokers of tobacco.

Data presented in this fact sheet relate only to select tobacco indicators. Additional information on tobacco or other NCD risk factors from the survey is available from sources listed below.

For additional information, please contact:

WHO STEPS Team [steps@who.int]

STEPS country focal point [Dr. Gerald Mutungi, gnmutungi@yahoo.com]

www.health.go.ug

*Tobacco questions are drawn from the Tobacco Questions for Surveys (TQS)

<http://www.who.int/tobacco/publications/surveillance/tqs/en/>

Results for adults aged 18-69 years	Overall % (95% CI)	Males % (95% CI)	Females % (95% CI)
Tobacco Use			
Current tobacco users (smoked and/or smokeless)¹			
Current tobacco users	11.2 (9.4-12.9)	18.4 (15.7-21.2)	4.5 (2.9-6.1)
Current daily tobacco users	9.8 (8.1-11.5)	16.0 (13.3-18.7)	4.1 (2.5-5.7)
Current tobacco smokers			
Current tobacco smokers	9.6 (8.1-11.1)	16.8 (14.2-19.5)	2.9 (1.8-4.0)
Current cigarette smokers ²	8.7 (7.2-10.2)	15.9 (13.3-18.5)	2.1 (1.1-3.2)
Current daily tobacco smokers	8.3 (6.9-9.8)	14.5 (12.0-17.1)	2.6 (1.5-3.7)
Current daily cigarette smokers	7.6 (6.1-9.1)	13.6 (11.1-16.2)	2.0 (0.9-3.1)
Average age started tobacco smoking (years)	22.1 (20.9-23.3)	22.2 (20.8-23.6)	21.5 (18.1-24.8)
Average number of cigarettes smoked per day (among daily cigarette smokers)	5.7 (4.8-6.6)	6.0 (5.1-7.0)	**
Current smokeless tobacco users			
Current smokeless tobacco users	3.7 (2.5-4.9)	4.6 (3.0-6.1)	2.9 (1.5-4.4)
Current daily smokeless tobacco users	2.8 (1.7-4.0)	3.3 (1.9-4.7)	2.4 (1.1-3.7)
Current non-users (smoked and/or smokeless)¹			
Former tobacco users ³	7.3 (6.2-8.5)	10.5 (8.6-12.4)	4.4 (3.3-5.5)
Former tobacco smokers ⁴	6.8 (5.7-7.9)	10.2 (8.3-12.0)	3.7 (2.7-4.7)
Never users	81.5 (79.5-83.5)	71.1 (68.1-74.0)	91.1 (89.2-93.0)
Exposure to Second-hand smoke			
Adults exposed to second-hand smoke at home*	34.8 (32.1-37.4)	37.5 (34.1-40.9)	32.3 (29.0-35.6)
Adults exposed to second-hand smoke in the closed areas in their workplace*	43.3 (40.4-46.3)	51.4 (47.5-55.3)	35.6 (31.8-39.4)
Tobacco Cessation			
Current smokers who tried to stop smoking in past 12 months	49.5 (42.1-56.8)	48.7 (40.6-56.8)	53.7 (37.4-70.1)
Current smokers advised by a health care provider to stop smoking in past 12 months ⁵	31.5 (22.3-40.8)	34.7 (24.2-45.1)	14.7 (3.4-26.0)

1 Current use refers to daily and less than daily use. 2 Includes manufactured cigarettes and hand-rolled cigarettes. Adapted for other products as per country situation. 3 Current non-users. 4 Current non-smokers. 5 Among those who visited a health care provider in past 12 months. * During the past 30 days. ** Fewer than 50 respondents. Adults refer to persons age 18-69 years. Data have been weighted to be nationally representative of all men and women age 18-69 years. Technical assistance for the survey was provided by the World Health Organization (WHO). This document has been produced with a partial grant from the CDC Foundation, with financial support from the Bloomberg Initiative to Reduce Tobacco Use, a program of Bloomberg Philanthropies. The contents of this document are the sole responsibility of the authors and can under no circumstances be regarded to reflect the positions of the CDC Foundation.

APPENDIX G: FACT SHEET - STEPS Survey 2014

Uganda STEPS Survey 2014 Fact Sheet

The STEPS survey of non-communicable disease (NCD) risk factors in Uganda was carried out from April, 2014 through June, 2014. Uganda carried out STEP 1, STEP 2 and STEP 3. Socio demographic and behavioral information was collected in STEP 1. Physical measurements such as height, weight and blood pressure were collected in STEP 2. Biochemical measurements were collected to assess blood glucose and cholesterol levels in STEP 3. The survey was a population-based survey of adults aged 18-69 years. A Multistage sample design was used to produce representative data for that age range in Uganda. A total of 3987 adults participated in the survey. The overall response rate was 99.0% for STEP 1 & 2 and 92.2% for STEP 1, 2 & 3. A repeat survey is planned for 2024 funds permitting.

Results for adults aged 18-69 years (incl. 95% CI)	Both Sexes	Males	Females
Step 1 Tobacco Use			
Percentage who currently smoke tobacco	9.6 (8.1-11.1)	16.8 (14.2-19.5)	2.9 (1.8-4.0)
Percentage who currently smoke tobacco daily	8.3 (6.9-9.8)	14.5 (12.0-17.1)	2.6 (1.5-3.7)
<i>For those who smoke tobacco daily</i>			
Average age started smoking (years)	22.1 (20.9-23.3)	22.2 (20.8-23.6)	21.5 (18.1-24.8)
Percentage of daily smokers smoking manufactured cigarettes	61.5 (53.1-70.0)	68.8 (59.5-78.1)	24.5 (11.3-37.6)
Mean number of manufactured cigarettes smoked per day (by smokers of manufactured cigarettes)	2.7 (2.1-3.2)	3.0 (2.4-3.6)	0.9 (0.2-1.7)
Step 1 Alcohol Consumption			
Percentage who are lifetime abstainers	51.8 (49.3-54.3)	40.4 (36.9-43.8)	62.4 (59.2-65.5)
Percentage who are past 12 month abstainers	12.1 (10.8-13.4)	12.5 (10.4-14.5)	11.8 (10.2-13.4)
Percentage who currently drink (drank alcohol in the past 30 days)	28.5 (26.2-30.8)	40.1 (36.5-43.6)	17.9 (15.3-20.5)
Percentage who engage in heavy episodic drinking (6 or more drinks on any occasion in the past 30 days)	16.7 (14.9-18.5)	26.2 (23.1-29.4)	7.9 (6.3-9.6)
Step 1 Fruit and Vegetable Consumption (in a typical week)			
Mean number of days fruit consumed	2.9 (2.7-3.0)	2.8 (2.6-3.0)	2.9 (2.8-0.0)
Mean number of servings of fruit consumed on average per day	1.4 (1.2-1.5)	1.3 (1.1-1.5)	1.4 (1.2-1.6)
Mean number of days vegetables consumed	3.5 (3.4-3.7)	3.2 (3.0-3.4)	3.8 (3.6-4.0)
Mean number of servings of vegetables consumed on average per day	1.3 (1.2-1.4)	1.2 (1.1-1.3)	1.4 (1.3-1.5)
Percentage who ate less than 5 servings of fruit and/or vegetables on average per day	87.8 (85.9-89.8)	88.4 (85.9-90.8)	87.3 (85.2-89.5)
Step 1 Physical Activity			
Percentage with insufficient physical activity (defined as < 150 minutes of moderate-intensity activity per week, or equivalent)*	4.3 (3.4-5.3)	3.7 (2.1-5.4)	4.9 (3.8-6.0)
Median time spent in physical activity on average per day (minutes) (presented with inter-quartile range)	308.6 (171.4-471.4)	325.7 (184.3-497.1)	285.0 (155.7-441.4)
Percentage not engaging in vigorous activity	49.6 (46.5-52.7)	40.1 (36.3-43.9)	58.4 (54.7-62.1)

Step 1 Cervical Cancer Screening			
Percentage of women aged 30-49 years who have ever had a screening test for cervical cancer			9.9 (6.9-12.8)
Step 2 Physical Measurements			
Mean body mass index - BMI (kg/m ²)	22.6 (22.4-22.8)	21.7 (21.5-22.0)	23.4 (23.1-23.7)
Percentage who are overweight (BMI ≥ 25 kg/m ²)	19.1 (17.2-21.0)	11.3 (9.3-13.3)	27.1 (24.2-29.9)
Percentage who are obese (BMI ≥ 30 kg/m ²)	4.6 (3.7-5.6)	1.8 (1.0-2.6)	7.5 (6.0-9.1)
Average waist circumference (cm)		77.1 (76.6-77.6)	80.3 (79.5-81.0)
Mean systolic blood pressure - SBP (mmHg), including those currently on medication for raised BP	124.5 (123.6-125.3)	126.6 (125.5-127.7)	122.5 (121.5-123.5)
Mean diastolic blood pressure - DBP (mmHg), including those currently on medication for raised BP	80.6 (79.9-81.2)	80.2 (79.3-81.2)	80.9 (80.2-81.6)
Percentage with raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP)	24.3 (22.3-26.4)	25.8 (22.8-28.9)	22.9 (20.5-25.3)
Percentage with raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg) who are not currently on medication for raised BP	93.5 (91.8-95.3)	96.9 (95.4-98.4)	90.1 (87.0-93.2)
Step 3 Biochemical Measurement			
Mean fasting blood glucose, including those currently on medication for raised blood glucose (mmol/l)	3.9 (3.8-4.0)	3.8 (3.7-3.9)	3.9 (3.9-4.0)
Percentage with impaired fasting glycaemia as defined below •capillary whole blood value ≥6.1 mmol/L (110 mg/dl) and <7.0 mmol/L (126 mg/dl)	2.0 (1.5-2.5)	2.0 (1.2 – 2.8)	1.9 (1.2-2.6)
Percentage with raised fasting blood glucose as defined below or currently on medication for raised blood glucose •capillary whole blood value ≥ 7.0 mmol/L (126 mg/dl)	1.3 (0.7 – 1.9)	1.7 (0.6 – 2.8)	1.0 (0.5 – 1.5)
Mean total blood cholesterol, including those currently on medication for raised cholesterol (mmol/l)	3.4 (3.4-3.5)	3.3 (3.2-3.3)	3.6 (3.5-3.7)
Percentage with raised total cholesterol (≥ 5.0 mmol/L or ≥ 190 mg/dl or currently on medication for raised cholesterol)	6.7 (5.6-7.8)	4.4 (3.1-5.6)	8.9 (7.2-10.5)
Percentage with low HDL Cholesterol (males ≤ 1.03 mmol/l and females ≤ 1.29 mmol/l)		59.9 (56.1 - 63.6)	68.3 (65.4 - 71.2)
Cardiovascular disease (CVD) risk			
Percentage aged 40-69 years with a 10-year CVD risk ≥ 30%, or with existing CVD**	10.5 (8.1-12.9)	6.9 (4.1-9.6)	14.2 (10.6-17.8)
Summary of combined risk factors			
<ul style="list-style-type: none"> current daily smokers less than 5 servings of fruits & 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) 			
Percentage with none of the above risk factors	6.6 (5.2-8.1)	6.0 (4.2-7.8)	7.3 (5.6-9.0)
Percentage with three or more of the above risk factors, aged 18 to 44 years	6.6 (5.3-7.8)	5.8 (4.2-7.3)	7.4 (5.6-9.2)
Percentage with three or more of the above risk factors, aged 45 to 69 years	20.9 (16.1-25.6)	18.6 (11.1-26.2)	23.0 (17.6-28.3)
Percentage with three or more of the above risk factors, aged 18 to 69 years	9.8 (8.1-11.4)	8.5 (6.3-10.7)	11.0 (9.0-13.0)

** A 10-year CVD risk of ≥30% is defined according to age, sex, blood pressure, smoking status (current smokers OR those who quit smoking less than 1 year before the assessment), total cholesterol, and diabetes (previously diagnosed OR a fasting plasma glucose concentration >7.0 mmol/l (126 mg/dl).

For additional information, please contact:
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