

NON-COMMUNICABLE DISEASES RISK FACTORS SURVEY - PAKISTAN



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Foreword

Globally, non-communicable diseases (NCDs) are a major cause of morbidity and mortality. A progressive rise in the disease pattern of NCDs foretells a serious public health issue. The major risk factors for non-communicable diseases are tobacco, a sedentary lifestyle, and an unhealthy diet. It is believed that about half of non-communicable disease-related premature deaths could be prevented through healthy diet, regular physical activity and by avoiding tobacco.

In view of the magnitude of the public health problem of chronic diseases, Pakistan Health Research Council initiated NCD risk factors survey in two large provinces i.e. Punjab and Sindh. It was well planned community based survey providing estimates for major NCD risk factors in different strata of population. Information on the NCD risk factors is an important input for targeted prevention of NCDs and effective health care planning.

I congratulate the team of PHRC for successfully completing the survey and bringing out report of NCD risk factors which would be highly beneficial for prevention and control of non-communicable diseases.

Gratitude is due to our partner the World Health Organization for the continuous support and guidance in carrying out the survey.

I am confident that public health specialists, planners and researchers would make optimal use of this report.

Muhammad Ayub Shaikh
Secretary
Government of Pakistan
Ministry of National Health Services
Regulations & Coordination
Islamabad, Pakistan

Foreword

Chronic non-communicable diseases (NCDs), such as hypertension, cardiovascular diseases and diabetes, pose a major burden and threat to the community. Together these, NCDs account for more than half of the deaths registered annually.

Having said that, there is enough global evidence on preventability and significant reductions in the burden of these diseases by applying sets of effective preventive and curative measures.

On this ground, establishing an efficient surveillance system using the step-wise approach to collect information on occurrence, prevalence and mortality due to these diseases, and on their known risk factors is of paramount importance for planning and evaluating preventive and curative interventions against them.

The report presents very important and extensive base-line data on major preventable risk factors of NCDs. These are; smoking, obesity, lack of physical activity, poor intake of fruits and vegetables and hypertension.

I thank the World Health Organization for their technical and financial support. I am happy to learn that substantial capacity building for doing large scale survey by using electronic data collection system has been done through this survey.

I appreciate the efforts of all those who participated in the study and published the report which I am confident will be great benefit to the cause of reduction of disease burden from NCDs.

Dr. Assad Hafeez
Director General
Government of Pakistan
Ministry of National Health Services
Regulations & Coordination
Islamabad, Pakistan

Foreword

Non-communicable Diseases (NCDs) are one of the major health and development challenges confronting the mankind in 21st century. These not only multiply manifold the human sufferings but also cause serious damage to the socioeconomic condition, particularly in the low- and middle-income countries like Pakistan.

The NCDs and injuries are amongst the top ten causes of mortality and morbidity in Pakistan and account for estimated 51% of all deaths in the country. The major NCDs are associated with four behavioral risk factors including tobacco use, unhealthy diet, physical inactivity and harmful use of alcohol.

Findings of the Steps Survey conducted in two provinces of the Punjab and Sindh provide reliable base-line data on the preventable behavioural risk factors of NCDs, including tobacco use, insufficient fruit and vegetables intake, physical inactivity and obesity.

It is high time that the country has an operational multi-sectoral national strategy/action plan that integrates the major NCDs and their shared risk factors; country is implementing demand reduction measures of the WHO FCTC at the highest level of achievement; country is taking concrete measures to reduce unhealthy diet; enjoying the services of a functioning system for generating reliable cause-specific mortality data on routine basis; and finally the country has evidence-based protocols and standards for the management of major NCDs through a primary health care approach.

Pakistan has to report on the progress achieved in the implementation of the time-bound commitments to the 3rd UN General Assembly in 2018. We are confident that this report will pave the way for designing and implementing effective NCD control measures in Pakistan to scale up implementation of the UN Political Declaration and the Outcome Document of the high level meeting of the UN General Assembly in 2014.

Dr Michel Thieren
WHO Representative
Pakistan

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We wish to express our special thanks to Country Director, Dr. Micheal Thierin, World Health Organization for kind facilitation of this survey. We greatly acknowledge the contributions of Mr. Shahzad Alam Khan, Dr. Khizar Tauseef Ashraf, Dr. Ghulam Nabi Qazi and Ms. Mariam Tariq from WHO.

We sincerely appreciate the technical and supportive role of Melanie Cowan, Technical Officer, Dr. Lubna Bhatti and Leanne Riley, WHO Head quarter Geneva, throughout the survey. We thank Melanie for conducting training in Lahore. We would also like to thank Dr. Heba Fouad, Regional Office WHO for her support and coordination in the survey.

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In addition, the untiring efforts of Provincial Coordinators, Dr. Rizwan Iqbal (Punjab), Dr. Iffat Shabbir (Punjab) and Dr. Ayaz Mustafa (Sindh) and Survey Coordinator Mr. Mehmood Ahmed are highly acknowledged. We appreciate the efforts of the monitoring teams.

Special thanks are due to the field supervisors, Sindh, Mr. Allah Rakhia, Shakeel Ahmed Dahar, field supervisors Punjab, Dr. Saira Bashir, Dr. Faiza Bashir and Mr. Muhammad Kashif Munir

Data cleaning was done by Saeed Ahmed Shahid, Hafiz Saqib Mehmood, Muhammad Zulfiqar, Waryal Ali Daheri, Sajid Kazmi of PHRC Head Office and Data analysis was done by Mr. Rizwanullah, Senior Statistical Officer, PHRC Islamabad. We commend their untiring efforts and dedication in timely completing the task. Our special thanks to Mrs. Sumera Abid, for Urdu translation of questionnaire, Hafiz Saqib Mehmood and Mr. Khalid Mehmood for typing the Urdu manuscripts and to all PHRC Officers and staff who contributed in achieving this very important task.

Last but not the least we would like to express our sincere thanks and gratitude to the survey teams, and above all the household members/community who participated in the survey.

Dr Huma Qureshi
Executive Director
Pakistan Health Research Council
Islamabad

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EXECUTIVE SUMMARY

Non communicable diseases (NCDs) encompass all diseases that are not transmitted from person to person. These include diabetes, hypertension, cancers, mental disorders, arthritis, injuries and accidents. NCDs pose a major challenge to both developed and developing countries. According to WHO in 2008, globally 57 million people died due to various causes and of these, 63% deaths were due to NCDs. The highest proportion of premature deaths (under 60 years) due to NCDs was reported from low and lower middle income countries. According to WHO by 2030, only NCD deaths is projected to increase to 52 million and most of these shall be occurring in developing countries. NCDs are mainly related to the diet and living habits of the people of that country. Its risk factors include use of tobacco, lack of physical activity, poor dietary practices and low fruit and vegetable consumption etc.

WHO is gathering information on the NCDs and its risk factors in all countries. The NCD survey in Pakistan was carried out with technical and financial support from WHO. Its main objectives were to identify the risk factors associated with non-communicable diseases and to determine their magnitude in Pakistan. The evidence generated through this survey would be used to predict future disease trends, health services needed/demands and also help policy makers in planning future strategies and thus reduce the burden of non-communicable diseases.

The survey was conducted using WHO STEPS methodology for NCD Risk Factor Surveillance which consists of three STEPS. STEP1 is a questionnaire based assessment, STEP2 is physical measurements and STEP3 includes biochemical measurements. In the present survey, only STEPS1 and STEP2 were carried out. Initially the survey was planned for all provinces to get the national estimates, however, due to budget constraints; the survey was confined to Punjab and Sindh which represents 75% population of the country. The target population included all individuals of both genders 18 years and above in two most populated provinces of Pakistan; Punjab and Sindh. A sample size of 7710 households (Punjab 4110, Sindh 3600), was calculated with representation of urban/rural and male/female breakdown. One individual aged 18 years or above was selected from each house using Kish method.

The selected individual was then interviewed using STEPS1 and 2 questionnaires and information was collected on demographic characteristics (age, gender, marital status, education, and occupation), tobacco use, dietary habits, physical activity, history of raised blood pressure and diabetes. The height, weight, waist and blood pressure were measured and information was also collected on tobacco policy and injury. Data were collected electronically using Windows Mobile devices.

A total of 7,366 individuals were enrolled out of which 57% were females and 43% males. About 45.3% of participants had no formal schooling and only 15.2% had completed high school education. Majority (80%) was married and occupationally 63% belonged to the category of unpaid and unemployed individuals which included students, housewives, retired and unemployed workers.

Risk factors analysis was done for smoke and smokeless tobacco. For smoke tobacco, 13.9% were current smokers and the smoking tendency increased with age. Among smokers, 25.5% men and 3.8% women were daily smokers. The mean age of initiation of smoking was 22.1 years. Overall 67% smokers smoked manufactured cigarettes. Majority (77%) of current smokers had noticed health warnings on cigarette packages and 66% thought to quit after seeing these warnings. Exposure to second hand smoke was 29% among women at home and 31% among males at their workplaces.

Overall 6.9% population used smokeless tobacco (9.9% males, 4.7% females). The percentage of smokeless tobacco users was; snuff by mouth: 59.8%, chewing tobacco: 23.1%, and Paan (betel and quid): 20.4%.

In a week, fruits were consumed on an average of 2.3 days and vegetable on 4.4 days. Only 0.4 meals were eaten outside the home per week. Majority (81.0%) of population did not do any vigorous physical activity and half the population was spending 3 hours or more in sedentary activities daily.

About 45.3% people never got their blood pressure checked, 78.5% never checked for diabetes and 93.8% never checked for cholesterol. Almost 37% population had stage-I hypertension and 32.5% were not taking any medication for raised blood pressure. Similarly 15.9% had stage II hypertension (severe) and 9.9% were not taking any medication for this. Amongst the diagnosed cases, only 52.9% of those having hypertension and 43.3% of those having high cholesterol were taking prescribed medicines. Almost 74.5% diabetics were taking drugs (medication) for diabetes and 15.9% were taking insulin. Past history of heart attack, chest pain or stroke was present in 6% population but only 3.4% were regularly taking aspirin to prevent the disease.

On anthropometry, 11.3% population was underweight, 14.9% obese and 41.3% overweight. Less than 50% had normal BMI. Obesity was more prevalent in women. Over a one third of the population was given dietary advice by the doctors to increase their fruit and vegetable (39.0%), reduce salt (36.7%) and fat in the diet (40.2%). Similarly a quarter were asked to quit tobacco or not start using tobacco (24.9%), to start or do more physical activity (28.0%) and maintain a healthy body weight or lose weight (26.7%). Only 0.9% women aged 30-49 years were tested for cervical cancer.

Regarding tobacco control policy, information on the dangers of smoking or information that encourages quitting was noticed by the population on TV (61.6%) followed by newspapers (46.0%) and on radio (32.9%). Advertisements and/or signs of promoting cigarettes in stores were noticed by 4.8% while 3.8% reported availability of cigarettes on sale price, 2.8% noticed cigarette coupons and 2.2% noticed free samples of cigarettes.

Almost 3.4% population suffered from traffic injuries and 2.3% from injuries other than traffic. Overall 95% people confessed that they do not regularly use safety helmet during driving or sitting as a passenger on motorcycle. The common reason for injury was fall and common place was road/highway or street.

INTRODUCTION

1. INTRODUCTION

1.1 Non-Communicable Diseases:

Non communicable diseases (NCDs) encompass all diseases that are not transmitted from person to person. These include diabetes, hypertension, cancers, mental disorders, arthritis, injuries and accidents^{1,2}. These diseases have emerged as a major public health challenge with devastating impact on premature morbidity, mortality and economic losses³. NCDs were responsible for 63% of the 57 million deaths that occurred in 2008⁴. The highest proportion of premature deaths (under 60 years) were reported from low and lower middle income countries i.e. 41% and 28% respectively followed by 25% in middle income and 13% in high income countries⁵. According to WHO by 2030, only NCD deaths is projected to increase to 52 million and most of these shall be occurring in developing countries⁶.

1.2 Risk Factors:

Different risk factors associated with NCDs have been characterized and divided into behavioral and metabolic/physiological factors. The behavioral risk factors include tobacco use, physical inactivity, unhealthy diet and alcohol use whereas metabolic risk factors include raised blood pressure, overweight/obesity, hyperglycemia and hyperlipidemia^{3,7,8}.

1.2.1 Tobacco Use:

Tobacco consumption (smoke and smokeless) is major public issue globally. There are one billion smokers in the world who consume 6 trillion cigarettes annually. Smoking is major risk factor for cardiovascular disease, tuberculosis and lower respiratory tract infections⁹. Smoking causes lung cancer (71%) and chronic respiratory disease (42%) and kills about 6 million people annually¹⁰. In Pakistan, smoking prevalence in men is 28.6% and goes as high as 40.6% in those aged over 40 years¹¹. The recently Global Youth Tobacco Survey conducted in Pakistan in school going children of age 13-15 years reported 11% children to be smokers¹². Among these, 3% were current cigarette smokers. Another study reported high prevalence of shisha smoking among Pakistani students aged 20-25 years¹³.

1.2.2. Physical Inactivity:

Insufficient physical activity causes 3.2 million deaths and 32.1 million DALYs each year around the globe¹⁴. It is estimated that moderate physical activity of 150 minutes weekly can reduce the risk of ischemic heart disease by 30%, diabetes by 27% and breast and colon cancer by 21-25%^{14,15}. In addition, physical activity also lowers the risk of stroke, hypertension and depression¹⁵.

The prevalence of insufficient physical inactivity is higher in high income countries as compared to middle and low income countries and every second women in high income countries is physically inactive¹⁶. In Pakistan, a community based study on adults in Karachi reported physical inactivity in

60% individuals¹⁷. Similarly another study on obese patients showed that 73% were physically inactive¹⁸.

1.2.3 Unhealthy Diet:

About 1.7 million deaths occur worldwide due to low fruit and vegetable consumption^{14,19}. Consumption of high energy foods (high in fats and sugars) promotes obesity as compared to high consumption of fruits and vegetables¹⁹. Dietary salt intake is also an important determinant of blood pressure and cardiovascular risk²⁰. WHO recommends that salt intake should be less than 5 grams per day per person to prevent cardiovascular disease whereas current global consumption is between 9-12 grams per day^{21,22}. Consumption of saturated fat and trans fat increase the risk of coronary heart disease and type 2 diabetes^{23,24}.

The concept of healthy diet in Pakistan is changing and its definition varies in different socioeconomic groups. The people of upper class generally eat higher proportion of saturated fats, trans-fatty acids and sugar sweets thus contributing to overall high caloric intake. The increase consumption “desi ghee”, meat, and sweets along with over eating are common dietary practices in our culture²⁵. Price inflation in healthy and good foods like cereals, pulses, vegetables and fruits compelled the common man to go for cheaper ways of making energy like using more fats and sugar²⁶. In addition to this, the consumption of fast foods, junk food and sugary fizzy drinks is also getting very popular in younger generation. A study from Peshawar showed high consumption of junk food and lack of exercise in medical students²⁷ while another study from Karachi, Lahore and Quetta on secondary school children showed that 80% children were consuming unhealthy diets²⁸.

1.2.4 Raised Blood Pressure:

About 7.5 million deaths (12.8% of all) occur due to raised blood pressure¹⁴. It is a major risk factor for ischemic stroke and coronary heart disease²⁹ and its complications include heart failure, peripheral vascular disease, renal impairment, retinal hemorrhage and visual impairment³⁰. In Pakistan, the prevalence of hypertension was 19% in adults aged 15 years and above³¹ and this figure went up to 33% in those aged over 45 years³².

1.2.5 Overweight and Obesity:

Overweight and obesity is responsible for 2.8 million deaths annually worldwide¹⁴. Increased Body Mass Index (measurement of weight relative to height) increases the risk of coronary heart disease, ischemic stroke and type 2 diabetes mellitus³³ as well as cancer of the breast, colon/rectum, endometrium, kidney, esophagus (adenocarcinoma) and pancreas³⁴.

In Pakistan, a study reported obesity in 37% urban women as compared to 22% in urban men. The female preponderance of obesity persisted in the rural areas where the prevalence of obesity was

14% in women and 9% in men³⁵. A study from Peshawar reported obesity in 16% with 15% being overweight in male and female students²⁶.

1.2.6 Raised Cholesterol:

Raised cholesterol causes 2.6 million deaths¹⁴ and increases the risk of heart disease and stroke³⁶. Globally, the prevalence of raised cholesterol is 39% among adults³⁷ with high prevalence in high income countries (almost double of the low income countries)¹⁶.

In Pakistan, due to unhealthy diet and junk foods, the prevalence of hypercholestraemia in general population was reported to be 12%³⁸. The frequency of hypercholesterolemia, hypertriglyceridemia, "low HDL-cholesterol" and "isolated low-HDL-cholesterol" were 30.6%, 30.1%, 48.6% and 34.1%, respectively in Pakistani patients who suffered from acute myocardial infarction^{39,40}.

1.3 Status of NCDs in Pakistan

Non-communicable diseases represent one of the top 10 causes of morbidity and mortality in Pakistan⁴⁰. Almost 25% of the deaths in the country occur due to non-communicable diseases comprising mostly of cardiovascular disease, diabetes, cancer, injuries etc⁴¹. With 11% prevalence of diabetes in Pakistan⁴² the country is the sixth in the world having high diabetes³¹. Similarly the incidence of breast cancer is also highest among the Asian Population⁴³. In addition, almost 50 million people are suffering from mental health disorders⁴⁴.

The National Health Survey of Pakistan (NHSP) conducted in 1996 reported that about 24% urban and 13% rural men had diabetes. Within gender, 13% rural men and 24% rural women were diabetics. Similarly the overall prevalence of hypertension was 17.9%. The NHSP showed that 24% urban and 14% rural men were overweight and these figures were significantly high for rural women (24%)³². A study from Karachi reported 53% abdominal obesity, 45% tobacco use, 40% pre-diabetes, 18% hypertension and 8% diabetes in general population⁴⁵.

The increasing trend of tobacco consumption, physical inactivity, unhealthy diet, overweight, obesity and raised cholesterol have made Pakistan a high NCDs risk country. Further the cheap availability of cigarettes, poorly enforced antismoking and road safety laws, and poor health care delivery system are also key contributors to disease prevalence. Projection models based on the Global Burden of Disease 2010 data suggest that there will be about 3.87 million premature deaths in Pakistan by 2025 due to NCDs with serious economic consequences⁴⁶.

1.4 Purpose

Keeping in view the above reports and the high risk of NCDs in the population, this study was done to identify the risk factors associated with non-communicable diseases and to determine their magnitude in Pakistan. The data will help to predict future disease trend, health services needs/demands and help policy makers in planning future strategies accordingly.

METHODS

2. METHODS

2.1 Study Population and Sample Size:

All males and females aged 18 years and above who normally live in their residences in Province of Pakistan were the target population for the survey. Some population groups like persons living in military cantonments and boarding houses were excluded from the study population.

The sample size was calculated keeping the need that it should provide estimates at national/provincial levels with urban/rural and male/female breakdown. For the calculation of sample size, risk factors particularly tobacco use which varied from 40% to 50% in the various studies was taken, similarly other risk factors also have similar figures, so a prevalence of 50% was used. With 5% precision levels for Punjab, Sindh the estimation of sample size for each Province is shown in table 1. However due to financial constraints. The survey was conducted in only Punjab and Sindh Provinces which according to population covers over 75% of the population.

Table 1: Details of sample size calculation

Province	Sample Size Estimation	NR Adjustment	Province Pop. Adjustment factor	Total Sample Size
Punjab	With 5% precision level= $384 \times 4 \times 2 = 3072$	153	865(57.68%)	4090(30.5%)
Sindh	With 5% precision level= $384 \times 4 \times 2 = 3072$	153	354(23.58%)	3579(26.7)
Total	5% precision level.	306	1219	7669

2.2 Sample Design:

Two stage stratified sampling approach was used in which the union councils (UCs) were selected from ultimate stratum with probability proportionate to size (PPS) and population within each UC treated as measure of size for the selection of UCs. In case of Urban sample UCs, blocks were formed of approximately 2000 population using quick count and one block was picked and a cluster of 150 households was enumerated. After enumeration of 150 households, 30 were selected by taking every fifth house. In rural areas from the selected UC, one village was selected from where a cluster of 30 households was selected. From each household, the details i.e. name and ages of all members (male/female) who were equal to or over 18 years were entered in the Personnel Digital Assistant (PDA). The PDA then selected one member randomly using KISH method⁴⁷

The province wise distribution of UCs and households according to urban/rural breakdown is shown in table 2.

Table 2: Distribution of sampled union councils and households

Province	Sample UCs			Sample Households		
	Urban UCs	Rural UCs	Total UCs	Urban	Rural	Total
Punjab	57	80	137	1710	2400	4110
Sindh	53	67	120	1590	2010	3600
Total	110	147	257	3300	4410	7710

2.3 Time Frame:

The survey was conducted from November 2013 to April 2014.

2.4 Study Instrument and Tool:

The WHO STEPS instrument was used which is recommended for surveillance of chronic disease and their risk factors. It starts with gathering key information on risk factors with a questionnaire, then moves to simple physical measurements and then to more complex collection of blood samples for biochemical analysis.

The STEPS instrument consists of 03 STEPS which include;

- (i) STEPS 1- questionnaire based assessment
- (ii) STEPS 2- physical measurements
- (iii) STEPS 3-biochemical measurements

Each STEPS is further divided into 03 modules i.e. core, expanded and optional modules. In the present study, all modules i.e. core, expanded and optional of STEPS1 that consists of different sections in which information was collected on demographic characteristics (age, gender, marital status, education and occupation), tobacco use, dietary habits, physical activity, history of raised blood pressure and diabetes. Section containing questions regarding alcohol consumptions was excluded. The optional modules of tobacco policy and injury were included. For STEPS2, only core module was used in which height, weight, waist and blood pressure were assessed. However, the STEP3 was not used due to financial constraints.

The STEPS questionnaire was translated in Urdu (National Language) and again translated back in English for verification. After pilot testing making further refinements, the questionnaire was fed in the PDAs. Ethical Clearance was taken from National Bioethics Committee.

Consent form and report forms were also translated to Urdu language as per local need.

2.5 Staff Recruitment and Training:

In order to maintain uniformity and quality of data, a comprehensive 03 days training workshop was conducted by WHO trainers who came from Geneva, Switzerland. A total of 38 participants including

supervisors and coordinators were trained on the use of PDAs, selection of participant by using KISH method, filling of STEPS questionnaire in PDAs and physical measurement of selected individual (height, weight and BP). All the materials like training manuals, survey instruments, BMI charts, show cards for physical activities (vigorous, moderate and recreational physical activities and sedentary behavior), details of selected UCs and PDAs were provided to the teams.

2.6 Data Collection:

The data collection team comprised of one enumerator, one supervisor and three interviewers. The enumerator marked and numbered the houses whereas each interviewer conducted interview of 10 selected household members making a total of 30 households between three interviewers. The supervisor approached the head of the community for community mobilization in the selected UCs prior to arrival of data collection team.

The member selected through KISH method was interviewed and his/her height (Cm) and weight (Kg) was measured using SECA stadiometers 213 and SECA 874 weighing machines respectively. Waist circumference was measured in centimeters at the level of the umbilicus using a measuring tape. Blood pressure (systolic and diastolic) was measured using BOSCO digital BP apparatus in sitting position. Three readings were taken and its average was used.

2.7 Monitoring:

In order to maintain the quality of data, all data collection process was monitored by PHRC staff who visited the fields while local WHO staff also monitored the data collection independently.

2.8 Data Analysis:

After data collection was completed, the data was transferred from PDAs to the computer and converted into the excel sheet. The data was filtered, cleaned, and transferred into the EPI Info 3.5.1 and analyzed as per the statistical plan of WHO STEPS protocol.

2.9 Response Proportions and Sample Weight:

Overall refusal rate was 4.6% in which 1.6% refused at STEPS2 of physical measurements. Refusal rate was more in Sindh (6.3%) as compared to Punjab (3%). The sampling weight was calculated by multiplying the UCs selection probabilities, household selection probabilities within UCs, individual selection probabilities and household non-response adjustments.

RESULTS

3. RESULTS

3.1 STEPS 1

3.1.1 Demographic Characteristics:

3.1.1.1 Age and Gender composition:

A total of 7,366 individuals were enrolled, out of which 4,216 (57%) were females and 3,150 (43%) males. The age distribution is shown in table 3. Overall 36.8% were between 30-44 years age followed by 36% in 18-29 years. In women, majority were between 18-29 years whereas in men, it was 60-69 years. The number of respondents was least in the age group 60-69. Ethnic distribution showed that majority (43%) were Punjabi followed by Sindhi (23%) while 11% each were Urdu speaking or of other ethnic origin (Pathans, Saraiki etc).

Table3: The distribution of respondents with respect to age and gender

Age groups (years)	Men		Women		Both genders	
	N	%	N	%	N	%
18-29	992	37.4	1659	62.6	2651	36
30-44	1141	42.0	1573	58.0	2714	36.8
45-59	655	47.5	723	52.5	1378	18.7
60-69	362	58.1	261	41.9	623	8.5
18-69	3150	42.8	4216	57.2	7366	100

3.1.1.2 Education Level:

Educational level showed that 45.3% population had no formal schooling and only 15.2% had completed high school education (Table 4).

Table4: Educational status of the respondents

Age Groups	N	% with no formal schooling	% Less than primary school	% Primary school completed	% Secondary school completed	% High School completed	% College/ university completed	% Post graduate degree
18-29	2593	35.7	5.7	13.3	10	18.4	9.8	6.3
30-44	2648	43.8	4.3	12.7	10.1	16.4	8.2	4.5
45-59	1348	58.6	5.3	12.0	7.0	10.2	4.0	2.9
60-69	611	63.2	6.9	9.7	8.0	7.4	2.0	2.9

3.1.1.3 Marital Status

The proportion of married individuals was 80.4%, never married 15.8% and rest were widowed, divorced or separated (Table 5). Among genders, 19% men and 14% women were never married while the percentage of widowed was higher in women (5%) as compared to men (0.5%).

Table5: Marital status of the respondents

Age groups (years)	Both genders					
	N	% Never Married	% Currently married	% Separated	% Divorced	% Widowed
18-29	2650	39.5	59.8	0.2	0.3	0.3
30-44	2712	3.6	94.8	0.3	0.1	1.2
45-59	1377	1.5	90.1	0.5	0.1	7.8
60-69	622	0.5	84.4	1.0	0.2	14.0
18-69	7361	15.8	80.4	0.3	0.2	3.2

3.1.1.4 Occupation:

Occupation wise, 21.2% population was non-government employees, 12.3% were self-employed and 62.8% were unpaid (Table 6). Among unpaid, 6.8% were unemployed but were able to work (36.7% men), 82% homemakers (who manages home), 6.3% students, 1.8% retired. (Table-7).

Table 6: Employment status of the respondents

Age groups (years)	Both genders				
	N	% Govt. employee	% non-Govt. employee	% self-employed	% Unpaid
18-29	2647	1.5	20.9	8.8	68.8
30-44	2710	4.7	22.7	14.4	58.2
45-59	1374	6.9	20.1	15.0	58.0
60-69	616	1.6	17.9	12.2	68.3
18-69	7347	3.7	21.2	12.3	62.8

Table 7: Details of unpaid respondents

Both genders						
Age groups (years)	N	% Student	% Retired	% Unemployed (able to work)	% Unemployed (not able to work)	% Home maker
18-29	1820	15.7	0.0	6.8	1.3	76.3
30-44	1578	0.2	0.4	5.8	2.1	91.4
45-59	797	0.0	2.5	7.2	3.4	87.0
60-69	421	0.2	13.5	9.3	8.1	68.9
18-69	4616	6.3	1.8	6.8	2.5	82.6

3.1.2 Behavioral Risk Factors**3.1.2.1 Tobacco Smoking:**

The proportion of current smokers was 13.9% (28% men, 4% women). The prevalence of smoking increased with age and was highest (25.2%) in age group 60-69 (Table 8).

Table 8: Percentage of current smokers among all respondents

Age groups (years)	Men		Women		Both genders	
	N	% Current smoker	N	% Current smoker	N	% Current smoker
18-29	992	15.5	1659	1.2	2651	6.2
30-44	1141	30.1	1573	2.7	2714	14.0
45-59	655	35.1	723	10.4	1378	21.9
60-69	362	36.8	261	12.9	623	25.2
18-69	3150	27.8	4216	4.2	7366	13.9

Among smokers, over 23% were daily smokers in men and 3.2% in women. The mean age of initiation was 22.1 years. The men started smoking at the age of 21 while women started at 25 years (Table 9).

Table 9: Mean age at initiation of smoking

Age groups (years)	Men		Women		Both genders	
	N	Mean	N	Mean	N	Mean
18-29	114	17.7	16	18	130	17.7
30-44	288	20.8	40	19.5	328	20.7
45-59	182	22.7	50	28.9	232	24.3
60-69	119	25	26	26.5	145	25.4
18-69	703	21.5	132	24.9	835	22.1

The mean duration of smoking was 22 years which was almost similar in both genders. Among the daily and current smokers, 74% used manufactured cigarettes. Almost 81% male smokers were using manufactured cigarettes as against 40% females. Overall 58% current smokers had tried to quit smoking (Table 10).

Table 10: Current smokers who tried to stop smoking

Age groups (years)	Men		Women		Both genders	
	N	% Tried to stop smoking	N	% Tried to stop smoking	N	% Tried to stop smoking
18-29	138	54.9	19	54.9	157	54.9
30-44	313	62.8	45	67.5	358	63.3
45-59	209	55.5	59	59.5	268	56.5
60-69	130	56.3	29	40.8	159	52.4
18-69	790	58.5	152	56.7	942	58.2

The mean year, since cessation of tobacco was 11 years in 30-44 years age group and 15 years in 45-59 years age group. About 6.9% were current users of smokeless tobacco (9.9% men and 4.7% women) as shown in table 11.

Table 11: Current users of smokeless tobacco

Age groups (years)	Men		Women		Both genders	
	N	% Current users	N	% Current users	N	% Current users
18-29	992	10	1659	2.7	2651	5.2
30-44	1141	9.3	1573	4.4	2714	6.4
45-59	655	11.8	723	7.0	1378	9.2
60-69	362	8.0	261	11.4	623	9.7
18-69	3150	9.9	4216	4.7	7366	6.9

In both genders, 8% (12% men and 5% women) were daily using smokeless tobacco. The mode of using smokeless tobacco was snuff by mouth (59.8%) followed by chewing tobacco (23%), betel and quid (20%) and snuff by nose (7%) (Table 12).

Table 12: Percentage of current users using different products of smokeless tobacco

Age groups (years)	Both genders									
	N	% snuff by mouth	N	% snuff by nose	N	% Chewing tobacco	N	% betel, quid	N	others
18-29	193	47.2	193	6.3	193	20.6	193	38	193	19.5
30-44	222	52.0	222	3.8	222	28.3	222	21.6	222	12.8
45-59	169	74.7	169	13.6	169	18.6	169	8.8	169	3.7
60-69	71	76.8	71	4.9	71	22.6	71	5.3	71	4.4
18-69	655	59.8	655	7.1	655	23.1	655	20.4	655	11.1

It was observed that daily smokeless tobacco as snuff by mouth or by nose was more in adults between 45-59 years while Paan (betel and quid) was more in younger age group (18-29 years) (Table 13).

Table 13: Mean times per day smokeless tobacco used by daily smokeless tobacco users by type

Age groups (years)	Both genders									
	N	% Snuff by mouth	N	% Snuff by nose	N	Chewing tobacco	N	% betel, quid	N	Others
18-29	174	3.7	173	0.2	172	1.1	172	2.7	172	0.6
30-44	207	4.0	206	0.2	205	1.0	206	1.0	205	1.0
45-59	157	5.7	154	0.6	154	0.8	154	0.2	155	0.1
60-69	66	5.7	66	0.1	66	1.0	66	0.2	66	0.0
18-69	604	4.6	599	0.3	597	1.0	598	1.1	598	0.5

Overall 19.7% were current tobacco users with men being more (35.6%) as compared to women (8.7%) table 14.

Table 14: Status of current tobacco users among the respondents

Age groups (years)	Men		Women		Both genders	
	N	% current user	N	% current user	N	% current user
18-29	992	24.2	1659	3.8	2651	10.9
30-44	1141	37.0	1573	6.7	2714	19.2
45-59	655	44.3	723	16.7	1378	29.6
60-69	362	43.1	261	24.2	623	33.9
18-69	3150	35.6	4216	8.7	7366	19.7

Table 15 presents daily tobacco use which was 18.2% in both genders; being higher in men (32.9%) as compared to women (8%).

Table 15: Details of daily tobacco users

Age groups (years)	Men		Women		Both genders	
	N	daily user	N	daily user	N	daily user
18-29	992	21.0	1659	3.5	2651	9.6
30-44	1141	34.8	1573	6.4	2714	18.1
45-59	655	40.7	723	14.9	1378	26.9
60-69	362	41.7	261	23.0	623	32.5
18-69	3150	32.9	4216	8.0	7366	18.2

The percentage of passive smokers at home or work place ranged from as low as 15% to as high as 31% in different age groups. More people (27.3%) were exposed to second hand smoke at home as compared to workplace (16.5%). Women (28.7%) were more exposed to passive smoking at home as compared to men (25.3%) (Table 16 & 17).

Table 16: Exposed to second-hand smoke at home during the past 30 days

Age groups (years)	Men		Women		Both genders	
	N	% Exposed	N	% Exposed	N	% Exposed
18-29	992	24.1	1659	30.4	2651	28.2
30-44	1141	23.8	1573	26.7	2714	25.5
45-59	655	24.3	723	29	1378	26.8
60-69	362	34.9	261	29.2	623	32.1
18-69	3150	25.3	4216	28.7	7366	27.3

Table 17: Exposure to second-hand smoke at the workplace during the past 30 days

Age groups (years)	Men		Women		Both genders	
	N	% Exposed	N	% Exposed	N	% Exposed
18-29	700	26.1	1306	7.4	2006	13.5
30-44	819	34.3	1250	6.6	2069	17.4
45-59	482	33.5	556	7.9	1038	19.8
60-69	255	24.7	205	8.2	460	16.6
18-69	2256	30.7	3317	7.2	5573	16.5

3.1.2.2 Fruits and Vegetables Consumption

In a typical week, vegetables consumption was higher (4.4 days) as compared to fruits (2.3 days). Weekly consumption of fruits and vegetables was similar in both genders. (Table 18 & 19).

Table 18: Mean number of days fruit consumed in a typical week

Age groups (years)	Men		Women		Both genders	
	N	Mean number of days	N	Mean number of days	N	Mean number of days
18-29	986	2.4	1636	2.4	2622	2.4
30-44	1134	2.4	1549	2.3	2683	2.3
45-59	646	2.3	714	2.0	1360	2.1
60-69	357	2.1	252	2.0	609	2.0
18-69	3123	2.3	4151	2.2	7274	2.3

Table 19: Mean number of days vegetables consumed in a typical week

Age groups (years)	Men		Women		Both genders	
	N	Mean number of days	N	Mean number of days	N	Mean number of days
18-29	992	4.5	1653	4.5	2645	4.5
30-44	1140	4.5	1566	4.3	2706	4.4
45-59	654	4.4	721	4.3	1375	4.3
60-69	360	4.5	257	4.3	617	4.4
18-69	3146	4.5	4197	4.4	7343	4.4

The mean number of servings of vegetables and fruit on average per day was 1.2 and 0.7 respectively with no difference between genders (Table 20 & 21).

Table20: Mean number of servings of fruit on average per day

Age groups (years)	Men		Women		Both genders	
	N	Mean number of servings	N	Mean number of servings	N	Mean number of servings
18-29	986	0.7	1626	0.7	2612	0.7
30-44	1131	0.7	1539	0.6	2670	0.7
45-59	644	0.6	711	0.6	1355	0.6
60-69	357	0.5	252	0.5	609	0.5
18-69	3118	0.7	4128	0.6	7246	0.6

Table21: Mean number of servings of vegetables on average per day

Age groups (years)	Men		Women		Both genders	
	N	Mean number of servings	N	Mean number of servings	N	Mean number of servings
18-29	992	1.3	1652	1.2	2644	1.3
30-44	1137	1.2	1566	1.2	2703	1.2
45-59	654	1.1	721	1.2	1375	1.2
60-69	360	1.2	257	1.0	617	1.1
18-69	3143	1.2	4196	1.2	7339	1.2

The consumption of fruit and/or vegetable was 1.9 on an average per day. Though 70% were consuming fruit and/or vegetable daily but 54.3% were having 1-2 serving, 12.6% were having 3-5 serving and only 3.5% were having >5 servings. However 29.5% of the population had no fruit and vegetable consumption on average per day (Table 22). Almost 95% of the population consumed less than five servings of fruits and vegetables per day. The mean number of serving of fruits and vegetables ranged between 1.5 to 2.0 per day which was 2 in men and 1.8 in women.

Table22: Number of servings of fruit and/or vegetables on average per day

Age groups (years)	Both genders				
	N	% No fruit and/or vegetables	% 1-2 servings	% 3-4 servings	% ≥5 servings
18-29	2651	26	51.1	14.7	6.3
30-44	2711	27.6	54.1	13.2	5.4
45-59	1378	34.6	52.1	10.7	3.4
60-69	620	31.2	54.5	10.3	2.8
18-69	7360	29.5	54.3	12.6	3.5

3.1.2.3 Food and Oil Consumption:

when inquired about the type of edible oil used for cooking meal, 41% said they were using vegetable oil while 19% were using non vegetable oil i.e. 10.8% margarine, 2.7% butter and 0.8% Lard (from cattle fat). About 42.8% were not using any particular cooking oil and 1.9% were using other kinds. Mean number of meals eaten outside the home per week was more in men i.e. 0.7 as compared to 0.2 in women.

3.1.2.4 Physical Activity:

Physical inactivity was more in women where overall 53% women were not following WHO recommendation on physical activity for health as compared to 25% in men. Within the age groups, the percentage of men and women showed a gradual decline in physical activity with the advancement of age (Table 23).

Table 23: Population not meeting WHO recommendations on physical activity for health

Age groups (years)	Men		Women		Both genders	
	N	% not meeting recommendations	N	% not meeting recommendations	N	% not meeting recommendations
18-29	959	17.8	1582	54.8	2541	42.0
30-44	1109	23.0	1483	49.9	2592	38.7
45-59	640	29.6	690	50.4	1330	40.6
60-69	355	37.9	246	69.3	601	52.9
18-69	3063	24.7	4001	53.3	7064	41.5

Physical activity in both genders was classified into low, moderate and high using WHO standards. About 28% population showed high physical activity while others showed mild to moderate activity. (Table 24).

Table 24: The Level of total physical activity according to WHO recommendations

Age groups (years)	Both genders			
	N	% Low	% Moderate	% High
18-29	2541	47.0	23.3	29.7
30-44	2592	43.6	27.3	29.1
45-59	1330	44.6	27.0	28.4
60-69	601	55.7	27.5	16.8
18-69	7064	46.1	25.9	28.0

The mean time spent on total physical activity in both genders was 113.3 minutes which was three time higher in men as compared to women (Table 25).

Table 25: Mean minutes of total physical activity on average per day

Age groups (years)	Men		Women		Both genders	
	N	Mean minutes	N	Mean minutes	N	Mean minutes
18-29	959	216.1	1582	60.3	2541	114.3
30-44	1109	199.2	1483	65.7	2592	121.0
45-59	640	163.9	690	75.2	1330	117.0
60-69	355	101.0	246	36.7	601	70.2
18-69	3063	184.8	4001	63.1	7079	113.3

Similarly the mean time spent in work related physical activity was also more (four times) in men as compared to women (Table 26).

Table 26: Mean minutes of work-related physical activity on average per day

Age groups (years)	Men		Women		Both genders	
	N	Mean minutes	N	Mean minutes	N	Mean minutes
18-29	959	114.1	1582	26.3	2548	56.7
30-44	1109	117.6	1483	28.0	2599	65.2
45-59	640	88.3	690	32.2	1332	58.6
60-69	355	35.3	246	12.	600	24.5
18-69	3063	100.6	4001	27.0	7079	57.3

The mean time spent in transport related activity in men was mostly in age group 18-29 years which gradually decreased with age. However in women, this trend was hyperbolic (Table 27).

Table 27: Mean minutes of transport-related physical activity on average per day

Age groups (years)	Men		Women		Both genders	
	N	Mean minutes	N	Mean minutes	N	Mean minutes
18-29	959	89.4	1583	32.9	2548	52.5
30-44	1109	76.3	1486	36.8	2599	53.2
45-59	640	70.4	691	42.6	1332	55.7
60-69	355	62.6	245	24.0	600	44.1
18-69	3063	77.1	4005	35.4	7079	52.6

On an average, both genders were spending 3.4 minutes on recreational activities per day. The time spent was very low (almost one minute) in women at all ages (Table 28).

Table 28: Mean minutes of recreation-related physical activity on average per day

Age groups (years)	Men		Women		Both genders	
	N	Mean minutes	N	Mean minutes	N	Mean minutes
18-29	959	12.7	1582	1.0	2548	5.1
30-44	1109	5.3	1483	0.9	2599	2.7
45-59	640	5.2	690	0.3	1332	2.6
60-69	355	3.0	246	0.1	600	1.6
18-69	3063	7.1	4001	0.8	7079	3.4

Seventy percent of the population did not have any work related physical activity. Similarly no transport and recreation related physical activity was reported by 32% and 95% respectively.

The total composition of physical activity was highest for transport i.e. 70.8% followed by 26.8% from work and 2.3% during leisure time (Table 29).

Table29: Composition of total physical activity of the respondents

Age groups (years)	Both genders			
	N	% Activity from work	% Activity for transport	% Activity during leisure time
18-29	1928	27.8	68.7	3.5
30-44	2031	28.9	69.4	1.8
45-59	1021	25.8	72.5	1.8
60-69	402	15.3	83.2	1.5
18-69	5382	26.8	70.8	2.3

About 81.0% population had no vigorous physical activity in both genders. The time spent on sedentary activities was 222.8 minutes (almost 4 hours) per day (Table 30).

Table30: Time spent in sedentary activities on average per day

Age groups (years)	Both genders			
	N	Mean minutes	Median minutes	Inter-quartile range (P25-P75)
18-29	2650	218.9	180	180
30-44	2710	205.9	180	180
45-59	1375	228.8	210	195
60-69	623	294.1	300	240
18-69	7358	222.8	180	180

3.1.2.5 Hypertension and Diabetes

This chapter describes the prevalence and history of hypertension and diabetes in the population.

3.1.2.6 Hypertension:

About 45.3% population had never had their blood pressure checked by the Doctor/health care worker while 40% were told by doctor or health care worker that they were not hypertensive. Twelve percent cases were diagnosed with raised blood pressure in the last 12 months while 3% had raised blood pressure for many years (Table 31).

Table 31: Details of blood pressure measurements of the respondents

Age Groups (Years)	Both genders				
	N	% Never measured	% measured, not diagnosed	% diagnosed, but not within past 12 months	% diagnosed within past 12 months
18-29	2650	55.1	37.2	1.7	6.0
30-44	2710	43.8	42.3	2.4	11.4
45-59	1375	36.2	40.8	3.4	19.6
60-69	623	33.8	38.0	4.6	23.6
18-69	7358	45.3	39.9	2.6	12.3

Most patients with hypertension were taking allopathic treatment (52.9%) followed by treatment with traditional healer (25.5%) and herbal & home remedy (11%) (Table 32, 33).

Table 32: Respondents currently taking prescribed medicines for raised blood pressure

Age groups (years)	Men		Women		Both genders	
	N	% taking meds	N	% taking meds	N	% taking meds
18-29	26	25.6	140	32.8	166	31.9
30-44	104	44.5	274	46.9	378	46.2
45-59	111	55.4	219	68.4	330	64.4
60-69	71	57.7	104	72.4	175	68.1
18-69	312	49.3	737	54.2	1049	52.9

Table 33: Percentage of respondents who visited a traditional healer

Age groups (years)	Men		Women		Both genders	
	N	% visited traditional healer	N	% visited traditional healer	N	% visited traditional Healer
18-29	26	4.6	140	39.7	166	35.2
30-44	104	26.7	274	22.2	378	23.4
45-59	111	20.9	219	25.2	330	23.8
60-69	71	11.0	104	27.3	175	22.5
18-69	312	19.7	737	27.5	1049	25.5

3.1.2.7 Diabetes:

Blood glucose was never tested in 78.5% population while only 18.2% got it tested on the directions of the Doctor/health care worker and were not diabetic. Almost 3% were diagnosed as diabetic in the last 12 months while 1% were already known diabetics. (Table 34).

Table 34: Details of blood sugar measurements of the respondents

Age Groups (Years)	Both Genders				
	N	% Never measured	% measured, not diagnosed	% diagnosed, but not within past 12 months	% diagnosed within past 12 months
18-29	2650	88.7	10.6	0.2	0.5
30-44	2710	78.3	19.9	0.3	1.5
45-59	1375	69.8	23.5	1.5	5.2
60-69	623	60.1	27.5	1.7	10.7
18-69	7358	78.5	18.2	0.7	2.7

Among the diagnosed cases, 77% were taking insulin, 16% were taking oral allopathic medicines while 12% were taking treatment from a traditional healer.

3.1.2.8 History of Raised Cholesterol:

Total cholesterol levels were never checked in 94% population while only 5% got it checked and had normal cholesterol. One percent cases were newly diagnosed (with in last 12 months) and 0.5% were already diagnosed. Within the newly diagnosed cases, most cases were diagnosed between 60-69 years (Table 35). Among diagnosed cases, 43% were taking oral allopathic treatment, 22.6% were seeking help from a traditional healer and 9.8% taking herbal remedy.

Table 35: Details of total cholesterol measurement and diagnosis among respondents

Age groups (years)	Both genders				
	N	% Never measured	% measured, not diagnosed	% diagnosed, but not within past 12 months	% diagnosed within past 12 months
18-29	2649	97.1	2.6	0.1	0.3
30-44	2710	94.1	4.3	0.4	1.2
45-59	1375	89.6	7.8	1.3	1.3
60-69	623	88.9	8.1	0.8	2.2
18-69	7357	93.8	4.7	0.5	1.0

3.1.2.9 History of cardiovascular diseases (CVD):

Overall 6% respondents gave history of ever suffering from heart attack or chest pain due to heart diseases or stroke. These symptoms were more evident in those aged 45 years and above in both genders (Table 36).

Table 36: Respondents who had ever a heart attack or chest pain

Age groups (years)	Men		Women		Both genders	
	N	% CVD history	N	% CVD history	N	% CVD history
18-29	990	2.0	1659	3.5	2649	3.0
30-44	1139	6.3	1571	6.8	2710	6.6
45-59	654	8.4	721	8.0	1375	8.2
60-69	362	14.1	261	13.2	623	13.7
18-69	3145	6.4	4212	6.2	7357	6.3

Overall 3.4% were taking aspirin regularly to prevent the disease and within gender, more women (4%) were taking aspirin as compared to men (2.4%). Overall 1.1% population were currently taking statins to prevent or treat heart disease (Table 37 & 38).

Table 37: Respondents currently taking aspirin regularly to prevent or treat heart disease

Age groups (years)	Men		Women		Both genders	
	N	% taking aspirin	N	% taking aspirin	N	% taking aspirin
18-29	990	0.6	1659	3.4	2649	2.4
30-44	1139	1.9	1571	3.5	2710	2.9
45-59	654	4.0	721	5.6	1375	4.8
60-69	362	5.5	261	6.5	623	6.0
18-69	3145	2.4	4212	4.0	7357	3.4

Table 38: Respondents currently taking statins regularly to prevent or treat heart disease

Age groups (years)	Men		Women		Both genders	
	N	% taking statins	N	% taking statins	N	% taking statins
18-29	990	0.2	1659	0.1	2649	0.1
30-44	1139	0.9	1571	0.5	2710	0.7
45-59	654	2.1	721	1.7	1375	1.9
60-69	362	4.9	261	4.4	623	4.7
18-69	3145	1.4	4212	0.8	7357	1.1

3.1.2.10 Lifestyle advice:

Dietary advice was given by the doctors to one third cases to take at least five servings of fruit or vegetables, reduce salt and fat in their diet. Similarly a quarter were asked to quit tobacco, start or do more physical activity and maintain a healthy body weight or lose weight.

When asked about screening for cervical cancer, overall 0.7% women responded that they were screened for cervical cancer. Most (1.3%) women were screened between 45-59 years age group. Within the most vulnerable age for cervical cancer i.e. 30-49 years age group, 0.9% underwent screening.

3.2 STEPS 2

3.2.1 Physical Measurements:

This chapter describes physical measurements such as height, weight, waist circumference and body mass index (BMI).

3.2.1.1 Weight:

The mean weight of men was 66 kg while it was 59 Kg in women. Mean height of men and women was 165.8cm and 153.9cm respectively.

3.2.1.2 Body Mass Index (BMI):

Table 39 presents the BMI score. About 11.3% were underweight (BMI <18.5), 14.9% were obese (BMI ≥ 30) and 26.3% were at risk of going into obesity (BMI between 25-29). Less than 50% had normal BMI (18.5-24.9). Most underweight population was seen between 18-29 years. The nutritional status improved till 60 years of age after which it again showed a decline. Among obese; more women were obese (16.6%) as compared to men (11.6%).

Table 39: BMI classification of the respondents

BMI classifications					
Age Groups	N	% Under-weight (BMI <18.5)	% Normal weight (BMI 18.5-24.9)	% Over-weight (BMI 25.0 29.9)	% Obese (BMI ≥ 30.0)
18-29	2348	15.2	57.1	19.1	8.6
30-44	2422	8.5	41.3	31.3	18.9
45-59	1260	9.6	41.4	30.8	18.2
60-69	582	12.2	49.3	23.2	15.3
18-69	6613	11.3	47.4	26.3	14.9

3.2.1.3 Waist Circumference:

The mean waist circumference in men was 85 cm and in women 84 cm. The waist circumference of men was normal (less than the cut-off levels i.e. 90 cm) while for women it was slightly higher than the cut-off i.e. 80 cm. Similarly the hip circumference in men was 95 cm and in women, it was 96 cm. The waist to hip ratio was similar in both genders i.e. 0.9. It was normal in men and slightly higher in women (cutoff value for male is 0.9 and female 0.85).

3.2.1.4 Blood Pressure:

The blood pressure of the participants was measured and grouped into normal (systolic 120, diastolic 80), pre-hypertension (systolic BP >120 and diastolic BP >80), stage I hypertension (systolic BP >140 and diastolic BP >90) and stage II hypertension (systolic BP >160 and diastolic BP >100).

Overall 37% population had stage I hypertension. The proportion of newly diagnosed stage I hypertension was 33%. This was more in men (36.8%) as compared to women (29.3%) as shown in table 40.

Table 40: Stage I hypertension excluding those on medication for raised blood pressure

Age groups (years)	Men			Women			Both genders		
	N	%	95% CI	N	%	95% CI	N	%	95% CI
18-29	940	27.3	23.5-31.1	1572	18.4	16.0-20.9	2512	21.5	19.3-23.8
30-44	1036	36.6	32.6-40.5	1383	31.1	27.9-34.4	2419	33.3	30.7-36.1
45-59	561	44.4	38.7-50.3	570	44.8	39.5-50.3	1131	44.6	40.4-49.0
60-69	304	49.8	41.9-57.6	178	52.6	42.2-62.4	482	50.9	44.4-57.4
18-69	2841	36.8	34.3-39.5	3703	29.3	27.0-31.8	6544	32.5	30.5-34.5

Similarly 9.9% had stage II hypertensive with 11% in men and 9% in women. (Table 41)

Table 41: Stage II hypertension excluding those on medication for raised blood pressure

Age groups (years)	Men			Women			Both genders		
	N	%	95% CI	N	%	95% CI	N	%	95% CI
18-29	940	4.7	3.2-6.5	1572	3.3	2.3-4.3	2512	3.8	3.0-4.7
30-44	1036	10.2	8.1-12.3	1383	9.3	7.3-11.3	2419	9.7	8.2-11.2
45-59	561	15.2	11.8-18.6	570	16.1	12.0-18.9	1131	15.3	12.7-18.0
60-69	304	24.8	18.0-31.5	178	27.1	18.9-35.2	482	25.8	20.8-30.8
18-69	2841	11.1	9.8-12.6	3703	9.0	7.7-10.1	6544	9.9	8.9-10.8

Among hypertensive cases (newly and already diagnosed), 5.5% were already on treatment and their blood pressure was controlled (SBP was <140 and DBP was <90). However despite taking treatment, 12% cases still had high blood pressure (SBP >140 and DBP >90). Almost 82% were not taking any treatment despite having SBP >140 and DBP >90.

3.3 Optional Modules

The tobacco policy and injuries were assessed as optional modules.

3.3.1 Tobacco policy:

Participants were inquired whether they had seen any information on the dangers of smoking cigarettes or that encourages quitting smoking in print (newspapers or magazines) and electronic media (TV and radio). About 61.6% reported TV, 46.0% newspaper and 33.0% radio as the key source of information (Table 42,43,44).

The advertisements and/or signs of promoting cigarettes in stores were noticed by 5% of the population (Table 45). About 3.8%, reported the availability of cigarettes on sale price, 2.8% received cigarettes' coupon and 2.2% got free samples of cigarettes. Similarly 2% reported distribution of clothing and other items with branded name or logo of cigarettes and 0.4% received cigarette promotion mails.

Majority (77%) of current smokers noticed health warnings on cigarette packages and out of them, 66% thought to quit after watching these warning labels (Table 46,47). When asked about the cost of 20 manufactured cigarettes, the response varied from PKR 48 to 210 (Table 48).

Table 42: Participants noticed information in newspapers or magazines about dangers of smoking or that encourages quitting

Age groups (years)	Men	Women					Both genders		
	N	%	95% CI	N	%	95% CI	N	%	95% CI
18-29	950	56.3	51.6-60.9	1579	45.0	40.5-49.4	2529	49.0	45.2-52.7
30-44	1109	57.5	52.8-62.2	1503	38.8	34.5-43.1	2612	46.6	42.6-50.6
45-59	631	50.7	44.2-57.2	672	33.4	28.2-38.6	1303	41.7	37.2-46.2
60-69	337	52.1	44.2-60.0	243	28.6	19.7-37.5	580	40.7	33.9-47.6
18-69	3027	55.1	51.2-58.9	3997	39.5	35.9-43.0	7024	46.0	42.6-49.3

Table 43: Participants noticed information on television about dangers of smoking or that encourages quitting

Age groups (years)	Men			Women			Both genders		
	N	%	95% CI	N	%	95% CI	N	%	95% CI
18-29	950	56.3	51.6-60.9	1579	45.0	40.5-49.4	2529	49.0	45.2-52.7
30-44	1109	57.5	52.8-62.2	1503	38.8	34.5-43.1	2612	46.6	42.6-50.6
45-59	631	50.7	44.2-57.2	672	33.4	28.2-38.6	1303	41.7	37.2-46.2
60-69	337	52.1	44.2-60.0	243	28.6	19.7-37.5	580	40.7	33.9-47.6
18-69	3027	55.1	51.2-58.9	3997	39.5	35.9-43.0	7024	46.0	42.6-49.3

Table 44: Participants noticed information on radio about dangers of smoking or that encourages quitting

Age groups (years)	Men			Women			Both genders		
	N	%	95% CI	N	%	95% CI	n	%	95% CI
18-29	948	37.9	32.9-42.9	1566	30.5	25.9-35.1	2514	33.1	29.1-37.0
30-44	1095	41.5	36.1-46.8	1485	27.8	23.7-31.8	2580	33.5	29.4-37.6
45-59	620	38.3	32.4-44.2	670	25.0	19.9-30.1	1290	31.3	26.9-35.6
60-69	332	41.6	33.5-49.7	238	25.0	16.1-34.0	570	33.7	27.5-39.9
18-69	2995	39.8	35.8-43.7	3959	28.1	24.4-31.8	6954	33.0	29.5-36.4

Table 45: Participants noticed advertisements or signs promoting cigarettes in stores

Age groups (years)	Men			Women			Both genders		
	N	%	95% CI	N	%	95% CI	N	%	95% CI
18-29	943	7.9	5.9-9.8	1547	2.8	1.7-3.9	2490	4.6	3.5-5.6
30-44	1113	8.0	5.8-10.3	1474	2.7	1.7-3.7	2587	4.9	3.8-6.1
45-59	629	8.4	5.8-10.9	664	2.5	1.1-4.0	1293	5.3	3.8-6.8
60-69	328	7.7	4.6-10.8	235	0.4	0.0-1.2	563	4.2	2.5-5.9
18-69	3013	8.0	6.7-9.4	3920	2.5	1.8-3.3	6933	4.8	4.0-5.6

Table 46: Current smokers who noticed health warnings on cigarette packages

Age groups (years)	Men			Women			Both genders		
	N	%	95% CI	N	%	95% CI	N	%	95% CI
18-29	136	79.8	71.7-88.0	17	50.6	15.5-85.6	153	76.7	68.2-85.2
30-44	301	87.1	82.8-91.5	41	50.2	27.3-73.1	342	83.1	78.0-88.1
45-59	199	74.2	65.8-82.6	52	59.2	40.8-77.6	251	70.7	62.4-79.1
60-69	120	80.3	71.9-88.7	23	57.8	29.8-85.9	143	75.8	67.1-84.4
18-69	756	81.4	77.2-85.6	133	55.6	41.5-69.8	889	77.2	72.5-82.0

Table 47: Current smokers who saw health warnings on cigarette packages that thought of quitting

Age groups (years)	Men			Women			Both genders		
	N	%	95% CI	N	%	95% CI	N	%	95% CI
18-29	108	64.2	53.3-75.2	8	96.8	89.9-100.0	116	66.6	56.2-77.0
30-44	249	67.6	60.1-75.0	20	73.9	52.8-95.1	269	68.0	60.6-75.3
45-59	149	65.3	56.7-73.9	30	75.5	57.5-93.5	179	67.3	59.4-75.2
60-69	91	63.6	50.9-76.2	11	42.4	8.0-76.9	102	60.3	47.4-73.3
18-69	597	65.9	61.1-70.7	69	70.4	55.7-85.0	666	66.4	61.9-70.9

Table 48: Average price paid for manufactured cigarettes

Age groups (years)	Men		Women		Both genders	
	N	Mean(Rs)	N	Mean(Rs)	N	Mean(Rs)
18-29	124	44.761	6	61.008	130	45.57
30-44	258	49.143	20	58.601	278	49.724
45-59	178	51.466	22	59.551	200	52.485
60-69	107	45.829	10	296.59	117	79.578
18-69	667	48.592	58	110.526	725	54.091

3.3.2 Injury:

Overall 3.1% population reported suffering from injury. These injuries were divided into those due to traffic accidents and other causes.

3.3.2.1 Traffic injuries:

Traffic injuries were assessed by asking whether a person had suffered a traffic injury in the past 12 months. The prevalence of self-reported traffic injuries in the past 12 months was 3.5% which were common in men (5.9%) as compared to women (1.7%). The frequency of traffic injuries was more common (7.6%) in young males aged between 18-29 years as compared to others age groups (Table 49). Majority (64.8%) of the population were not regularly using safety helmet during driving or sitting as a passenger on motorcycle while 7% used this sometimes and only 3% used it all the times (Table 50).

Table 49: Self-reported Traffic injuries

Age Group	Male		Female		Total	
	%	N	%	N	%	N
18 – 29	7.6	992	1.7	1659	3.9	2651
30 – 44	5.5	1141	1.5	1573	3.2	2714
45 – 59	5.3	655	2.4	723	3.8	1378
60 – 69	5.3	362	1.9	261	2.7	623
Overall	5.9	3150	1.7	4216	3.5	7366

Table 50: Use of safety helmet by motorcycle drivers and passengers

Age Groups	All of times	Some times	Never	Has not been on motorcycle	Do not have any helmet	TOTAL
18-29	3.2	6.3	67.1	13.8	5.4	2651
30-44	3.3	7.2	63.7	15.6	5.7	2714
45-59	3.2	6.5	63.1	18.9	3.0	1378
60-69	1.3	6.1	62.9	24.6	1.1	623
TOTAL	3.1	6.7	64.8	16.4	4.7	7366

3.3.2.2 Injuries other than traffic:

The frequency of self-reported injuries which required medical attention was 2.7% which was more in men (3.6%) as compared to women (2.1%) (Table 51). Breakdown by the type of injury showed that falls were most common (2%) followed by cuts (0.3%), burns (0.1%) and others (0.2%). The frequency of injuries increased with age in women but decreased with age in men (Table 52). The home and road were the most common place of injury (Table 53).

Table 51: Self reported injuries required medical attention (other than traffic)

Age Group	Male		Female		Total	
	%	N	%	N	%	N
18 – 29	4.2	992	1.4	1659	2.5	2651
30 – 44	3.5	1141	1.9	1573	2.6	2714
45 – 59	3.1	655	3.6	723	3.3	1378
60 – 69	3.0	362	3.8	261	3.4	623
Overall	3.6	3150	2.1	4216	2.7	7366

Table 52: Cause of injury

Age Groups	Fall	Burn	Cut	near drowning	animal bite	Others	N
18-29	1.8	0.1	0.3	0.0	0.0	0.2	2651
30-44	1.8	0.1	0.4	0.0	0.0	0.2	2714
45-59	2.8	0.1	0.1	0.0	0.1	0.3	1378
60-69	2.6	0.2	0.5	0.0	0.0	0.0	623
TOTAL	2.0	0.1	0.3	0.0	0.0	0.2	7366

Table 53: Place of injury

Age Groups	Home	School	Workplace	Road/Street/ Highway	Farm	Sports	Others	N
18-29	0.7	0.2	0.5	0.7	0.2	0.1	0.1	2651
30-44	0.9	0.0	0.5	1.0	0.1	0.0	0.0	2714
45-59	1.4	0.0	0.3	1.5	0.1	0.0	0.1	1378
60-69	1.3	0.0	0.3	1.4	0.0	0.0	0.2	623
TOTAL	1.0	0.1	0.5	1.0	0.1	0.0	0.1	7366

REFERENCES

4. REFERENCES:

1. World Health Organization. Non-Communicable Diseases [accessed on 24-06-2013] <http://www.who.int/mediacentre/factsheets/fs355/en/>.
2. Jafar TH, Haaland BA, Rahman A, Razzak JA, Bilger M, Naghavi M, Mokdad AH, Hyder AA. Non-communicable diseases and injuries in Pakistan: strategic priorities. *Lancet*. 2013-16. pii: S0140-6736(13)60646-7.
3. Khuwaja AK, Qureshi R, Fatmi Z. Noncommunicable diseases and injuries: Action needed in South Asia too. *PLoS Med* 2007; 4(1): e38.
4. Alwan A et al. Monitoring and surveillance of chronic Non communicable diseases: progress and capacity in high-burden countries. *The Lancet*, 2010; 376: 1861-1868.
5. Non-communicable diseases country profiles, 2011. www.who.int/nmh/publications/need-profiles2011/en/. [accessed on 20-02-2016].
6. WHO Global Status Report on non-communicable disease. World Health Organization. World Health Organization, 2014. http://apps.who.int/iris/bitstream/10665/148114/1/9789241564854_eng.pdf [accessed on 11-6-2016]
7. Cureau FV, Duarte P, Santos DL, Reichert FF. Clustering of Risk Factors for Non-Communicable Diseases in Brazilian Adolescents: Prevalence and Correlates. *J Phys Act Health*. 2013 May 10.
8. Bhagyalaxmi A, Atul T, Shikha J. Prevalence of risk factors of non-communicable diseases in a District of Gujarat, India. *J Health Popul Nutr*, 2013 31(1): 78-85.
9. Shafey O et al. The tobacco atlas, 3rd ed. Atlanta, GA, American Cancer Society, 2009.
10. Line H et al. Tobacco smoke, indoor air pollution and tuberculosis: A systematic review and meta- analysis. *PLoS Medicine*, 2007; 4: e20.
11. Ahmad K, Jafary F, Jehan I, Hatcher J, Khan A.Q, Chaturvedi N, Jafar TH. "Prevalence and Predictors of Smoking in Pakistan: Results of the National Health Survey of Pakistan"; ©European Society of Cardiology. 2004.
12. http://www.emro.who.int/images/stories/tfi/documents/GYTS_FS_PAK_2013.pdf?ua=1 accessed on 20-02-2016]
13. Habibullah S, Ashraf J, Taseer I, Javed R, Naz S, Arain GM, Akhtar T, Misbah-ul-Islam. Prevalence of Shisha Smoking in College, University and Madarsa Students Aged 20-25 Years in Pakistan. *Pak J Med Res Vol. 52, No. 1, 2013*
14. Global health risks: mortality and burden of disease attributable to selected major risks. Geneva, World Health Organization, 2009.
15. Global recommendations on physical activity for health. Geneva, World Health Organization, 2010.
16. Global status report on non-communicable diseases 2010. Geneva, World Health Organization, 2011.
17. Khuwaja AK, Kadir MM. Gender differences and clustering pattern of behavioural risk factors for chronic non-communicable diseases: community-based study from a developing country, 2010 Sep; 6(3):163-70. doi: 10.1177/1742395309352255.
18. Samir N. Mahmud S. Khuwaja A. Prevalence of physical inactivity and barriers to physical activity among obese attendants at a community health-care center in Karachi, Pakistan. *BMC Research Notes* 2011; 4(1): 174.
19. Diet, nutrition and the prevention of chronic diseases: report of a joint WHO/FAO expert consultation. Geneva, World Health Organization, 2003.
20. Creating an enabling environment for population-based salt reduction strategies: report of a joint technical meeting held by WHO and the Food Standards Agency, United Kingdom. Geneva, World Health Organization, 2010.
21. Prevention of cardiovascular disease: pocket guidelines for assessment and management of cardiovascular risk. Geneva, World Health Organization, 2007.
22. He FJ, MacGregor GA. A comprehensive review on salt and health and current experience of worldwide salt reduction programmes. *Journal of Human Hypertension*, 2009; 23: 363-384.
23. Hu FB et al. Dietary fat intake and the risk of coronary heart disease in women. *New England Journal of Medicine*, 1997; 337: 1491-1499.
24. Meyer KA et al. Dietary fat and incidence of type 2 diabetes in older Iowa women. *Diabetes Care*, 2001; 24: 1528-1535.

25. Safdar NF, Bertone-Johnson E, Cordeiro L, Jafar TH, Cohen NL. Dietary patterns of Pakistani adults and their associations with sociodemographic, anthropometric and life-style factors. *J Nutr Sci*. 2014 Jan 2;2:e42. doi: 10.1017/jns.2013.37. eCollection 2013.
26. Bahadur S, Yousaf M, Ayaz HM, Sohail Z, Rehman AU, Baloch S, et al. Self reporting of obesity, overweight and health risks among 1st year MBBS students of Rehman medical college, Peshawar. *Khyber Med Univ J*, 2013; 5(2):
27. Nisar N, Qadri MH, Fatima K, Perveen S. Dietary habits and life style among the students of a private medical university Karachi. *J Pak Med Assoc* 2009; 59(2): 98-101.
28. Khuwaja A K, Khawaja S, Motwani K, Khoja A A, Azam I S, Fatmi Z, Ali B S, Kadir M M. Preventable Lifestyle Risk Factors for Non-Communicable Diseases in the Pakistan Adolescents Schools Study 1 (PASS-1). *Journal of Preventive Medicine and Public Health* July, 2011; 44(5): 210-217.
29. Policy and action for cancer prevention. Food, nutrition, and physical activity: a global perspective. Washington, DC, World cancer research fund/American Institute for Cancer Research, 2009.
30. Williams B et al. British Hypertension Society guidelines for hypertension management (BHS-IV): summary. *BMJ*, 2004; 328: 634-640.
31. Jafar TH, Rahbar MH, Khan AQ, Hattersley A, Schmid CH, Chaturvedi N. Ethnic subgroup differences in hypertension in Pakistan. *J Hypert*, 2003; 21: 905-12.
32. Chronic diseases. National Health Survey of Pakistan; 1990-94. Health profile of peoples of Pakistan. Pakistan Medical Research Council, 1998; 49-69.
33. The world health report 2002: Reducing risks, promoting healthy life. Geneva, World Health Organization, 2002.
34. Policy and action for cancer prevention. Food, nutrition, and physical activity: a global perspective. Washington, DC, World cancer research fund/American Institute for Cancer Research, 2009.
35. Nanan DJ The Obesity Pandemic - Implications for Pakistan. (Department of Community Health Sciences, The Aga Khan University, Karachi. *JPMA* ,2002.
36. Ezzati M et al. Selected major risk factors and global and regional burden of disease. *The Lancet*, 2002; 360: 1347–1360.
37. Farzadfar F et al. National, regional, and global trends in serum total cholesterol since 1980: systematic analysis of health examination surveys and epidemiological studies with 321 country-years and 3.0 million participants. *The Lancet*, 2011; 337(9765): 578–586.
38. Sherin T, Obesity: How To Prevent Pakistani People From Getting Heavier? *Home*, 2013; 5(2).
39. M. P. Iqbal, M. Shafiq, N. Mehboobali, S. P. Iqbal, K. Abbasi Variability in Lipid Profile in Patients with Acute Myocardial Infarction from two tertiary care hospitals in Pakistan (Department of Biological and Biomedical Sciences, The Aga Khan University, Karachi).
40. Hyder AA, Morrow RH. Lost Healthy Life Years in Pakistan in 1990. *Am J Public Health*, 2000; 90(8): 1235- 40.
41. Federal Bureau of Statistics, Statistics Division. Pakistan Demographic Survey, 2001. Islamabad, Pakistan: Government of Pakistan, 2003.
42. Shera AS, Rafique G, Khuwaja IA, Ara J, Baqai S, King H. Pakistan National Diabetes Survey: prevalence of glucose intolerance and associated factors in Shikarpur, Sindh province. *Diabet Med* 1995; 12(12): 1116-21.
43. Bhurgri Y, Bhurgri A, Hasan SH, Usman A, Faridi N, Khurshid M, et al. Cancer patterns in Karachi division (1998-1999). *J Pak Med Assoc* 2002; 52(6): 244-6.
44. Jafar TH, Haaland BA, Rahman A, Razzak JA, Bilger M, Naghavi M, et al. Non-communicable diseases and injuries in Pakistan: strategic priorities. *Lancet* 2013; 381: 2281-90.
45. Khan FS, Lotia-Farrukh I, Khan AJ, Siddiqui ST, Sajun SZ, et al. The Burden of Non-Communicable Disease in Transition Communities in an Asian Megacity: Baseline Findings from a Cohort Study in Karachi, Pakistan, 2013. *PLoS ONE* 8(2): e56008. doi:10.1371/journal.pone.0056008.
46. Global status report on non-communicable diseases 2010. Geneva, World Health Organization, 2011. 47.
47. What is the Kish Selection Procedure. *Survey Methods*. <http://blog.surveymethods.com/what-is-the-kish-selection-procedure/> [accessed on 18-4-16].

APPENDIX - A

Participant identification Number

WHO STEPS Instrument

For Non-communicable disease

Risk Factor Surveillance

Pakistan

سروے کی معلومات

کوڈ	جواب	تاریخ اور جگہ
11		یونین کونسل / سینٹر / گاؤں کا شناختی نمبر
12		یونین کونسل / سینٹر / گاؤں کا نام
13		انٹرویو کرنے والے کا نام
14	dd mm year	تاریخ

اجازت نامہ

اسلام و علیکم:

میرا نام----- ہے۔ اور میں PMRC میں کام کرتا / کرتی ہوں۔ اور ہم اس ادارے کی طرف سے NCD سروے کر رہے ہیں۔ NCD ایک مخفف ہے۔ ان بیماریوں کا جو چھوت کی طرح نہیں لگتیں۔ یہ بیماریاں اکثر خاندانی ہوتی ہیں اور ان کا تعلق ہمارے کھانے پینے، ورزش اور طرز زندگی سے ہے۔ اس سروے میں ہم آپ سے طرز زندگی، خوراک، بلڈ پریشر، خون میں چربی اور تمباکو نوشی کے حوالے سے سوالات کریں گے۔ اس سروے میں آپ کی شرکت رضاکارانہ ہوگی۔ اور اس میں کسی قسم کی مالی معاونت نہیں دی جائے گی۔ اگر آپ کسی سوال کا جواب نہ دینا چاہیں تو آپ بتادیں میں اگلا سوال پوچھ لوں گا / گی۔ آپ کسی بھی وقت انٹرویو ختم کرانے کا حق رکھتے / رکھتی ہیں۔ اور ہم آپ کو یقین دلاتے ہیں کہ آپ کی تمام معلومات صیغہ راز میں رکھی جائیں گی۔ اس سروے کے لیے ہمیں آپ کے 30-40 منٹ درکار ہوں گے۔ اگر آپ اس سروے میں شریک ہوں تو ہم آپ کے بہت شکر گزار ہوں گے۔ ہم آپ کا بلڈ پریشر چیک کریں گے اور اس کے ساتھ قد، وزن، کمر کا گھیرنا پئیں گے۔

کوڈ	جواب	سوال
15	1۔ ہاں 2۔ نہیں (اگر اجازت نہیں ملی تو انٹرویو ختم کیا جائے)	اجازت نامہ پڑھ کے گیا ہے۔
17	منٹ گھنٹے ---	انٹرویو کے وقت ٹائم تھا۔
18		خاندانی نام
19		پہلا نام

اضافی معلومات: (جو مفید ہوں)

110		ٹیلیفون نمبر
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پہلا مرحلہ: نوآبادیاتی معلومات

سوال	جواب	کوڈ
جنس	1- مرد 2- عورت	C1
آپ کی تاریخ پیدائش	دن-----مہینہ-----سال----- 77- معلوم نہیں	C2
آپ کی عمر کتنی ہے؟	سال----- 77- معلوم نہیں	C3
مجموعی طور پر آپ نے کتنے سال تعلیم حاصل کی۔	1-----سال 2- ان پڑھ 77- معلوم نہیں 88- جواب دینے سے انکار	C4
آپ کی تعلیم کتنی ہے۔	1- ان پڑھ 2- پرائمری سے کم 3- پرائمری 4- مڈل 5- میٹرک 6- انٹر 7- گریجویٹ 8- پوسٹ گریجویٹ 88- جواب دینے سے انکار	C5
آپ کی مادری زبان کیا ہے۔	1- اردو 2- سندھی 3- پنجابی 4- کوئی اور-----	C6
ازدواجی حیثیت	1- غیر شادی شدہ 2- شادی شدہ 3- علیحدگی 4- طلاق یافتہ 5- بیوہ 88- جواب دینے سے انکار	C7
گزشتہ ایک سال کے دوران آپ کا پیشہ	1- سرکاری ملازم 2- پرائیویٹ 3- ذاتی کاروبار 4- طالب علم 5- ریٹائرڈ 6- بیروزگار (کام کر سکتا ہوں) 7- بیروزگار (معذوری) 8- گھرداری 88- جواب دینے سے انکار	C8
آپ کے گھر میں آپ کو ملا کر اٹھارہ سال سے زیادہ عمر کے کتنے افراد ہیں؟	افراد کی تعداد (-----)	C9
آپ کے گھر میں کل لوگ کتنے ہیں۔	افراد کی تعداد (-----)	C9
پچھلے سال ان تمام لوگوں کو ملا کر آپ کے گھر ان کی اوسط آمدن کتنی تھی؟ (صرف ایک میں اندراج کریں)۔	1- روپے----- ہفتہ وار (T1 پر جائیں) 2- روپے----- مہینہ کے دوران (T1 پر جائیں) 3- روپے----- سالانہ (T1 پر جائیں) 77- معلوم نہیں 88- جواب دینے سے انکار	C10 a C10 b C10 c C10 d
اگر آپ کو رقم نہیں معلوم تو کیا آپ اندازہ لگا سکتے ہیں کہ آپ کے گھر کی سالانہ آمدنی کتنی ہوگی۔	1- ایک لاکھ سے کم 2- ایک سے دو لاکھ 3- دو سے چار لاکھ 4- چار لاکھ سے زیادہ 77- معلوم نہیں 88- جواب دینے سے انکار	C11

پہلا مرحلہ: رویوں کا جائزہ

تمباکو کا استعمال: (CORE)

اب میں آپ سے کچھ سوال تمباکو نوشی کے متعلق پوچھوں گا/گی۔ تمباکو دو قسم کا ہوتا ہے۔ دھوئیں والا اور بے دھواں۔ دھوئیں والا تمباکو پیاجاتا ہے اور اسے پینے کے دوران دھواں پیدا ہوتا ہے۔ جیسا کہ سگریٹ، بیڑی، حقہ، پائپ، شیشہ وغیرہ۔ بے دھواں تمباکو وہ ہے جو منہ اور ناک کے ذریعے سے لیا جاتا ہے۔ اور اس سے دھواں پیدا نہیں ہوتا۔ مثلاً تمباکو والا پان، گولکا، نسوار وغیرہ۔ نیچے دیئے گئے سوالوں میں تمباکو نوشی سے مراد دونوں قسم کا تمباکو کا استعمال ہے۔

سوال	جواب	کوڈ
کیا آپ آج کل تمباکو نوشی کرتے ہیں۔ مثلاً سگریٹ، حقہ، پائپ، شیشہ، وغیرہ	1- ہاں 2- نہیں (اگر نہیں تو T8 پر جائیں)	T1
کیا آپ نے ان میں سے کسی بھی چیز (سگریٹ، حقہ، پائپ، شیشہ وغیرہ) کا استعمال روزانہ کرتے ہیں۔	1- ہاں 2- نہیں	T2
جب آپ نے ان چیزوں (سگریٹ، حقہ، پائپ، شیشہ، وغیرہ) کا استعمال کیا اس وقت آپ کی عمر کیا تھی۔	1-----سال 77- معلوم نہیں (اگر معلوم ہے تو T5a/T5aw پر جائیں)	T3
تقریباً آج سے کتنا عرصہ پہلے آپ نے ان چیزوں (سگریٹ، حقہ، پائپ، شیشہ کا استعمال کیا۔	1-----سال پہلے (اگر جانتے ہیں تو T5a/T5aw) یا	T4a T4b

T4c	2----- مینے پہلے (اگر جانتے ہیں تو T5a/T5aw) یا 3----- نقتے پہلے (اگر جانتے ہیں تو T5a/T5aw) 77- معلوم نہیں	
T5a/T5aw T5b/T5bw T5c/T5cw T5d/T5dw T5f/T5fw T5g/T5gw T5h/T5hw	روزانہ ہفتہ وار 1- تیار شدہ سگریٹ 2- ہاتھ سے بنائے ہوئے سگریٹ 3- پائپ / سگار 4- حقہ / چلم 5- شیشہ 77- معلوم نہیں 88- جواب دینے سے انکار	آپ روزانہ / ہفتہ وار کتنی اور تمباکو نوشی کرتے ہیں۔ آپ او-طامندر چہ زیل میں سے تمباکو کی کتنی مصنوعات روزانہ / ہفتہ وار استعمال کرتے ہیں
T6	1- ہاں 2- نہیں	گزشتہ بارہ مہینوں کے دوران آپ نے کبھی تمباکو نوشی ترک کرنے کی کوشش کی
T7	1- ہاں (اگر جواب ہے تو T12 پر جائے اگر جواب T2 نہیں ہے تو T9 پر جائے) 2- نہیں (اگر جواب T2 ہے تو T12 پر جائے اگر جواب T2 نہیں ہے تو T9 پر جائے) 3- پچھلے 12 مہینوں کے دوران ڈاکٹر کے پاس نہیں گیا۔ (اگر جواب T2 ہے تو T12 پر جائے اگر جواب T2 نہیں ہے تو T9 پر جائے)	کیا بارہ مہینوں کے دوران کبھی کسی ڈاکٹر یا طبی عملے نے آپ کو تمباکو نوشی چھوڑنے کا کہا۔
T8	1- ہاں 2- نہیں (اگر نہیں تو T12 پر جائیں)	کیا باضی میں کبھی بھی آپ نے تمباکو نوشی کی
T9	1- ہاں 2- نہیں	کیا باضی میں کبھی بھی تمباکو نوشی روزانہ کی

تمباکو نوشی: (Expanded)		
T10	1- سال 77- معلوم نہیں (اگر جواب معلوم ہے تو T12 پر جائے)	جب آپ نے تمباکو نوشی ترک کی اس وقت آپ کی عمر کیا تھی۔
T11 A T11 B T11 C	یا یا 1----- سال پہلے (اگر جانتے ہیں تو T12 پر جائے) 2----- مینے پہلے (اگر جانتے ہیں تو T12 پر جائے) 3----- نقتے پہلے (اگر جانتے ہیں تو T12 پر جائے) 77- معلوم نہیں	کتنے عرصہ پہلے آپ نے دھوئیں والے تمباکو (سگریٹ، بیڑی، حقہ، پائپ، شیشہ) کا استعمال چھوڑا۔ (صرف ایک میں اندراج کریں)۔
T12	1- ہاں 2- نہیں (اگر نہیں تو T15 پر جائیں)	کیا آپ آج کل بے دھواں تمباکو جو کہ ناک / منہ کے ذریعے لیا جاتا ہے جیسے تمباکو والا پان، گٹکا، نسوار، ناس، مین پوری وغیرہ کا استعمال کرتے ہیں۔
T13	1- ہاں 2- نہیں (اگر نہیں تو پر جائیں)	کیا آپ کل ان چیزوں تمباکو والا پان، گٹکا، نسوار وغیرہ کا استعمال روزانہ کرتے ہیں۔
T14a/T14aw T14b/T14bw T14c/T14cw T14d/T14dw T14e/T14ew	روزانہ ہفتہ وار 1- نسوار منہ کے ذریعے 2- نسوار ناک 3- تمباکو والا پان 4- گٹکا 5- کوئی اور (مثلاً پان پر اگ وغیرہ)	او-طامندر روزانہ / ہفتے میں کتنی بار ان چیزوں (تمباکو والا پان، گٹکا، نسوار، ناس، مین پوری وغیرہ) کا استعمال کرتے ہیں۔
T15	1- ہاں 2- نہیں (اگر نہیں تو T14aw پر جائیں)	کیا آپ نے پہلے کبھی بھی ان چیزوں (تمباکو والا پان، گٹکا، نسوار وغیرہ) کا استعمال کیا۔
T16	1- ہاں 2- نہیں (اگر نہیں تو۔۔۔ پر جائیں)	کیا آپ نے پہلے کبھی بھی ان چیزوں (تمباکو والا پان، گٹکا، نسوار وغیرہ) کا استعمال روزانہ کیا۔
T17	1- ہاں 2- نہیں (اگر نہیں تو۔۔۔ پر جائیں)	کیا پچھلے تیس دنوں میں آپ کے گھر میں کسی نے تمباکو نوشی کی۔
T18	1- ہاں 2- نہیں 3- بند جگہ پر کام نہیں کرتا	کیا پچھلے تیس دنوں کے دوران جہاں آپ کام کرتے ہیں اس کی عمارت مثلاً آفس، دوکان، سکول وغیرہ کے کمروں کے اندر کسی نے تمباکو نوشی کی۔

تمباکو نوشی کا قانون: Tobacco Policy

اس سے پہلے آپ سے تمباکو نوشی کے استعمال کے بارے میں سوالات کئے گئے تھے اگلے سوالات تمباکو نوشی کی روک تھام کے لیے کیے گئے قوانین کے بارے میں ہیں۔ ان میں سے میڈیا پر تمباکو نوشی کے بارے میں اشتہارات، سگریٹ نوشی کے تشہیری طریقوں، سگریٹ کے مضر صحت اثرات اور خریداری کے بارے میں ہیں۔

کیا گزشتہ تیس دنوں میں آپ نے میڈیا پر ایسی معلومات کی تشہیر (اشتہارات) دیکھی ہیں جس میں سگریٹ نوشی کے مضر صحت اثرات اور سگریٹ نوشی کو ترک کرنے کے بارے میں بتایا گیا ہو۔		
TP1a	1- ہاں 2- نہیں 77- معلوم نہیں	اخبارات اور رسالے
TP1b	1- ہاں 2- نہیں 77- معلوم نہیں	ٹیلی ویژن
TP1c	1- ہاں 2- نہیں 77- معلوم نہیں	ریڈیو
TP2	1- ہاں 2- نہیں 77- معلوم نہیں	کیا گزشتہ تیس دنوں میں آپ نے ان دوکانوں پر جہاں سگریٹ بیچے جاتے ہیں۔ ایسے اشتہارات یا اشارے دیکھے ہیں۔ جن میں سگریٹ نوشی کرنے کی ترغیب دی گئی ہو۔
کیا گزشتہ تیس دنوں میں آپ نے درج ذیل سگریٹ کے تشہیری طریقے دیکھے		
TP3a	1- ہاں 2- نہیں 77- معلوم نہیں	مفت سگریٹ کی تقسیم
TP3b	1- ہاں 2- نہیں 77- معلوم نہیں	سستی قیمت پر سگریٹ بیچنا
TP3c	1- ہاں 2- نہیں 77- معلوم نہیں	سگریٹ کے لئے کوپن کی تقسیم
TP3d	1- ہاں 2- نہیں 77- معلوم نہیں	سگریٹ خریدنے پر مفت یا کچھ اور اشیاء پر ڈسکاؤنٹ وغیرہ
TP3e	1- ہاں 2- نہیں 77- معلوم نہیں	کچھ اور اشیاء مثلاً ٹی شرٹ، پی کیپ کپڑوں پر سگریٹ کا نام یا (Logo) کا چھپا ہونا
TP3f	1- ہاں 2- نہیں 77- معلوم نہیں	ڈاک کے ذریعے سگریٹ کے اشتہارات کو تقسیم کرنا

یہ سوالات ان لوگوں سے پوچھے جائیں گے جو آج کل سگریٹ نوشی کرتے ہیں۔

TP4	1- ہاں 2- نہیں 3- میں نے ایسا کوئی پیکٹ نہیں دیکھا (اگر نہیں دیکھا تو TP6 پر جائیے) 77- معلوم نہیں (اگر نہیں دیکھا تو TP6 پر جائیے)	یا پچھلے تیس دنوں میں آپ نے سگریٹ کے پیکٹ پر "سگریٹ کے مضر صحت اثرات کے بارے میں "وارننگ" دیکھی ہے۔
TP5	1- ہاں 2- نہیں 77- معلوم نہیں	یا پچھلے تیس دنوں میں آپ نے سگریٹ کے پیکٹ پر "سگریٹ کے مضر صحت اثرات کے بارے میں "وارننگ" کی وجہ سے سگریٹ چھوڑنے کے بارے میں سوچا۔
TP6	1- ----- سگریٹ کی تعداد 7777- نہیں جانتا، یا نہیں پتہ چلتا یا بنے بنائے سگریٹ نہیں خریدتا (اگر نہیں جانتا، یا نہیں پتہ چلتا یا بنے بنائے سگریٹ نہیں خریدتا تو آخر پر جائیے)	آخری بار آپ نے اپنے لئے بازار سے بنے بنائے کل کتنے سگریٹ خریدے۔
TP7	1- ----- روپے 77- معلوم نہیں 88- جواب دینے سے انکار	ان سگریٹوں کی خریداری پر آپ نے کتنی رقم ادا کی۔

اگلے سوالات پھل اور سبز پلوں کے بارے میں ہوں گے جو عموماً آپ کھاتے ہیں۔ میرے پاس کارڈ ہے۔ جس میں آپ کو سبز پلوں اور پھلوں کی تصویریں دکھائی جائیں گی۔

D1	1-----دن کی تعداد 77- معلوم نہیں (اگر ایک دن بھی نہیں کھاتے تو D3 پر جائیے)	ہفتے میں آپ کتنے دن پھل کھاتے ہیں۔
D2	1-----قسم 77- معلوم نہیں	ان دنوں میں سے کسی ایک دن میں کتنی قسم کے پھل کھاتے ہیں۔
D3	1-----دن کی تعداد 77- معلوم نہیں (اگر ایک دن بھی نہیں کھاتے تو D5 پر جائیے)	ہفتے میں کتنے دن آپ سبزیاں استعمال کرتے ہیں۔
D4	1-----قسم 77- معلوم نہیں	ان دنوں میں سے کسی ایک دن میں کتنی قسم کی سبزیاں کھاتے ہیں۔
خوراک: (Expanded)		
D5	1- کوئنگ آئل 2- سرسوں کا تیل 3- مکھن یا دیسی گھی 4- چربی کا گھی 5- مارجرین 6- کوئی اور 77- معلوم نہیں	آپ گھر میں کھانا بنانے کے لئے کون سا تیل یا گھی استعمال کرتے ہیں۔ (صرف ایک جواب دیں)
D6	1-----دفعہ 77- معلوم نہیں	اوسطاً ایک ہفتے میں کتنے کھانے آپ باہر کھاتے ہیں۔ کھانے سے مراد ناشتہ، دوپہر کا کھانا اور رات کا کھانا ہے۔

جسمانی ورزش: (Core)

اس حصے میں آپ سے مختلف قسم کی روزمرہ جسمانی سرگرمیوں مثلاً اسکول و کالج، روزانہ گار کے لئے جانا، کاشتکاری کے لئے جانا وغیرہ کے بارے میں پوچھا جائے گا۔ جس میں ورزش شامل نہیں ہے۔ جسمانی ورزش / مشقت دو قسم کی ہے۔ "سخت جسمانی مشقت اور درمیانی جسمانی مشقت" سخت جسمانی مشقت وہ ہے جس میں جسمانی طاقت زیادہ لگتی ہے سانس پھول جاتی ہے اور دل کی دھڑکن تیز ہو جاتی ہے جیسا کہ وزن اٹھانا، کھدائی کا کام کرنا یا تعمیراتی کام وغیرہ اور درمیانی جسمانی مشقت وہ ہے جس میں تھوڑا سا سانس پھولے اور دل کی دھڑکن تھوڑی تیز ہو جیسا کہ تیز چلنا، کرکٹ کھیلنا وغیرہ۔

سوال	جواب	کوڈ
کیا آپ سخت جسمانی مشقت کا کام جیسے (وزن اٹھانا، کھدائی کا کام کرنا یا تعمیراتی کام وغیرہ) مسلسل دس منٹ تک کرتے ہیں۔	1۔ ہاں 2۔ نہیں (اگر نہیں تو P4 پر جائیے)	P1
عموماً جتنے میں کتنے دن آپ اس قسم کی سخت جسمانی مشقت کا کام کرتے ہیں۔	دنوں کی تعداد:-----	P2
ایک دن میں آپ کتنا وقت اس قسم کی سخت جسمانی مشقت کے کام میں گزارتے ہیں۔	گھنٹے:-----	P3 (a-b)
کیا آپ درمیانی جسمانی مشقت کا کام مسلسل دس منٹ تک کرتے ہیں۔ جس سے تھوڑا سانس پھولے اور دل کی دھڑکن تھوڑی تیز ہو جیسے (تیز چلنا، کھیلنا، ہلکا وزن اٹھا کر چلنا وغیرہ)	1۔ ہاں 2۔ نہیں (اگر نہیں تو P7 پر جائیے)	P4
عموماً جتنے میں کتنے دن آپ اس قسم کی مشقت کا کام کرتے ہیں۔	دنوں کی تعداد:-----	P5
ایک دن میں آپ کتنا وقت اس قسم کی مشقت کرتے ہیں۔	گھنٹے:----- منٹ:-----	P6 (a-b)

اگلے سوالات آپ کی ان جسمانی سرگرمیوں کے بارے میں جو کہ آنے جانے کے دوران ہوتی ہیں جیسا کہ شاہنگ کے لئے جانا، بازار جانا، مسجد جانا۔

P7	<p>1-ہاں</p> <p>2-نہیں (اگر نہیں تو P10 پر جائیے)</p>	<p>کیا آپ ایک ہفتے میں آنے جانے کے لئے مسلسل دس منٹ تک پیدل چلتے ہیں۔</p>
P8	<p>دونوں کی تعداد:-----</p>	<p>ایک ہفتے میں عموماً آپ کتنے دن دس منٹ تک مسلسل پیدل چلتے ہیں</p> <p>یا سائیکل چلاتے ہیں۔</p>

P9 (a-b)	گھٹنے: منٹ:-----	ایک دن میں آپ کتنا وقت پیدل چلتے ہیں یا سائیکل چلاتے ہیں۔
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اگلے سوالات آپ سے کھیل، ورزش اور فارغ وقت گزارنے کے بارے میں ہیں

سوال	جواب	کوڈ
کیا ایک ہفتے میں آپ ایسا سخت مشقت والا کوئی کھیل / ورزش کرتے ہیں جس سے آپ کو سانس چڑھ جائے یا دل کی دھڑکن دس منٹ تک تیز ہو جائے۔ جیسا کہ فٹ بال کھیلنا، دوڑ لگانا، جم جانا وغیرہ۔	1- ہاں 2- نہیں (اگر نہیں تو P13 پر جائیے)	P10
عموماً ایک ہفتے میں آپ کتنے دن اس طرح کے کھیل یا ورزش کرتے ہیں۔	دنوں کی تعداد:-----	P11
عموماً ایک دن میں کتنا وقت آپ ایسی کھیلوں یا ورزش میں صرف کرتے ہیں۔	گھٹنے: منٹ:-----	P12 (a-b)
کیا آپ درمیانے درجے کی مشقت والا کوئی کھیل / ورزش کرتے ہیں جس سے معمولی سانس چڑھ جائے یا دل کی دھڑکن دس منٹ تک تیز ہو۔ جیسے سائیکل چلانا، تیراکی کرنا یا والی بال کھیلنا وغیرہ۔	1- ہاں 2- نہیں (اگر نہیں تو P16 پر جائیے)	P13
عموماً ایک ہفتے میں آپ کتنے دن درمیانے درجے کی ورزش کرتے ہیں یا کھیل کھیلتے ہیں۔	دنوں کی تعداد:-----	P14
عموماً ایک دن میں کتنا وقت آپ درمیانے درجے کی ورزش میں صرف کرتے ہیں۔	گھٹنے: منٹ:-----	P15 (a-b)
جسمانی ورزش: (Expanded) زیادہ بیٹھے رہنے کا رویہ: درج ذیل سوال آپ سے کام کرنے کی جگہ، گھر پر، سفر کے دوران، دوستوں کے ساتھ وقت گزارنے کے دوران بیٹھے رہنے کی عادت کے بارے میں ہیں۔ اس میں وہ تمام وقت شامل ہے جیسا کہ میز پر بیٹھنا، بس، کار یا ٹرین میں سفر کے دوران بیٹھنا، ٹیلی ویژن دیکھنے کے دوران بیٹھنا وغیرہ۔ لیکن سونے کا وقت اس میں شامل نہیں ہے۔		
عام طور پر ایک دن میں آپ کتنا وقت بیٹھے رہنے میں گزارتے ہیں۔	گھٹنے: منٹ:-----	P16 (a-b)

بلند فشار خون: (History of Raised Blood Pressure – Core)

H1	1- ہاں 2- نہیں (اگر نہیں تو H6 پر جائیے)	کیا ڈاکٹر نے یا طبی عملے نے کبھی آپ کا بلڈ پریشر چیک کیا۔
H2a	1- ہاں 2- نہیں (اگر نہیں تو H6 پر جائیے)	کیا کبھی ڈاکٹر یا طبی عملے نے آپ کو بتایا کہ آپ کو بلڈ پریشر ہے۔
H2b	1- ہاں 2- نہیں	کیا آپ کو گزشتہ بارہ مہینوں کے دوران بتایا گیا ہے کہ آپ کو بلڈ پریشر کا مرض ہے۔
H3	1- ہاں 2- نہیں	کیا گزشتہ دو ہفتوں میں آپ نے بلڈ پریشر کے علاج کے لئے کوئی ڈاکٹری دوا استعمال کی۔
H4	1- ہاں 2- نہیں	کیا آپ نے کبھی بلڈ پریشر کے علاج کے لئے کسی حکیم یا ہومیو پیٹھ کو دکھایا ہے۔
H5	1- ہاں 2- نہیں	کیا آپ آج کل بلڈ پریشر کے لئے کوئی حکیمی یا ہومیو پیٹھ دوائی استعمال کر رہے ہیں۔

ذیابیطس (شوگر): (History of Diabetes – Core)

H6	1- ہاں 2- نہیں (اگر نہیں تو H12 پر جائیے)	کیا کبھی ڈاکٹر یا طبی عملے نے آپ کو خون میں شوگر چیک کی۔
H7a	1- ہاں 2- نہیں (اگر نہیں تو H12 پر جائیے)	کیا آپ کو کبھی ڈاکٹر یا طبی عملے نے بتایا کہ آپ کو شوگر کی بیماری

		ہیں۔
H7b	1- ہاں 2- نہیں	کیا آپ کو شوگر کی بیماری کے بارے میں گزشتہ 12 مہینوں کے دوران بتایا گیا۔
H8	1- ہاں 2- نہیں	کیا گزشتہ دو ہفتوں میں آپ نے شوگر کے علاج کے لئے کوئی ڈاکٹری دوا استعمال کی۔
H9	1- ہاں 2- نہیں	کیا آپ آج کل شوگر کے لئے انسولین لے رہے ہیں۔
H10	1- ہاں 2- نہیں	کیا آپ کبھی شوگر کے علاج کے لئے کسی حکیم یا ہومیوپیٹھ کے پاس گئے۔
H11	1- ہاں 2- نہیں	کیا آپ آج کل شوگر کے علاج کے لئے کوئی حکیمی / ہومیوپیٹھ دوائی یا کوئی اور دبی دوا / جڑی بوٹیاں استعمال کرتے ہیں۔

خون میں چربی کی زیادتی: (Cholesterol – Core)

H12	1- ہاں 2- نہیں (اگر نہیں تو H17 پوچھیں)	کیا کبھی ڈاکٹر یا طبی عملے نے آپ کا کولیسٹرول چیک کیا۔
H13a	1- ہاں 2- نہیں (اگر نہیں تو H17 پوچھیں)	کیا آپ کو کبھی ڈاکٹر یا طبی عملے نے بتایا کہ آپ کا کولیسٹرول بڑھا ہوا / زیادہ ہے۔
H13b	1- ہاں 2- نہیں	کیا آپ کو کولیسٹرول کے بڑھے ہوئے ہونے کے بارے میں گزشتہ بارہ مہینوں کے دوران بتایا گیا۔
H14	1- ہاں 2- نہیں	کیا گزشتہ دو ہفتوں میں آپ نے کولیسٹرول کے علاج کے لئے کوئی ڈاکٹری دوا استعمال کی۔
H15	1- ہاں 2- نہیں	کیا آپ کولیسٹرول کے علاج کے لئے کسی حکیم یا ہومیوپیٹھ کے پاس گئے۔
H16	1- ہاں 2- نہیں	کیا آپ آج کل کولیسٹرول کے علاج کے لئے کوئی حکیمی / ہومیوپیٹھ دوائی یا کوئی اور دبی دوا / جڑی بوٹیاں استعمال کرتے ہیں۔

امراض قلب: (Core)

H17	1- ہاں 2- نہیں	کیا آپ کو کبھی دل کا دورہ یا دل کی بیماری کی وجہ سے سینے میں درد، فالج یا فالج کی وجہ سے جسم کے کسی حصے میں وقتی کمزوری ہوئی۔
H18	1- ہاں 2- نہیں	کیا آپ دل کے دورے سے بچنے کے لئے آج کل اسپرین / ڈسپرین یا لوپرین (Lopren) کا استعمال کر رہے ہیں۔
H19	1- ہاں 2- نہیں	کیا آپ دل کی بیماری کے علاج کے لئے باقاعدہ طور پر (Lovastatin, Simvastatin, Atoreastatin, Rovastatin) کا استعمال کر رہے ہیں۔

طرز زندگی کے بارے میں تجویز: (Core)

گزشتہ تین سالوں کے دوران کیا ڈاکٹر یا طبی عملے نے آپ کو درج ذیل میں سے کوئی تجویز دی۔

سوال	جواب	کوڈ
تبا کو نوشی نہ کریں اور اگر کرتے ہیں تو اس کو ختم کر دیں۔	1- ہاں 2- نہیں	H20a
کھانے میں نمک کم استعمال کریں۔	1- ہاں 2- نہیں	H20b
کم از کم پانچ قسم کی پھل / سبزیاں استعمال کریں۔	1- ہاں 2- نہیں	H20c
کھانے میں چکنائی کا کم استعمال کریں۔	1- ہاں 2- نہیں	H20d
جسمانی ورزش شروع کریں اور اگر کر رہے ہیں تو بڑھا دیں۔	1- ہاں 2- نہیں	H20e

H20f	1- ہاں (اگر $C1=1$ تو $M2$ پر جائیں) 2- نہیں (اگر $C1=1$ تو $M2$ پر جائیں)	اپنا وزن کم کریں یا وزن کو صحت مند حد تک برقرار رکھیں۔
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صرف خواتین کے لئے: (چھ دانے کے منہ کا کینسر) (Cervical Cancer Screening) اگلا سوال بچہ دانے کے منہ کا کینسر سے بچاؤ کے بارے میں ہے۔ اس کینسر کی تشخیص مختلف طریقوں سے کی جاتی ہے۔ جن میں Pap سمیٹر، ہٹا، HPV کا ٹیسٹ یا Acetic Acid کو استعمال کر کے مریض کا جسمانی معائنہ کو شامل ہے۔ Pap سمیٹر کے ٹیسٹ میں لیبارٹری میں غیر معمولی خلیوں کو چیک کیا جاتا ہے۔ جب کہ HPV کے ٹیسٹ میں HP وائرس کی موجودگی کا پتہ چلا یا جاتا ہے۔ تیسرے طریقے میں Acetic Acid کو بچہ دانے کے منہ پر لگا کر مریض کا اندرونی معائنہ کیا جاتا ہے۔		
CX1	1- ہاں 2- نہیں	کیا بچہ دانے کے منہ کے کینسر کے لئے آپ نے کبھی بتائے گئے تینوں ٹیسٹوں میں سے کوئی ٹیسٹ کر دیا ہے۔

دوسرا مرحلہ: جسمانی پیمانے:

(Blood Pressure)

M2	1- Mercury 2- Air 3- Automatic (Air Based) 4- Manual Air Based	بلڈ پریشر کے آلے کی قسم
M3	1- چھوٹا 2- درمیانہ 3- بڑا	استعمال شدہ کف سائز
M4a	Systolic mmHg	چابی ریڈنگ
M4b	Diastolic mmHg	
M5a	Systolic mmHg	دوسری ریڈنگ
M5b	Diastolic mmHg	
M6a	Systolic mmHg	تیسری ریڈنگ
M6b	Diastolic mmHg	
M7	1- ہاں 2- نہیں	گزشتہ دو ہفتوں کے دوران ڈاکٹر یا طبی عملے نے آپ کو بلڈ پریشر کی دوائی دی۔

قد (لمبائی) اور وزن:

کوڈ	جواب	سوال
M8	1- ہاں 2- نہیں (اگر ہاں تو M16 پر جائیے)	(خواتین کے لئے) کیا آپ حاملہ ہیں۔
M10a	1- قد	قد اور وزن کے لئے مشین کا نمبر
M10b	2- وزن	
M11	----- سینٹی میٹر	قد
M12	----- کلو گرام	وزن
کمر: (Waist)		
M13		کمر اپنے والے آلے کی قسم
M14	----- سینٹی میٹر	کمر کا گھیراؤ / کمر کا پھیلاؤ

(Expanded: Hip Circumference and Heart Rate)		
M15	----- سینٹی میٹر	کوہنے کا گھیراؤ (Hip Circumference)
دل کی دھڑکن: (Heart Rate)		
M16a	دل کی دھڑکن فی منٹ	پہلی ریڈنگ
M16b	دل کی دھڑکن فی منٹ	دوسری ریڈنگ
M16c	دل کی دھڑکن فی منٹ	تیسری ریڈنگ

کور: انجری (Injury)

اگلے سوالات میں آپ سے ٹریفک حادثات کے متعلق معلومات لی جائیں گی۔

V2	<p>1 ہر دفعہ</p> <p>2 کبھی کبھار</p> <p>3 کبھی نہیں</p> <p>4 پچھلے تیس دنوں میں سواری نہیں کی</p> <p>5 ہیلٹ نہیں ہے</p> <p>77 پتہ نہیں</p> <p>88 انکار کر دیا</p>	<p>گزشتہ تیس دنوں میں آپ نے کتنی دفعہ موٹر سائیکل چلاتے ہوئے یا پیچھے بیٹھے ہوئے ہیلٹ کا استعمال کیا ہے</p>
V4	<p>1 ہاں</p> <p>2 نہیں</p> <p>77 پتہ نہیں</p> <p>88 انکار کر دیا</p>	<p>کیا پچھلے بارہ مہینوں میں آپ کسی ٹریفک حادثے کا شکار بطور ڈرائیور، مسافر، راہ گیر یا سائیکل سوار کے طور پر ہوئے ہیں جس میں آپ کو طبی امداد کی ضرورت پڑی ہو</p>
<p>اگلے مرحلے میں آپ سے گزشتہ بارہ مہینوں کے دوران شدید نوعیت کے حادثات کے بارے میں معلومات اکٹھی کی جائیں گی۔</p>		
V5	<p>1 ہاں</p> <p>2 نہیں (اگر نہیں تو V8 پر جائیں۔)</p> <p>77 پتہ نہیں</p> <p>88 انکار کر دیا</p>	<p>گزشتہ بارہ مہینوں میں آپ روڈ ٹریفک کے علاوہ کسی اور حادثے میں زخمی ہوئے جس میں آپ کو طبی امداد کی ضرورت پڑی ہو</p>
V6	<p>1 گرنا</p> <p>2 چلنا</p> <p>3 زہر</p> <p>4 کٹ</p> <p>5 ڈوبنا</p> <p>6 جانور کا کاٹنا</p> <p>7 کوئی اور (وضاحت کریں)</p> <p>77 پتہ نہیں</p> <p>88 انکار کر دیا</p>	<p>برائے مہربانی مندرجہ ذیل وجوہات میں سے اس حادثے کی وجہ بتائیں</p>
V7	<p>1 گھر</p> <p>2 سکول</p> <p>3 کام کی جگہ</p> <p>4 گلی / سڑک / ہائی وے</p> <p>5 کھیت</p> <p>6 کھیل کا میدان</p> <p>7 کوئی اور (وضاحت کریں)</p> <p>77 پتہ نہیں</p> <p>88 انکار کر دیا</p>	<p>آپ اُس وقت کہاں تھے جب حادثہ ہوا</p>
		<p>چھاتی کا کینسر</p>
	<p>1 ہاں</p>	<p>کیا آپ کو کبھی خود سے چھاتی کا معائنہ کرنے کے بارے میں بتایا یا</p>

APPENDIX - B

Pakistan NCD STEPS Survey 2014-15

Fact Sheet



The STEPS survey of chronic disease risk factors in Pakistan was carried out from November 2013 to April 2014. This was a population-based survey of adults aged 18-69. A two stage sample design was used to produce representative data in Punjab and Sindh provinces of Pakistan. Socio demographic and behavioral information was collected in Step 1 and Physical measurements such as height, weight and blood pressure were collected in Step 2. Total of 7710 adults participated in the Pakistan STEPS survey. The overall response rate was 95.4%. A repeat survey is planned in 5 years if funds permit.

Results for adults aged 18-69 years (incl. 95% CI)	Both genders	Males	Females
Step 1 Tobacco Use			
Percentage who currently smoke tobacco	13.9% (12.4-15.3)	27.8% (25.2-30.3)	4.2% (3.1-5.4)
Percentage who currently smoke tobacco daily	12.7% (11.3-14.1)	25.5% (23.0-28.1)	3.8% (2.7-4.8)
<i>For those who smoke tobacco daily</i>			
Average age started smoking (years)	22.1 (21.4-22.9)	21.5 (20.8-22.3)	24.9 (22.8-27.1)
Percentage of daily smokers smoking manufactured cigarettes	67.2% (62.1-72.2)	74.9% (70.1-79.8)	30.6% (20.2-41.1)
Mean number of manufactured cigarettes smoked per day (by smokers of manufactured cigarettes)	9.4 (8.4-10.4)	10.7 (9.7-11.8)	2.9 (1.3-4.4)
Step 1 Fruit and Vegetable Consumption (in a typical week)			
Mean number of days fruit consumed	2.3 (2.2-2.4)	2.3 (2.2-2.4)	2.2 (2.1-2.4)
Mean number of servings of fruit consumed on average per day	0.6 (0.6-0.7)	0.7 (0.6-0.7)	0.6 (0.6-0.7)
Mean number of days vegetables consumed	4.4 (4.3-4.5)	4.5 (4.4-4.6)	4.4 (4.3-4.5)
Mean number of servings of vegetables consumed on average per day	1.2 (1.1-1.2)	1.2 (1.2-1.3)	1.2 (1.1-1.2)
Percentage who ate less than 5 servings of fruit and/or vegetables on average per day	96.5% (95.7-97.2)	95.2% (94.0-96.3)	97.4% (96.7-98.0)
Step 1 Physical Activity			
Percentage with insufficient physical activity (defined as < 150 minutes of moderate-intensity activity per week, or equivalent)*	41.5% (38.9-44.2)	24.7% (22.0-27.5)	53.3% (50.1-56.4)
Median time spent in physical activity on average per day (minutes) (presented with inter-quartile range)	38.6 (0.0-154.3)	102.9 (21.4-260.0)	17.1 (0.0-85.7)
Percentage not engaging in vigorous activity	81.0% (78.9-83.1)	70.0% (67.0-73.0)	88.7% (86.8-90.6)
Step 1 Cervical Cancer Screening			
Percentage of women aged 30-49 years who have ever had a screening test for cervical cancer			0.9% (0.5-1.3)

Results for adults aged 18-69 years (incl. 95% CI)	Both genders	Males	Females
Step 2 Physical Measurements			
Mean body mass index - BMI (kg/m ²)	24.5 (24.2-24.8)	24.2 (23.9-24.5)	24.8 (24.4-25.1)
Percentage who are overweight (BMI = 25 kg/m ²)	41.3% (38.9-43.6)	38.6% (35.8-41.5)	43.2% (40.5-46.0)
Percentage who are obese (BMI = 30 kg/m ²)	14.9% (13.4-16.5)	12.1% (10.2-14.0)	17.1% (15.0-19.1)
Average waist circumference (cm)		84.0 (83.0-85.0)	83.0 (81.9-84.1)
Mean systolic blood pressure - SBP (mmHg), including those currently on medication for raised BP	128.0 (127.3-128.7)	129.6 (128.7-130.6)	126.9 (126.1-127.8)
Mean diastolic blood pressure - DBP (mmHg) , including those currently on medication for raised BP	84.8 (84.3-85.2)	85.2 (84.6-85.8)	84.4 (83.9-85.0)
Percentage with raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP)	37.0% (34.9-39.0)	39.3% (36.8-41.9)	35.4% (32.8-37.9)
Percentage with raised BP (SBP ≥ 160 and/or DBP ≥ 100 mmHg) or currently on medication for raised BP	15.9% (14.5-17.3)	14.6% (13.0-16.3)	16.8% (14.9-18.6)
Summary of combined risk factors <ul style="list-style-type: none"> Current daily smokers Less than 5 servings of fruits & vegetables per day Low level of 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	0.6% (0.4-0.9)	1.1% (0.6-1.6)	0.3% (0.1-0.4)
Percentage with three or more of the above risk factors, aged 18 to 44 years	34.3% (31.7-36.8)	31.2% (28.2-34.2)	36.4% (33.2-39.6)
Percentage with three or more of the above risk factors, aged 45 to 69 years	53.9% (50.2-57.6)	49.6% (44.8-54.4)	57.9% (53.1-62.7)
Percentage with three or more of the above risk factors, aged 18 to 69 years	40.0% (37.6-42.4)	37.2% (34.6-39.9)	42.1% (39.1-45.1)

* For complete definitions of insufficient physical activity, refer to the GPAQ Analysis Guide(<http://www.who.int/chp/steps/GPAQ/en/index.html>) or to the WHO Global recommendations on physical activity for health (http://www.who.int/dietphysicalactivity/factsheet_recommendations/en/index.html)

Pakistan NCD STEPS Survey 2014-15



Tobacco Fact Sheet

The WHO STEP wise approach to surveillance (STEPS) is a simple, standardized method for collecting, analyzing and disseminating data on non-communicable diseases (NCDs) and risk factors. Data collected on the established risk factors and NCD conditions that determine the major NCD burden, including tobacco use, unhealthy diet, insufficient physical activity, overweight and obesity, raised blood pressure, raised blood glucose, and abnormal blood lipids.

The STEPS survey on NCD risk factors in Pakistan was carried out from November 2013 to April 2014. It was a population-based survey of adults aged 18-69. A two stage sample design was used to produce representative data for that age range in Pakistan. Survey information was collected electronically using handheld devices. The survey was implemented by the Pakistan Health Research Council. A total of 7710 adults participated in the Pakistan STEPS survey. The overall response rate was 95.4%. A repeat survey is planned for 5 years if funds permit.

Highlights

TOBACCO USE

- 27.8% of men, 4.2% of women, and 13.9% overall were current smokers of tobacco.
- 9.9% of men, 4.7% of women, and 6.9% overall were current users of smokeless tobacco.

CESSATION

- 6 in 10 current smokers tried to stop smoking in the last 12 months.
- 5 in 10 current smokers were advised by a health care provider to stop smoking in the last 12 months.

SECONDHAND SMOKE

- 16.5% of adults were exposed to tobacco smoke at the workplace.
- 27.3% of adults were exposed to tobacco smoke at home.

MEDIA

- 6 in 10 adults noticed anti-cigarette smoking information on the television or radio.
- 7 in 10 current smokers thought about quitting because of warning labels on cigarette packages.
- 0.5 in 10 adults noticed cigarette marketing in stores where cigarettes are sold.
- 1 in 10 adults noticed cigarette promotions.

ECONOMICS

- Average monthly expenditure on manufactured cigarettes was Rs.1241.55.

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	19.7 (18.0-21.3)	35.6 (32.9-38.4)	8.7 (7.0-10.3)
Current daily tobacco users	18.2 (16.6-19.8)	32.9 (30.2-35.7)	8.0 (6.4-9.6)
Current tobacco smokers			
Current tobacco smokers	13.9 (12.4-15.3)	27.8 (25.2-30.3)	4.2 (3.1-5.4)
Current cigarette smokers ²	67.9 (63.1-72.8)	75.7 (71.2-80.3)	32.5 (22.0-43.0)
Current daily tobacco smokers	12.7 (11.3-14.1)	25.5 (23.0-28.1)	3.8 (2.7-4.8)
Current daily cigarette smokers*	67.2 (62.1-72.2)	74.9 (70.1-79.8)	30.6 (20.2-41.1)
Average age started tobacco smoking (years)	22.1 (21.4-22.9)	21.5 (20.8-22.3)	24.9 (22.8-27.1)
Average number of cigarettes smoked per day (among daily cigarette smokers)	9.4 (8.4-10.4)	10.7 (9.7-11.8)	2.9 (1.3-4.4)
Current smokeless tobacco users			
Current smokeless tobacco users	6.9 (5.7-8.0)	9.9 (8.2-11.6)	4.7 (3.5-6.0)
Current daily smokeless tobacco users	6.4 (5.3-7.5)	9.0 (7.4-10.6)	4.5 (3.3-5.7)
Current non-users(smoked and/or smokeless)¹			
Former tobacco users ³	3.2 (2.6-3.8)	4.3 (3.3-5.3)	2.4 (1.7-3.2)
Former tobacco smokers ⁴	1.9 (1.5-2.3)	4.0 (3.0-4.9)	0.5 (0.2-0.8)
Never users	84.2 (82.7-85.7)	68.3 (65.7-70.9)	95.3 (94.0-96.5)
Exposure to Second-hand smoke			
Adults exposed to second-hand smoke at home*	27.3 (25.6-28.9)	25.3 (23.2-27.3)	28.7 (26.5-30.9)
Adults exposed to second-hand smoke in the closed areas in their workplace*	16.5 (14.8-18.1)	30.7 (27.4-34.0)	7.2 (5.7-8.7)
Tobacco Cessation			
Current smokers who tried to stop smoking in past 12 months	58.2 (53.8-62.6)	58.5 (54.2-62.9)	56.7 (46.1-67.2)
Current smokers advised by a health care provider to stop smoking in past 12 months ⁵	50.9 (45.9-56.0)	52.4 (47.0-57.7)	44.8 (34.9-54.7)
Health Warnings			
Current smokers who thought about quitting because of a warning label*	66.4 (61.9-70.9)	65.9 (61.1-70.7)	70.4 (55.7-85.0)
Adults who noticed anti-cigarette smoking information on the television or radio*	61.6(57.7-65.4)	67.2 (63.1-71.3)	57.6 (53.5-61.7)
Adults who noticed anti-cigarette smoking information in newspapers or magazines*	46.0 (42.6-49.3)	55.1 (51.2-58.9)	39.5 (35.9-43.0)
Tobacco Advertisement and Promotion			
Adults who noticed cigarette marketing in stores where cigarettes are sold*	4.8 (4.0-5.6)	8.0 (6.7-9.4)	2.5 (1.8-3.3)
Adults who noticed any cigarette promotions*	6.5 (5.6-7.4)	11.8 (10.2-13.5)	2.5 (1.8-3.1)
Economics			
Local Currency			
Average monthly expenditure on manufactured cigarettes	Rs1241.55 (986.58-1496.52)		
Cost of 100 packs of manufactured cigarettes as a percentage of per capita Gross Domestic Product (GDP) [2013] ⁶	6.4 (5.0-7.7)		

¹ Current use refers to daily and less than daily use. ² Includes manufactured cigarettes, cigars, pipes among current smokers. ³ Current non-users. ⁴ Current non-smokers. ⁵ Among those who visited a health care provider in past 12 months. ⁶ World Bank, 2013. * During the past 30 days. † Promotions include free cigarette sample, cigarettes at sale prices, coupons for cigarettes, free gifts upon purchase of cigarettes, clothing or other items with cigarette brand name or logo and cigarette promotions in mail. 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).

APPENDIX - C

Demographic Information Results

Age group by gender Description: Summary information by age group and gender of the respondents.
Instrument question:

- ◆ Gender
- ◆ What is your date of birth?

Age group and gender of respondents						
Age Group (years)	Men		Women		Both genders	
	N	%	N	%	n	%
18-29	992	37.4	1659	62.6	2651	36.0
30-44	1141	42.0	1573	58.0	2714	36.8
45-59	655	47.5	723	52.5	1378	18.7
60-69	362	58.1	261	41.9	623	8.5
18-69	3150	42.8	4216	57.2	7366	100.0

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 genders	
	n	Mean	N	Mean	n	Mean
18-29	990	6.9	1616	5.5	2606	6.0
30-44	1133	6.4	1507	4.4	2640	5.3
45-59	650	5.1	699	2.1	1349	3.6
60-69	361	4.3	257	1.1	618	3.0
18-69	3134	6.1	4079	4.2	7213	5.0

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								
Age Group (years)	Men							
	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	968	27.0	6.0	13.8	11.3	21.1	13.1	7.7
30-44	1100	32.0	4.3	13.9	12.5	21.4	10.1	5.9
45-59	632	41.3	7.1	15.2	10.4	15.5	6.0	4.4
60-69	354	47.7	9.3	13.3	10.2	11.9	2.8	4.8
18-69	3054	34.2	6.0	14.1	11.4	19.0	9.4	6.1

Highest level of education								
Age Group (years)	Women							
	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	1625	40.9	5.5	12.9	10.5	16.9	7.8	5.5
30-44	1548	52.2	4.3	11.9	8.5	12.8	6.8	3.6
45-59	716	73.9	3.8	9.2	3.9	5.4	2.2	1.5
60-69	257	84.4	3.5	4.7	5.1	1.2	0.8	0.4
18-69	4146	53.5	4.6	11.4	8.3	12.4	6.1	3.8

Highest level of education								
Age Group (years)	Both genders							
	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	2593	35.7	5.7	13.3	10.8	18.4	9.8	6.3
30-44	2648	43.8	4.3	12.7	10.1	16.4	8.2	4.5
45-59	1348	58.6	5.3	12.0	7.0	10.2	4.0	2.9
60-69	611	63.2	6.9	9.7	8.0	7.4	2.0	2.9
18-69	7200	45.3	5.2	12.5	9.6	15.2	7.5	4.7

Ethnicity Description: Summary results for the ethnicity of the respondents.

Instrument Question:

♣ What is your [mother tongue] background?

Ethnic group of respondents					
Age Group (years)	Both Sexes				
	N	% Urdu	% Sindhi	% Punjabi	% Other
18-29	2651	10.9	25.4	39.3	24.4
30-44	2714	11.5	22.7	44.9	21.0
45-59	1378	10.7	19.9	46.1	23.4
60-69	623	10.4	19.9	46.7	23.0
18-69	7366	11.0	22.9	43.2	22.8

Marital status Description: Marital status of survey respondents.

Instrument question:

♣ What is your marital status?

Marital status						
Age Group (years)	Men					
	n	% Never married	% Currently married	% Separated	% Divorced	% Widowed
18-29	991	51.5	48.4	0.0	0.0	0.1
30-44	1139	5.4	93.8	0.4	0.2	0.4
45-59	654	1.4	97.7	0.5	0.0	0.5
60-69	361	0.3	95.8	1.4	0.0	2.5
18-69	3145	18.5	80.5	0.4	0.1	0.5

Marital status						
Age Group (years)	Women					
	n	% Never married	% Currently married	% Separated	% Divorced	% Widowed
18-29	1659	32.3	66.6	0.2	0.4	0.4
30-44	1573	2.3	95.5	0.3	0.1	1.8
45-59	723	1.5	83.3	0.6	0.1	14.5
60-69	261	0.8	68.6	0.4	0.4	29.9
18-69	4216	13.9	80.4	0.3	0.3	5.2

Marital status						
Age Group (years)	Both genders					
	n	% Never married	% Currently married	% Separated	% Divorced	% Widowed
18-29	2650	39.5	59.8	0.2	0.3	0.3
30-44	2712	3.6	94.8	0.3	0.1	1.2
45-59	1377	1.5	90.1	0.5	0.1	7.8
60-69	622	0.5	84.4	1.0	0.2	14.0
18-69	7361	15.8	80.4	0.3	0.2	3.2

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					
Age Group (years)	Men				
	n	% Government employee	% Non-government employee	% Self-employed	% Unpaid
18-29	989	3.3	45.3	18.6	32.8
30-44	1138	9.3	46.8	29.5	14.3
45-59	652	13.7	37.3	29.1	19.9
60-69	357	2.5	28.9	18.8	49.9
18-69	3136	7.6	42.3	24.8	25.4

Employment status					
Age Group (years)	Women				
	N	% Government employee	% Non-government employee	% Self-employed	% Unpaid
18-29	1658	0.5	6.4	2.9	90.2
30-44	1572	1.4	5.2	3.4	90.0
45-59	722	0.8	4.6	2.2	92.4
60-69	259	0.4	2.7	3.1	93.8
18-69	4211	0.9	5.4	3.0	90.7

Employment status					
Age Group (years)	Both genders				
	N	% Government employee	% Non-government employee	% Self-employed	% Unpaid
18-29	2647	1.5	20.9	8.8	68.8
30-44	2710	4.7	22.7	14.4	58.2
45-59	1374	6.9	20.1	15.0	58.0
60-69	616	1.6	17.9	12.2	68.3
18-69	7347	3.7	21.2	12.3	62.8

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 workers and unemployed						
Age Group (years)	Men					
	n	% student	% Retired	% Unemployed (able to work)	% Unemployed (Not able to work)	Home maker
18-29	324	48.1	0.0	35.5	6.8	9.6
30-44	163	1.8	4.3	52.1	19.0	22.7
45-59	130	0.0	14.6	42.3	17.7	25.4
60-69	178	0.6	29.2	20.8	17.4	32.0
18-69	795	20.1	9.8	36.7	13.5	19.9

Unpaid workers and unemployed						
Age Group (years)	Women					
	n	% Student	% Retired	% Unemployed (able to work)	% Unemployed (Not able to work)	% Home maker
18-29	1496	8.6	0.0	0.6	0.1	90.7
30-44	1415	0.0	0.0	0.5	0.1	99.4
45-59	667	0.0	0.1	0.3	0.6	99.0
60-69	243	0.0	2.1	0.8	1.2	95.9
18-69	3821	3.4	0.2	0.5	0.3	95.7

Unpaid work and unemployed						
Both genders						
Age Group (years)	n	% Student	% Retired	% Unemployed (able to work)	% Unemployed (Not able to work)	% Home maker
18-29	1820	15.7	0.0	6.8	1.3	76.3
30-44	1578	0.2	0.4	5.8	2.1	91.4
45-59	797	0.0	2.5	7.2	3.4	87.0
60-69	421	0.2	13.5	9.3	8.1	68.9
18-69	4616	6.3	1.8	6.8	2.5	82.6

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
5394	63032.3

Estimated household earnings

Description: summary of participant household earnings by quartile.

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	% <1 lac.....	% 1-2 lac.....	% 2-4 lac.....	% >4 lacs.....
292	76.40%	17.80%	3.10%	2.70%

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 genders		
	n	% Current smoker	95% CI	N	% Current smoker	95% CI	n	% Current smoker	95% CI
18-29	992	15.5	12.4-18.6	1659	1.2	0.4-1.9	2651	6.2	4.9-7.4
30-44	1141	30.1	26.2-34.0	1573	2.7	1.6-3.9	2714	14.0	12.0-16.0
45-59	655	35.1	30.9-39.4	723	10.4	6.9-13.9	1378	21.9	19.0-24.8
60-69	362	36.8	31.0-42.6	261	12.9	7.0-18.8	623	25.2	20.9-29.4
18-69	3150	27.8	25.2-30.3	4216	4.2	3.1-5.4	7366	13.9	12.4-15.3

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									
Age Group (years)	Men								
	n	Current smoker				Non-smokers			
		% Daily	95% CI	% Non-daily	95% CI	% Former smoker	95% CI	% Never smoker	95% CI
18-29	992	13.5	10.4-16.5	2.0	1.0-3.1	2.3	1.3-3.4	82.2	78.9-85.5
30-44	1141	28.1	24.3-31.9	2.0	0.9-3.0	2.9	1.9-3.9	67.0	63.1-70.9
45-59	655	31.5	27.5-35.6	3.6	1.8-5.5	5.1	3.0-7.2	59.7	55.6-63.9
60-69	362	36.0	30.1-41.9	0.8	0.0-1.7	9.4	4.6-14.3	53.8	47.9-59.7
18-69	3150	25.5	23.0-28.1	2.2	1.6-2.9	4.0	3.0-4.9	68.3	65.7-70.9

Smoking status									
Age Group (years)	Women								
	n	Current smoker				Non-smokers			
		% Daily	95% CI	% Non-daily	95% CI	% Former smoker	95% CI	% Never smoker	95% CI
18-29	1659	1.0	0.3-1.7	0.2	0.0-0.5	0.1	0.0-0.2	98.7	97.9-99.5
30-44	1573	2.5	1.4-3.6	0.2	0.0-0.5	0.2	0.0-0.5	97.0	95.8-98.2
45-59	723	9.0	5.6-12.3	1.4	0.2-2.7	1.3	0.1-2.5	88.3	84.4-92.2
60-69	261	11.9	6.3-17.5	1.1	0.0-2.3	1.8	0.0-4.1	85.3	79.3-91.3
18-69	4216	3.8	2.7-4.8	0.5	0.2-0.8	0.5	0.2-0.8	95.3	94.0-96.5

Smoking status									
Age Group (years)	Both genders								
	n	Current smoker				Non-smokers			
		% Daily	95% CI	% Non-daily	95% CI	% Former smoker	95% CI	% Never smoker	95% CI
18-29	2651	5.3	4.1-6.5	0.8	0.4-1.2	0.9	0.5-1.3	93.0	91.7-94.3
30-44	2714	13.0	11.1-15.0	0.9	0.5-1.4	1.3	0.9-1.8	84.7	82.6-86.8
45-59	1378	19.5	16.8-22.2	2.5	1.3-3.6	3.1	2.0-4.2	75.0	72.0-77.9
60-69	623	24.2	20.0-28.4	0.9	0.2-1.7	5.7	3.0-8.4	69.1	64.7-73.6
18-69	7366	12.7	11.3-14.1	1.2	0.9-1.5	1.9	1.5-2.3	84.2	82.7-85.7

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 genders		
	n	% Daily smokers	95% CI	n	% Daily smokers	95% CI	n	% Daily smokers	95% CI
18-29	138	86.9	80.3-93.4	19	82.9	63.8-100.0	157	86.4	80.1-92.6
30-44	313	93.4	90.0-96.8	45	92.2	82.4-100.0	358	93.3	90.1-96.4
45-59	209	89.7	84.7-94.7	59	86.1	74.4-97.9	268	88.8	84.0-93.6
60-69	130	97.8	95.4-100.0	29	91.7	82.3-100.0	159	96.3	93.3-99.3
18-69	790	92.0	89.6-94.4	152	88.5	82.2-94.9	942	91.4	89.2-93.6

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 genders		
	n	Mean age	95% CI	N	Mean age	95% CI	n	Mean age	95% CI
18-29	114	17.7	16.8-18.5	16	18.0	13.7-22.3	130	17.7	16.8-18.7
30-44	288	20.8	19.9-21.7	40	19.5	17.5-21.5	328	20.7	19.8-21.5
45-59	182	22.7	21.3-24.1	50	28.9	25.1-32.7	232	24.3	22.8-25.7
60-69	119	25.0	22.2-27.9	26	26.5	22.7-30.2	145	25.4	22.9-27.9
18-69	703	21.5	20.8-22.3	132	24.9	22.8-27.1	835	22.1	21.4-22.9

Mean duration of smoking									
Age Group (years)	Men			Women			Both genders		
	n	Mean duration	95% CI	n	Mean duration	95% CI	n	Mean duration	95% CI
18-29	114	6.9	5.9-7.9	16	7.3	3.2-11.4	130	7.0	6.0-7.9
30-44	288	15.8	14.8-16.8	40	16.0	13.4-18.5	328	15.8	14.9-16.8
45-59	182	28.0	26.6-29.4	50	21.2	17.8-24.7	232	26.3	25.0-27.6
60-69	119	38.6	35.7-41.5	26	35.6	31.2-39.9	145	37.8	35.3-40.4
18-69	703	21.4	20.2-22.6	132	22.0	19.6-24.5	835	21.5	20.5-22.6

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 genders		
	n	% Manu- factured cigarette smoker	95% CI	n	% Manu- factured cigarette smoker	95% CI	n	% Manu- factured cigarette smoker	95% CI
18-29	120	83.5	74.0-92.9	16	35.7	3.0-68.4	136	77.7	68.3-87.0
30-44	294	80.1	73.1-87.1	42	38.0	17.9-58.1	336	75.3	68.4-82.2
45-59	188	69.7	61.2-78.2	50	25.8	11.7-39.8	238	58.9	50.7-67.2
60-69	126	62.3	51.0-73.7	26	29.0	7.0-51.1	152	54.4	43.2-65.6
18-69	728	74.9	70.1-79.8	134	30.6	20.2-41.1	862	67.2	62.1-72.2

Manufactured cigarette smokers among current smokers									
Age Group (years)	Men			Women			Both genders		
	n	% Manu- factured cigarette smoker	95% CI	n	% Manu- factured cigarette smoker	95% CI	n	% Manu- factured cigarette smoker	95% CI
18-29	138	83.8	75.2-92.3	19	38.1	6.2-70.0	157	78.0	69.4-86.6
30-44	313	80.6	74.0-87.2	45	41.6	21.6-61.5	358	76.1	69.7-82.5
45-59	209	70.8	62.8-78.7	59	28.5	13.7-43.2	268	60.0	52.4-67.7
60-69	130	63.2	52.0-74.4	29	27.9	8.9-46.9	159	54.3	43.7-65.0
18-69	790	75.7	71.2-80.3	152	32.5	22.0-43.0	942	67.9	63.1-72.8

Amount of tobacco used among daily smokers by type

Description: Mean amount of tobacco used by daily smokers per day, 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	115	10.8	8.2-13.3	112	0.9	0.3-1.5	115	0.0	0.0-0.1
30-44	291	11.8	10.3-13.3	284	0.6	0.2-1.1	287	0.0	0.0-0.0
45-59	188	10.4	8.5-12.4	184	0.8	0.1-1.5	185	0.0	0.0-0.0
60-69	123	8.4	6.2-10.7	123	0.5	0.0-0.9	123	0.0	0.0-0.1
18-69	717	10.7	9.7-11.8	703	0.7	0.4-1.0	710	0.0	0.0-0.0

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	115	0.2	0.0-0.4	116	0.0	0.0-0.1	120	0.0	0.0-0.0
30-44	290	0.6	0.3-0.9	289	0.0	0.0-0.0	294	0.0	0.0-0.0
45-59	187	1.0	0.5-1.5	184	0.0	0.0-0.1	188	0.0	0.0-0.0
60-69	124	1.3	0.8-1.9	124	0.0	0.0-0.0	126	0.0	0.0-0.0
18-69	716	0.8	0.5-1.1	713	0.0	0.0-0.0	728	0.0	0.0-0.0

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	15	2.0	0.0-4.8	15	0.2	0.0-0.6	16	0.0	0.0-0.0
30-44	41	5.1	1.2-9.0	41	2.1	0.0-4.4	41	0.0	0.0-0.1
45-59	49	2.9	0.7-5.2	49	0.2	0.0-0.4	49	0.6	0.0-1.6
60-69	24	0.9	0.0-1.7	24	0.8	0.0-2.1	25	0.0	0.0-0.0
18-69	129	2.9	1.3-4.4	129	0.8	0.1-1.5	131	0.2	0.0-0.7

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	16	3.9	1.8-6.0	16	0.0	0.0-0.0	16	0.0	0.0-0.0
30-44	41	3.4	1.2-5.7	41	0.0	0.0-0.0	42	0.0	0.0-0.0
45-59	49	3.3	2.2-4.5	50	0.0	0.0-0.0	50	0.0	0.0-0.0
60-69	24	4.6	2.6-6.7	25	0.0	0.0-0.0	26	0.0	0.0-0.0
18-69	130	3.7	2.7-4.7	132	0.0	0.0-0.0	134	0.0	0.0-0.0

Mean amount of tobacco used by daily smokers by type									
Age Group (years)	Both genders								
	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	130	9.8	7.5-12.0	127	0.8	0.3-1.4	131	0.0	0.0-0.1
30-44	332	11.0	9.6-12.4	325	0.8	0.3-1.3	328	0.0	0.0-0.0
45-59	237	8.6	6.8-10.4	233	0.6	0.1-1.1	234	0.1	0.0-0.4
60-69	147	6.7	4.8-8.6	147	0.6	0.1-1.0	148	0.0	0.0-0.0
18-69	846	9.4	8.4-10.4	832	0.7	0.4-1.0	841	0.1	0.0-0.1

Mean amount of tobacco used by daily smokers by type									
Age Group (years)	Both genders								
	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	131	0.6	0.2-1.1	132	0.0	0.0-0.1	136	0.0	0.0-0.0
30-44	331	0.9	0.5-1.4	330	0.0	0.0-0.0	336	0.0	0.0-0.0
45-59	236	1.6	1.1-2.1	234	0.0	0.0-0.0	238	0.0	0.0-0.0
60-69	148	2.0	1.1-2.9	149	0.0	0.0-0.0	152	0.0	0.0-0.0
18-69	846	1.3	0.9-1.6	845	0.0	0.0-0.0	862	0.0	0.0-0.0

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	138	83.8	75.2-92.3	17.0	8.8-25.2	7.1	1.5-12.8
30-44	313	80.6	74.0-87.2	10.1	5.4-14.9	3.5	1.2-5.9
45-59	209	70.8	62.8-78.7	8.2	3.7-12.7	3.4	0.1-6.6
60-69	130	63.2	52.0-74.4	8.9	3.1-14.6	1.4	0.0-3.5
18-69	790	75.7	71.2-80.3	10.5	7.1-13.9	3.7	1.9-5.6

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	138	10.4	3.8-17.0	6.5	1.2-11.9	0.0	0.0-0.0
30-44	313	15.4	9.6-21.3	2.7	0.7-4.8	0.0	0.0-0.0
45-59	209	25.8	17.5-34.0	4.9	1.0-8.9	0.0	0.0-0.0
60-69	130	30.2	18.9-41.6	1.7	0.0-3.9	0.0	0.0-0.0
18-69	790	19.7	14.7-24.7	3.8	2.0-5.6	0.0	0.0-0.0

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	19	38.1	6.2-70.0	6.4	0.0-15.9	8.9	0.0-26.2
30-44	45	41.6	21.6-61.5	16.4	3.9-28.9	6.1	0.0-14.4
45-59	59	28.5	13.7-43.2	9.0	2.3-15.7	5.3	0.0-14.5
60-69	29	27.9	8.9-46.9	8.7	1.1-16.3	2.7	0.0-7.7
18-69	152	32.5	22.0-43.0	10.5	5.2-15.7	5.3	0.1-10.5

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	19	67.4	37.1-97.8	0.0	0.0-0.0	0.0	0.0-0.0
30-44	45	59.7	39.9-79.6	1.2	0.0-3.7	0.0	0.0-0.0
45-59	59	74.0	59.2-88.8	0.0	0.0-0.0	0.0	0.0-0.0
60-69	29	79.2	62.3-96.1	2.7	0.0-7.7	0.0	0.0-0.0
18-69	152	71.0	59.6-82.4	0.9	0.0-2.2	0.0	0.0-0.0

Percentage of current smokers smoking each of the following products							
Age Group (years)	Both genders						
	n	% Manuf. cigs.	95% CI	% Hand-rolled cigs.	95% CI	% Pipes of tobacco	95% CI
18-29	157	78.0	69.4-86.6	15.7	8.4-23.0	7.4	1.2-13.5
30-44	358	76.1	69.7-82.5	10.9	6.5-15.3	3.8	1.6-6.1
45-59	268	60.0	52.4-67.7	8.4	4.6-12.2	3.9	0.5-7.2
60-69	159	54.3	43.7-65.0	8.8	4.1-13.6	1.7	0.0-3.8
18-69	942	67.9	63.1-72.8	10.5	7.5-13.5	4.0	2.1-5.9

Percentage of current smokers smoking each of the following products							
Age Group (years)	Both genders						
	n	% Cigars, cheroots, cigarillos	95% CI	% Shisha	95% CI	% Other	95% CI
18-29	157	17.6	9.7-25.5	5.7	1.0-10.4	0.0	0.0-0.0
30-44	358	20.5	14.6-26.4	2.6	0.8-4.4	0.0	0.0-0.0
45-59	268	38.0	29.4-46.6	3.7	0.7-6.7	0.0	0.0-0.0
60-69	159	42.5	30.3-54.7	2.0	0.0-4.0	0.0	0.0-0.0
18-69	942	29.0	23.1-34.9	3.3	1.7-4.8	0.0	0.0-0.0

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											
Age Group (years)	Men										
	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	98	24.1	11.7-36.6	10.5	4.6-16.5	21.1	11.1-31.1	36.2	25.0-47.4	8.0	1.4-14.6
30-44	239	6.8	3.6-10.0	22.4	15.3-29.6	18.1	12.1-24.1	43.7	35.2-52.2	9.0	4.9-13.1
45-59	142	13.1	6.7-19.5	18.3	10.0-26.7	18.9	11.3-26.5	35.1	24.8-45.4	14.6	6.9-22.2
60-69	91	15.3	6.4-24.3	23.6	12.6-34.6	20.7	9.3-32.1	27.8	17.4-38.2	12.6	4.6-20.5
18-69	570	12.4	8.8-15.9	19.7	15.6-23.7	19.2	15.0-23.3	38.1	32.7-43.4	10.8	7.6-14.0

Percentage of daily smokers smoking given quantities of manufactured or hand-rolled cigarettes per day											
Age Group (years)	Women										
	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	4	50.5	0.0-100.0	12.4	0.0-38.5	37.1	0.0-93.9	0.0	0.0-0.0	0.0	0.0-0.0
30-44	22	35.9	10.0-61.8	10.0	0.0-21.6	12.1	0.0-29.0	26.9	6.9-46.8	15.2	0.0-35.0
45-59	20	12.7	0.0-27.4	42.3	14.4-70.2	7.4	0.0-18.4	34.5	3.4-65.5	3.1	0.0-9.4
60-69	8	79.6	53.6-100.0	0.0	0.0-0.0	6.6	0.0-20.3	8.0	0.0-24.5	5.9	0.0-18.2
18-69	54	35.8	19.2-52.4	21.1	8.2-34.1	11.9	1.6-22.2	23.9	8.4-39.3	7.3	0.0-15.5

Percentage of daily smokers smoking given quantities of manufactured or hand-rolled cigarettes per day											
Age Group (years)	Both genders										
	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	102	25.5	13.4-37.5	10.6	4.8-16.5	21.9	12.1-31.8	34.4	23.6-45.2	7.6	1.3-13.9
30-44	261	8.5	5.1-11.9	21.7	14.9-28.5	17.7	12.0-23.5	42.7	34.6-50.8	9.4	5.3-13.4
45-59	162	13.1	7.1-19.0	21.1	12.7-29.4	17.6	10.7-24.5	35.0	25.2-44.8	13.3	6.4-20.1
60-69	99	21.2	11.0-31.4	21.4	11.3-31.6	19.4	8.8-30.0	26.0	16.4-35.6	12.0	4.6-19.3
18-69	624	14.2	10.6-17.7	19.8	15.9-23.7	18.6	14.6-22.6	37.0	31.8-42.1	10.5	7.5-13.5

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 among all respondents									
Age Group (years)	Men			Women			Both genders		
	n	% Former daily smokers	95% CI	n	% Former daily smokers	95% CI	n	% Former daily smokers	95% CI
18-29	992	1.8	0.9-2.8	1659	0.2	0.0-0.4	2651	0.7	0.4-1.1
30-44	1141	2.9	1.8-4.0	1573	0.2	0.0-0.5	2714	1.3	0.9-1.8
45-59	655	6.5	4.2-8.8	723	1.7	0.4-3.0	1378	3.9	2.7-5.1
60-69	362	9.7	4.7-14.7	261	0.9	0.0-2.0	623	5.4	2.7-8.1
18-69	3150	4.2	3.2-5.1	4216	0.5	0.2-0.8	7366	2.0	1.6-2.4

Former daily smokers among ever daily smokers								
Age Group (years)	Men			Women			Both genders	
	n	% Former daily smokers	95% CI	n	% Former daily smokers	95% CI	n	% Former daily smokers
18-29	139	11.8	5.7-17.9	19	14.4	0.0-33.3	158	12.1
30-44	334	9.4	5.9-12.9	47	7.7	0.0-16.7	381	9.2
45-59	230	17.1	11.3-22.9	60	16.0	5.4-26.6	290	16.8
60-69	157	21.3	11.1-31.4	29	6.9	0.0-15.8	186	18.3
18-69	860	14.0	10.7-17.2	155	11.8	5.9-17.6	1015	13.6

Mean years since cessation								
Age Group (years)	Men			Women			Both genders	
	n	Mean years	95% CI	n	Mean years	95% CI	n	Mean years
18-29	27	4.3	2.9-5.7	4	0.5	0.0-3.7	31	4.0
30-44	45	11.8	9.1-14.5	6	14.2	9.1-19.2	51	12.1
45-59	34	14.4	9.9-19.0	7	4.0	0.5-7.6	41	12.1
60-69	28	21.5	11.3-31.6	3	6.8	0.8-12.8	31	19.2
18-69	134	13.9	10.6-17.1	20	6.3	2.7-10.0	154	12.7

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 genders	
	n	% Tried to stop smoking	95% CI	n	% Tried to stop smoking	95% CI	n	% Tried to stop smoking
18-29	138	54.9	46.0-63.7	19	54.9	24.5-85.4	157	54.9
30-44	313	62.8	56.1-69.4	45	67.5	52.8-82.3	358	63.3
45-59	209	55.5	47.2-63.9	59	59.5	44.2-74.8	268	56.5
60-69	130	56.3	45.6-67.0	29	40.8	17.7-63.8	159	52.4
18-69	790	58.5	54.2-62.9	152	56.7	46.1-67.2	942	58.2

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 genders		
	n	% Advised to stop smoking	95% CI	n	% Advised to stop smoking	95% CI	n	% Advised to stop smoking	95% CI
18-29	116	48.8	38.4-59.2	17	55.1	24.2-86.0	133	49.7	39.0-60.4
30-44	265	52.8	45.2-60.5	39	57.6	41.4-73.8	304	53.4	46.1-60.7
45-59	184	56.3	47.4-65.3	56	40.2	22.9-57.4	240	52.1	44.4-59.9
60-69	119	47.5	35.8-59.3	27	35.5	12.1-58.9	146	44.4	32.9-56.0
18-69	684	52.4	47.0-57.7	139	44.8	34.9-54.7	823	50.9	45.9-56.0

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 genders		
	N	% Current users	95% CI	n	% Current users	95% CI	n	% Current users	95% CI
18-29	992	10.0	7.7-12.3	1659	2.7	1.4-3.9	2651	5.2	3.9-6.5
30-44	1141	9.3	7.1-11.6	1573	4.4	2.9-5.9	2714	6.4	5.0-7.9
45-59	655	11.8	8.5-15.0	723	7.0	4.6-9.4	1378	9.2	7.1-11.3
60-69	362	8.0	5.0-10.9	261	11.4	6.4-16.5	623	9.7	6.7-12.7
18-69	3150	9.9	8.2-11.6	4216	4.7	3.5-6.0	7366	6.9	5.7-8.0

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									
Age Group (years)	Men								
	n	Current user				Non user			
		% Daily	95% CI	% Non-daily	95% CI	% Past user	95% CI	% Never used	95% CI
18-29	992	8.4	6.3-10.6	1.5	0.6-2.4	2.9	1.5-4.3	87.1	84.3-89.9
30-44	1141	8.6	6.5-10.8	0.7	0.3-1.2	2.0	1.0-3.1	88.6	86.1-91.1
45-59	655	11.4	8.1-14.6	0.4	0.0-0.8	3.1	1.5-4.6	85.2	81.6-88.7
60-69	362	7.2	4.5-9.9	0.8	0.0-1.7	3.2	0.7-5.8	88.8	84.9-92.7
18-69	3150	9.0	7.4-10.6	0.9	0.6-1.2	2.6	1.9-3.4	87.5	85.6-89.3

Smokeless tobacco use									
Age Group (years)	Women								
	n	Current user				Non user			
		% Daily	95% CI	% Non-daily	95% CI	% Past user	95% CI	% Never used	95% CI
18-29	1659	2.5	1.3-3.7	0.1	0.0-0.3	2.1	1.0-3.2	95.2	93.6-96.7
30-44	1573	4.2	2.7-5.7	0.2	0.0-0.5	1.9	1.1-2.7	93.7	92.0-95.4
45-59	723	6.6	4.3-9.0	0.4	0.0-0.7	2.0	0.7-3.3	91.0	88.4-93.6
60-69	261	11.3	6.2-16.3	0.2	0.0-0.5	3.9	1.0-6.9	84.6	79.2-90.0
18-69	4216	4.5	3.3-5.7	0.2	0.1-0.4	2.2	1.5-2.9	93.1	91.8-94.4

Smokeless tobacco use									
Age Group (years)	Both genders								
	n	Current user				Non user			
		% Daily	95% CI	% Non-daily	95% CI	% Past user	95% CI	% Never used	95% CI
18-29	2651	4.6	3.4-5.8	0.6	0.3-1.0	2.4	1.5-3.3	92.4	90.8-93.9
30-44	2714	6.0	4.7-7.4	0.4	0.2-0.7	1.9	1.3-2.6	91.6	90.1-93.2
45-59	1378	8.8	6.8-10.9	0.4	0.1-0.7	2.5	1.6-3.4	88.3	86.0-90.6
60-69	623	9.2	6.3-12.1	0.5	0.0-1.0	3.6	1.6-5.6	86.7	83.3-90.2
18-69	7366	6.4	5.3-7.5	0.5	0.3-0.7	2.4	1.8-2.9	90.8	89.6-92.0

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 among all respondents									
Age Group (years)	Men			Women			Both genders		
	n	% Former daily users	95% CI	n	% Former daily users	95% CI	n	% Former daily users	95% CI
18-29	992	1.7	0.6-2.9	1659	0.1	0.0-0.3	2651	0.7	0.3-1.1
30-44	1141	1.2	0.5-1.8	1573	0.6	0.2-1.1	2714	0.8	0.4-1.2
45-59	655	1.8	0.6-2.9	723	1.4	0.3-2.6	1378	1.6	0.8-2.4
60-69	362	2.3	0.4-4.2	261	3.1	0.4-5.9	623	2.7	1.0-4.5
18-69	3150	1.6	1.0-2.1	4216	0.8	0.4-1.1	7366	1.1	0.8-1.4

Former daily smokeless tobacco users among ever daily users									
Age Group (years)	Men			Women			Both genders		
	n	% Former daily users	95% CI	n	% Former daily users	95% CI	n	% Former daily users	95% CI
18-29	131	17.1	7.1-27.1	59	5.1	0.0-12.2	190	13.1	5.7-20.5
30-44	143	11.8	6.1-17.6	90	12.9	4.0-21.7	233	12.3	7.0-17.5
45-59	108	13.3	4.8-21.9	71	17.8	4.9-30.7	179	15.2	8.1-22.3
60-69	45	24.2	8.4-40.1	35	21.8	3.5-40.1	80	22.8	10.2-35.5
18-69	427	15.0	10.3-19.6	255	14.5	8.2-20.9	682	14.8	10.7-18.8

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	118	4.9	3.4-6.3	117	0.2	0.0-0.5	115	0.7	0.3-1.1
30-44	127	4.1	2.7-5.5	126	0.3	0.0-0.7	125	1.1	0.6-1.6
45-59	98	5.6	4.4-6.8	93	0.7	0.1-1.3	93	0.8	0.4-1.3
60-69	38	5.3	3.5-7.2	38	0.2	0.0-0.6	38	1.0	0.1-1.9
18-69	381	4.8	4.0-5.6	374	0.4	0.2-0.6	371	0.9	0.7-1.2

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	115	2.4	1.0-3.7	115	0.3	0.0-0.8
30-44	126	0.9	0.5-1.4	126	0.5	0.1-0.9
45-59	93	0.2	0.0-0.4	94	0.1	0.0-0.1
60-69	38	0.3	0.0-0.9	38	0.1	0.0-0.3
18-69	372	1.1	0.6-1.5	373	0.3	0.1-0.5

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	56	1.7	0.5-2.8	56	0.2	0.0-0.6	57	1.8	0.0-4.6
30-44	80	3.8	2.3-5.4	80	0.0	0.0-0.1	80	1.2	0.4-1.9
45-59	59	5.9	3.3-8.5	61	0.5	0.0-1.1	61	0.7	0.2-1.1
60-69	28	5.9	3.7-8.2	28	0.0	0.0-0.0	28	0.9	0.0-1.9
18-69	223	4.3	3.0-5.6	225	0.2	0.0-0.4	226	1.1	0.4-1.9

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	57	3.2	0.5-6.0	57	1.7	0.0-4.5
30-44	80	1.0	0.2-1.8	79	1.1	0.1-2.1
45-59	61	0.3	0.0-0.6	61	0.1	0.0-0.2
60-69	28	0.0	0.0-0.1	28	0.0	0.0-0.0
18-69	226	1.1	0.3-1.9	225	0.8	0.1-1.5

Mean times per day smokeless tobacco used by daily smokeless tobacco users by type									
Age Group (years)	Both genders								
	n	Snuff by mouth	95% CI	n	Snuff by nose	95% CI	n	Chewing tobacco	95% CI
18-29	174	3.7	2.6-4.9	173	0.2	0.0-0.5	172	1.1	0.0-2.2
30-44	207	4.0	3.0-5.0	206	0.2	0.0-0.4	205	1.1	0.7-1.6
45-59	157	5.7	4.4-7.0	154	0.6	0.2-1.0	154	0.8	0.4-1.1
60-69	66	5.7	4.1-7.3	66	0.1	0.0-0.3	66	1.0	0.3-1.6
18-69	604	4.6	3.9-5.3	599	0.3	0.1-0.5	597	1.0	0.6-1.4

Mean times per day smokeless tobacco used by daily smokeless tobacco users by type						
Age Group (years)	Both genders					
	N	Betel, quid	95% CI	n	Other	95% CI
18-29	172	2.7	1.3-4.0	172	0.9	0.0-1.9
30-44	206	1.0	0.6-1.4	205	0.7	0.3-1.2
45-59	154	0.2	0.1-0.4	155	0.1	0.0-0.1
60-69	66	0.2	0.0-0.4	66	0.0	0.0-0.1
18-69	598	1.1	0.7-1.5	598	0.5	0.2-0.8

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	132	48.8	37.2-60.3	4.9	0.4-9.5	21.6	14.4-28.8
30-44	138	49.7	37.8-61.5	5.4	0.0-11.4	27.8	17.8-37.8
45-59	102	78.6	69.1-88.1	18.2	8.4-28.0	19.1	10.2-28.1
60-69	42	79.4	62.7-96.2	11.6	0.1-23.1	20.9	3.3-38.5
18-69	414	59.6	52.3-66.9	9.1	5.3-13.0	23.1	17.6-28.7

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	132	35.1	24.6-45.6	18.2	8.3-28.1
30-44	138	23.2	14.9-31.5	14.0	6.1-21.9
45-59	102	9.4	2.1-16.6	3.0	0.0-6.1
60-69	42	9.7	0.0-21.3	9.4	0.0-24.8
18-69	414	21.8	16.1-27.6	12.0	6.5-17.5

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	61	44.0	25.0-63.0	8.9	0.0-18.7	18.5	6.3-30.7
30-44	84	55.4	38.2-72.5	1.5	0.0-3.4	29.0	12.8-45.2
45-59	67	69.1	55.1-83.1	6.7	1.2-12.2	17.8	7.2-28.4
60-69	29	74.8	54.6-94.9	0.0	0.0-0.0	23.8	3.9-43.7
18-69	241	60.0	47.7-72.3	4.1	1.4-6.8	23.0	13.0-33.0

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	61	43.6	25.1-62.1	22.1	8.9-35.3
30-44	84	19.1	7.4-30.9	11.0	2.9-19.1
45-59	67	7.9	0.0-16.4	4.8	0.4-9.2
60-69	29	2.0	0.0-6.0	0.7	0.0-2.1
18-69	241	18.3	8.3-28.3	9.9	5.3-14.5

Percentage of current users of smokeless tobacco using each of the following products							
Age Group (years)	Both genders						
	N	% Snuff by mouth	95% CI	% Snuff by nose	95% CI	% Chewing tobacco	95% CI
18-29	193	47.2	36.3-58.0	6.3	1.8-10.8	20.6	13.9-27.2
30-44	222	52.0	41.9-62.1	3.8	0.2-7.5	28.3	18.8-37.8
45-59	169	74.7	66.3-83.1	13.6	7.4-19.7	18.6	11.2-26.0
60-69	71	76.8	63.0-90.5	4.9	0.0-10.1	22.6	8.7-36.5
18-69	655	59.8	52.6-66.9	7.1	4.4-9.7	23.1	17.5-28.7

Percentage of current users of smokeless tobacco using each of the following products					
Age Group (years)	Both genders				
	n	% Betel, quid	95% CI	% Other	95% CI
18-29	193	38.0	27.2-48.7	19.5	11.4-27.6
30-44	222	21.6	13.9-29.2	12.8	6.7-18.9
45-59	169	8.8	3.1-14.5	3.7	0.7-6.7
60-69	71	5.3	0.0-12.3	4.4	0.0-11.3
18-69	655	20.4	14.1-26.7	11.1	7.1-15.1

Current tobacco users

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

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 genders		
	n	% Current users	95% CI	n	% Current users	95% CI	n	% Current users	95% CI
18-29	992	24.2	20.6-27.9	1659	3.8	2.4-5.2	2651	10.9	9.2-12.6
30-44	1141	37.0	33.0-41.1	1573	6.7	4.8-8.6	2714	19.2	16.9-21.5
45-59	655	44.3	39.7-48.9	723	16.7	12.6-20.8	1378	29.6	26.2-32.9
60-69	362	43.1	37.0-49.2	261	24.2	16.9-31.5	623	33.9	29.3-38.5
18-69	3150	35.6	32.9-38.4	4216	8.7	7.0-10.3	7366	19.7	18.0-21.3

Daily tobacco users									
Age Group (years)	Men			Women			Both genders		
	n	% Daily users	95% CI	n	% Daily users	95% CI	n	% Daily users	95% CI
18-29	992	21.0	17.4-24.6	1659	3.5	2.1-4.8	2651	9.6	7.9-11.2
30-44	1141	34.8	30.8-38.9	1573	6.4	4.6-8.2	2714	18.1	15.9-20.3
45-59	655	40.7	36.2-45.3	723	14.9	11.0-18.8	1378	26.9	23.8-30.1
60-69	362	41.7	35.6-47.7	261	23.0	16.1-29.9	623	32.5	28.0-37.1
18-69	3150	32.9	30.2-35.7	4216	8.0	6.4-9.6	7366	18.2	16.6-19.8

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 genders		
	n	% Exposed	95% CI	n	% Exposed	95% CI	n	% Exposed	95% CI
18-29	992	24.1	20.6-27.6	1659	30.4	27.3-33.6	2651	28.2	25.7-30.8
30-44	1141	23.8	20.7-26.8	1573	26.7	23.7-29.6	2714	25.5	23.3-27.6
45-59	655	24.3	20.3-28.4	723	29.0	24.3-33.6	1378	26.8	23.8-29.9
60-69	362	34.9	29.2-40.6	261	29.2	21.8-36.6	623	32.1	27.3-36.9
18-69	3150	25.3	23.2-27.3	4216	28.7	26.5-30.9	7366	27.3	25.6-28.9

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 genders		
	N	% Exposed	95% CI	n	% Exposed	95% CI	n	% Exposed	95% CI
18-29	700	26.1	21.5-30.8	1306	7.4	5.4-9.3	2006	13.5	11.4-15.7
30-44	819	34.3	29.4-39.2	1250	6.6	4.8-8.4	2069	17.4	15.1-19.6
45-59	482	33.5	27.5-39.4	556	7.9	4.7-11.0	1038	19.8	16.4-23.2
60-69	255	24.7	19.2-30.3	205	8.2	3.6-12.9	460	16.6	13.1-20.1
18-69	2256	30.7	27.4-34.0	3317	7.2	5.7-8.7	5573	16.5	14.8-18.1

Fruit and Vegetable Consumption

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 genders		
	N	Mean number of days	95% CI	n	Mean number of days	95% CI	n	Mean number of days	95% CI
18-29	986	2.4	2.2-2.6	1626	2.4	2.2-2.5	2612	2.4	2.2-2.5
30-44	1132	2.4	2.2-2.6	1541	2.3	2.1-2.4	2673	2.3	2.2-2.4
45-59	644	2.3	2.0-2.5	711	2.0	1.8-2.2	1355	2.1	1.9-2.3
60-69	357	2.1	1.8-2.3	252	2.0	1.6-2.4	609	2.0	1.8-2.3
18-69	3119	2.3	2.2-2.4	4130	2.2	2.1-2.4	7249	2.3	2.2-2.4

Mean number of days vegetables consumed in a typical week									
Age Group (years)	Men			Women			Both genders		
	N	Mean number of days	95% CI	N	Mean number of days	95% CI	n	Mean number of days	95% CI
18-29	989	4.5	4.4-4.6	1648	4.5	4.3-4.6	2637	4.5	4.4-4.6
30-44	1137	4.5	4.3-4.6	1564	4.3	4.2-4.4	2701	4.4	4.3-4.5
45-59	654	4.4	4.2-4.5	720	4.3	4.1-4.5	1374	4.3	4.2-4.5
60-69	360	4.5	4.3-4.7	257	4.3	4.1-4.5	617	4.4	4.3-4.6
18-69	3140	4.5	4.4-4.6	4189	4.4	4.3-4.5	7329	4.4	4.3-4.5

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 genders		
	n	Mean number of servings	95% CI	n	Mean number of servings	95% CI	n	Mean number of servings	95% CI
18-29	986	0.7	0.6-0.8	1625	0.7	0.6-0.7	2611	0.7	0.6-0.7
30-44	1131	0.7	0.6-0.8	1539	0.6	0.6-0.7	2670	0.7	0.6-0.7
45-59	644	0.6	0.5-0.7	711	0.6	0.5-0.6	1355	0.6	0.5-0.6
60-69	357	0.5	0.5-0.6	252	0.5	0.4-0.7	609	0.5	0.5-0.6
18-69	3118	0.7	0.6-0.7	4127	0.6	0.6-0.7	7245	0.6	0.6-0.7

Mean number of servings of vegetables on average per day									
Age Group (years)	Men			Women			Both genders		
	n	Mean number of servings	95% CI	n	Mean number of servings	95% CI	n	Mean number of servings	95% CI
18-29	989	1.3	1.2-1.5	1648	1.2	1.1-1.3	2637	1.3	1.2-1.3
30-44	1134	1.2	1.1-1.3	1564	1.1	1.1-1.2	2698	1.2	1.1-1.2
45-59	654	1.1	1.1-1.2	720	1.2	1.1-1.2	1374	1.2	1.1-1.2
60-69	360	1.2	1.1-1.3	257	1.0	0.9-1.1	617	1.1	1.0-1.2
18-69	3137	1.2	1.2-1.3	4189	1.2	1.1-1.2	7326	1.2	1.1-1.2

Mean number of servings of fruit and/or vegetables on average per day									
Age Group (years)	Men			Women			Both genders		
	n	Mean number of servings	95% CI	n	Mean number of servings	95% CI	n	Mean number of servings	95% CI
18-29	992	2.1	1.9-2.2	1659	1.9	1.8-1.9	2651	1.9	1.8-2.0
30-44	1140	1.9	1.8-2.0	1571	1.8	1.7-1.9	2711	1.8	1.7-1.9
45-59	655	1.7	1.6-1.9	723	1.7	1.6-1.8	1378	1.7	1.6-1.8
60-69	361	1.7	1.6-1.9	259	1.5	1.3-1.7	620	1.6	1.5-1.7
18-69	3148	1.9	1.8-2.0	4212	1.8	1.7-1.8	7360	1.8	1.7-1.9

vegetable

consumption 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?

Number of servings of fruit and/or vegetables on average per day									
Age Group (years)	Men								
	n	% no fruit and/or vegetables	95%CI	% 1-2 servings	95%CI	% 3-4 servings	95%CI	% ≥5 servings	95% CI
18-29	992	26.1	22.0-30.3	51.2	46.8-55.6	16.4	13.6-19.2	6.3	4.1-8.4
30-44	1140	28.2	24.3-32.2	53.7	49.7-57.8	12.9	10.2-15.5	5.2	3.5-6.8
45-59	655	34.5	29.2-39.7	52.3	47.3-57.2	9.9	6.8-13.0	3.4	2.0-4.8
60-69	361	31.2	24.8-37.6	54.5	47.5-61.5	11.5	7.4-15.5	2.8	1.2-4.5
18-69	3148	29.3	26.4-32.2	52.8	49.8-55.8	13.1	11.2-14.9	4.8	3.7-6.0

Number of servings of fruit and/or vegetables on average per day									
Age Group (years)	Women								
	n	% no fruit and/or vegetables	95% CI	% 1-2 servings	95% CI	% 3-4 servings	95% CI	% ≥5 servings	95% CI
18-29	1659	24.6	21.5-27.7	58.8	55.2-62.5	13.8	11.5-16.1	2.8	1.9-3.6
30-44	1571	30.2	26.8-33.5	55.3	51.5-59.1	11.9	9.6-14.3	2.6	1.5-3.7
45-59	723	34.2	29.4-39.0	51.0	46.1-55.8	12.1	8.8-15.4	2.7	1.4-4.0
60-69	259	42.1	33.4-50.9	49.0	41.0-57.0	6.9	3.3-10.5	1.9	0.1-3.8
18-69	4212	29.7	26.9-32.4	55.4	52.7- 58.1	12.3	10.8-13.8	2.6	2.0-3.3

Number of servings of fruit and/or vegetables on average per day									
Age Group (years)	Both genders								
	n	% no fruit and/or vegetables	95% CI	% 1-2 servings	95% CI	% 3-4 servings	95% CI	% ≥5 servings	95% CI
18-29	2651	25.1	22.2-28.0	56.2	52.9-59.5	14.7	12.9-16.5	4.0	3.0-5.0
30-44	2711	29.4	26.4-32.3	54.6	51.5-57.8	12.3	10.5-14.1	3.7	2.7-4.6
45-59	1378	34.3	30.4-38.3	51.6	47.7-55.4	11.1	8.6-13.5	3.1	2.0-4.1
60-69	620	36.5	30.8-42.2	51.8	46.2-57.5	9.3	6.4-12.1	2.4	1.2-3.6
18-69	7360	29.5	27.0-32.0	54.3	51.9-56.8	12.6	11.3-13.9	3.5	2.8-4.3

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 genders		
	n	% < five servings per day	95% CI	n	% < five servings per day	95% CI	n	% < five servings per day	95% CI
18-29	992	93.7	91.6-95.9	1659	97.2	96.4-98.1	2651	96.0	95.0-97.0
30-44	1140	94.8	93.2-96.5	1571	97.4	96.3-98.5	2711	96.3	95.4-97.3
45-59	655	96.6	95.2-98.0	723	97.3	96.0-98.6	1378	97.0	95.9-98.0
60-69	361	97.2	95.5-98.8	259	98.1	96.2-99.9	620	97.6	96.4-98.8
18-69	3148	95.2	94.0-96.3	4212	97.4	96.7-98.0	7360	96.5	95.7-97.2

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 quest on:

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

Type of oil or fat most often used for meal preparation in household									
n (households)	% Vegetable oil	95% CI	% Lard	95% CI	% Butter	95% CI	% Margarine	95% CI	
7262	41.0	37.4-44.5	0.8	0.5-1.1	2.7	1.9-3.5	10.8	8.2-13.5	

Type of oil or fat most often used for meal preparation in household							
n (households)	% none in particular	95% CI	% None used	95% CI	% Other	95% CI	
7262	42.8	38.3-47.3	0.0	0.0-0.0	1.9	1.1-2.7	

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 genders		
	n	mean	95% CI	n	mean	95% CI	n	mean	95% CI
18-29	946	0.9	0.7-1.1	1505	0.2	0.1-0.2	2451	0.4	0.3-0.5
30-44	1095	0.7	0.6-0.8	1422	0.2	0.1-0.2	2517	0.4	0.3-0.5
45-59	622	0.6	0.4-0.9	672	0.1	0.1-0.2	1294	0.4	0.2-0.5
60-69	351	0.2	0.1-0.3	243	0.1	0.0-0.2	594	0.1	0.1-0.2
18-69	3014	0.7	0.6-0.8	3842	0.2	0.1-0.2	6856	0.4	0.3-0.4

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 genders		
	n	% not meeting recs	95% CI	n	% not meeting recs	95% CI	n	% not meeting recs	95% CI
18-29	959	17.8	14.5-21.2	1582	54.8	50.7-58.9	2541	42.0	38.7-45.3
30-44	1109	23.0	19.0-26.9	1483	49.9	45.7-54.0	2592	38.7	35.3-42.1
45-59	640	29.6	24.7-34.5	690	50.4	45.5-55.3	1330	40.6	36.7-44.5
60-69	355	37.9	31.2-44.6	246	69.3	60.7-77.8	601	52.9	46.8-59.1
18-69	3063	24.7	22.0-27.5	4001	53.3	50.1-56.4	7064	41.5	38.9-44.2

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	959	21.0	17.0-25.0	25.4	21.6-29.2	53.6	48.8-58.3
30-44	1109	26.6	22.6-30.7	27.9	24.4-31.5	45.4	40.9-49.9
45-59	640	33.6	28.2-39.1	27.9	23.6-32.3	38.4	33.2-43.7
60-69	355	40.8	34.1-47.4	35.1	29.0-41.2	24.1	18.8-29.4
18-69	3063	28.2	25.2-31.3	28.1	25.6-30.6	43.7	40.3-47.1

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	1582	60.8	56.8-64.8	22.1	19.2-25.1	17.1	13.9-20.2
30-44	1483	55.7	51.4-60.0	26.8	23.4-30.3	17.5	14.5-20.5
45-59	690	54.3	49.5-59.2	26.2	22.1-30.3	19.5	15.5-23.4
60-69	246	72.0	63.4-80.6	19.1	12.1-26.2	8.9	3.4-14.4
18-69	4001	58.6	55.4-61.8	24.4	21.9-26.9	17.0	14.7-19.4

Level of total physical activity according to former recommendations							
Age Group (years)	Both genders						
	n	% Low	95% CI	% Moderate	95% CI	% High	95% CI
18-29	2541	47.0	43.7-50.4	23.3	20.9-25.6	29.7	26.5-32.9
30-44	2592	43.6	40.1-47.2	27.3	24.7-29.8	29.1	26.0-32.2
45-59	1330	44.6	40.6-48.6	27.0	24.2-29.8	28.4	24.9-31.9
60-69	601	55.7	49.6-61.9	27.5	22.3-32.6	16.8	12.7-21.0
18-69	7064	46.1	43.3-48.9	25.9	24.0-27.8	28.0	25.5-30.5

Total physical activity-mean

Description: Mean minutes of total physical activity on average per day.

Instrument questions

- ♦ 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 genders		
	n	Mean minutes	95% CI	n	Mean minutes	95% CI	n	Mean minutes	95% CI
18-29	959	216.2	195.4-236.9	1582	60.3	51.8-68.7	2541	114.3	103.3-125.3
30-44	1109	199.2	179.2-219.2	1483	65.7	57.0-74.5	2592	121.0	109.5-132.6
45-59	640	163.9	142.7-185.1	690	75.2	63.5-86.9	1330	117.0	103.0-131.0
60-69	355	101.0	84.6-117.4	246	36.7	23.4-50.0	601	70.2	58.0-82.4
18-69	3063	184.8	170.6-198.9	4001	63.1	56.3-69.9	7064	113.3	104.3-122.3

Total physical activity-median

Description: Median minutes of total physical activity on average per day.

Instrument questions

- ◆ 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 genders		
	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	959	141.4	42.9-317.1	1582	15.0	0.0-75.0	2541	38.6	0.0-154.3
30-44	1109	120.0	25.7-295.7	1483	20.0	0.0-85.7	2592	42.9	0.0-154.3
45-59	640	85.7	12.9-232.7	690	20.0	0.0-104.3	1330	40.0	0.0-154.3
60-69	355	60.0	0.0-137.1	246	2.1	0.0-30.0	601	17.1	0.0-102.9
18-69	3063	102.9	21.4-260.0	4001	17.1	0.0-85.7	7064	38.6	0.0-154.3

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 genders		
	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	959	0.0	0.0-171.4	1582	0.0	0.0-0.0	2541	0.0	0.0-30.0
30-44	1109	0.0	0.0-180.0	1483	0.0	0.0-1.4	2592	0.0	0.0-35.7
45-59	640	0.0	0.0-102.9	690	0.0	0.0-0.0	1330	0.0	0.0-19.3
60-69	355	0.0	0.0-0.0	246	0.0	0.0-0.0	601	0.0	0.0-0.0
18-69	3063	0.0	0.0-128.6	4001	0.0	0.0-0.0	7064	0.0	0.0-25.7

Median minutes of transport-related physical activity on average per day									
Age Group (years)	Men			Women			Both genders		
	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	959	60.0	25.7-128.6	1582	8.6	0.0-50.0	2541	21.4	0.0-75.0
30-44	1109	60.0	15.0-120.0	1483	12.9	0.0-51.4	2592	25.7	0.0-85.7
45-59	640	60.0	0.0-120.0	690	14.3	0.0-60.0	1330	30.0	0.0-85.7
60-69	355	38.6	0.0-102.9	246	0.0	0.0-30.0	601	12.9	0.0-60.0
18-69	3063	60.0	12.9-120.0	4001	8.6	0.0-51.4	7064	25.7	0.0-85.7

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	959	0.0	0.0-0.0	1582	0.0	0.0-0.0	2541	0.0	0.0-0.0
30-44	1109	0.0	0.0-0.0	1483	0.0	0.0-0.0	2592	0.0	0.0-0.0
45-59	640	0.0	0.0-0.0	690	0.0	0.0-0.0	1330	0.0	0.0-0.0
60-69	355	0.0	0.0-0.0	246	0.0	0.0-0.0	601	0.0	0.0-0.0
18-69	3063	0.0	0.0-0.0	4001	0.0	0.0-0.0	7064	0.0	0.0-0.0

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 genders		
	n	% no activity at work	95% CI	n	% no activity at work	95% CI	n	% no activity at work	95% CI
18-29	959	56.6	51.9-61.2	1582	75.7	72.4-79.0	2541	69.1	65.9-72.2
30-44	1109	58.0	53.6-62.4	1483	74.8	71.3-78.2	2592	67.8	64.6-71.1
45-59	640	65.8	61.0-70.7	690	75.6	71.2-79.9	1330	71.0	67.6-74.4
60-69	355	81.1	76.2-86.0	246	89.3	83.5-95.1	601	85.0	81.2-88.9
18-69	3063	62.0	58.8-65.2	4001	76.4	73.7-79.0	7064	70.4	68.0-72.9

No transport-related physical activity									
Age Group (years)	Men			Women			Both genders		
	n	% no activity for transport	95% CI	n	% no activity for transport	95% CI	n	% no activity for transport	95% CI
18-29	959	15.2	12.1-18.3	1582	42.2	38.1-46.2	2541	32.8	29.7-35.9
30-44	1109	18.3	15.0-21.7	1483	38.2	34.3-42.0	2592	29.9	27.0-32.9
45-59	640	25.4	20.4-30.3	690	35.4	30.8-40.0	1330	30.7	27.1-34.3
60-69	355	29.4	23.4-35.4	246	51.4	43.8-59.0	601	40.0	34.8-45.1
18-69	3063	20.3	17.9-22.6	4001	40.2	37.2-43.2	7064	32.0	29.7-34.3

No recreation-related physical activity									
Age Group (years)	Men			Women			Both genders		
	n	% no activity at recreation	95% CI	n	% no activity at recreation	95% CI	n	% no activity at recreation	95% CI
18-29	959	82.2	79.0-85.4	1582	98.6	97.9-99.2	2541	92.9	91.6-94.2
30-44	1109	92.1	90.1-94.1	1483	98.4	97.5-99.2	2592	95.8	94.8-96.8
45-59	640	92.6	90.1-95.2	690	99.1	98.4-99.9	1330	96.1	94.8-97.3
60-69	355	95.4	92.7-98.1	246	99.5	98.5-100.0	601	97.4	95.8-98.9
18-69	3063	89.8	88.3-91.3	4001	98.7	98.2-99.2	7064	95.0	94.3-95.7

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							
Age Group (years)	Men						
	n	% Activity from work	95% CI	% Activity for transport	95% CI	% Activity during leisure time	95% CI
18-29	855	30.2	26.9-33.6	62.7	59.2-66.2	7.1	5.4-8.7
30-44	971	32.9	29.6-36.3	64.5	61.1-67.9	2.6	1.8-3.4
45-59	526	28.3	24.6-31.9	68.6	64.6-72.6	3.1	1.6-4.6
60-69	271	16.2	12.1-20.2	81.9	78.0-85.9	1.9	0.6-3.2
18-69	2623	29.4	27.2-31.7	66.6	64.2-69.0	4.0	3.3-4.7

Composition of total physical activity							
Age Group (years)	Women						
	n	% Activity from work	95% CI	% Activity for transport	95% CI	% Activity during leisure time	95% CI
18-29	1066	26.0	22.6-29.5	73.1	69.6-76.5	0.9	0.2-1.6
30-44	1053	25.2	22.3-28.1	73.8	70.9-76.8	1.0	0.4-1.6
45-59	493	23.2	19.5-27.0	76.4	72.6-80.3	0.3	0.0-0.6
60-69	132	13.9	6.7-21.1	85.1	77.8-92.5	1.0	0.0-2.9
18-69	2744	24.5	22.2-26.7	74.7	72.4-77.0	0.8	0.4-1.2

Composition of total physical activity							
Age Group (years)	Both genders						
	n	% Activity from work	95% CI	% Activity for transport	95% CI	% Activity during leisure time	95% CI
18-29	1921	27.8	25.2-30.4	68.7	66.0-71.3	3.5	2.7-4.4
30-44	2024	28.9	26.4-31.3	69.4	66.8-71.9	1.8	1.3-2.2
45-59	1019	25.8	23.2-28.4	72.5	69.7-75.2	1.8	1.0-2.5
60-69	403	15.3	11.4-19.1	83.2	79.2-87.1	1.5	0.4-2.6
18-69	5367	26.8	25.0-28.7	70.8	68.9-72.7	2.3	1.9-2.7

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 genders		
	n	% no vigorous activity	95% CI	n	% no vigorous activity	95% CI	N	% no vigorous activity	95% CI
18-29	959	61.4	56.8-66.0	1582	87.9	85.3-90.5	2541	78.7	76.0-81.4
30-44	1109	67.9	63.8-72.1	1483	89.1	86.9-91.4	2592	80.3	77.6-83.0
45-59	640	74.8	70.3-79.3	690	87.6	84.3-90.9	1330	81.5	78.6-84.5
60-69	355	88.3	84.6-92.0	246	93.2	87.9-98.6	601	90.7	87.4-94.0
18-69	3063	70.0	67.0-73.0	4001	88.7	86.8-90.6	7064	81.0	78.9-83.1

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	991	219.7	207.9-231.5	180.0	120.0-300.0
30-44	1139	208.5	198.0-219.0	180.0	120.0-285.0
45-59	654	226.8	213.1-240.6	180.0	120.0-300.0
60-69	362	286.3	265.8-306.8	300.0	180.0-360.0
18-69	3146	224.6	216.5-232.8	180.0	120.0-300.0

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	1659	218.4	209.4-227.5	180.0	120.0-300.0
30-44	1571	204.1	193.9-214.3	180.0	120.0-300.0
45-59	721	230.6	216.1-245.1	180.0	120.0-300.0
60-69	261	302.4	276.9-327.9	300.0	180.0-420.0
18-69	4212	221.5	214.1-228.8	180.0	120.0-300.0

Minutes spent in sedentary activities on average per day					
Age Group (years)	Both genders				
	n	Mean minutes	95% CI	Median minutes	Inter-quartile range (P25-P75)
18-29	2650	218.9	211.6-226.2	180.0	120.0-300.0
30-44	2710	205.9	198.1-213.7	180.0	120.0-300.0
45-59	1375	228.8	218.4-239.3	180.0	120.0-300.0
60-69	623	294.1	278.2-310.1	300.0	180.0-360.0
18-69	7358	222.8	216.8-228.7	180.0	120.0-300.0

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									
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	991	65.3	60.8-69.9	31.9	27.4-36.3	0.5	0.1-0.9	2.4	1.1-3.7
30-44	1139	49.8	45.3-54.2	41.1	36.5-45.6	2.2	1.0-3.3	7.0	4.9-9.1
45-59	654	41.0	35.6-46.4	43.8	38.8-48.9	3.2	1.7-4.7	12.0	9.1-15.0
60-69	362	37.4	31.0-43.8	46.5	39.7-53.3	3.3	1.3-5.4	12.8	8.6-17.1
18-69	3146	50.9	47.4-54.4	39.7	36.3-43.0	2.0	1.4-2.6	7.4	6.1-8.7

Blood pressure 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	1659	49.7	45.9-53.4	40.1	36.3-43.9	2.3	1.4-3.3	7.9	5.9-9.9
30-44	1571	39.7	35.4-44.0	43.2	39.2-47.2	2.6	1.6-3.6	14.6	12.1-17.0
45-59	721	32.0	27.2-36.9	38.1	33.9-42.3	3.6	2.0-5.3	26.2	22.0-30.5
60-69	261	30.0	23.3-36.7	29.0	21.3-36.7	5.9	2.9-9.0	35.0	26.7-43.4
18-69	4212	41.4	38.4-44.4	40.1	37.2-43.0	2.9	2.2-3.7	15.6	13.7-17.5

Blood pressure measurement and diagnosis									
Age Group (years)	Both genders								
	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	2650	55.1	51.8-58.3	37.2	34.1-40.4	1.7	1.0-2.3	6.0	4.5-7.5
30-44	2710	43.8	40.2-47.5	42.3	38.9-45.7	2.4	1.7-3.2	11.4	9.6-13.3
45-59	1375	36.2	32.2-40.3	40.8	37.3-44.3	3.4	2.3-4.5	19.6	16.8-22.4
60-69	623	33.8	29.1-38.4	38.0	32.4-43.6	4.6	2.7-6.5	23.6	18.3-29.0
18-69	7358	45.3	42.4-48.1	39.9	37.3-42.5	2.6	2.1-3.1	12.3	10.8-13.7

Blood pressure treatment among those diagnosed

Description: Raised blood pressure treatment results 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?
- ♦ 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 genders		
	n	% taking meds	95% CI	n	% taking meds	95% CI	n	% taking meds	95% CI
18-29	26	25.6	6.0-45.3	140	32.8	23.4-42.2	166	31.9	22.9-40.8
30-44	104	44.5	33.1-55.9	274	46.9	39.5-54.2	378	46.2	40.0-52.4
45-59	111	55.4	45.3-65.5	219	68.4	60.0-76.7	330	64.4	57.8-71.0
60-69	71	57.7	43.3-72.2	104	72.4	61.5-83.4	175	68.1	59.1-77.2
18-69	312	49.3	42.1-56.5	737	54.2	48.8-59.5	1049	52.9	48.5-57.3

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 genders		
	n	% seen trad. healer	95% CI	n	% seen trad. healer	95% CI	n	% seen trad. healer	95% CI
18-29	26	4.6	0.0-13.5	140	39.7	26.8-52.5	166	35.2	23.3-47.1
30-44	104	26.7	15.6-37.8	274	22.2	15.9-28.6	378	23.4	17.6-29.3
45-59	111	20.9	12.0-29.7	219	25.2	17.4-32.9	330	23.8	18.0-29.6
60-69	71	11.0	3.8-18.2	104	27.3	16.4-38.2	175	22.5	14.5-30.5
18-69	312	19.7	14.0-25.4	737	27.5	21.9-33.0	1049	25.5	20.9-30.0

Currently taking herbal or traditional remedy for raised blood pressure among those previously diagnosed									
Age Group (years)	Men			Women			Both genders		
	n	% taking trad. meds	95% CI	n	% taking trad. meds	95% CI	n	% taking trad. meds	95% CI
18-29	26	0.0	0.0-0.0	140	5.6	0.7-10.4	166	4.8	0.7-9.0
30-44	104	16.5	8.1-25.0	274	6.9	3.4-10.5	378	9.5	5.9-13.2
45-59	111	8.6	2.2-15.1	219	14.1	8.5-19.7	330	12.4	8.2-16.6
60-69	71	7.5	0.9-14.1	104	22.2	12.0-32.4	175	17.9	10.4-25.4
18-69	312	10.6	6.4-14.8	737	11.2	8.5-13.9	1049	11.0	8.7-13.4

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	991	88.0	85.0-91.0	11.7	8.7-14.8	0.1	0.0-0.3	0.2	0.0-0.4
30-44	1139	76.5	72.6-80.4	21.5	17.8-25.3	0.6	0.1-1.1	1.4	0.7-2.1
45-59	654	70.8	65.8-75.9	24.6	19.8-29.5	0.6	0.1-1.0	3.9	2.4-5.5
60-69	362	58.2	51.3-65.2	32.0	25.0-38.9	1.0	0.0-2.4	8.8	5.0-12.6
18-69	3146	76.5	73.5-79.4	20.6	17.7-23.4	0.5	0.2-0.8	2.4	1.8-3.1

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	1659	89.0	86.7-91.3	10.1	8.1-12.1	0.3	0.0-0.6	0.6	0.0-1.3
30-44	1571	79.5	76.8-82.2	18.8	16.2-21.3	0.2	0.0-0.3	1.6	0.9-2.3
45-59	721	68.9	64.1-73.7	22.5	18.5-26.6	2.3	0.8-3.8	6.3	4.1-8.4
60-69	261	62.2	54.6-69.7	22.8	16.6-29.0	2.4	0.3-4.5	12.6	6.9-18.3
18-69	4212	79.9	77.7-82.2	16.5	14.5-18.4	0.8	0.5-1.1	2.9	2.1-3.6

Blood sugar measurement and diagnosis									
Age Group (years)	Both genders								
	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	2650	88.7	86.7-90.6	10.6	8.8-12.5	0.2	0.0-0.4	0.5	0.0-0.9
30-44	2710	78.3	75.6-80.9	19.9	17.3-22.5	0.3	0.1-0.6	1.5	1.0-2.0
45-59	1375	69.8	65.9-73.7	23.5	20.0-27.1	1.5	0.7-2.3	5.2	3.8-6.6
60-69	623	60.1	54.9-65.4	27.5	22.7-32.3	1.7	0.5-2.9	10.7	7.1-14.2
18-69	7358	78.5	76.3-80.7	18.2	16.1-20.2	0.7	0.4-0.9	2.7	2.1-3.2

Diabetes treatment among those diagnosed

Description: Diabetes treatment results among those previously diagnosed with raised blood sugar or diabetes.

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?
- ◆ 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 genders		
	n	% taking meds	95% CI	n	% taking meds	95% CI	n	% taking meds	95% CI
18-29	4	43.0	0.0-94.5	12	47.7	5.2-90.3	16	47.1	9.7-84.6
30-44	29	71.6	51.9-91.3	36	68.5	46.8-90.3	65	69.9	55.4-84.4
45-59	39	61.5	43.0-80.0	58	75.4	61.9-88.9	97	71.0	59.9-82.1
60-69	36	77.7	55.5-99.9	42	93.3	85.8-100.0	78	86.9	76.1-97.8
18-69	108	69.9	57.6-82.2	148	77.1	67.5-86.6	256	74.5	66.8-82.2

Currently taking insulin prescribed for diabetes among those previously diagnosed									
Age Group (years)	Men			Women			Both genders		
	n	% taking insulin	95% CI	n	% taking insulin	95% CI	n	% taking insulin	95% CI
18-29	4	0.0	0.0-0.0	12	0.0	0.0-0.0	16	0.0	0.0-0.0
30-44	29	13.7	0.1-27.3	36	2.0	0.0-5.9	65	7.1	0.8-13.4
45-59	39	17.5	1.2-33.8	58	16.9	5.3-28.6	97	17.1	7.7-26.5
60-69	36	24.8	7.3-42.3	42	22.2	10.2-34.3	78	23.3	13.5-33.0
18-69	108	18.9	9.9-27.9	148	14.2	8.0-20.4	256	15.9	11.0-20.8

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 genders		
	n	% seen trad. healer	95% CI	n	% seen trad. healer	95% CI	n	% seen trad. healer	95% CI
18-29	4	0.0	0.0-0.0	12	12.3	0.0-26.4	16	10.8	0.0-22.9
30-44	29	21.9	2.3-41.6	36	8.0	0.0-17.3	65	14.1	3.9-24.4
45-59	39	21.9	4.6-39.2	58	14.8	3.6-26.0	97	17.0	7.7-26.4
60-69	36	9.7	0.0-23.3	42	5.6	0.0-14.0	78	7.3	0.0-14.7
18-69	108	16.7	6.9-26.4	148	10.4	4.2-16.6	256	12.7	7.0-18.3

Currently taking herbal or traditional treatment for diabetes among those previously diagnosed									
Age Group (years)	Men			Women			Both genders		
	n	% taking trad. meds	95% CI	n	% taking trad. meds	95% CI	n	% taking trad. meds	95% CI
18-29	4	0.0	0.0-0.0	12	10.6	0.0-24.0	16	9.3	0.0-20.9
30-44	29	24.6	3.4-45.9	36	10.3	0.0-20.7	65	16.6	5.1-28.1
45-59	39	23.3	6.3-40.3	58	13.7	2.7-24.6	97	16.7	7.6-25.8
60-69	36	0.8	0.0-2.3	42	3.9	0.0-11.7	78	2.6	0.0-7.3
18-69	108	14.4	6.2-22.5	148	9.7	3.6-15.7	256	11.4	6.6-16.1

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									
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	990	95.6	93.8-97.5	4.0	2.3-5.7	0.0	0.0-0.0	0.4	0.0-0.9
30-44	1139	93.8	92.0-95.5	4.8	3.3-6.2	0.2	0.0-0.4	1.3	0.3-2.3
45-59	654	89.8	87.0-92.6	8.1	5.5-10.8	0.7	0.1-1.4	1.4	0.4-2.3
60-69	362	86.5	81.7-91.3	10.7	6.6-14.9	1.7	0.2-3.2	1.1	0.1-2.1
18-69	3145	92.6	91.2-94.0	6.0	4.8-7.2	0.4	0.2-0.7	1.0	0.6-1.5

Total cholesterol 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	1659	97.8	96.9-98.7	1.8	1.0-2.7	0.1	0.0-0.2	0.3	0.0-0.6
30-44	1571	94.4	93.1-95.7	3.9	2.9-5.0	0.5	0.1-0.9	1.2	0.6-1.7
45-59	721	89.5	86.5-92.5	7.5	5.1-9.8	1.9	0.7-3.1	1.2	0.5-1.9
60-69	261	91.4	88.0-94.8	5.2	2.3-8.1	0.0	0.0-0.0	3.4	1.2-5.6
18-69	4212	94.6	93.6-95.7	3.8	3.0-4.7	0.6	0.3-0.8	1.0	0.6-1.4

Total cholesterol measurement and diagnosis									
Age Group (years)	Both genders								
	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	2649	97.1	96.1-98.0	2.6	1.7-3.5	0.1	0.0-0.1	0.3	0.0-0.6
30-44	2710	94.1	93.0-95.3	4.3	3.3-5.2	0.4	0.1-0.6	1.2	0.7-1.8
45-59	1375	89.6	87.4-91.8	7.8	5.9-9.6	1.3	0.6-2.1	1.3	0.7-1.8
60-69	623	88.9	85.9-91.9	8.1	5.6-10.5	0.8	0.1-1.6	2.2	1.0-3.4
18-69	7357	93.8	92.8-94.8	4.7	3.9-5.5	0.5	0.3-0.7	1.0	0.7-1.3

- 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 genders		
	n	% taking meds	95% CI	n	% taking meds	95% CI	n	% taking meds	95% CI
18-29	3	0.0	0.0-0.0	7	9.1	0.0-27.4	10	5.8	0.0-17.5
30-44	17	65.0	35.7-94.3	34	39.5	20.2-58.7	51	49.2	31.8-66.7
45-59	18	47.0	17.8-76.3	30	38.6	19.2-58.1	48	41.7	26.5-57.0
60-69	11	23.9	0.0-51.9	11	71.9	41.8-100.0	22	49.8	26.8-72.9
18-69	49	45.5	24.7-66.3	82	41.9	29.3-54.5	131	43.3	33.0-53.6

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 genders		
	n	% seen trad. healer	95% CI	n	% seen trad. healer	95% CI	n	% seen trad. healer	95% CI
18-29	3	71.7	19.7-100.0	7	62.2	16.8-100.0	10	65.6	30.9-100.0
30-44	17	29.5	0.2-58.9	34	15.9	1.0-30.8	51	21.1	6.6-35.6
45-59	18	28.5	0.0-58.4	30	17.3	0.1-34.5	48	21.5	5.7-37.2
60-69	11	19.3	0.0-48.7	11	0.0	0.0-0.0	22	8.9	0.0-23.2
18-69	49	30.2	12.9-47.4	82	17.8	7.3-28.2	131	22.6	13.4-31.8

Currently taking herbal or traditional treatment for raised cholesterol among those previously diagnosed									
Age Group (years)	Men			Women			Both genders		
	n	% taking trad. meds	95% CI	n	% taking trad. meds	95% CI	n	% taking trad. meds	95% CI
18-29	3	0.0	0.0-0.0	7	0.0	0.0-0.0	10	0.0	0.0-0.0
30-44	17	2.2	0.0-6.9	34	4.7	0.0-11.4	51	3.8	0.0-8.3
45-59	18	15.6	0.0-40.5	30	17.1	0.0-43.1	48	16.5	0.0-35.2
60-69	11	33.8	0.0-70.3	11	0.0	0.0-0.0	22	15.6	0.0-35.4
18-69	49	13.1	0.7-25.4	82	7.7	0.0-17.8	131	9.8	2.1-17.5

History of Cardiovascular Diseases

History of cardiovascular 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 genders		
	n	% CVD history	95% CI	n	% CVD history	95% CI	n	% CVD history	95% CI
18-29	990	2.0	1.1-2.9	1659	3.5	2.3-4.7	2649	3.0	2.1-3.9
30-44	1139	6.3	4.7-7.9	1571	6.8	4.7-8.8	2710	6.6	5.1-8.0
45-59	654	8.4	5.8-10.9	720	8.0	5.5-10.5	1374	8.2	6.3-10.0
60-69	362	14.1	9.6-18.6	261	13.2	7.6-18.7	623	13.7	9.8-17.5
18-69	3145	6.4	5.3-7.5	4211	6.2	4.9-7.6	7356	6.3	5.3-7.3

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 genders		
	n	% taking aspirin	95% CI	n	% taking aspirin	95% CI	n	% taking aspirin	95% CI
18-29	990	0.6	0.2-1.0	1659	3.4	2.0-4.7	2649	2.4	1.5-3.3
30-44	1139	1.9	1.1-2.8	1571	3.5	1.8-5.1	2710	2.9	1.8-3.9
45-59	654	4.0	2.3-5.8	721	5.6	3.6-7.5	1375	4.8	3.5-6.1
60-69	362	5.5	3.0-8.0	261	6.5	2.6-10.5	623	6.0	3.5-8.5
18-69	3145	2.4	1.8-3.1	4212	4.0	2.8-5.2	7357	3.4	2.6-4.2

Currently taking statins regularly to prevent or treat heart disease									
Age Group (years)	Men			Women			Both genders		
	n	% taking statins	95% CI	n	% taking statins	95% CI	n	% taking statins	95% CI
18-29	990	0.2	0.0-0.4	1659	0.1	0.0-0.1	2649	0.1	0.0-0.2
30-44	1139	0.9	0.3-1.6	1571	0.5	0.0-1.0	2710	0.7	0.3-1.1
45-59	654	2.1	0.7-3.5	721	1.7	0.7-2.7	1375	1.9	1.0-2.8
60-69	362	4.9	2.2-7.6	261	4.4	0.7-8.0	623	4.7	2.3-7.0
18-69	3145	1.4	0.9-2.0	4212	0.8	0.4-1.2	7357	1.1	0.7-1.4

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 genders		
	n	% advised	95% CI	n	% advised	95% CI	n	% advised	95% CI
18-29	990	29.4	25.1-33.8	1659	13.4	10.8-16.1	2649	19.0	16.4-21.6
30-44	1139	35.9	31.5-40.4	1571	18.3	14.8-21.8	2710	25.6	22.2-28.9
45-59	653	38.5	33.0-44.0	721	23.5	19.2-27.7	1374	30.5	26.7-34.2
60-69	362	41.9	35.0-48.9	261	22.4	14.5-30.3	623	32.4	26.7-38.2
18-69	3144	35.3	32.0-38.6	4212	17.7	15.2-20.2	7356	24.9	22.3-27.4

Advised by doctor or health worker to reduce salt in the diet									
Age Group (years)	Men			Women			Both genders		
	n	% advised	95% CI	n	% advised	95% CI	n	% advised	95% CI
18-29	990	33.2	28.8-37.6	1659	27.8	24.2-31.4	2649	29.7	26.4-32.9
30-44	1139	40.0	35.5-44.6	1571	34.2	30.4-38.1	2710	36.6	33.0-40.2
45-59	653	43.9	38.1-49.8	721	46.2	41.3-51.2	1374	45.2	41.2-49.2
60-69	362	44.9	38.2-51.6	261	46.6	37.7-55.5	623	45.7	39.7-51.7
18-69	3144	39.5	36.0-43.0	4212	34.8	31.8-37.8	7356	36.7	33.8-39.6

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 genders		
	n	% advised	95% CI	n	% advised	95% CI	n	% advised	95% CI
18-29	990	35.4	31.0-39.7	1659	32.4	28.8-36.0	2649	33.4	30.1-36.7
30-44	1139	44.2	39.5-48.9	1571	36.4	32.3-40.6	2710	39.6	35.8-43.5
45-59	653	44.4	38.4-50.5	721	43.9	38.8-48.9	1374	44.1	39.8-48.5
60-69	362	47.0	40.0-54.1	261	46.1	37.4-54.8	623	46.6	40.8-52.4
18-69	3144	42.0	38.4-45.7	4212	36.9	33.6-40.2	7356	39.0	35.8-42.2

Advised by doctor or health worker to reduce fat in the diet									
Age Group (years)	Men			Women			Both genders		
	n	% advised	95% CI	n	% advised	95% CI	n	% advised	95% CI
18-29	990	36.2	31.7-40.6	1659	33.0	29.3-36.8	2649	34.1	30.7-37.5
30-44	1139	45.6	41.0-50.2	1571	37.6	33.5-41.7	2710	40.9	37.2-44.6
45-59	653	46.3	40.2-52.5	721	45.7	40.8-50.7	1374	46.0	41.7-50.3
60-69	362	51.1	44.0-58.2	261	44.1	35.0-53.1	623	47.7	41.7-53.6
18-69	3144	43.7	40.1-47.3	4212	37.8	34.5-41.0	7356	40.2	37.1-43.3

Advised by doctor or health worker to start or do more physical activity									
Age Group (years)	Men			Women			Both genders		
	n	% advised	95% CI	n	% advised	95% CI	n	% advised	95% CI
18-29	990	29.0	24.8-33.2	1659	18.4	15.8-20.9	2649	22.0	19.5-24.6
30-44	1139	34.6	30.2-38.9	1571	25.1	21.7-28.5	2710	29.0	25.8-32.2
45-59	653	35.1	29.6-40.6	721	32.8	28.1-37.5	1374	33.9	29.9-37.9
60-69	362	39.0	32.1-45.9	261	28.2	19.6-36.8	623	33.7	28.3-39.1
18-69	3144	33.6	30.4-36.8	4212	24.1	21.7-26.6	7356	28.0	25.5-30.5

Advised by doctor or health worker to maintain a healthy body weight or to lose weight									
Age Group (years)	Men			Women			Both genders		
	n	% advised	95% CI	n	% advised	95% CI	n	% advised	95% CI
18-29	990	27.4	23.1-31.7	1659	18.0	15.3-20.7	2649	21.2	18.6-23.9
30-44	1139	32.7	28.3-37.0	1571	24.8	21.4-28.2	2710	28.0	24.8-31.2
45-59	653	33.3	27.7-38.9	721	31.7	26.9-36.6	1374	32.5	28.4-36.5
60-69	362	34.2	27.4-41.0	261	25.4	16.8-33.9	623	29.9	24.6-35.2
18-69	3144	31.5	28.3-34.6	4212	23.5	21.0-25.9	7356	26.7	24.3-29.2

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	1606	0.2	0.0-0.5
30-44	1524	0.9	0.5-1.3
45-59	688	1.3	0.2-2.4
60-69	246	0.2	0.0-0.6
18-69	4064	0.7	0.4-0.9

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	1828	0.9	0.5-1.3

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 genders		
	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
18-29	951	125.2	124.2-126.2	1613	120.7	120.0-121.5	2564	122.3	121.6-122.9
30-44	1078	128.4	127.4-129.5	1492	126.4	125.2-127.6	2570	127.2	126.4-128.1
45-59	600	133.2	131.2-135.1	681	135.1	133.1-137.1	1281	134.2	132.7-135.8
60-69	349	138.4	134.9-141.9	247	142.6	138.3-146.8	596	140.4	137.7-143.2
18-69	2978	129.6	128.7-130.6	4033	126.9	126.1-127.8	7011	128.0	127.3-128.7

Mean diastolic blood pressure (mmHg)									
Age Group (years)	Men			Women			Both genders		
	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
18-29	951	82.9	82.0-83.7	1613	81.2	80.6-81.7	2564	81.7	81.2-82.3
30-44	1079	85.6	84.8-86.4	1492	85.3	84.5-86.1	2571	85.4	84.8-86.1
45-59	601	86.3	85.1-87.6	681	87.5	86.3-88.7	1282	87.0	86.1-87.8
60-69	349	87.6	85.7-89.4	247	90.0	88.2-91.9	596	88.8	87.4-90.1
18-69	2980	85.2	84.6-85.8	4033	84.4	83.9-85.0	7013	84.8	84.3-85.2

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 ≥140 and/or DBP ≥ 90 mmHg, excluding those on medication for raised blood pressure									
Age Group (years)	Men			Women			Both genders		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	935	27.4	23.6-31.2	1569	18.4	16.0-20.8	2504	21.5	19.2-23.7
30-44	1035	36.4	32.4-40.3	1373	31.1	27.8-34.3	2408	33.3	30.6-36.0
45-59	558	44.4	38.6-50.3	567	44.8	39.3-50.3	1125	44.6	40.2-49.0
60-69	304	49.8	41.9-57.6	178	52.6	42.5-62.8	482	51.0	44.5-57.5
18-69	2832	36.8	34.2-39.4	3687	29.3	26.9-31.7	6519	32.5	30.4-34.5

SBP ≥140 and/or DBP ≥ 90 mmHg or currently on medication for raised blood pressure									
Age Group (years)	Men			Women			Both genders		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	951	28.5	24.7-32.3	1614	20.3	17.7-22.9	2565	23.1	20.8-25.4
30-44	1079	38.5	34.6-42.3	1496	36.3	32.9-39.6	2575	37.2	34.5-39.8
45-59	600	47.2	41.6-52.8	683	53.8	48.6-59.1	1283	50.8	46.6-55.0
60-69	349	55.0	47.3-62.8	248	65.3	56.7-73.9	597	60.0	53.9-66.1
18-69	2979	39.3	36.8-41.9	4041	35.4	32.8-37.9	7020	37.0	34.9-39.0

SBP ≥160 and/or DBP ≥ 100 mmHg, excluding those on medication for raised blood pressure									
Age Group (years)	Men			Women			Both genders		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	935	4.7	3.1-6.4	1569	3.3	2.3-4.2	2504	3.8	2.9-4.6
30-44	1035	10.1	8.0-12.2	1373	9.3	7.3-11.4	2408	9.7	8.2-11.2
45-59	558	15.0	11.6-18.4	567	16.1	12.6-19.6	1125	15.6	12.9-18.2
60-69	304	24.8	18.0-31.5	178	27.1	18.9-35.2	482	25.8	20.8-30.8
18-69	2832	11.1	9.7-12.5	3687	9.0	7.8-10.2	6519	9.9	8.9-10.8

SBP ≥160 and/or DBP ≥ 100 mmHg or currently on medication for raised blood pressure									
Age Group (years)	Men			Women			Both genders		
	n	%	95% CI	n	%	95% CI	n	%	95% CI
18-29	951	6.2	4.1-8.2	1614	5.6	4.3-6.9	2565	5.8	4.7-6.9
30-44	1079	13.1	10.8-15.3	1496	16.2	13.6-18.8	2575	14.9	13.1-16.7
45-59	600	19.2	15.5-22.9	683	29.8	25.4-34.1	1283	25.0	21.8-28.1
60-69	349	32.7	25.4-39.9	248	46.6	38.0-55.2	597	39.4	33.8-45.0
18-69	2979	14.6	13.0-16.3	4041	16.8	14.9-18.6	7020	15.9	14.5-17.3

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							
Age Group (years)	Men						
	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	274	4.2	1.0-7.3	1.3	0.2-2.3	94.6	91.3-97.9
30-44	441	2.6	0.9-4.3	5.9	3.4-8.4	91.5	88.5-94.4
45-59	309	3.1	1.0-5.2	7.4	3.9-10.9	89.5	85.4-93.6
60-69	197	4.0	0.0-8.4	15.2	9.5-20.8	80.8	73.3-88.3
18-69	1221	3.3	2.0-4.6	6.8	5.1-8.6	89.9	87.5-92.3

Respondents with treated and/or controlled raised blood pressure							
Age Group (years)	Women						
	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	355	5.5	2.8-8.1	6.2	2.8-9.5	88.3	83.9-92.8
30-44	553	8.2	5.4-11.0	12.1	9.0-15.2	79.7	75.5-84.0
45-59	391	6.9	4.2-9.7	23.3	17.8-28.7	69.8	64.1-75.6
60-69	169	7.5	3.1-11.9	33.4	24.3-42.4	59.1	49.6-68.6
18-69	1468	7.2	5.6-8.7	16.7	13.9-19.4	76.2	72.9-79.4

Respondents with treated and/or controlled raised blood pressure							
Age Group (years)	Both genders						
	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	629	4.9	2.8-7.1	4.1	2.0-6.1	91.0	87.9-94.1
30-44	994	5.8	3.8-7.8	9.5	7.2-11.7	84.7	81.7-87.8
45-59	700	5.3	3.4-7.2	16.5	12.9-20.1	78.2	74.2-82.2
60-69	366	5.9	2.9-8.9	24.8	19.0-30.5	69.3	62.9-75.8
18-69	2689	5.5	4.4-6.6	12.4	10.5-14.3	82.1	79.6-84.6

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	957	165.4	164.8-166.0	1402	154.0	153.4-154.5
30-44	1075	165.7	165.0-166.4	1361	154.3	153.8-154.9
45-59	595	164.9	164.0-165.8	667	154.0	153.3-154.7
60-69	343	163.7	162.5-164.9	246	151.9	150.9-152.8
18-69	2970	165.2	164.7-165.7	3676	153.9	153.6-154.3

Mean weight (kg)						
Age Group (years)	Men			Women		
	n	Mean	95% CI	N	Mean	95% CI
18-29	960	61.8	60.7-62.8	1410	54.9	53.9-55.9
30-44	1080	68.8	67.6-70.0	1373	61.6	60.4-62.8
45-59	600	67.8	66.3-69.2	672	61.2	59.7-62.8
60-69	348	64.5	62.3-66.7	248	57.5	54.9-60.1
18-69	2988	66.0	65.2-66.9	3703	58.8	57.9-59.7

Mean BMI (kg/m ²)									
Age Group (years)	Men			Women			Both genders		
	n	Mean	95% CI	n	Mean	95% CI	n	Mean	95% CI
18-29	952	22.6	22.2-23.0	1396	23.1	22.7-23.5	2348	22.9	22.6-23.3
30-44	1067	25.0	24.6-25.5	1353	25.8	25.4-26.3	2420	25.5	25.1-25.9
45-59	594	24.9	24.4-25.5	662	25.8	25.2-26.4	1256	25.4	24.9-25.9
60-69	339	24.1	23.4-24.8	243	24.8	23.8-25.8	582	24.4	23.8-25.1
18-69	2952	24.2	23.9-24.5	3654	24.8	24.4-25.1	6606	24.5	24.2-24.8

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	952	13.7	11.2-16.2	62.6	58.7-66.5	17.0	13.8-20.2	6.7	4.7-8.8
30-44	1067	7.3	5.4-9.2	45.7	41.5-49.8	31.9	28.2-35.5	15.1	12.2-18.1
45-59	594	8.9	5.7-12.1	46.9	41.8-51.9	29.6	25.1-34.1	14.6	10.8-18.4
60-69	339	12.0	7.2-16.8	49.1	42.3-55.9	27.6	21.5-33.8	11.3	7.5-15.0
18-69	2952	10.1	8.6-11.6	51.3	48.6-54.0	26.5	24.3-28.8	12.1	10.2-14.0

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	1396	16.1	13.5-18.8	53.8	50.2-57.4	20.3	17.4-23.3	9.7	7.7-11.7
30-44	1353	9.4	7.3-11.5	38.0	34.6-41.5	30.8	27.9-33.8	21.7	18.5-24.9
45-59	662	10.2	7.1-13.2	36.9	31.8-41.9	31.8	26.9-36.7	21.1	17.1-25.1
60-69	243	12.5	7.5-17.5	49.5	42.7-56.4	18.5	13.3-23.7	19.5	13.0-25.9
18-69	3654	12.2	10.6-13.9	44.5	42.1-46.9	26.2	24.3-28.0	17.1	15.0-19.1

BMI classifications									
Age Group (years)	Both genders								
	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	2348	15.2	13.1-17.4	57.1	54.4-59.8	19.1	16.9-21.2	8.6	7.1-10.1
30-44	2420	8.5	6.9-10.1	41.4	38.5-44.2	31.3	28.9-33.6	18.9	16.4-21.3
45-59	1256	9.6	7.4-11.9	41.5	37.6-45.3	30.8	27.5-34.1	18.1	15.2-21.0
60-69	582	12.2	8.8-15.6	49.3	44.6-54.1	23.2	18.8-27.5	15.3	11.6-18.9
18-69	6606	11.3	10.0-12.7	47.4	45.4-49.4	26.3	24.8-27.8	14.9	13.4-16.5

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 genders		
	n	% BMI≥25	95% CI	n	% BMI≥25	95% CI	n	% BMI≥25	95% CI
18-29	952	23.7	20.0-27.5	1396	30.1	26.8-33.3	2348	27.7	25.1-30.3
30-44	1067	47.0	42.5-51.5	1353	52.6	48.7-56.5	2420	50.2	46.9-53.4
45-59	594	44.2	39.3-49.1	662	52.9	47.7-58.2	1256	48.9	45.1-52.8
60-69	339	38.9	32.0-45.8	243	38.0	30.2-45.7	582	38.4	33.1-43.8
18-69	2952	38.6	35.8-41.5	3654	43.2	40.5-46.0	6606	41.3	38.9-43.6

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	951	78.5	77.4-79.7	1381	77.7	76.5-78.9
30-44	1054	86.1	84.6-87.6	1347	85.5	84.0-87.0
45-59	580	86.7	85.1-88.4	653	87.1	85.3-88.9
60-69	336	86.5	83.9-89.0	241	86.5	83.5-89.6
18-69	2921	84.0	83.0-85.0	3622	83.0	81.9-84.1

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	948	89.5	88.6-90.5	1371	89.9	88.9-90.9
30-44	1052	95.6	94.2-96.9	1344	96.7	95.3-98.0
45-59	577	95.1	93.6-96.5	652	96.8	95.1-98.5
60-69	335	93.7	91.9-95.5	240	95.6	93.1-98.2
18-69	2912	93.5	92.6-94.3	3607	94.2	93.2-95.1

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	947	0.9	0.9-0.9	1369	0.9	0.9-0.9
30-44	1052	0.9	0.9-0.9	1343	0.9	0.9-0.9
45-59	577	0.9	0.9-0.9	651	0.9	0.9-0.9
60-69	335	0.9	0.9-0.9	240	0.9	0.9-0.9
18-69	2911	0.9	0.9-0.9	3603	0.9	0.9-0.9

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	1944	1.4	0.8-2.0	67.4	64.4-70.4	31.2	28.2-34.2
45-69	906	0.5	0.1-0.9	49.9	45.0-54.7	49.6	44.8-54.4
18-69	2850	1.1	0.6-1.6	61.7	59.0-64.3	37.2	34.6-39.9

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	2580	0.4	0.2-0.5	63.2	60.0-66.4	36.4	33.2-39.6
45-69	853	0.1	0.0-0.3	42.0	37.2-46.8	57.9	53.1-62.7
18-69	3433	0.3	0.1-0.4	57.6	54.6-60.6	42.1	39.1-45.1

Summary of Combined Risk Factors							
Age Group (years)	Both genders						
	n	% with 0 risk factors	95% CI	% with 1-2 risk factors	95% CI	% with 3-5 risk factors	95% CI
18-44	4524	0.8	0.5-1.1	64.9	62.4-67.5	34.3	31.7-36.8
45-69	1759	0.3	0.1-0.6	45.8	42.1-49.5	53.9	50.2-57.6
18-69	6283	0.6	0.4-0.9	59.3	57.0-61.7	40.0	37.6-42.4

APPENDIX - D

REPORT FORM

NCD سروے میں آپ کی شمولیت پر پاکستان میڈیکل ریسرچ کونسل (PMRC) آپ کی مشکور ہے اس سروے میں آپ کا بلڈ پریشر، دل کی دھڑکن کی رفتار اور جسمانی پیمائش کی گئی ہے۔

آپ کے نتائج مندرجہ ذیل ہیں

Blood pressure Systolic: _____ mmHg (reading 3)

Diastolic: _____ mmHg (reading 3)

Blood pressure

classification

- ☐ Normal نارمل (SBP < 140 and DBP < 90)
- ☐ **Elevated** معمولی بڑھا ہوا (SBP 140–159 and/or DBP 90–99)
- ☐ **Raised** زیادہ بڑھا ہوا (SBP ≥ 160 and/or DBP ≥ 100)
- ☐ Currently on medication دوائی لے رہے ہیں

Heart rate

Beats per minute دل کی دھڑکن: _____ (reading 3)

Height

Height: _____ cm

Weight

Weight: _____ kg

Body Mass Index

BMI: _____ kg/m² (weight in kg divided by height in meters squared; ex.

for height 170 cm and weight 68 kg BMI = (68 / (1.7²) = 23.5)

BMI classification

- ☐ Underweight کم وزن (BMI < 18.5)
- ☐ Normal weight نارمل وزن (BMI 18.5–24.9)
- ☐ **Overweight** بڑھا ہوا وزن (BMI 25–29.9)
- ☐ **Obese** بہت زیادہ وزن (موٹاپا) (BMI ≥ 30)

Waist circumference

Waist (کمر کا گھیر): _____ cm

Hip circumference

Hip (کوہے کا گھیر): _____ cm

نوٹ: اگر آپ کا بلڈ پریشر ہائی ہے یا آپ کی BMI زیادہ ہے تو اپنے قریبی ہسپتال یا معالج سے مشورہ کریں۔

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| • M. Zafar Ilyas | • Sadia Ameen |
| • Shah Sultan | • Maryam Khan |

List of Union Councils (Punjab)

Lahore District		
District	Town	UC
Lahore	Aziz Bhatti	GHAZIABAD UC
Lahore	Data Gunj Baksh	AMEEN PARK UC
Lahore	Data Gunj Baksh	GARRHI SHAHU UC
Lahore	Data Gunj Baksh	KASUR PURA UC
Lahore	Data Gunj Baksh	SANDA KALAN UC
Lahore	Iqbal	BAKAR MANDI UC
Lahore	Iqbal	NEW SAMANABAD UC
Lahore	Nishtar	02-KAHNANAU UC
Lahore	Nishtar	KOT LAKHPAT (NEW ABADI) UC
Lahore	Ravi	ANDROON BHATTI GATE UC
Lahore	Ravi	BILAL PARK UC
Lahore	Ravi	JIA MUSA UC
Lahore	Ravi	REHMAT PURA UC
Lahore	Shalimar	CROWN PARK UC
Lahore	Shalimar	MUSLIM ABAD UC
Lahore	Iqbal	ALI RAZA ABAD UC
Lahore	Iqbal	SHAH PUR UC
Lahore	Nishtar	JIA BAGGA UC
Lahore	Shalimar	MINHALA UC
Lahore(Excluding Lahore District) Division		
District	Tehsil	UC
Sheikhupura	Ferozewala	WANDALA DYAL SHAH NO 01 UC
Nankana	Sadarabad	CHAK NO 119/RB BHULLAIR UC
Sheikhupura	Sheikhupura	NOKHAR UC
Kasur	Kasur	DHOLAN HATHAR UC
Kasur	Pattoki	KHAN KE MORE UC
Nankana	Nankana	NANKANA SAHIB NO 02 UC
Kasur	Kasur	KASUR NO 05 UC
D.G. Khan Division		
District	Tehsil	UC
M'Garh	Jotai	JHALARIAN UC
M'Garh	Kot Addu	MIRPUR BHAGAL UC
M'Garh	M'Garh	JAGAT PUR UC
DG Khan	DG Khan	BASTI MALANA UC
DG Khan	DG Khan	PAIGAN UC
Layyah	Choubara	KHAIRAWALA UC
Layyah	Layyah	JHAKHAR UC
Rajanpur	Jampur	NOUSHEHRA UC
Rajanpur	Rojhan	SOGHIANI UC
M'Garh	M'Garh	MUZAFFARGARH CITY 01 UC
Layyah	Layyah	LAYYAH 02 UC

Bahawalpur Division		
District	Tehsil	UC
B'Nagar	B'Nagar	MALAK PURA UC
B'Nagar	Fort Abbas	CHAK NO 167/7-R UC
B'Nagar	Minchnabad	KHOLA MIRZEDA UC
B'Pur	Ahmadpur East	NUNARI UC
B'Pur	Hasilpur	JAMAL PUR UC
R Y Khan	Khanpur	CHACHRAN SHARIF UC
R Y Khan	Liaquatpur	CHAK NO 046/ABS UC
R Y Khan	R Y Khan	BAHISHTI UC
R Y Khan	Sadiqabad	CHAK NO 160/P UC
B'Nagar	Haroonabad	HAROONABAD CITY BALDIA COL.UC
B'Pur	B'Pur	BAHAWALPUR UC-10
R Y Khan	Khanpur	KHANPUR-E UC
R Y Khan	Sadiqabad	SADIQABAD-C UC
Rawalpindi Division		
District	Tehsil	UC
Rawalpindi	Gujar Khan	SUKHO UC
Rawalpindi	Kahuta	BAGGA SHEIKHAN UC
Chakwal	Chakwal	8ALKASSAR UC
Chakwal	Tala Gang	BHALOMAR UC
Jehlum	Jehlum	PINDORI UC
Attock	Attock	KHAGWANI UC
Attock	Jand	THATTA UC
Rawalpindi	Rawalpindi	GUJAR KHANI UC
Rawalpindi	Rawalpindi	07 RAWALPINDI CANTT
Rawalpindi	Rawalpindi	CHAH SULTAN UC NO.30
Rawalpindi	Rawalpindi	MILLAT COLONY UC NO.42
Rawalpindi	Rawalpindi	02 WAH CANTT
Jehlum	Jehlum	JEHLUM VII UC
Multan Division		
District	Tehsil	UC
Khanewal	Kabirwala	JODHPUR UC
Khanewal	Khanewal	088/10-R UC
Multan	Jalalpur Pirwala	Ali pur sadat uc
Multan	Multan Saddar	5/Faiz uc
Multan	Multan Saddar	Matti tal uc
Lodhran	Dunyapur	CHAK NO 342/W.B UC
Lodhran	Lodhran	CHHAMB KALYAR UC
Vehari	Burewala	317/E.B DEWAN SAHIB UC
Vehari	Mailsi	KIKRI KHURD UC
Vehari	Vehari	CHAK 561/E.B UC
Khanewal	Khanewal	KHANEWAL-II UC
Multan	Multan City	Abid colony uc(Multan City)

Multan	Multan City	Mohallah kamangran uc(Multan City)
Multan	Multan City	Shah rukan-e-alam colony uc(Multan City)
Vehari	Burewala	Gulshan-e-Rehman UC(Burewala City)
Sargodha Division		
District	Tehsil	UC
Sargodha	Bhalwal	Garhi kala uc
Sargodha	Sargodha	Chak no.040/sb uc
Sargodha	Shahpur	Kandan uc
Mianwali	Mianwali	Dher umaid ali shah uc
Khushab	Khushab	DHAIWAL UC
Bhakkar	Bhakkar	DAGGAR REHTAS UC
Bhakkar	Kalur Kot	MALIANA DAGGAR UC
Sargodha	Bhalwal	Kot momin-I uc
Sargodha	Sargodha	Sargodha no.16 uc
Khushab	Khushab	JAUHARABAD NO.I UC
Sahiwal Division		
District	Tehsil	UC
Sahiwal	Chichawatni	CHAK NO 018/11-L UC
Sahiwal	Sahiwal	CHAK NO 048/G -D UC
Sahiwal	Sahiwal	CHAK NO 142/9-L UC
Okara	Depalpur	MOHIB ALI UTAR UC-65
Okara	Okara	CHAK NO 036-A/4-L UC -11
Okara	Renala Khurd	KAMAN UC33
Pakpattan	Pakpattan	CHAK NO 015/K -B UC
Sahiwal	Sahiwal	SAHIWAL -3 UC
Okara	Depalpur	HUJRA SHAH MUQEEM NO 03 UC
Pakpattan	Arifwala	ARIFWALA URBAN-I UC
Gujranwala Division		
District	Tehsil	UC
G'Wala	G'Wala Saddar	JANDIALA BAGHWALA UC
G'Wala	Nowshera Virkan	ARGAN UC
G'Wala	Wazirabad	LADHEWALA CHEEMA UC
M'BDin	M'Bdin	RASUL UC
Narowal	Narowal	FEROZEPUR UC
Narowal	Shakargarh	KOT NAINAN UC
Sialkot	Daska	KOPRA UC
Sialkot	Pasrur	MALI PUR UC
Sialkot	Sialkot	KHAROTA UC
Gujarat	Gujarat	IKHALAS GARH UC
Gujarat	Kharian	GULIANA UC
Hafizabad	Hafizabad	QILA RAM KAUR UC
G'Wala	G'Wala	GUJRANWALA 17 UC
G'Wala	G'Wala	GUJRANWALA 41 UC
G'Wala	G'Wala	GUJRANWALA 64 UC
G'Wala	Wazirabad	WAZIRABAD TOWN-I UC

M'BDin	M'Bdin	MANDI BAHAUDDIN UC NO.01
Sialkot	Daska	91/02 MANDI SAMBERIAL UC
Sialkot	Sialkot	48/13 IMAM SAHIB UC(Sialkot)
Gujarat	Gujarat	JALALPUR JATTANI-UC
Hafizabad	Hafizabad	UC NO.V (HAFIZABAD)
Faisalabad	F'Abad Saddar	CHAK NO 034/J.B UC
Faisalabad	F'Abad Saddar	CHAK NO 257/RB UC
Faisalabad	Jaranwala	CHAK NO 205/R.B UC
Faisalabad	Sammundri	CHAK NO 388/G.B UC
Faisalabad	Tandlian Wala	WALE WALI UC
TT Singh	Kamalia	JUSA UC
TT Singh	TT Singh	RAJANA UC
Jhang	Jhang	PIR KOT SADHANA UC
Jhang	Shorkot	PIR ABDUL RAHMAN UC
Chiniot	Chiniot	MATHRUMMA UC
Faisalabad	F'Abad Saddar	196 NO UC(F'Abad)
Faisalabad	F'Abad Saddar	214 NO UC(F'Abad)
Faisalabad	F'Abad Saddar	237 NO UC(F'Abad)
Faisalabad	F'Abad Saddar	258 NO UC(F'Abad)
Faisalabad	F'Abad Saddar	280 NO UC(F'Abad)
Faisalabad	Tandlian Wala	TANDLIANWALAI-UC
Jhang	Jhang	MADAN SHAH UC(Jhang)
Chiniot	Chiniot	04-Mohallah Mozaim Shah UC(Chiniot)

Union Councils of Sindh

Karachi Division	
Town	UC
Badia	MUSLIM MUJAHID COLONY UC
Gadap	GUJHRO UC
Gulberg	KARIMABAD UC
Gulshan e Iqbal	CIVIC CENTER UC
Gulshan e Iqbal	GULSHANE-IQBAL-II UC
Gulshan e Iqbal	PAHLWAN GOTH UC
Jamshed	CENTRAL JACOB LINES UC
Jamshed	MANZOOR COLONY UC
Jamshed	PECHS-II UC
Kimari	MARIPUR UC
Korangi	BILAL COLONY EAST UC
Korangi	MUSTAFA TAJ COLONY UC
Landhi	BURMEE COLONY UC
Landhi	MUSLIMABAD UC
Liaqatabad	BANDHANI COLONY UC
Liaqatabad	MUJAHID COLONY UC
Liaqatabad	SHARIFABAD UC
Kimari Town	MACHAR COLONY UC
Baldia Town	Nai Abadi UC
Malir	JAFFARE-TAYYAR UC
Malir	SAUDABAD UC
New Karachi	GULSHANE-SAEED UC
New Karachi	MADINA COLONY UC
North Nazimabad	BUFFER ZONE II UC
North Nazimabad	PAHAR GANJ UC
Orangi	CHISHTI NAGAR UC
Orangi	HARYANA COLONY UC
Orangi	MOMINABAD UC
Saddar	GARDEN UC
Saddar	NANAK WARA UC
Shah Faisal	DRIGH COLONY UC
SITE	BANARAS COLONY UC
SITE	OLD GOLIMAR UC
Bin Qasim	GULSHANE-HADEED UC
Orangi	BALUCH GOTH UC*

Larkana Division		
District	Tehsil	UC
Jacobabad	Jacobabad	Garhi Chand UC
Jacobabad	Garhi Khero	Khudad UC
Kashmor	Kashmor	Gublo UC
Kashmor	Kandh Kot	Daulat Pur UC
Shikarpur	Garhi Yasin	BHAMBHIR UC
Shikarpur	Shikarpur	JANO UC
Shikarpur	Khanpur	PIR BUX SHUJRAH UC
Larkana	Dokri	Karani UC
Larkana	Rato Dero	Rato Saido Dero UC
Shahdad Kot	Miro Khan	Bahrmi UC
Shahdad Kot	Shahdad Kot	Janiali UC
Shahdad Kot	Kamber	Ranwati UC
Shahdad Kot	Nasirabad	Muradi UC
Jacobabad	Jacobabad	Jacobabad-III UC
Kashmor	Kashmor	Kashmor-II UC
Larkana	Larkana	Larkana05 UC
Shahdad Kot	Kamber	Kamber-I UC




Sukkar Division		
District	Tehsil	UC
Sukkar	Rohri	Patni UC
Sukkar	Pono Aqhil	Sadhuja UC
Ghotki	Ghotki	Khuhara UC
Ghotki	Ubaro	Kamu Shaheed UC
Ghotki	Mirpur Mathelo	Jarwar UC
Khairpur	Khairpur	Tando Masti UC
Khairpur	Thari Mirwah	Sabar Rind UC
Khairpur	Thari Mirwah	Mandan UC
Khairpur	Kingri	Ahmed Pur UC
Khairpur	Kot Digi	Jiskani UC
N'Feroze	N'Feroze	Bham Bhri UC
N'Feroze	Mehrabpur	Lakha Road UC
N'Feroze	Kandioro	Dabhro UC
N'Feroze	Moro	Kahlat UC
Nawabshah	Daur	Bandhi UC
Nawabshah	Sakrand	Bahoori UC
Nawabshah	Daultpur	Sawari UC
Sukkar	Sukkar	Shamasabad(Sukkar City)UC
Sukkar	Sukkar	Pak Colony(Sukkar City)UC
Khairpur	Khairpur	Jilani(Khairpur City)UC
N'Feroze	Mehrabpur	Mehrabpur-2 UC
Nawabshah	Nawabshah	Nawabshah-9 UC

Mirpur Khas Division		
District	Tehsil	UC
Umerkot	Kunri	SHER KHAN CHADIO UC
Umerkot	Umerkot	Atta Mohammad Pall UC
Umerkot	Umerkot	SABHO UC
Sanghar	Jam Nawaz Ali	HINGORNO UC
Sanghar	Sanghar	KANHAR UC
Sanghar	Shahdadpur	LUNDO UC
Sanghar	Sinjhero	SHAH MARDAN ABAD UC
Mirpur Khas	Digri	FAZAL BHAMBRO UC
Mirpur Khas	Kot Ghulam Mohammad	HAJI HADL BUX UC
Mirpur Khas	Mirpur Khas	KHIRAH UC
Tharparkar	Chachro	HIRAR UC
Tharparkar	Chachro	TAR AHMED UC
Tharparkar	Mithi	BHAKAO UC
Tharparkar	Mithi	ISLAMKOT UC
Tharparkar	Mithi	NAGARPARKAR UC
Umerkot	Umerkot	UMER KOT UC
Sanghar	Shahdadpur	SHAHPUR CHAKAR UC
Mirpur Khas	Digri	DIGRI UC
Mirpur Khas	Mirpur Khas	MIRPUR KHAS UC 06

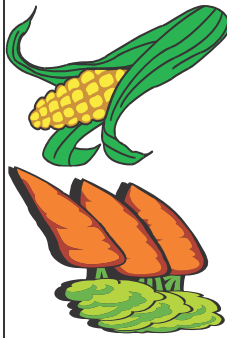
Hyderabad Division		
District	Taluka	UC
Hyderabad	Hyderabad-R	Tando Hyher UC
Tando M. Khan	Tando M.Khan	Lakhat UC
Tando Allah Yar	Tando Allah Yar	Shaikh Moosa UC
Tando Allah Yar Chamber	Began Jarwar UC	
Mitiani	Mitiani	Nasarpur UC
Mitiani	Hala	Bhitshah UC
Dadu	Dadu	Mondar UC
Dadu	Mehar	Baledi UC
Dadu	Mehar	Gahi Mehesar UC
Dadu	K.N.Shah	Butra UC
Jamshoro	Kotri	Petaro UC
Jamshoro	Sehwan Sharif	Bubak UC
Badin	Badin	Nindo Sahar UC
Badin	Tando Bagho	Pangio UC

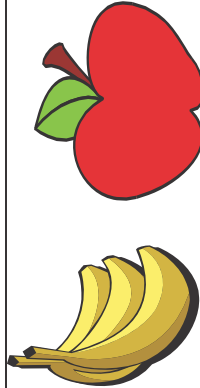
Badin	Talhar	Saeedpur UC
Badin	Matli	Mathan UC
Thatta	Thatta	Jhirk UC
Thatta	Mirpur Sakro	Gujjo
Thatta	SaJawal	Ali Bahar UC
Thatta	Mirpur Bathoro	Jhoke Sharif UC
Hyderabad	Hyderabad-City	Hyderabad-7 UC
Hyderabad	Hyderabad-City	Hyderabad-12 UC
Dadu	Dadu	Dadu-III UC
Badin	Badin	Badin-3 UC
Badin	Matli	Matli-1 UC
Thatta	Thatta	Thatta-2 UC

Tobacco Show Card

Cigarettes.	Rolling cigarettes.	Snuff	Cigars
			
Huqa	Pipe	Gutkha	Paan
			
Naswar	Shisha		
			

Servings of vegetables and fruits:

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

FRUIT Is considered to be:	Apple, banana, orange	Chopped, cooked, canned fruit	Fruit juice
1 Serving	1 medium size piece	½ cup	½ cup
Examples			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 at Work

Vigorous Physical Activity at Work



Moderate Physical Activity at Work



Physical Activity during leisure time:

Vigorous Physical Activity during Leisure Time



Moderate Physical Activity during Leisure Time



BMI Classification Chart

Weight (kg)

	30	32.5	35	37.5	40	42.5	45	47.5	50	52.5	55	57.5	60	62.5	65	67.5	70	72.5	75	77.5	80	82.5	85	87.5	90	92.5	95	97.5	100	102.5	105	107.5	110	112.5	115	117.5	120	122.5	125	127.5	130	
140	15	17	18	19	20	22	23	24	26	27	28	29	31	32	33	34	36	37	38	40	41	42	43	45	46	47	48	50	51	52	54	55	56	57	59	60	61	63	64	65	66	
142	15	16	17	19	20	21	22	24	25	26	27	29	30	31	32	33	35	36	37	38	40	41	42	43	45	46	47	48	50	51	52	53	55	56	57	58	60	61	62	63	64	
144	14	16	17	18	19	20	22	23	24	25	27	28	29	30	31	33	34	35	36	37	39	40	41	42	43	45	46	47	48	49	51	52	53	54	55	57	58	59	60	61	63	
146	14	15	16	18	19	20	21	22	23	25	26	27	28	29	30	32	33	34	35	36	38	39	40	41	42	43	45	46	47	48	49	50	52	53	54	55	56	57	58	59	61	
148	14	15	16	17	18	19	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	37	38	39	40	41	42	43	45	46	47	48	49	50	51	53	54	55	56	57	58	59
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Underweight (<18.5)

Normal weight (18.5-24.9)

Overweight (25-29.9)

Obese (30-39.9)

Morbidly Obese (≥ 40)

Field Work



Field Work



Field Work



NCD Survey Finding Dissemination Islamabad



NCD Survey Finding Dissemination Karachi



