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A Quarterly Report of
the Ministry of Health and Wellness

FINDINGS FROM THE JAMAICA HEALTH AND LIFESTYLE SURVEY III

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Vitals

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EDITORIAL

The Ministry of Health & Wellness is deeply committed to advancing health research as a tool for national development. We understand that reliable data and robust evidence are essential for creating effective health policies and ensuring the optimal allocation of resources. It is against this background that we are pleased to present selected findings of the third edition of the Jamaica Health & Lifestyle Survey (JHLS III) 2016/17 in plain language. The survey was conducted to estimate the current burden of, and risk factors for Non-Communicable Diseases (NCDs), including intentional and unintentional injuries, HIV/AIDS and other sexually related conditions, and Chikungunya.

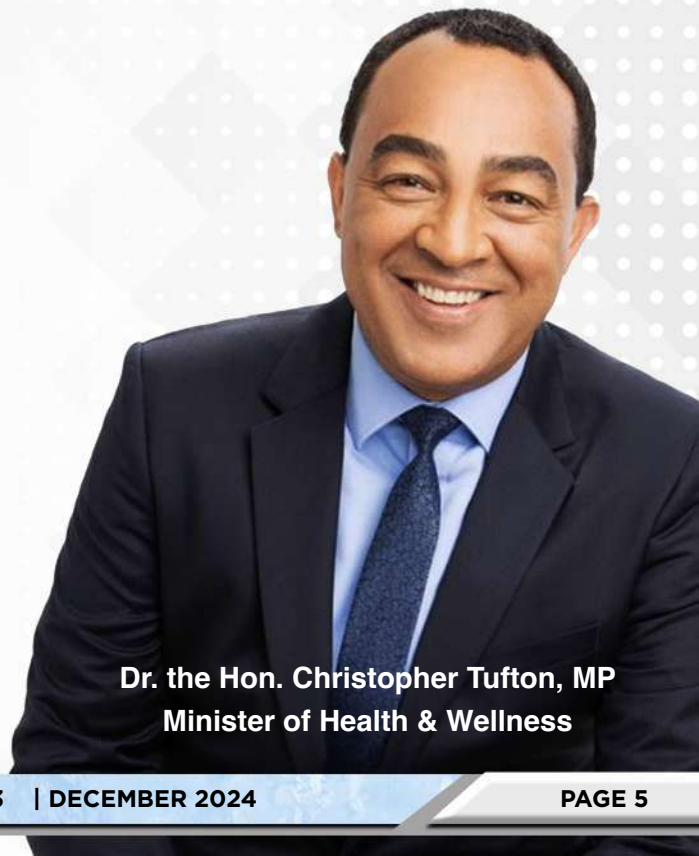
The JHLS III is an expanded study with the inclusion of a 75-year-old and older age cohort; the collection of blood from participants for evaluation of biomarkers; the assessment of the role of the built environment on risk factor and disease burden; and contains a special emphasis on men's health issues.

Additionally, JHLS III incorporates a qualitative component to explore behavioural factors that influence NCDs, gender-specific factors related to health and health disparities, and the ways in which the social and built environments challenge or support healthy lifestyles among Jamaicans dwelling in an urban community.

Among the findings, the survey continues to demonstrate the high NCD burden the country faces and has found that one in three (684,900) Jamaicans 15 years and older has hypertension – many of whom are female (35.8% compared to 31.7% males), with four out of every 10 Jamaicans with the disease unaware of their status. One in eight (236,200) has diabetes, with the prevalence of this disease also higher in females (14.4% compared to 9.4% males). Again, four out of every 10 with the disease are unaware that they have it. At the same time, one in two (577,300) Jamaicans are overweight or obese – a known modifiable risk factor for NCDs from which our children are not exempt.

This survey represents one of few studies in the Caribbean to sequentially collect national data on chronic on - communicable diseases and risk factors and its execution is linked with achievement of one of the sector strategies in the Vision 2030 National Development Plan - to Strengthen Disease Surveillance, Mitigation, Risk Reduction and the Responsiveness of the Health System.

I wish to give special recognition to the National Epidemiology Team of the Ministry of Health & Wellness, the editorial team and all the contributors of this Vitals edition, who have put this information together, so that it is not only available for future reference but will be used as a progress marker as the Government of Jamaica, through the Ministry of Health & Wellness seeks the best health outcome for all Jamaicans.



Dr. the Hon. Christopher Tufton, MP
Minister of Health & Wellness

Findings at a Glance

Fruit and Vegetable Consumption

About 1.9 million Jamaicans (1,856,635 persons) did not eat the recommended number of servings of fruits and vegetables

Anaemia

Anaemia levels were high in women of reproductive age (28.5%) and elderly men (19.8%)

Non-Communicable Diseases

- 1 in 8 persons had diabetes mellitus
- 2 in 3 Jamaicans had hypertension or pre-hypertension

Fast Food Consumption

About one in six (16.5%) youth aged 15-24 years reported eating fast foods one or more times per day

Sugar Sweetened Beverages

One in three (33%) Jamaicans consumed sugar-sweetened beverages one or more times per day

Chikungunya

About 8 out of 10 (78.8%) Jamaicans tested positive for Chikungunya

Cigarette Smoking

One in seven (14.8%) Jamaicans were current smokers

Marijuana Use

One third (32.5%) of Jamaicans used marijuana at some point in their life

Alcohol Use

8% of Jamaicans were heavy drinkers (that is, have six or more drinks in one sitting)

Skin Bleaching

About 1 in 10 (10.7%) Jamaicans bleached their skin at some time in their lives

Adherence to Medication

About half (46%) of Jamaicans who were on medication said they always took it

Means of Transportation

More than three quarters (76.6%) of Jamaicans used a public bus/taxi as their usual method of transportation

Prevalence of Non-Communicable Diseases among Jamaicans 15 Years and Older: 2017

"Perception"

"Reality"

Condition	Prevalence (%)		
	Male	Female	Total
Diabetes	4.4	8.8	6.6
Hypertension	15.4	32.2	24.0
High Cholesterol	4.5	12.0	8.3
Kidney Disease	0.6	1.7	1.1
Obesity/ Overweight	2.8	9.9	6.5

Condition	Prevalence (%)		
	Male	Female	Total
Diabetes	14.4	9.4	11.9
Hypertension	31.7	35.8	33.8
High Cholesterol	18.4	31.0	24.6
Kidney Disease	12.4	17.6	15.2
Obesity/ Overweight	38.8	67.6	53.8

Nb: **Perception: Self Reports** - The percentage of Jamaicans who said they had a particular health condition, regardless of whether or not this was confirmed by a particular test.

Reality: Actual results - The percentage of Jamaicans whose samples (e.g. blood, urine etc) were tested and found to actually have a particular health condition.

Source: Jamaica Health and Lifestyle Survey III (JHLSIII) 2017. Images from www.freepik.com

MINISTRY OF HEALTH & WELLNESS

Living well with Diabetes means knowing your numbers.

It is very important that persons living with Diabetes take responsibility for their health, know their numbers, and control their condition as they aim for a healthier lifestyle.

- Blood Sugar
- Blood Pressure
- Body Mass Index
- Blood Cholesterol

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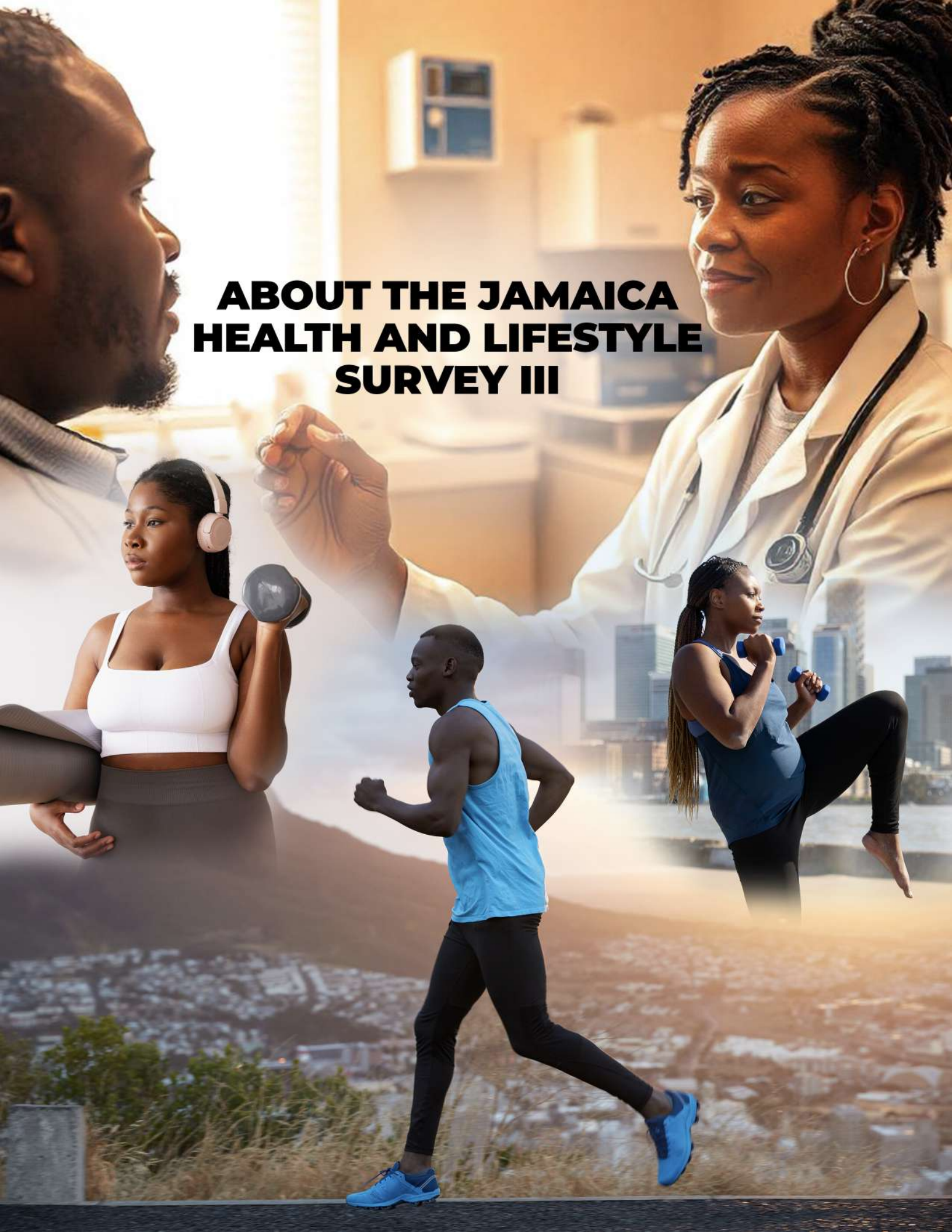


ABOUT THE JAMAICA HEALTH AND LIFESTYLE SURVEY III

About the Jamaica Health and Lifestyle Survey (JHLS)

Objectives

- To estimate the proportion of Jamaicans with NCDs, intentional and unintentional injuries, HIV/AIDS and other sexually-related conditions and Chikungunya
- To explore trends in NCDs and risk factors, HIV and sexually-related conditions over time
- To estimate the proportion of persons with NCDs or NCD complications who were aware of their condition, were on treatment and were controlled
- To understand factors that influence NCDs and gender-specific health issues
- To investigate the impact of social and environmental factors and national policies on NCDs

How many persons were involved in the study?

We aimed for: 3420 persons

We recruited: 2889 persons

We got: 2807 persons

Who was interviewed?

2889 Jamaicans aged 15 years and older who were not living in an institution and who lived in Jamaica were recruited to participate in the study. Full data was collected on 2807 persons.

What type of data was collected?

Data was collected using face to face interview. People were asked about their medical history, eating habits, sexual and lifestyle practices as well as their exposure to violence and injuries. Height, weight, waist circumference and waist to hip ratio measurements were taken. Blood pressure, blood sugar and cholesterol measurements were taken. Blood and urine samples were taken to determine diabetes, kidney diseases, exposure to the Chikungunya virus and anemia, among other areas.

When were the Jamaica Health and Lifestyle Surveys conducted?

There have been three versions of the Jamaica Health and Lifestyle Surveys.

Images from: www.freepik.com

ABOUT THE JAMAICA HEALTH AND LIFESTYLE SURVEY III

Who conducted the survey and why did they do it?

The Jamaica Health and Lifestyle Survey (JHLS III) was done by the Ministry of Health and Wellness (MOHW) and the Caribbean Institute for Health Research (CAIHR). The persons chosen to participate in the survey were Jamaicans aged 15 years or older. They lived in different areas of Jamaica that were categorised as "urban" or "rural".

The goal of the survey was to:

- Estimate the proportion of the population affected by certain health conditions in Jamaica
- Identify the main factors that contribute to these health issues.

In addition, the survey looked at how these health conditions and their causes changed over time. It also assessed why Jamaicans behave the way they do in terms of their health care practices.

Some of the areas covered in the survey relate to:

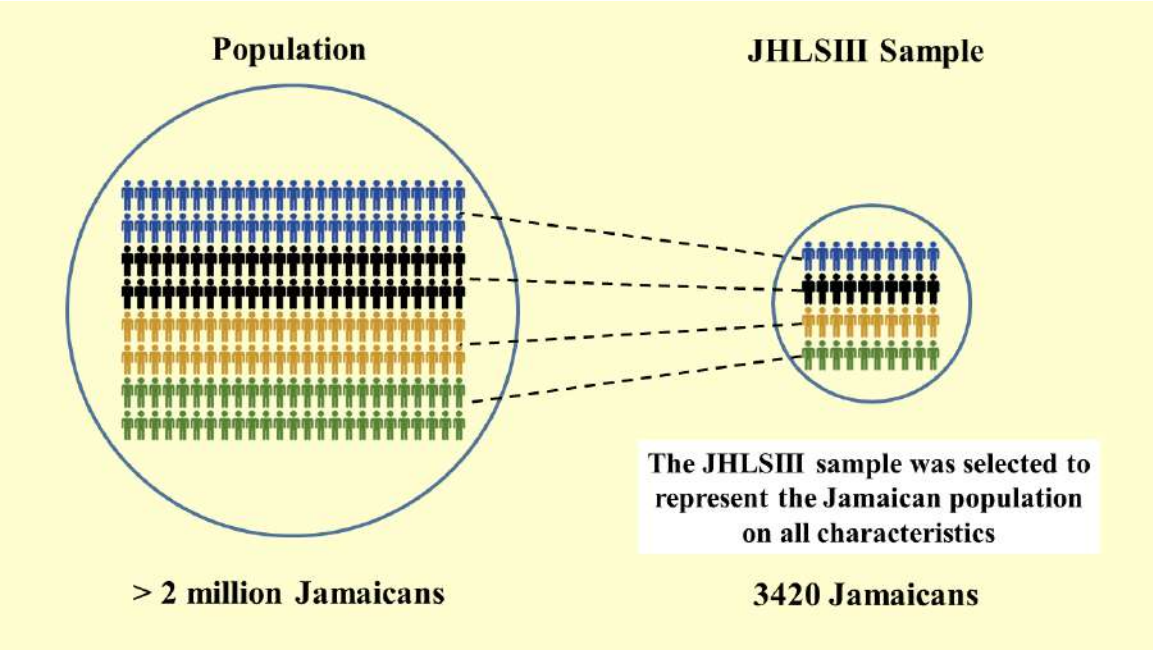
- Non-communicable diseases (NCDs) and risk factors
- Men's and women's health
- Family health history
- Sexual practices

The survey team also collected personal information on participants such as age and sex.

How do we know that the data collection process and findings can be trusted?

Data collectors were selected based on their experience and were trained in survey techniques. Each data collector was placed in one of four groups based on the four health regions (South East, North East, Western and Southern). Data collectors had supervisors who ensured that quality was maintained throughout the entire exercise.

The researchers ensured that persons who participated in the survey were representative of the overall Jamaican population. All efforts were made to ensure that those selected were interviewed. Data collectors made up to three visits to each household. If no one answered at the third try, there were no further attempts to contact these persons.



ABOUT THE JAMAICA HEALTH AND LIFESTYLE SURVEY III

Who provided financial support?

The survey was supported by the MOHW and the National Health Fund.

Who provided data analysis support?

The Statistical Institute of Jamaica provided information needed for sample size calculation and sample selection.

What was the sample size?

The survey team calculated that they needed 3,107 persons for the study. This number was increased by 10% to 3,418 to account for persons who may not be at home or may refuse to participate in the survey. Three thousand four hundred and twenty (3,420) persons were targeted and one person from each household, was selected to give answers to the questions. A smaller group of persons provided blood and urine samples.

How were the data collected?

The data collection process started in September 2016 and ended in March 2017. The team met with individuals in person, used questionnaires and took health measurements.

What types of information did they collect and why?

To check the health of persons, the survey team measured:

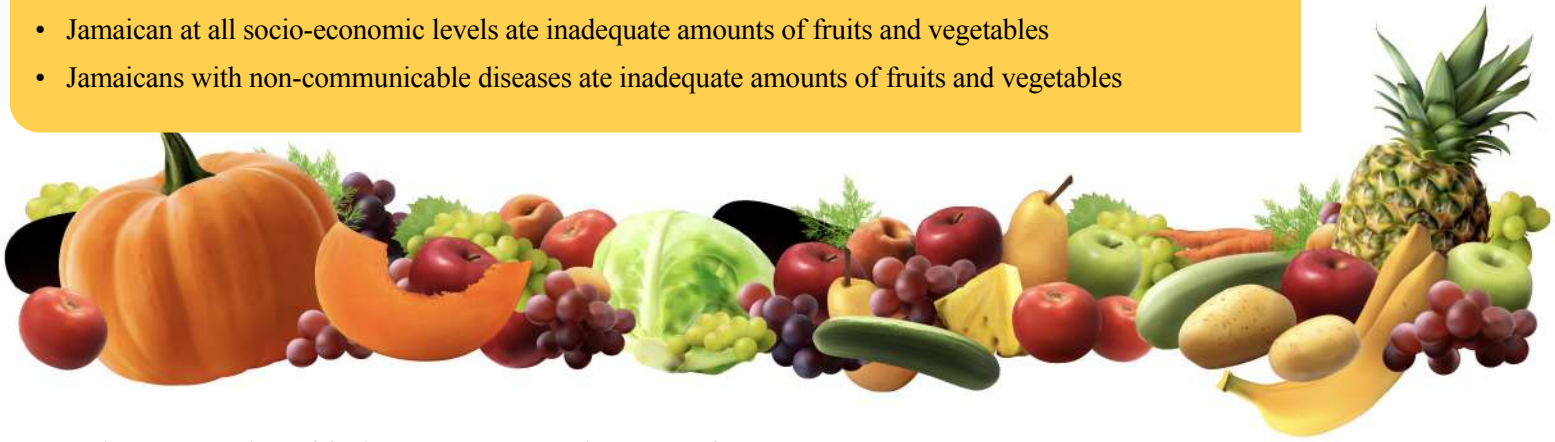
- Blood pressure
- Blood sugar
- Cholesterol
- Height
- Weight
- Waist size

Blood and urine samples were also collected from a smaller group to conduct specialised tests. These included tests for: chikungunya, kidney function, hemoglobin level and salt excretion.


Diet and
Lifestyle
Factors

Key Findings

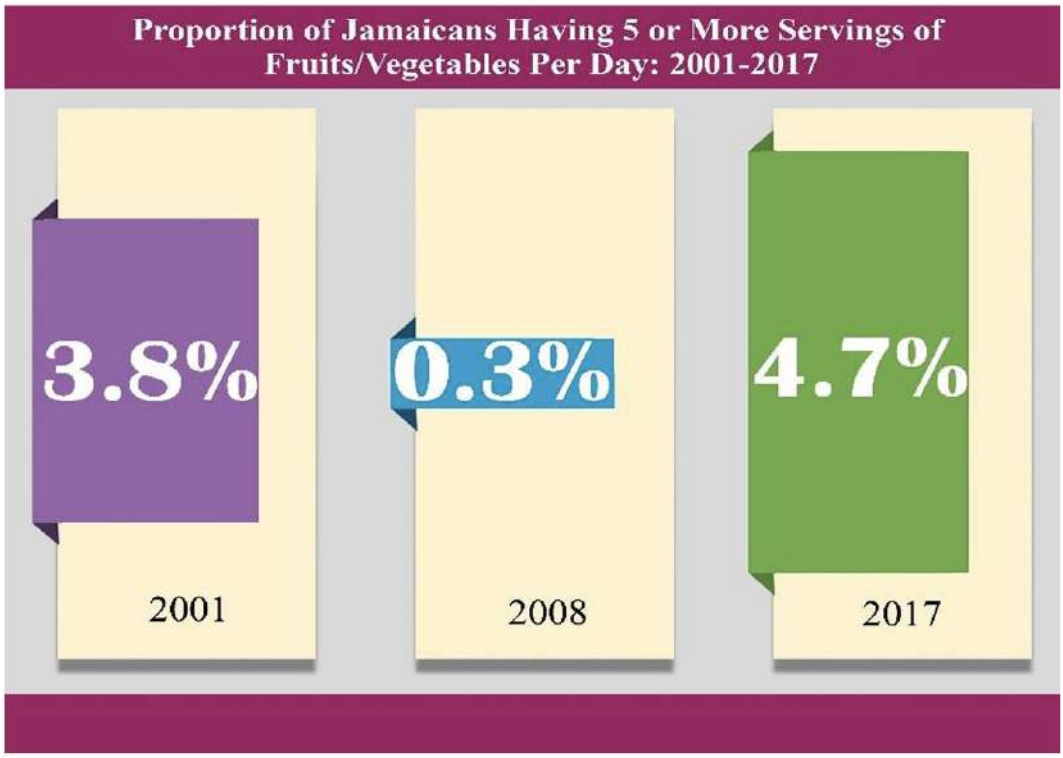
- Almost all Jamaicans do not eat enough fruits and vegetables
- Fruit and vegetable intake have not improved since 2001
- Jamaican at all socio-economic levels ate inadequate amounts of fruits and vegetables
- Jamaicans with non-communicable diseases ate inadequate amounts of fruits and vegetables



Why is consumption of fruits and vegetables important?

Fresh fruits and vegetables are important sources of vitamins and minerals. They help to provide energy to the body. Fruits and vegetables help us to feel full and limit our food intake. High intake of fruits and vegetables help to lower cholesterol and improve blood sugar levels. They are important sources of substances called 'phytochemicals' which may prevent the development of NCDs and other diseases. The World Health Organization (WHO) recommends an intake of five or more servings of fruits and vegetables per day[1]. In the study, this was broken down to two or more servings of fruits and two or more servings of vegetables.

Did Jamaicans improve their fruit and vegetable intake between 2001-2017?



Source:

1. World Health Organization, Food and Agriculture Organization of the United Nations. Diet, nutrition and the prevention of chronic diseases: report of a joint WHO/FAO expert consultation. Geneva: World Health Organization; 2003. (WHO Technical Report Series No. 916). Available from: https://www.who.int/nutrition/publications/obesity/WHO_TRS_916/en/

What did JHLS III find?

Fruit and Vegetable Intake in the Total Population

- Fruit and vegetable intake between the period 2001 to 2017 was very low
  - o In 2017, about 1.9 million Jamaicans (1,856,635 persons) did not eat the recommended servings of fruits and vegetables
  - o Approximately one in five (17.6%) Jamaicans ate vegetables two or more times per day
  - o One in eight Jamaicans (12%) ate fruits two or more times per day
  - o About one in fifteen Jamaicans (6.5%) consumed vegetables only once per week
  - o About one in seven Jamaicans (13.8%) consumed fruits only once per week

Intake of Fruits and Vegetables by Age

- Among all age groups fruit and vegetable consumption was inadequate
- Older persons ate greater amounts of fruits and vegetables
  - o Persons who were 65-74 years of age reported the highest consumption. Among Jamaicans aged 65-74 years about one in five (21.8%) consumed vegetables at least twice per day. About one in six (16.5%) ate fruits at least 2 times per day
- Persons aged 45-54 years reported the lowest consumption of both fruits and vegetables
  - o Sixteen percent (15.9%) reported intake of vegetables at least 2 times per day. One in ten (10.1%) of these participants ate vegetables 2 or more times per day
- Among the youth aged 15-24 years, one in ten (11.2%) ate fruits two or more times per day, while one in every six (16.6%) ate vegetables two or more times per day

Intake of Fruits and Vegetables by Socio-Economic Status

In the JHLS III socio-economic status was measured using different types of information. This included selfreported education level, as well as number of household possessions. These possessions included gas or electric stove, refrigerator or freezer, air conditioner, cable TV, motor vehicle, computer or tablet, and smart phone. Persons with higher levels of education or more household possessions were categorized as having higher socioeconomic status.

The study found that:

- Jamaicans who had higher education levels or more possessions ate more fruits and vegetables
  - o Among persons who were educated beyond secondary school, about one in five (18.0%) ate fruits twice per day. This compared with one in ten (9.9%) Jamaicans who were educated at the primary school level who ate fruits twice per day
  - o About one in four persons who were educated beyond the secondary level (24.5%) or had 10-20 household possessions (26.7%) ate vegetables a minimum of 2 times per day

Intake of Fruits and Vegetables by NCDs

Both persons with and without NCDs had inadequate amounts of fruits and vegetables. There was no difference in fruit or vegetable intake between persons with and without obesity, diabetes, hypertension and high cholesterol.

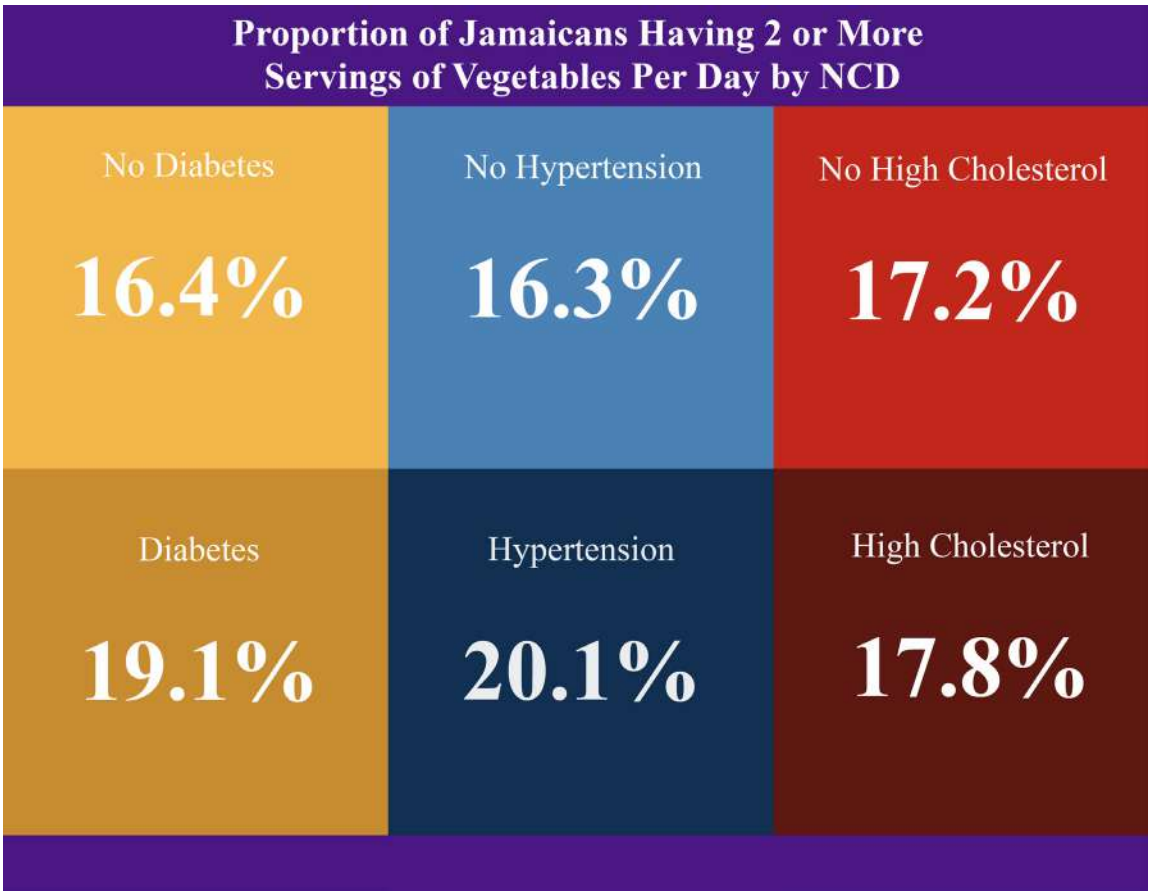
The proportion of Jamaicans having two or more servings of vegetables or fruits per day by characteristic is shown below

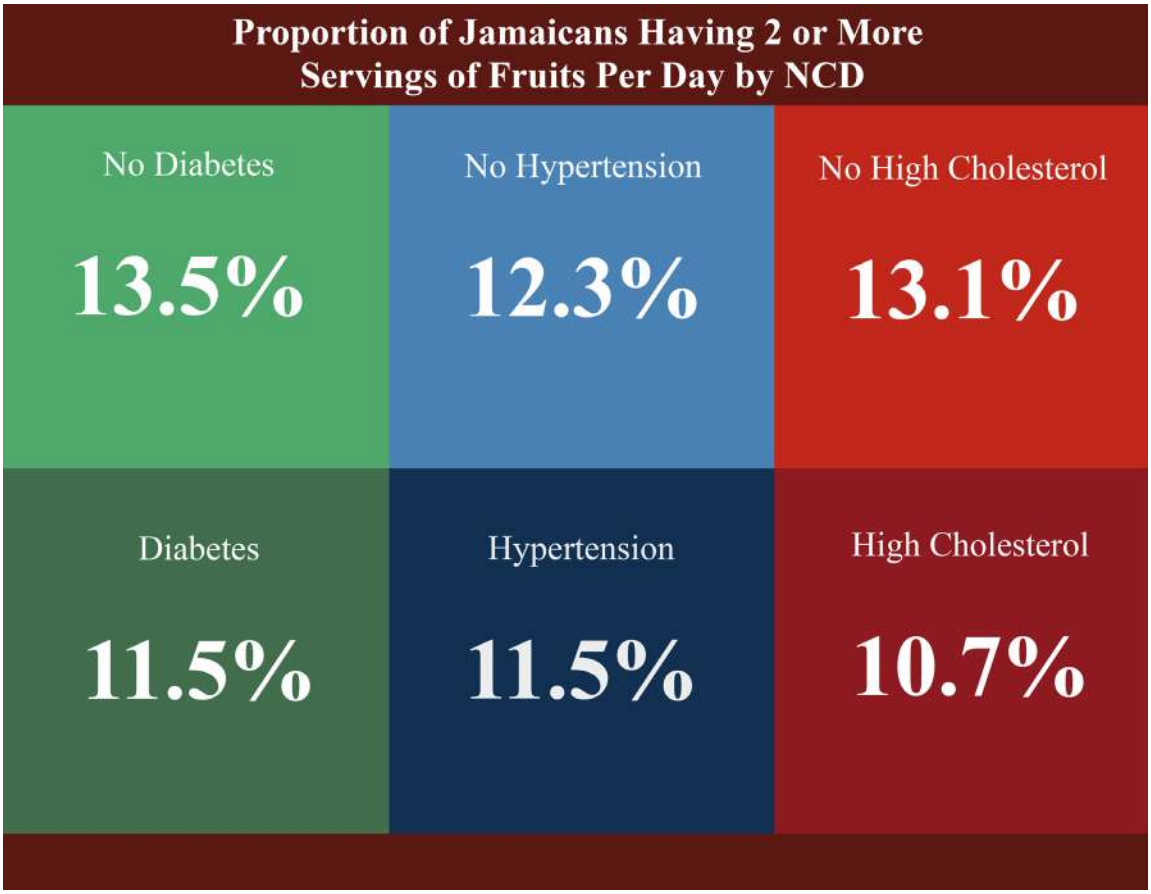
Proportion of Jamaicans Having 2 or More Servings of Vegetables Per Day by Characteristics: 2017

Category	Percentage (%)
Total Population	17.6%
Male	18.3%
Female	16.8%
Age 15 - 24 Years	16.6%
Age 65 - 74 years	21.8%
Primary Education	16.3%
Post Secondary	24.5%
0 - 5 Possessions	12.1%
10 - 20 Possessions	26.7%

Proportion of Jamaicans Having 2 or More Servings of Fruits Per Day by Characteristics: 2017

Category	Percentage (%)
Total Population	12.0%
Male	11.4%
Female	12.6%
Age 15 - 24 Years	11.2%
Age 65 - 74 years	16.5%
Primary Education	9.9%
Post Secondary	18.0%
0 - 5 Possessions	8.3%
10 - 20 Possessions	16.0%


Proportion of Jamaicans Having 2 or More Servings of Vegetables Per Day by NCD
No Diabetes
16.4%
No Hypertension
16.3%
No High Cholesterol
17.2%
Diabetes
19.1%
Hypertension
20.1%
High Cholesterol
17.8%


Proportion of Jamaicans Having 2 or More Servings of Fruits Per Day by NCD
No Diabetes
13.5%
No Hypertension
12.3%
No High Cholesterol
13.1%
Diabetes
11.5%
Hypertension
11.5%
High Cholesterol
10.7%

Findings from the JHLS III Qualitative Study

The qualitative study explored the beliefs, practices and experiences related to NCDs and risk factors.

QUALITATIVE FINDINGS

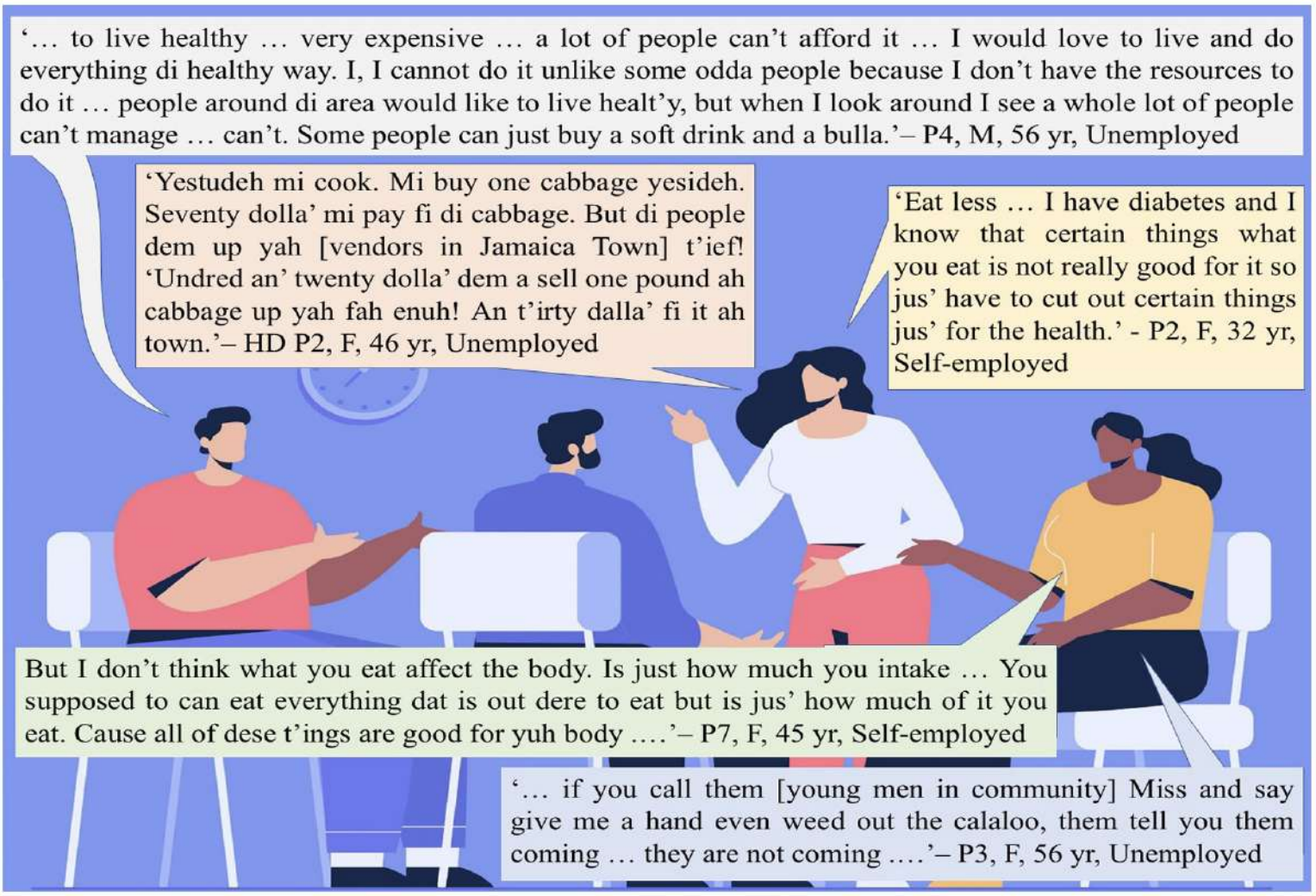
Among the women, some expressed disapproval regarding the typical contents of children's lunch boxes, while others emphasized that they are forced to pack the lunch boxes with whatever they can afford, even those items that they know are not the healthiest options.

Participants noted that most residents in the community did not have adequate space for backyard gardening.

Participants shared about the absence healthy food options in the community; Most of the available and more affordable food options were processed and packaged foods that were high in starches and sugars.

Many participants reported changing their diet only after being diagnosed with a non-communicable disease.

Some female participants believed that persons with NCDs should be able to eat any type of food once portion control was considered.



What did JHLS III find?

Preconception versus Study Findings

Preconception	Study Finding
• Persons at higher socioeconomic levels are expected to eat more fruits and vegetables.	• While persons with higher SES had greater intake of fruits and vegetables their consumption was also inadequate. Only one of four (24.5%) Jamaicans who had education beyond the secondary level ate at least two servings of vegetables daily. A similar proportion (26.7%) of Jamaicans with 10-20 possessions ate at least two servings of vegetables daily.
• Persons with hypertension, diabetes or high cholesterol are expected to eat more fruits and vegetables as part of a specialised diet.	• The study found no differences in the consumption of fruits and vegetables in persons with and without obesity, diabetes, hypertension and high cholesterol.

Ways to Increase Your Consumption of Fruits and Vegetables

Eat fruits and vegetables that are in season

Eat the recommended amounts of fruits and vegetables throughout the day

Substitute other foods with more fruits and vegetables

Grow your own fruits and vegetables at home or at a convenient place in your community

Explore different types of fruits and vegetables (fresh and frozen)

Sources: Healthy Habits: Fruits and Vegetables to Manage Weight. Healthy Weight and Growth. Centers for Disease Control and Prevention. https://www.cdc.gov/healthy-weight-growth/healthy-eating/fruits-vegetables.html Accessed [November 5, 2024). Images from: www.freepik.com

Sugar Sweetened Beverage Consumption

Key Findings

- Overall, about one in three Jamaicans consumed sugar-sweetened beverages (SSBs) one or more times per day
- Consumption of sugar-sweetened beverages (SSBs) varied by age, area of residence and socio-economic status

- There was higher consumption of SSBs among young persons, and intake declined with age
- Intake of cold SSBs declined over the period 2001-2017
- Persons with lower socioeconomic status were more likely to consume SSBs more than once per day

Images from www.freepik.com

Why is sugar sweetened beverage consumption harmful?

Sugar-sweetened beverages (SSBs) are any liquids that are sweetened with added sugars[1]. Examples of added sugars include brown or granulated sugar, molasses, raw sugar, corn syrup, glucose and fructose. Examples of SSBs include sodas or soft drinks, fruit drinks, sports drinks, energy drinks, sweetened waters, teas and coffee beverages[1]. Drinking SSBs may not result in a feeling of fullness which would signal the body to stop eating. High SSB intake may therefore result in excess intake of calories[2]. High intake of SSBs may also be linked to weight gain, obesity, type 2 diabetes, heart disease, kidney disease, non-alcoholic liver disease and tooth decay[1].

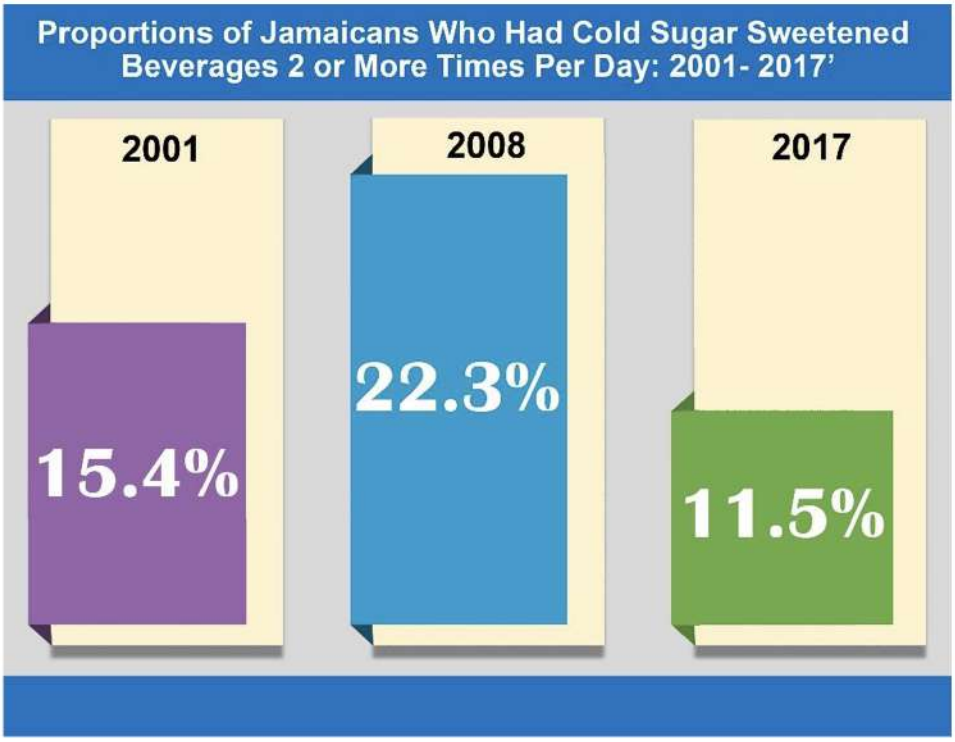
Sources:
1. Centers for Disease Control and Prevention. Get the facts: Sugar-sweetened beverages and consumption. Nutrition. Available from: https://www.cdc.gov/nutrition/data-statistics/sugar-sweetened-beverages-intake.html. Accessed: November 6, 2024.
2. World Health Organization. Reducing consumption of sugar-sweetened beverages to reduce the risk of childhood overweight and obesity. Available from: https://www.who.int/tools/elena/bbc/ssbs-childhood-obesity. Accessed: November 6, 2024.

What did the JHLS III find?

Overall Intake in the Past Month

- Approximately one third (32.6%) of Jamaicans or 668,035 reported consuming SSBs one or more times per day.
- One in five Jamaicans (19.6%) reported not consuming sugar sweetened beverages in the past month.

Did Jamaicans reduce their consumption of cold SSBs between 2001-2017?



Intake by Area of Residence

- Greater than one in three (35.0%) Jamaicans in rural areas consumed SSBs one or more times per day. This compares to 30.5% of Jamaicans living in urban areas.
- About one in four (23.5%) persons living in urban areas reported not consuming SSBs in the last month. In contrast, one in six (15.2%) Jamaicans living in rural areas did not consume SSBs in the last month.

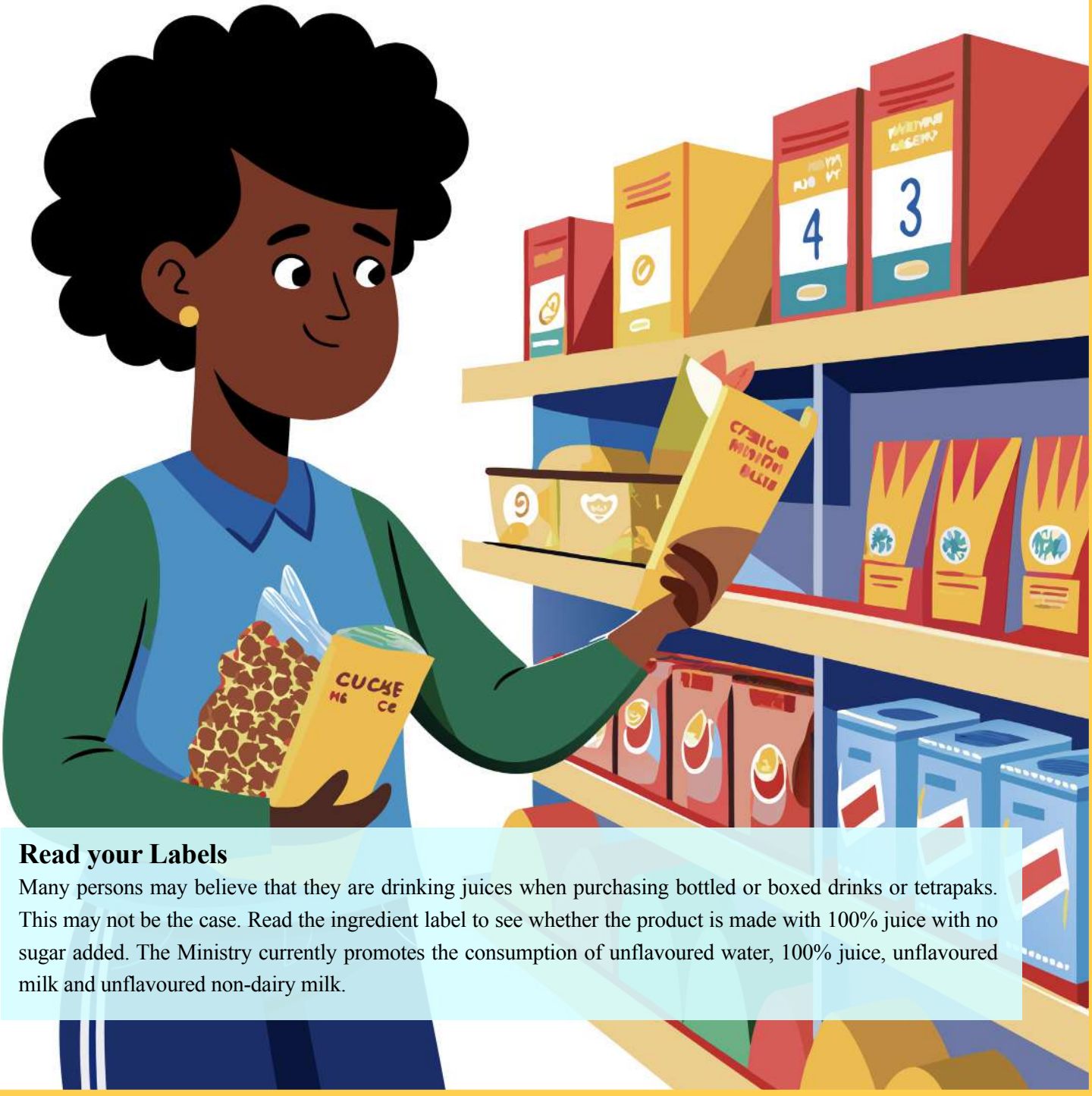
Intake by Socio-Economic Status

- Jamaicans with high SES had the lowest intake of SSBs;
  - o approximately one in four (28.1%) persons educated beyond the secondary level drank SSBs one or more times per day. About one in five (21.0%) persons with 10-20 possessions consumed SSBs at least once per day.
- In contrast, SSB intake of one or more times per day was highest in persons with secondary level education (36.2%) or in persons who had 6-9 household possessions (36.9%).

What did the JHLS III find?

Intake by Chronic Disease Status

Higher proportions of persons with diabetes, hypertension, and high cholesterol reported no SSB consumption when compared with persons with no disease.



Read your Labels

Many persons may believe that they are drinking juices when purchasing bottled or boxed drinks or tetrapaks. This may not be the case. Read the ingredient label to see whether the product is made with 100% juice with no sugar added. The Ministry currently promotes the consumption of unflavoured water, 100% juice, unflavoured milk and unflavoured non-dairy milk.

Key Findings

- Consumption of fast food varied by age and socio-economic status
- The majority of Jamaicans reported no consumption of fast foods during the usual week
- However, younger persons were more likely to consume fast food
- Persons with high socio-economic status reported greater consumption of fast food

Why is fast food consumption harmful?

Fast food restaurants are generally defined as those in which customers select, order and pay for their foods before receiving them[1]. Excessive consumption of fast foods may result in diets high in sodium, fats, sugars, and refined carbohydrates[2]. These diets may lead to increased weight gain, abdominal fat, impaired glucose tolerance and NCDs[2]. For the JHLS III, participants responded to the following question:

o During a usual week, do you eat at fast food places such as Burger King, KFC, Tastee, Juici Patties, Mother's, Pizza Hut, Dominos', Wendy's, and Island Grill?

What did the JHLS III find?

Overall Intake of Fast Foods

- About one in thirteen (7.8%) Jamaicans reported consuming fast food one or more times per day.
- A further one in three (30.8%) Jamaicans reported eating fast food 1-6 times per week.
- Six out of ten (61.4%) Jamaicans reported never eating fast foods during the usual week.

Sources:
1.Rhone R. ERS's updated food environment atlas shows an increase in fast food restaurants between 2009 and 2014. Economic Research Service, US Department of Agriculture. Available from: https://www.ers.usda.gov/amber-waves/2017/december/ers-s-updated-food-environment-atlas-shows-an-increasein-fast-food-restaurants-between-2009-and-2014/.
2. Bahadoran Z, Mirmiran P, Azizi F. Fast food pattern and cardiometabolic disorders: a review of current studies. Health Promot Perspect. 2016 Jan 30;5(4):23140.doi: 10.15171/hpp.2015.028.PMID: 26933642; PMCID: PMC4772793. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC4772793/.

What did the JHLS III find?

Fast Food Intake by Sex

- There was no difference in fast food consumption between males and females

Fast Food Intake by Age

- Consumption of fast food varied with age, with younger individuals reporting greater fast food intake
  - o About one in six (16.5%) youth aged 15-24 years reported eating fast foods one or more times per day. A further 40% of youth reported consuming fast foods 1-6 times per week
  - o In contrast, less than 1% of persons aged 75 years and above reported eating fast foods at the same frequency

Fast Food Intake by Area of Residence

- There was no difference in fast food intake by area of residence

Fast Food Intake by Socio-Economic Status

- Persons with more household possessions consumed fast foods at higher frequency. One in ten (10%) Jamaicans with 10-20 possessions ate fast foods one or more times per day. This is twice the proportion of Jamaicans with 0-5 possessions (4.7%) who ate fast food a minimum of one time per day
- Persons educated at the primary level or lower reported the lowest consumption of fast food. One in twenty (5.0%) persons educated at the primary school level ate fast foods one or more times per day. In contrast, persons with higher levels of education consumed more fast food; one in thirteen (8.0%) persons educated beyond secondary level ate fast foods one or more times per day

Fast Food Intake by Chronic Disease Status

- A higher percentage of persons who were obese, had diabetes or hypertension reported that they never consumed fast foods when compared with persons with no disease
- One in twenty obese persons (5.6%) reported eating fast food one or more times per day. This contrasts with 8.8% of individuals who were not obese
- Greater than two percent (2.8%) of persons with diabetes and greater than one in twenty (6.3%) individuals with hypertension ate fast food one or more times per day. This contrasts with 8.8% of persons were not diabetic and 8.7% of persons who were not hypertensive who ate fast foods at the same frequency

Findings of the Qualitative Study Related to Fast Food Intake

Qualitative Findings

Participants spoke about individual accountability and personal responsibility to maintain a healthy diet. Women reported that men who live alone or spend a lot of their time outside the home tend to buy from the fast-food restaurants and cook shops.

Community members indicated a preference for diets high in salt and carbohydrates and for fried foods

Images from www.freepik.com

Alternatives to Fast Food

Are Healthy Meals Easy To Prepare?

Healthy Meals Can Be Prepared Quickly

Are Healthy Meals Unappetizing?

Healthy Meals Do Not Have to Be Boring

Key Findings

- One in six Jamaicans currently smoke marijuana
- More men than women currently smoke marijuana
  - 3 in 10 males currently smoke marijuana compared to 1 in 20 females
- A high proportion of men who currently smoke marijuana do so daily
- One in five youth in the 15-24 age group currently smoke marijuana
- Marijuana smoking was much higher among unemployed males than in other employment groups

The JHLS asked questions about participant's marijuana smoking history.

Definitions for marijuana smokers

Lifetime smoker: A person who smoked at any point in their lifetime

Current smoker: A person who indicated that they currently smoked marijuana

Past smoker: A person who indicated that they smoked marijuana in the past

Why is marijuana smoking harmful?

Marijuana, which is also known as "Cannabis", "ganja" or "weed", contains tetrahydrocannabinols (THC). THC may affect different organs in the body including the brain, heart and lungs. Marijuana may affect a person's coordination, reaction time and awareness. Because of this, it can increase the risk of accidents, especially for persons driving motor vehicles or operating machinery[1].

Cannabis use may lead to social anxiety, depression, chronic bronchitis and schizophrenia. Other health risks include dependency, memory loss, stroke and heart disease, unintentional poisoning and injuries. When taken by adolescents, Cannibis use can interfere with brain development, particularly the parts of the brain that controls memory, learning, attention, decision-making, coordination, emotions, and reaction time.[1,2] Additionally, pregnant women who smoke marijuana can increase their risk of fetal development challenges, low birth rate and in some rare cases post-natal cancers[3].

Sources
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2. Centers for Disease Control and Prevention. Cannabis and brain health. Cannabis and public health [Internet]. Atlanta, Georgia; 2024 [cited 2024 Dec 13]. Available from: https://www.cdc.gov/cannabis/health-effects/brain-health.html.
3. Thompson R, DeJong K, Lo J. Marijuana use in pregnancy: a review. Obstet Gynecol Surv. 2019 Jul;74(7):415-428. doi: 10.1097/OGX.0000000000000685. PMID: 31343707; PMCID: PMC7090387. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC7090387/.

What did the JHLS Study find?

A Large Proportion of Jamaicans Have Tried Smoking Marijuana

Lifetime

- A large proportion of Jamaicans have tried smoking marijuana in their lifetime
  - o One in three (32.5%) Jamaicans had tried marijuana smoking at some point in their life
  - o About 1 in 2 (49.0%) males had tried marijuana at some point in their life
  - o About 1 in 5 (16.8%) females had tried marijuana at some point in their life

Current and Past Marijuana Use Among Jamaicans 15-17 Years

Current Use Percentage (%)	Past Use Percentage (%)	Never Used Percentage (%)
Male: 21.8	Male: 4.2	Male: 74.0
Female: 0.5	Female: 3.9	Female: 95.5
Total: 11.7	Total: 4.1	Total: 84.3
Current Use Estimated Population (n)	**Past Use Estimated Population (n)**	**Never Use Estimated Population (n)**
Male: 17,497	Male: 3,387	Male: 59,428
Female: 394	Female: 2,865	Female: 69,927
Total: 17,891	Total: 6,252	Total: 129,355

Current Marijuana Smokers

About one in six (16.7%) Jamaicans were current marijuana smokers.

Current Marijuana Smoking by Sex

Approximately one in three males (29.4%) currently smoke marijuana, compared to one in twenty females (4.8%). Among male marijuana smokers, seven out of ten (70.6%) smoked daily; among female marijuana smokers, 31.3% smoked daily.

Current Marijuana Smoking by Religion

When religion was examined, the highest proportion of smokers (69.2%) was found among persons from other religions. About one in three (32.2%) persons who had no religion currently smoked marijuana. This was followed by one in ten (12.6%) Christian current smokers.

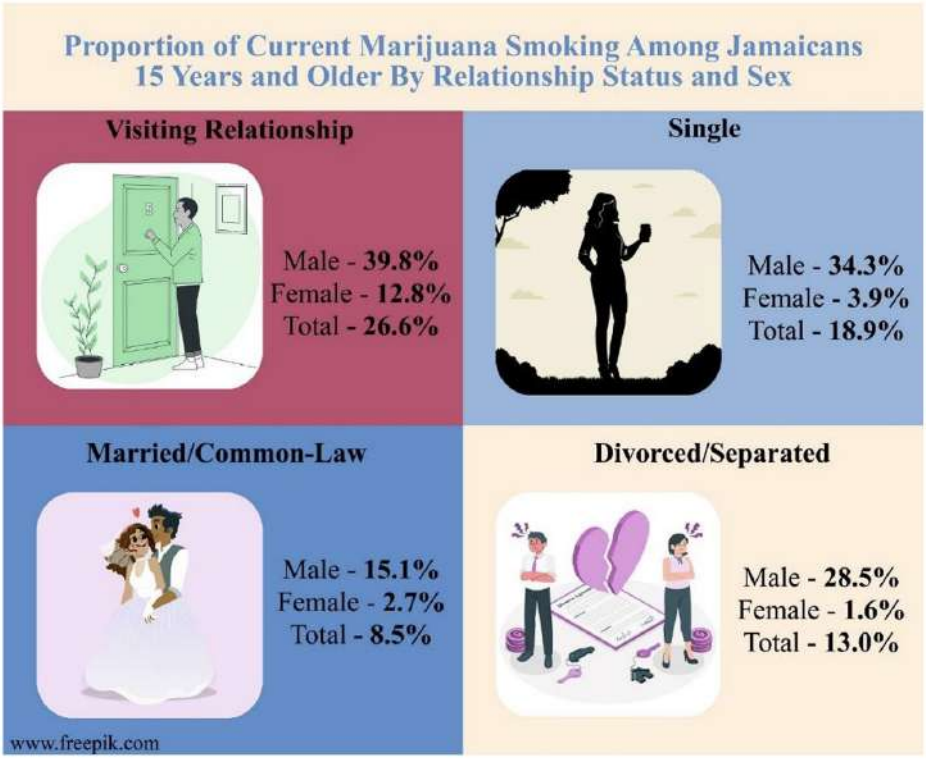
Current Marijuana Smoking by Relationship Status

The following shows the proportion of marijuana smokers among persons of different relationship status:

- Visiting relationships: 26.6%
- Single: 18.9%
- Divorced: 13.0%
- Married or common-law union: 8.5%

JHLS III findings

The proportion of marijuana smokers was highest among males in visiting relationships.



Current Marijuana Smoking by Age Group

The proportion of marijuana smokers was highest among youth in the 15-24 age group.

The following shows the proportion of marijuana smokers in each age group.

- 20.9 % in the 15-24 year age group
- 19.0 % in the 25-34 year age group
- 17.1% in the 35-44 year age group

Current marijuana smoking among young persons aged 15-17 years was as follows:

- 11.7% (17,891 persons) in the 15-17 year age group

Proportion of Current Marijuana Smoking by Age and Sex

Age Group	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	≥ 75
Male	38.3%	27.3%	32.8%	25.2%	28.0%	17.0%	7.2%
Female	3.7%	11.2%	3.0%	4.4%	2.6%	0.5%	0.1%
Total	20.9%	19.0%	17.1%	14.7%	15.4%	8.7%	2.8%

JHLS III findings

Current Marijuana Smoking by Employment Status

The following shows the proportion of marijuana smokers for persons of different employment status:

- Employed: 1 in 5 (19.2%)
- Unemployed: 1 in 5 (19.0%)
- Students: 1 in 10 (8.7%)
- Retired: 1 in 25 (4.0%)

A high proportion (44.7%) of unemployed males currently smoked marijuana compared to other employment status groups. The proportion of current marijuana smoking in unemployed males was approximately six times that of unemployed females.

- Unemployed males: 1 in 2 (44.7%), currently smoke marijuana
- Unemployed females: 1 in 20 (6.4%), currently smoke marijuana

Current Marijuana Smoking by Level of Education

The proportion of marijuana smoking was highest among persons with secondary level education. The following shows the proportion of persons at each educational level who currently smoke.

- Secondary level education: 1 in 5 (21.1%) currently smoke marijuana
- Primary level education or lower: about 1 in 6 (16.0%) currently smoke marijuana
- Other education: about 1 in 20 (4.4%) currently smoke marijuana
- Post-secondary or tertiary level education: 1 in 30 (3.3%) currently smoke marijuana

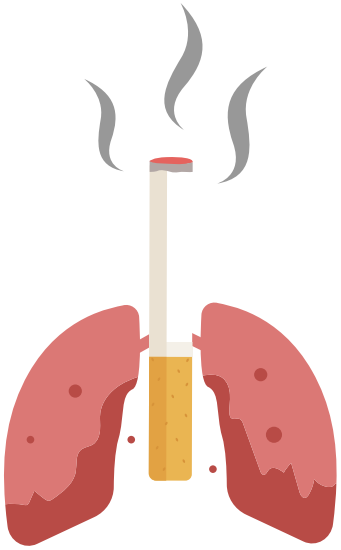
Current Marijuana Smoking by Income

The proportion of current marijuana smoking was highest in persons within the lowest income bracket. Marijuana smoking decreased as income levels increased.

- 19.2% persons earning <$12,000/week currently smoke marijuana
- 15.6% persons who gave no response about their income smoke marijuana
- 15.4% persons earning $12,000 -$59,999/week smoke marijuana
- 1.4% persons earning ≥$60,000/week smoke marijuana

Current Marijuana Smoking by Possessions

The proportion of marijuana smoking decreased as the number of household possessions increased. One in five (22.0%) persons with 0-5 possessions currently smoked. This compares with one in ten (10.4%) persons with 10-20 possessions who currently smoked.



Key Findings

- About 1 in 4 Jamaicans have tried smoking cigarettes at some point in their lives
- About 1 in 7 Jamaicans were current smokers
  - Jamaicans with primary school education/or lower were more likely to be current smokers
  - Females with low income levels were more likely to smoke compared to higher earning groups
- 28,326 children aged 15-17 years reported using cigarettes at some point in their lives

Why is cigarette smoking harmful?

Cigarette smoking involves inhaling and exhaling the fumes of the burning tobacco plant. This is the most common form of tobacco use. Cigarette smoking is a risk factor for NCDs and can cause damage to the liver, kidney and heart. Tobacco use can also lead to many types of cancer, including cancer of the mouth, lung, bladder, kidney, liver, stomach, pancreas, colon and cervix[1,2].

Second hand smoke comes from the burning of a tobacco product. It is exhaled by a smoker and inhaled by nearby persons. This is also called involuntary or passive smoking. Inhaling second hand smoke can also lead to similar conditions as a person who smokes[3].

Pregnant women who smoke are particularly at risk because smoking can affect the development of the foetus and cause low birth weight and miscarriages. The aesthetic of a smoker can also change over time as the appearance of nails, skin and teeth may also deteriorate[1].

The JHLS asked questions about participant's smoking history. Smokers were defined as:
Lifetime smoker: A person who smoked at any point in their lifetime
Current smoker: A person who currently smoked tobacco products
Past smoker: A person who has smoked cigarettes in their lifetime but has stopped[4]

Sources:
1. World Health Organization Eastern Mediterranean Region. The effects of tobacco use on health [Internet]. Cairo, Egypt; 2024 [cited 2024 Dec 13]. Available from: https://iris.who.int/bitstream/handle/10665/204206/Fact_Sheet_TFI_2014_EN_15316.pdf.
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3. National Cancer Institute. Secondhand smoke [Internet]. Bethesda, Maryland; 2024 [cited 2024 Dec 13]. Available from: https://www.cancer.gov/publications/dictionaries/cancer-terms/def/secondhand-smoke.
4. Younger-Coleman N, Webster-Kerr K, Ferguson T, McFarlane S, Grant A, Bennett N, Wiggan J, Cunningham-Myrie C, Elias N, Francis D, Soares-Wynter S, Williams-Lue S, Edwards SE, O'Meally V, Govia I, Gordon-Strachan G, Tamu, Guthrie-Dixon N, Charles C, Wilks R. Jamaica health and lifestyle survey 2016-17 (JHLSIII) [Internet]. Kingston, Jamaica: Ian Randle Publisher; 2024 [cited 2024 Dec 13].

What did the JHLS III find?

Tobacco Use among Jamaicans

- A large proportion of Jamaicans have tried smoking
- 1 in 4 (24.2%) Jamaicans tried smoking cigarettes in their lifetime
- 4 in 10 (39.8%) males smoked cigarettes at some point in their lives
- 1 in 10 (10.1%) females tried smoking cigarettes
- 28,326 (22.7%) children aged 15-17 years reported using cigarettes at some point in their lives
- One in eight (13.1%) children aged 15-17 years were current smokers

Proportion of Jamaicans 15 to 17 Years Who Use Tobacco by Sex

Current Use Percentage (%)		Past Use Percentage (%)		Never Used Percentage (%)	
Male:	25.6	Male:	15.5	Male:	58.9
Female:	0.8	Female:	3.8	Female:	95.4
Total:	13.1	Total:	9.6	Total:	77.3

Current Use Estimated Population (n)		Past Use Estimated Population (n)		Never Use Estimated Population (n)	
Male:	15,876	Male:	9,578	Male:	36,518
Female:	492	Female:	2,380	Female:	59,722
Total:	16,368	Total:	11,958	Total:	96,240

Jamaicans Start Cigarette Smoking at a Young Age

- 69.4% of smokers started above the age of 16 years
- 9.9% started between 14-15 years of age
- 9.6% started between the ages of 10-11 years
- 4.6% started at less than 8 years of age

The survey reported that males started smoking earlier than females.

- 15% of male smokers started between 14 and 15 years. This compares with 8.7% of females in the same age group
- 10.1% of male smokers started between 10 and 11 years of age, compared to 8.5% of females
- 8.8% of male smokers started between 12 and 13 years of age. This compares with 3.7% of females

Females also started smoking early

- 8.7 % of female cigarette smokers started between 14 and 15 year of age
- 8.5 % of female cigarette smokers started between 10 and 11 years of age and
- 3.7 % of female cigarette smokers started between 12 and 13 years of age

Proportion of Current Tobacco Smokers by Age and Sex

Age Group	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	≥ 75
Male	26.3%	20.4%	36.4%	31.1%	24.7%	19.3%	8.6%
Female	2.9%	10.0%	4.2%	4.9%	2.7%	0.8%	0.6%
Total	14.4%	14.8%	18.1%	18.1%	13.9%	10.0%	3.7%

Current Smoking by Sex

- One in four (26.0%) males currently smoke
- One in twenty (4.7%) females currently smoke

Current Smoking by Age

- Persons aged 35 - 44 and 45 - 54 years of age had the highest proportion of current smokers (18.1%)
- The lowest proportion of current cigarette smoking was among Jamaicans aged 75 years and older

Current Smoking by Religion

- Persons of the Christian faith (11.8%) as well as those with no religion (25.2%), smoked less than persons from other religions (58.7%)

Current Smoking by Relationship Status

- Current smoking was highest among persons in visiting relationships (22.4%) followed by persons who were single (14.3%).
- The proportion of smokers was lowest in those who were married or in common law relationships (12.5%) and those who were divorced or separated (4.9%)

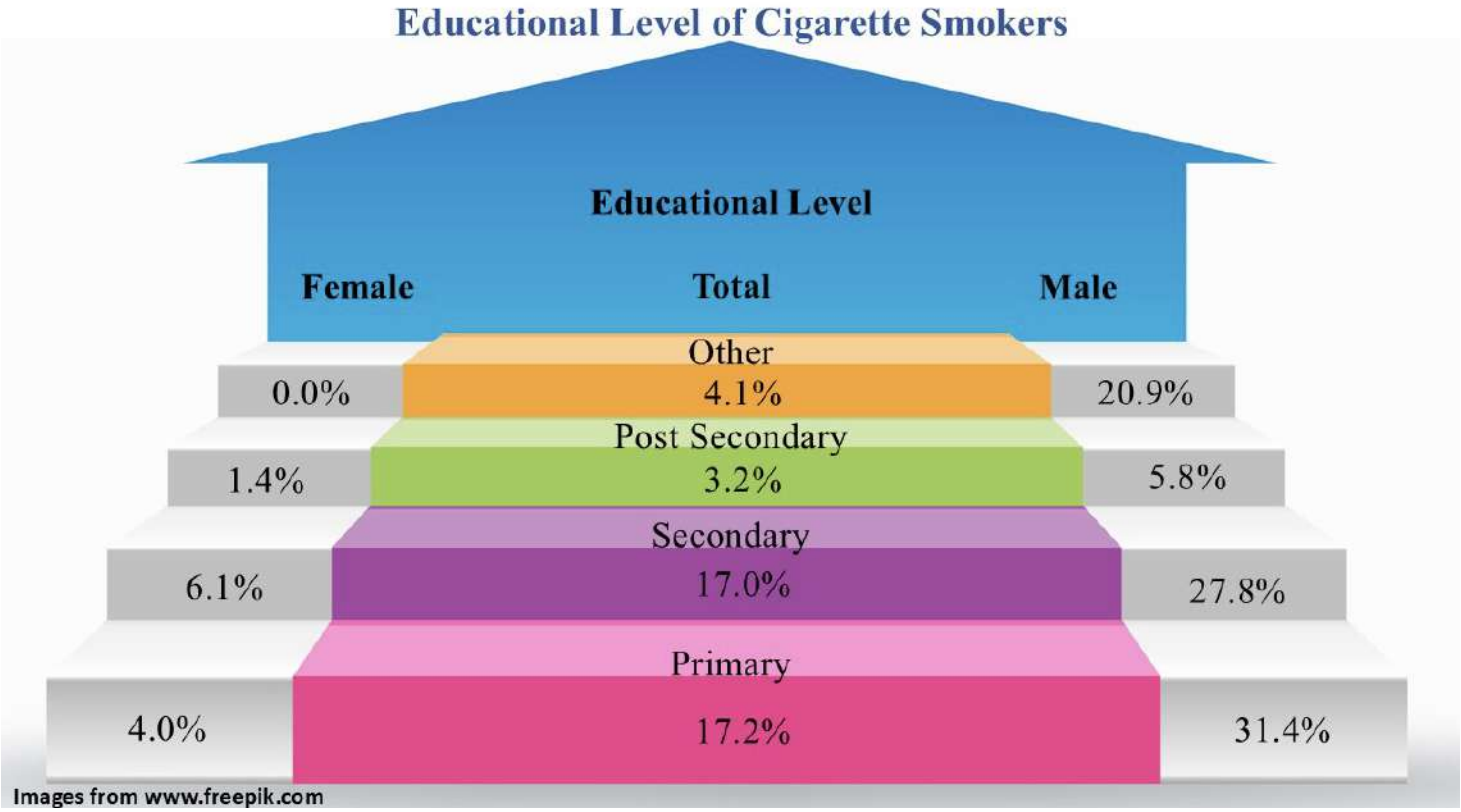
Current Smoking by Education Status

- The proportion of current smoking was highest among persons with a primary level education or lower (17.2%). This compared with 17.0% educated to the secondary level and 3.2% in persons educated at the tertiary level.

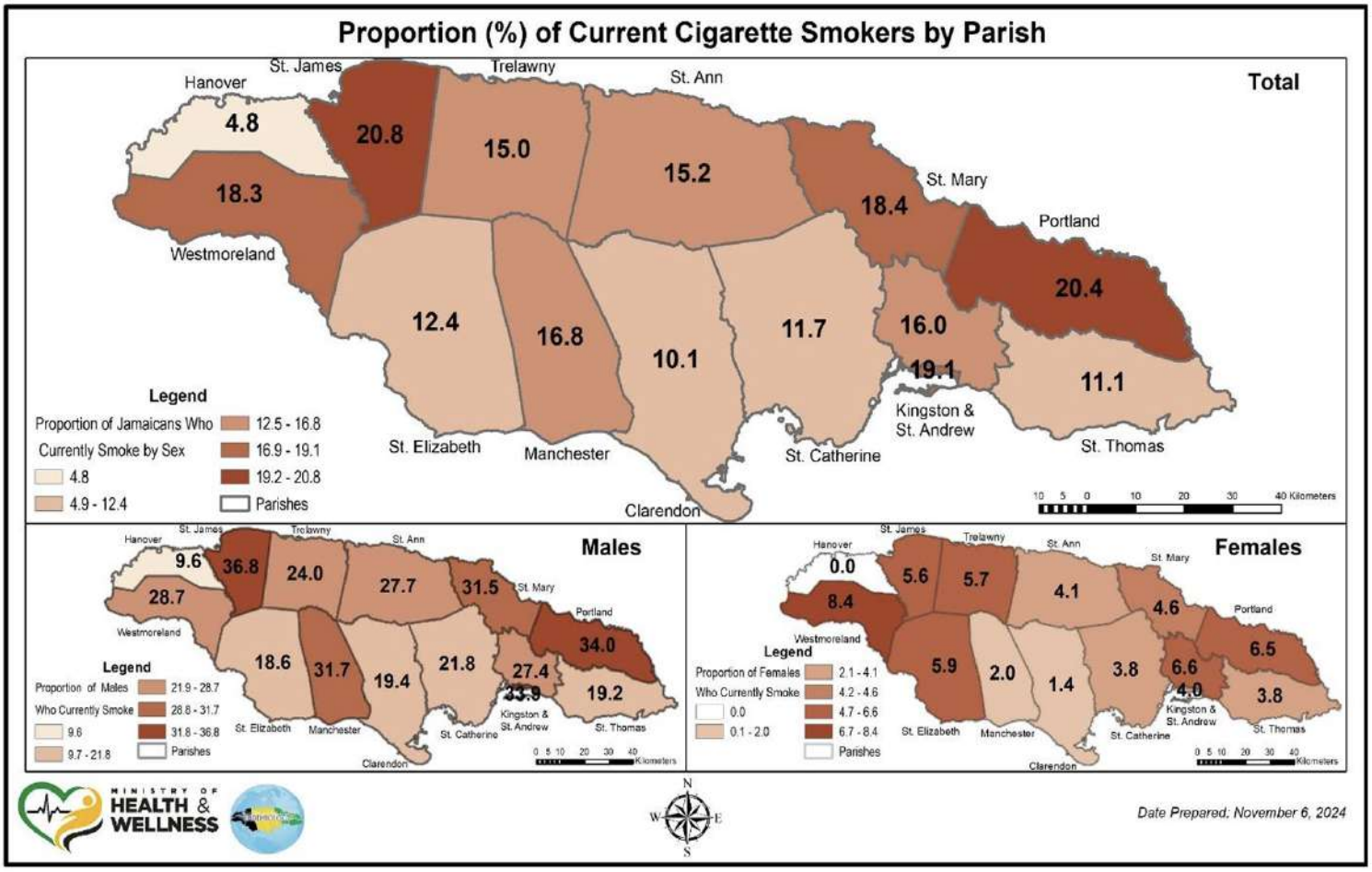
Males with secondary level education were the second highest proportion of smokers among educated groups

- 27.8% of males with secondary level education currently smoke
- 6.1% of females with secondary level education currently smoke

The survey also highlighted that females with no formal education did not smoke.



Current Smoking by Parish



The highest proportion of current smokers were in the parishes of St. James, Portland and Kingston

- St. James: 20.8 %
- Portland: 20.4%
- Kingston: 19.1 %

Key Findings

- Four out of ten Jamaicans were current alcohol drinkers
- Jamaicans drank mostly on weekends
- One in twelve Jamaicans were heavy drinkers
- Among males, the 65 - 74 age group, were more likely to engage in the harmful use of alcohol
- Among females, the 25 - 34 age group were more likely to engage in the harmful use of alcohol

Why is alcohol consumption harmful?

Alcohol is an addictive substance which is harmful even at low levels. However, most health risks result from heavy drinking. Consuming four to six servings of alcohol in a single sitting is considered heavy or binge drinking.

Alcohol can lead to over 200 diseases. Consumption of alcohol increases a person's risk of developing noncommunicable diseases. These include diseases of the liver, heart, and different types of cancers. In fact, alcohol is considered to be a carcinogen, meaning that it has the potential to cause cancer. Alcohol consumption may increase the risk of breast, liver, head and neck, and esophageal and colorectal cancers among others.

Alcohol drinking can also affect sexual performance, reduce testosterone levels and even cause fertility problems in women and impotence in men. Alcohol consumption during pregnancy may cause foetal alcohol syndrome which may result in developmental disabilities and birth defects. It is also linked to birth complications such as miscarriage, stillbirth and prematurity[1].

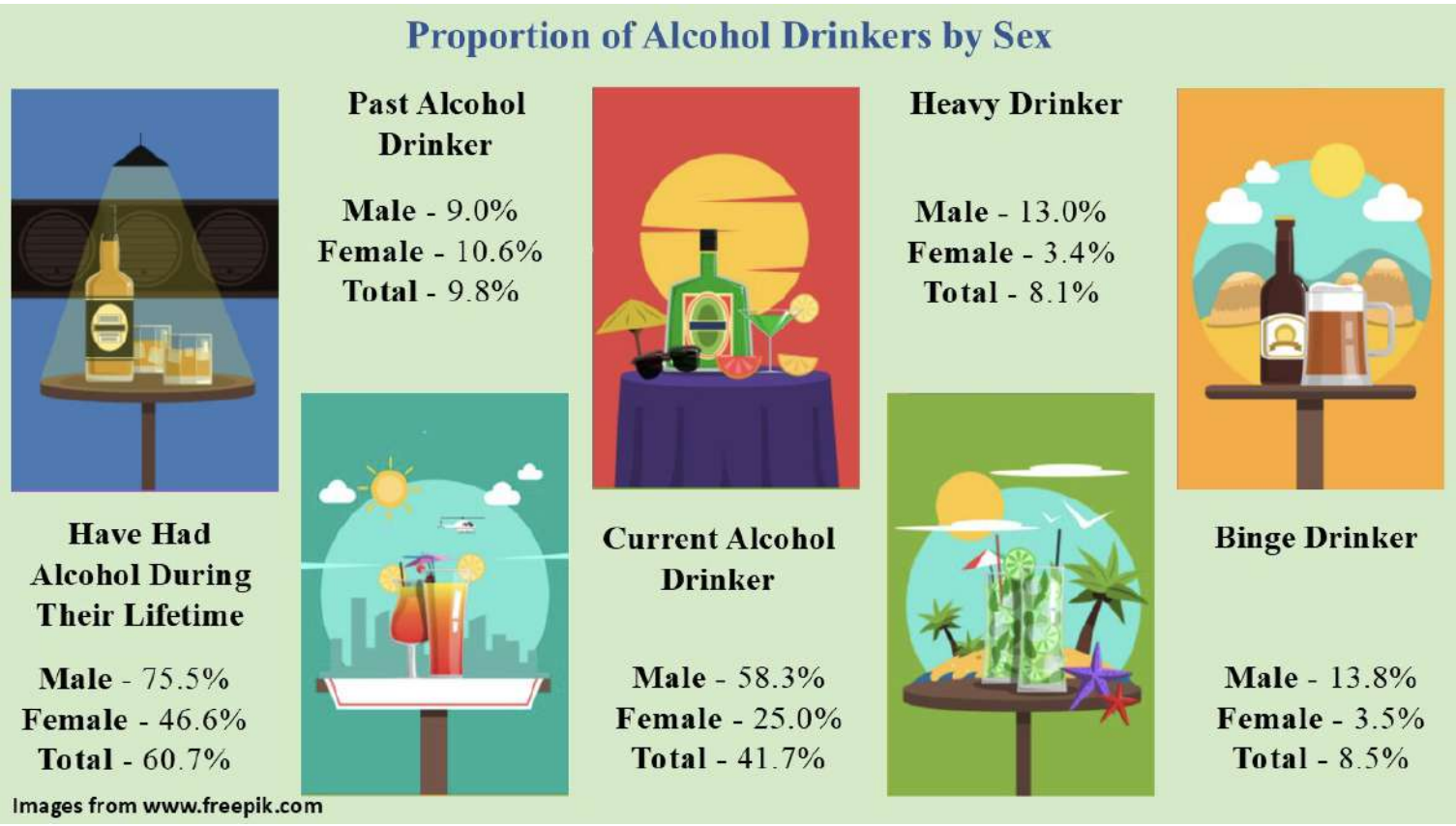
Definitions of alcohol consumption

Current drinker: A person who drank alcohol within the last 30 days

Heavy episodic drinker (heavy drinker): A person who consumed six or more standard drinks containing alcohol in one sitting within the last 30 days

Binge drinker: - A female who consumed four or more drinks at a time
- A male who consumed five or more drinks at a time

Source:
1. World Health Organization. Alcohol [Internet]. Geneva, Switzerland; 2024 [cited 2024 Dec 13]. Available from: https://www.who.int/news-room/factsheets/detail/alcohol.



What did the JHLS III find?

Lifetime Drinking:

- A large proportion of Jamaicans drank alcohol at some point in their lives
  - Total population of Jamaicans: Six out of ten (60.7%)
  - Males: Three out of four (75.5%)
  - Females: About 5 out of 10 (46.6%)

Current Drinking:

- Four out of ten (41.7%) Jamaicans were current alcohol drinkers
  - Males: 58.3%
  - Females: 25.0%

Heavy Drinking:

- One in twelve (8.1%) Jamaicans were heavy drinkers
  - Males: One in eight (13.0%)
  - Females: One in thirty (3.4%)

Why Did People Stop Drinking?

Health concerns motivated Jamaicans to stop drinking alcohol.

- About four out of ten (43.4%) Jamaicans reported that they stopped drinking alcohol due to health concerns
- Almost half (45.6%) of males cited health concerns as the reason for stopping alcohol consumption.
- Just over one in four (41.5%) females cited health concerns as the reason for stopping alcohol drinking

Current and Past Alcohol Use Among Jamaicans Aged 15-17 Years

Current Use Percentage (%)	Past Use Percentage (%)	Never Used Percentage (%)
Male: 47.6	Male: 47.6	Male: 52.4
Female: 37.9	Female: 37.9	Female: 62.1
Total: 43.0	Total: 43.0	Total: 57.0
Current Use Estimated Population (n)	**Past Use Estimated Population (n)**	**Never Use Estimated Population (n)**
Male: 38,206	Male: 38,206	Male: 42,106
Female: 27,734	Female: 27,734	Female: 45,452
Total: 65,940	Total: 65,940	Total: 87,558

Jamaicans Start Drinking at a Young Age

- About 1 in 2 alcohol drinkers started between the ages of 15 and 24 years.

Jamaicans Drank Mostly on Weekends

Weekend drinking was common among Jamaicans.

- About six out of ten (62.1%) Jamaicans who drank did so on weekends
  - o 64.5% of males who drank did so on weekends
  - o 56.4% of women who drank consumed alcohol on weekends

However, some persons who drank did so daily.

- One in seven (13.7%) alcohol drinkers consumed alcohol daily
  - o One in six (16.0%) males who drank, did so daily
  - o About one in twelve (8.0%) females who drank, consumed alcohol daily

Current alcohol drinking

Current Alcohol Drinking by Age

- About four in ten (43.0%) or 65,940 persons aged 15-17 years were current drinkers
- The highest proportion of current alcohol drinking occurred among Jamaicans aged 25-34 years (51.4%)
- The lowest proportion of current alcohol drinking was among Jamaicans aged 75 years (14.6%)
- Among females, the highest proportion of alcohol drinkers were among those aged 25–34 years (41.4%)
- Among males, the highest proportion of alcohol drinkers were among those aged 35–44 years (70.2%)

Current Alcohol Drinking by Sex

- The proportion of current alcohol drinking among males (58.3%) was twice the amount in females (25.0%)

Current Alcohol Drinking by Relationship Status

Persons in visiting relationships represented the group that had the highest alcohol intake. The following shows the proportion of current alcohol use within relationship status categories:

- Visiting relationships: 62.5%
- Married or common-law unions: 38.1%
- Single: 37.0%
- Divorced: 35.3%

A higher proportion of males in visiting relationships currently drank alcohol compared to females

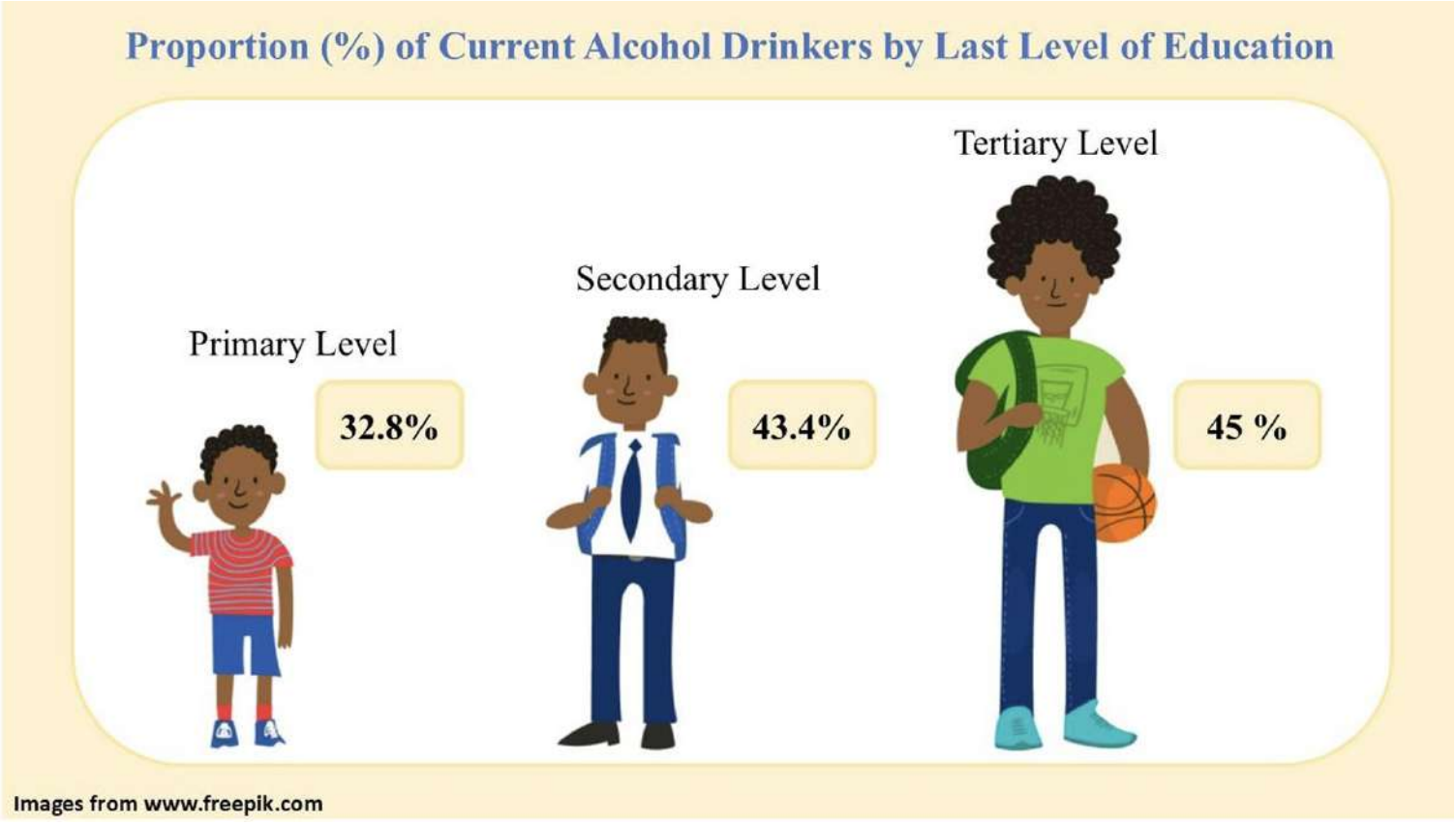
- Males: 8 in 10 (79.0%)
- Females: 5 in 10 (45.3%)

Current Alcohol Drinking by Education

The proportion of current alcohol intake was highest among persons with post-secondary education.

The following shows the proportion of current alcohol use within education level categories:

- Post-secondary education: Almost 1 in 2 (45.0 %)
- Secondary education: Almost 1 in 2 (43.4%)
- Primary education: 1 in 3 (32.8%)



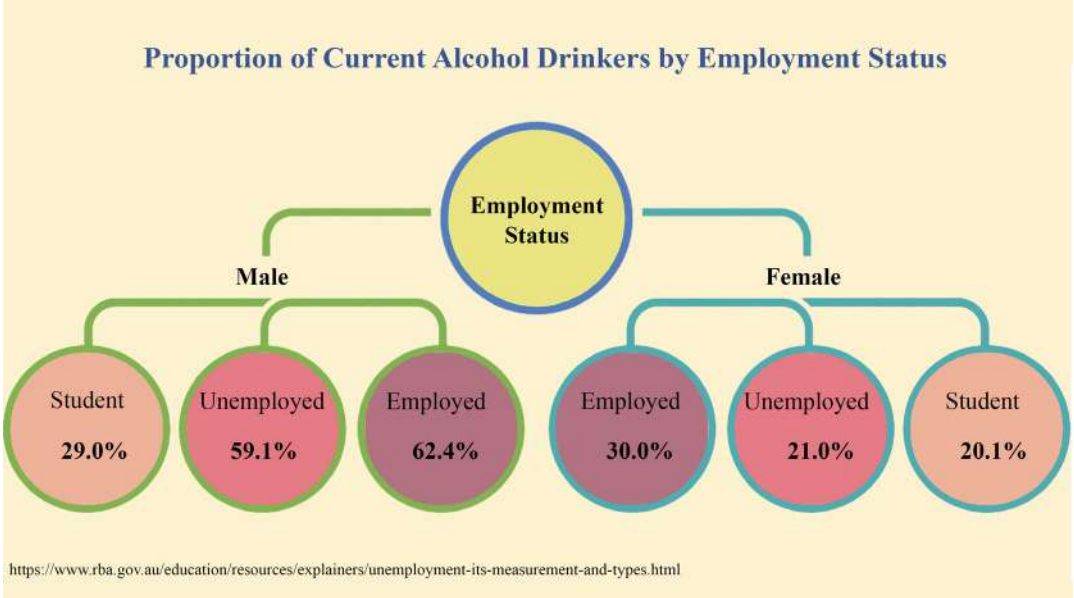
Current Alcohol Drinking by Employment Status

The following shows the proportion of current alcohol use within employment status:

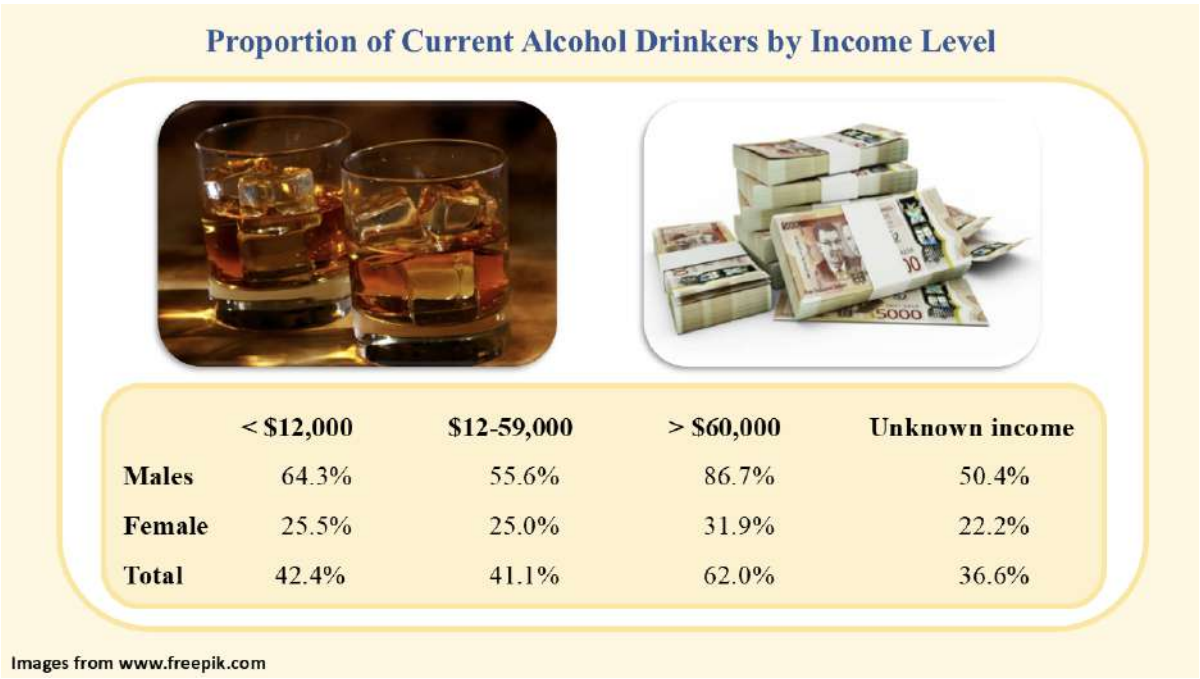
- Employed: 5 in 10 (48.9%)
- Unemployed: 3 in 10 (34.1%)
- Students: 2 in 10 (23.8%)

The proportion of current drinkers among employed males was two times higher than employed females

- Employed males: 6 in 10 (62.4%)
- Employed females: 3 in 10 (30.0%)



Additionally, a higher proportion of persons with household incomes greater than $60,000 per week were current alcohol drinkers



	< $12,000	$12-59,000	> $60,000	Unknown income
Males	64.3%	55.6%	86.7%	50.4%
Female	25.5%	25.0%	31.9%	22.2%
Total	42.4%	41.1%	62.0%	36.6%

Current Alcohol Drinking by Religion

- Compared to other faiths, a higher proportion of Rastafarians consumed alcohol
- 64.4% of Rastafarians were current drinkers compared to 38.9% of Christians and Other religions/non-Christian groups (50.9%)

Heavy Drinking

Heavy Drinking By Sex

- About one in twelve Jamaicans (8.1%) were heavy drinkers
  - o The proportion of heavy drinking was three times higher in males (13.0%) compared with females (3.4%)

Heavy Drinking by Parish

Kingston had the highest proportion of heavy alcohol drinkers

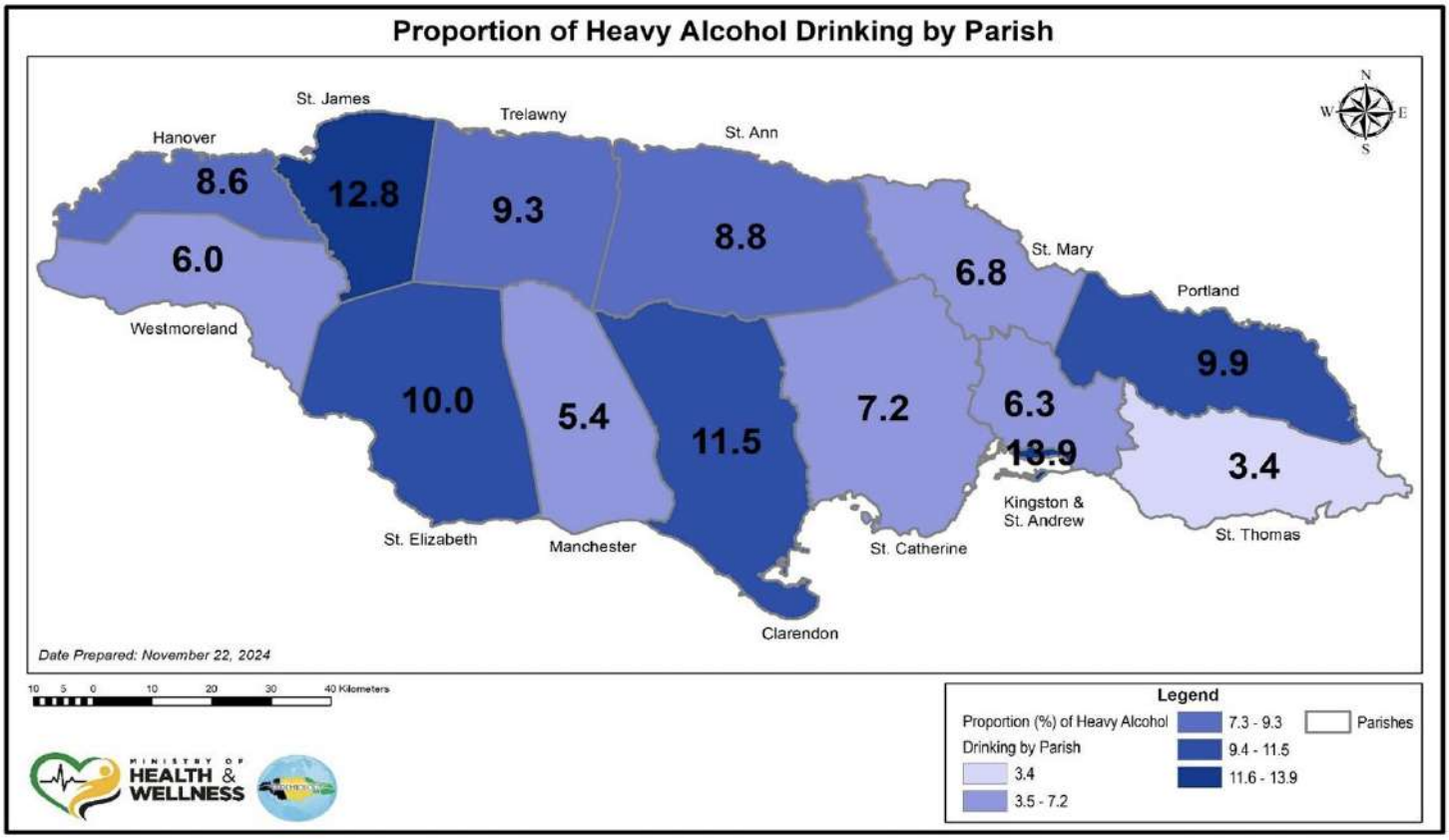
- o 13.9% of Kingston residents were heavy drinkers
- o 14.1% of Kingston residents were binge drinkers

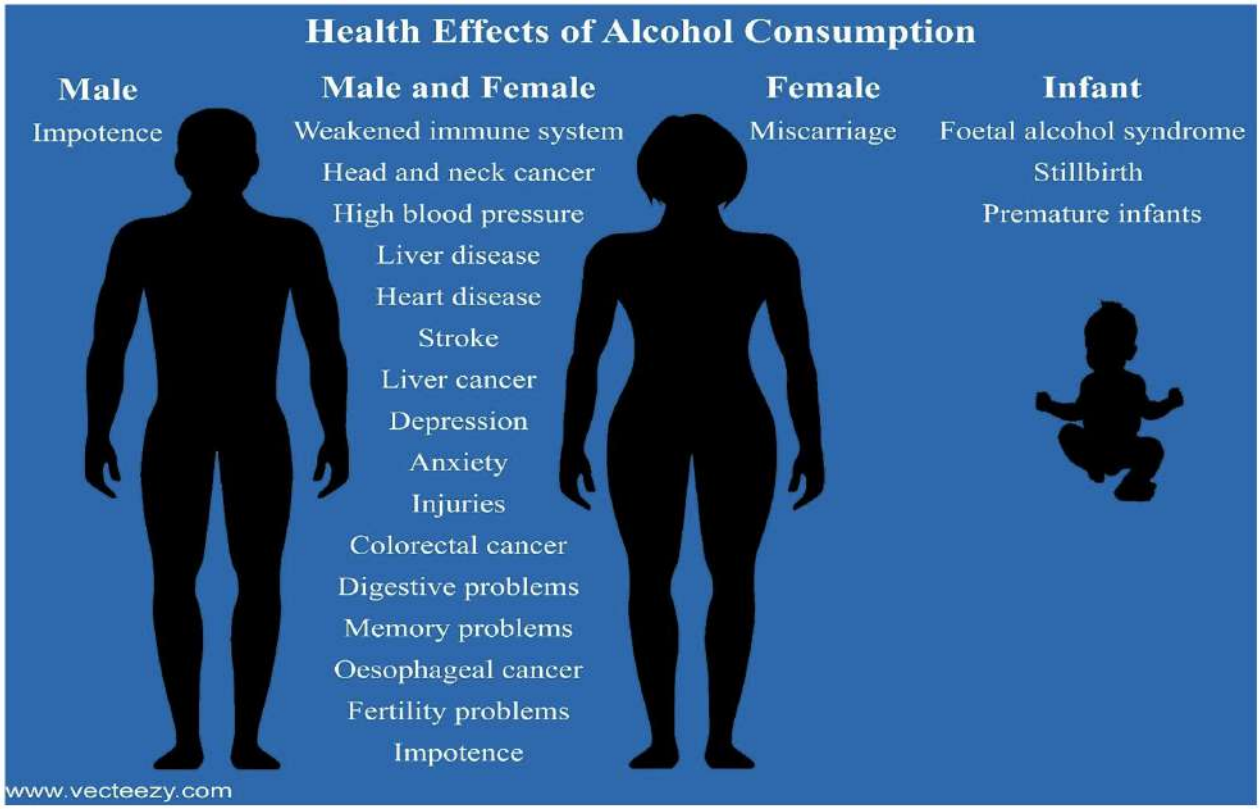
St. James had the second highest proportion of heavy drinkers

- o 12.8% of St. James residents were heavy drinkers
- o 13.6 % of St. James residents were binge drinkers

St. Thomas had the lowest proportion of heavy drinkers

- o 3.4% of St. Thomas residents were heavy drinkers
- o 3.4% of St. Thomas residents were binge drinkers





Source:

1. https://www.cdc.gov/alcohol/about-alcohol-use/index.html
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5. https://pmc.ncbi.nlm.nih.gov/articles/PMC8401155/
6. https://americanaddictioncenters.org/alcohol/risks-effects-dangers/gastrointestinal
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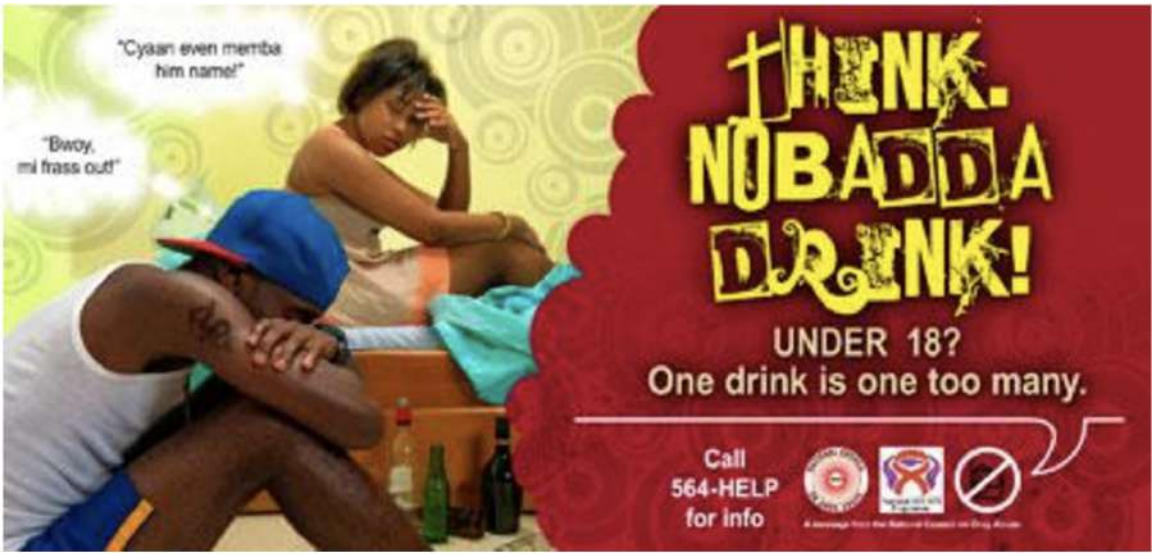

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Skin
BLEACHING

SKIN BLEACHING

Key Findings

- In general, more females than males bleached their skin
- Lifetime skin bleaching was greater among males who were unemployed compared to those who were employed
- Young persons were more likely to bleach their skin compared to older adults
- The parish of Westmoreland had the highest proportion of males and females who bleached their skin
- A greater proportion of males in western parishes bleached their skin. In contrast, skin bleaching was more common among women in south-eastern parishes

What is skin bleaching?

Skin bleaching also known as skin lightening or skin whitening involves the use of various substances or treatments to lighten the skin tone. Skin-bleaching products usually contain ingredients like hydroquinone, mercury, or corticosteroids; and can be used to reduce melanin concentration in the skin [1]. Household products have been used to lighten skin tone [2].

Risk and health concerns

Skin bleaching can have serious side effects, especially when done with unsafe or unregulated products. Risks include[1]:

- Skin thinning
- Increased risk of skin cancer
- Mercury poisoning
- Discoloration (skin may darken in patches)
- Premature aging

Background

It has been reported that more people in the Caribbean are using skin-bleaching products to lighten their skin[1]. Researchers wanted to find out how common skin bleaching was among Jamaicans. Persons were asked to share whether they bleached their skin two weeks prior to the interview or any time before.

- *Current skin bleaching:* was defined as bleaching within two weeks before the interview
- *Past skin bleaching:* happened more than two weeks before the interview
- *Lifetime skin bleaching:* was any history of bleaching, that is, current or past skin bleaching

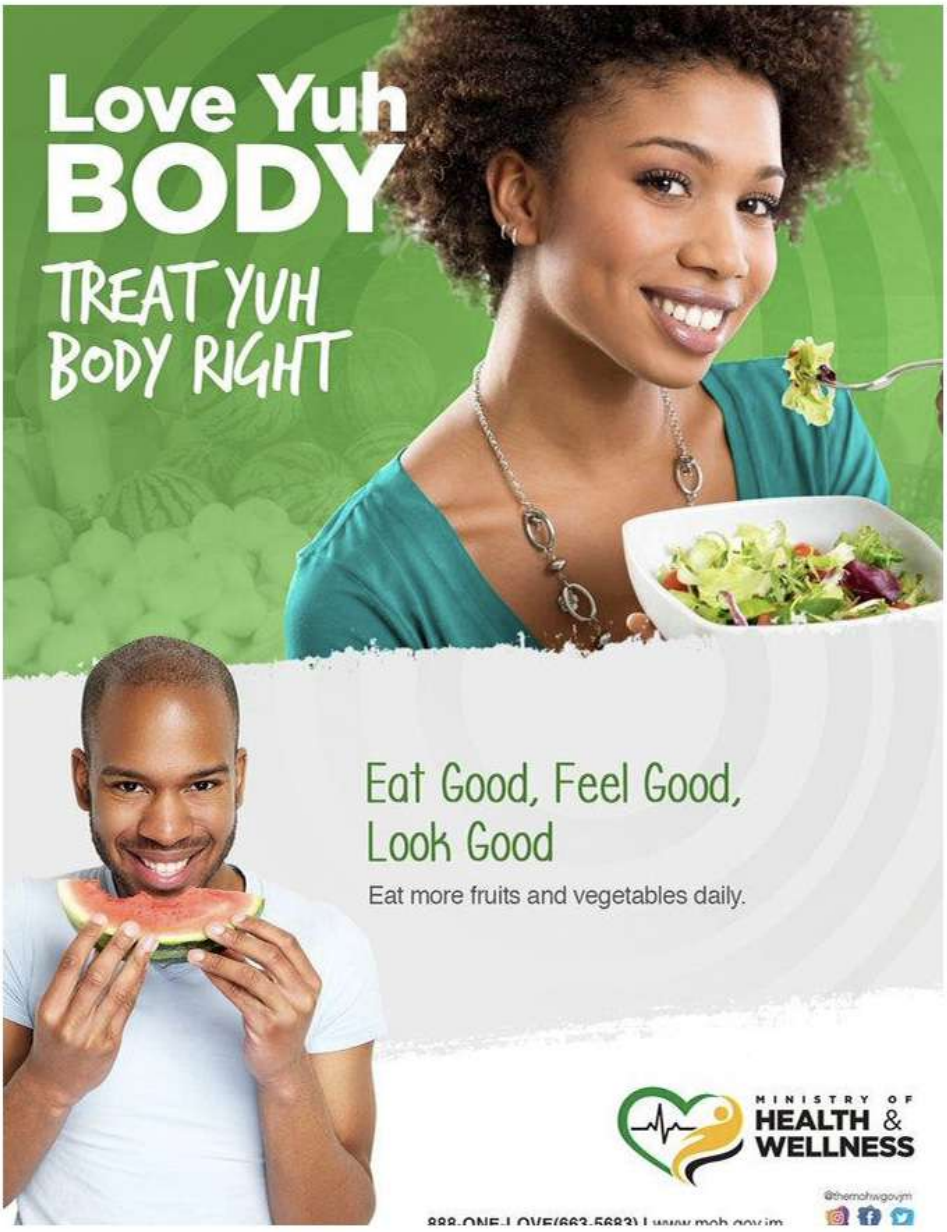
Sources:
1. World Health Organization. Skin bleaching in Africa: a public health problem. Geneva: World Health Organization; 2023 Nov. Available from: https://files.aho.afro.who.int/afahobckpcontainer/production/files/Skin_Bleaching_in_Africa_regional_fact_sheet_Nov23.pdf
2. Lewis KM, Gaska K, Robkin N, Martin A, Andrews E, Williams J. The need for interventions to prevent skin bleaching: A look at Tanzania. Journal of Black Studies. 2012 Oct;43(7):787-805.
3. Younger-Coleman, Novie, Webster-Kerr, Karen, Ferguson, Trevor , McFarlane, Shelly, Grant, Andriene,Bennett, Nadia, Wiggan, Jovan Cunningham-Myrie, Colette, Elias, Nicolas, Francis, Damian, Soares-Wynter, Suzanne,Williams-Lue, Shara, Edwards, Sharmaine E, O'Meally, Vanessa, Govia, Ishtar, Gordon-Strachan, Georgiana Davidson, Tamu, Guthrie-Dixon, Natalie, Charles, Christopher, Wilks, Rainford. Jamaica Health and Lifestyle Survey 2016-17 (JHLSIII). Kingston, Jamaica: Ian Randle Publisher; 2024.

How common is skin bleaching in Jamaica?

Among Jamaicans 15 years and older:

- *Current users:* Approximately 3 in 100 (3.3%) were using skin bleaching products at the time of the study
- *Past users:* About 7 in 100 (7.4%) persons used these products in the past
- *Lifetime history:* About 10 in 100 (10.7%) persons bleached their skin at some time in their lives
- *Non-users:* A greater percentage of men (91.1%) than women (87.5%) said they never used skin bleaching products. In the total population, 89.3% of Jamaicans never bleached their skin

The remainder of this section will focus on lifetime skin bleaching.



Differences in Lifetime Skin Bleaching Between Males and Females

A greater percentage of females (12.4%) than males (8.9%) tried skin bleaching at some point in their lives.

Among males lifetime skin bleaching was greater among the unemployed (18.6%) compared to the employed (5.7%).

Images from www.freepik.com

Differences in Lifetime Skin Bleaching by Age Group

Compared to older persons, young adults were more likely to lighten their skin.

16.7% of persons in the 15-24 year age group bleached their skin in the past.

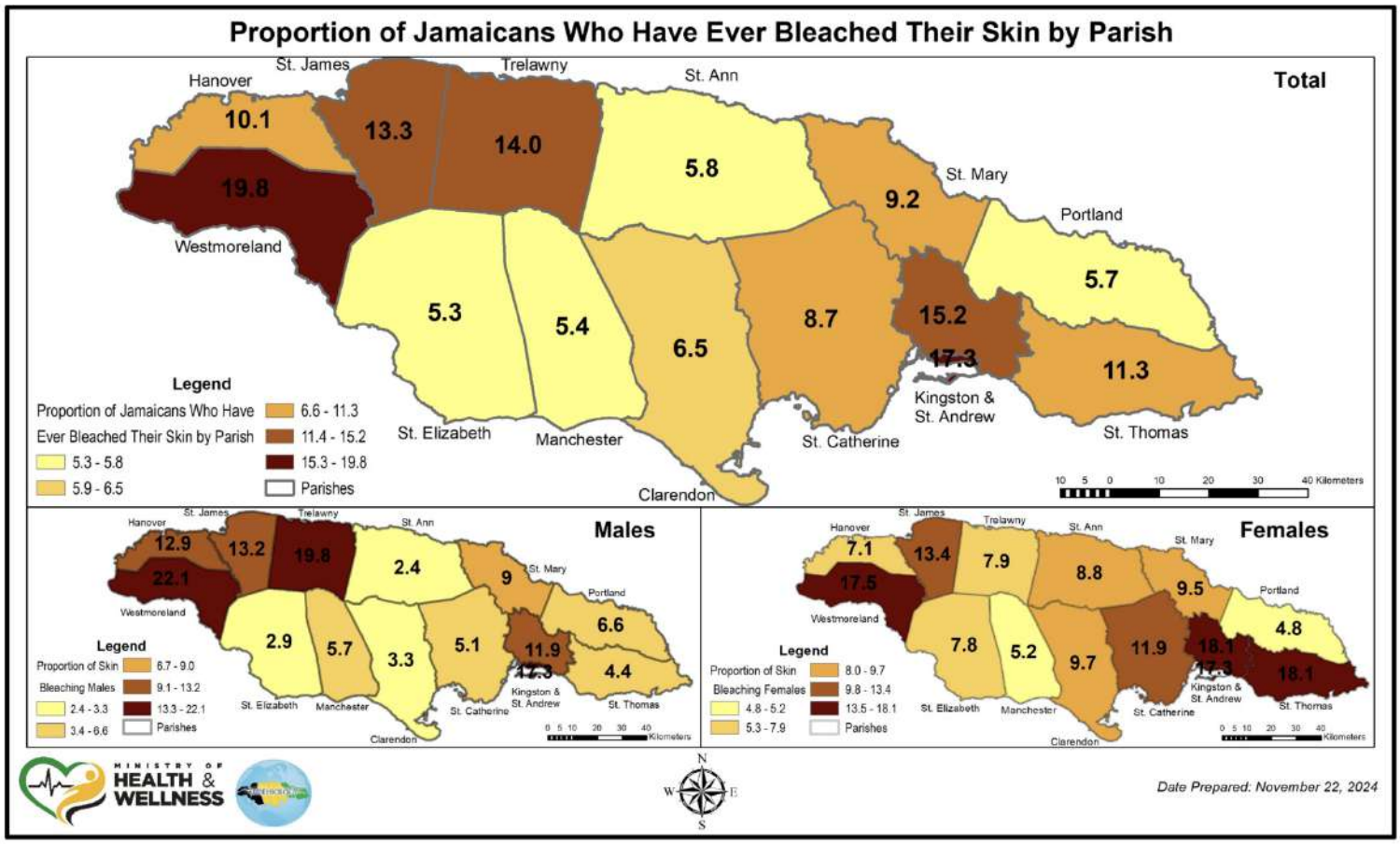
17.9% of persons in the 25-34 year age group bleached their skin in the past.

Less than 1.5% of persons aged 65 and older said they used skin bleaching products at some point in their lives.

Images from www.freepik.com

Differences in lifetime skin bleaching by parish

- *Total population:*
  - o The parishes with the greatest percentage of lifetime skin bleaching were Westmoreland (19.8%), followed by Kingston (17.3%) and St. Andrew (15.2%)
  - o St. Elizabeth (5.3%), Manchester (5.4%) and Portland (5.7%) had the lowest proportion of persons reporting a history of bleaching
- *Sex differences:*
  - o Westmoreland (22.1%) followed by Trelawny (19.8%) and Kingston (17.3%) had the highest percentage of males with a history of skin bleaching
  - o Among females, the greatest proportion of lifetime skin bleaching were found in the parishes of St. Andrew (18.1%), St. Thomas (18.1%) and Westmoreland (17.5%)
  - o Compared to other health regions a greater proportion of males in western parishes bleached their skin. In contrast, skin bleaching was more common among women in south-eastern parishes



Demographic factors

Relationship Status and Lifetime Skin Bleaching

- A greater proportion of persons in visiting relationships bleached their skin compared to those who were single
- Across the total population, skin bleaching was practiced by 23% of persons in visiting relationships, compared to 9% of single persons and 8.5% of individuals who were married or in common law partnerships. Less than 2% of individuals who were divorced or separated (1.3%) said they practiced skin bleaching
- Approximately a quarter (25.8%) of women in visiting relationships used skin bleaching products, compared to 9.8% of single women. Among women who were married or in common law relationships 11.7% bleached their skin.
- Similarly, 19.9% of men in visiting relationships said they bleached their skin, compared to 8.3% of single men. Among men who were married or in common law unions, 4.9% used these products

Religion and Lifetime Skin Bleaching

- Men without a religion (13.1%) tended to bleach their skin more than men who followed Christianity (7.7%) or other religions (4.0%)
- There is no association between lifetime skin bleaching and religious affiliation among females

Socioeconomic status factors

Sex, Employment Status, and Income

- Among males, lifetime skin bleaching was more common among those who were unemployed (unemployed males 18.6% vs employed males 5.7%), and among those whose weekly household income was less than J$12,000 per week (13.0%)
- When income was examined, lifetime skin bleaching was highest among females whose weekly household income was less than J$12,000 (14.8%)

Sex and Educational Status

- For both males and females lifetime skin bleaching was highest among persons with a secondary education
  - o Male: 12.2%
  - o Female: 17.0%
- Females with post-secondary education (3.6%) were least likely to have tried skin bleaching compared to persons with a primary or lower education (8.7%)
- Similarly, males with post-secondary education (2.9%) were least likely to use skin bleaching products compared to those with a primary or lower education (3.6%) or secondary education (12.2%)

MEANS OF TRANSPORTATION

MEANS OF TRANSPORTATION

Key Findings

- Greater than two thirds of Jamaicans used 'public bus/taxi' as their usual means of transportation
- Less than one percent of Jamaicans used a motor bike
- A larger proportion of males versus females reported using a private motor vehicle, motor bike and bicycle
- Use of public bus/taxi was higher in rural versus urban areas
- Use of private motor vehicles increased as number of household possessions and education increased
- More than nine in ten Jamaicans reported ease of access to public transportation

Why are means of transportation important?

The type of transportation used may help to prevent non-communicable diseases by encouraging physical activity by walking or cycling[1].

What did JHLS III find?

Usual Mode of Transportation

- 'Public bus/taxi' was the most common method of transportation used by Jamaicans
  - More than three quarters (76.6%) of Jamaicans used a public bus/taxi
- About one in five Jamaicans (18.2%) used a private motor vehicle
- Less than one percent (0.8%) used a chartered bus/taxi
- About one in hundred (1.2%) Jamaicans rode a bicycle
- About three in one hundred (2.9%) Jamaicans walked

Source:
1. Centers for Disease Control and Prevention. Improving health through transportation policy. CDC transportation recommendations. Available from: https://www.cdc.gov/transportation/index.html. Accessed October 8, 2024.

What did JHLS III find?

Usual Mode of Transportation by Sex

- Public bus/taxi was the most common method of transportation for both males and females. However, a lower percentage of males used this method of transportation (70.5% males vs. 82.8% females)
- A larger proportion of males versus females reported using:
  - A private motor vehicle (23% vs. 13%)
  - A motor bike (0.5% vs. 0.1%)
  - A bicycle (2.2% vs 0.1%).

Usual Mode of Transportation by Area of Residence

- Public bus/taxi was the most common means of transportation in both urban and rural areas. However, use of public bus/taxi was lower in urban versus rural areas (71.3% urban vs 82.5% rural)
- Use of private motor vehicles was higher in urban areas (22.6% urban vs. 13.3% rural)

Usual Mode of Transportation by Number of Household Possessions

- Use of private motor vehicles increased as number of household possessions increased
- More than one third of persons (36.3%) with 10-20 possessions used a private motor vehicle. In contrast, 3% of persons with 0-5 possessions used the same method of transportation

Usual Mode of Transportation by Level of Education

- Use of private motor vehicles increased as level of education increased. Approximately one in two Jamaicans (45.1%) educated to the post-secondary level used a private motor vehicle as their usual means of transport. This compares with one in ten (10.9%) Jamaicans educated to the primary level
- Use of public bus/taxi, walking and bicycles decreased as level of education increased

Ease of Access to Public Transportation

- More than nine in ten (91.3%) Jamaicans reported ease of access to public transportation. However, this differed by areas of residence and level of education
  - o Ease of access to public transportation was more frequently reported by persons in urban versus rural areas (95.6% vs. 86.4%)
  - o Ease of access to public transportation increased as education level increased (89.4% primary or lower vs 95.9% post-secondary)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SELF-REPORTED MEDICAL HISTORY AND HEALTH SEEKING BEHAVIOURS

How family history can contribute to certain health issues

It is important to know if your family members have certain diseases. These conditions can include diabetes, hypertension and some cancers. Knowing this information can help persons take the necessary steps to prevent or manage these conditions. Additionally, it is important that persons are aware of their own health status, and take action[1].

What are some other factors that can contribute to certain health issues?

A few factors that may contribute to the development of disease are[1]:

- Family history
- Genes
- Unhealthy diet
- Physical inactivity
- Smoking
- Excessive alcohol intake
- Air pollution
- Exposure to radiation
- Exposure to toxins and other harmful substances

Source:
1. Younger-Coleman, Novie, Webster-Kerr, Karen, Ferguson, Trevor , McFarlane, Shelly, Grant, Andriene,Bennett, Nadia, Wiggan, Jovan Cunningham-Myrie, Colette, Elias, Nicolas, Francis, Damian, Soares-Wynter, Suzanne,Williams-Lue, Shara, Edwards, Sharmaine E, O'Meally, Vanessa, Govia, Ishtar, Gordon-Strachan, Georgiana Davidson, Tamu, Guthrie-Dixon, Natalie, Charles, Christopher, Wilks, Rainford. Jamaica Health and Lifestyle Survey 2016-17 (JHLSIII). Kingston, Jamaica: Ian Randle Publisher; 2024.

What conditions did Jamaicans say they had?

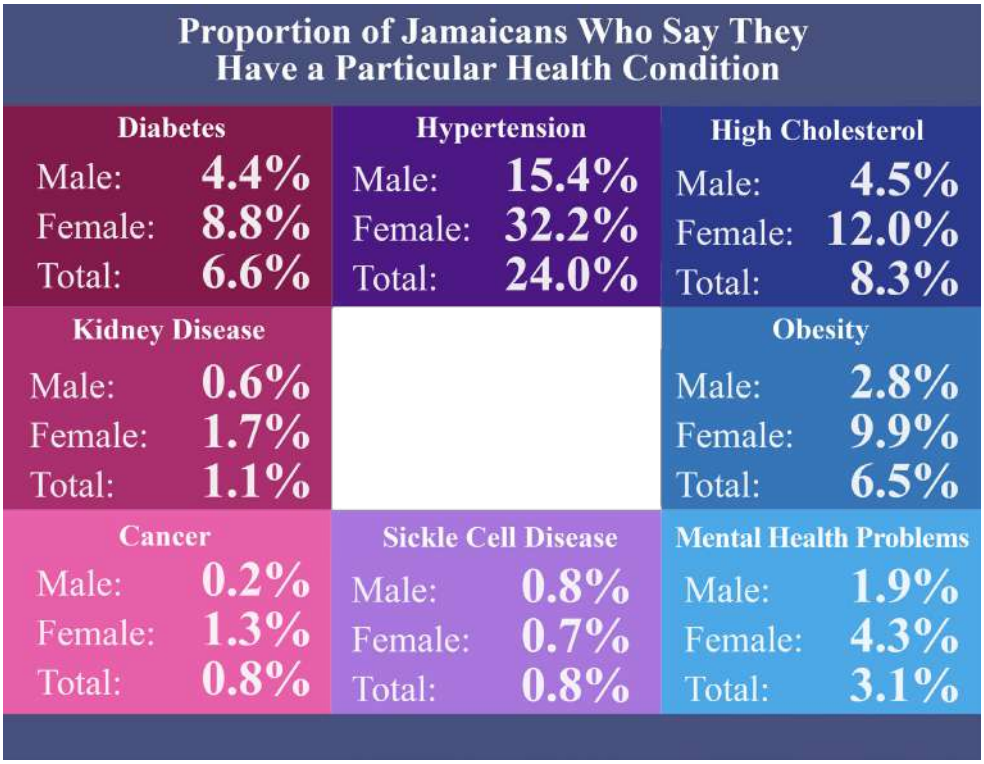


Figure 1: Percent of Jamaicans 15 years and older who say they have a particular health condition
Note: Mental Health Problems include: Depression, Anxiety and Psychosis. High Cholesterol – having too much fat in the blood which can be caused by unhealthy eating and not getting enough exercise among other things.

What percentage of Jamaicans said they had cancer?

A little less than 1% (0.8%) of Jamaicans said they had cancer at some point in their lives. Of this group of participants, 0.2% were males and 1.3% were females. The age groups of persons who said they have ever had cancer were as follows:

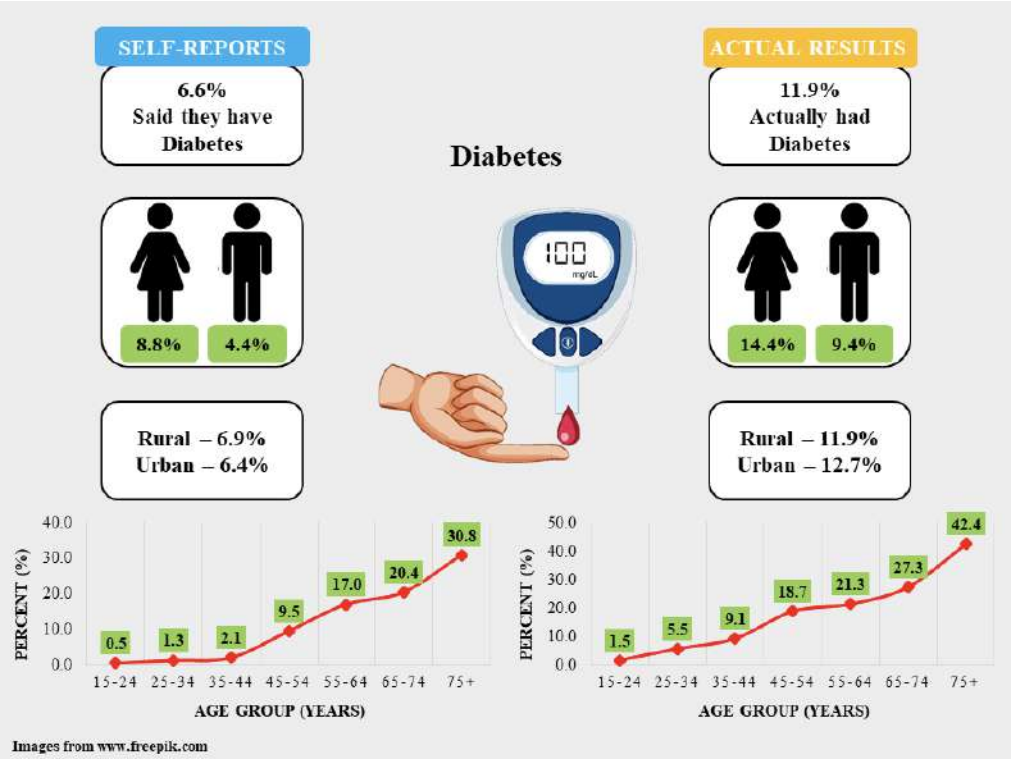
- 35-44 years – 0.7%
- 45-54 years – 0.6%
- 55-64 years – 1.8%
- 65-74 years – 3.8%
- 75 years and older – 3.6%

Reports of cancer increased beginning at age 55 years. No one in the 15-34 year age group said they ever had cancer.

Do persons know whether they have a health condition? Self-reports vs. actual measurements

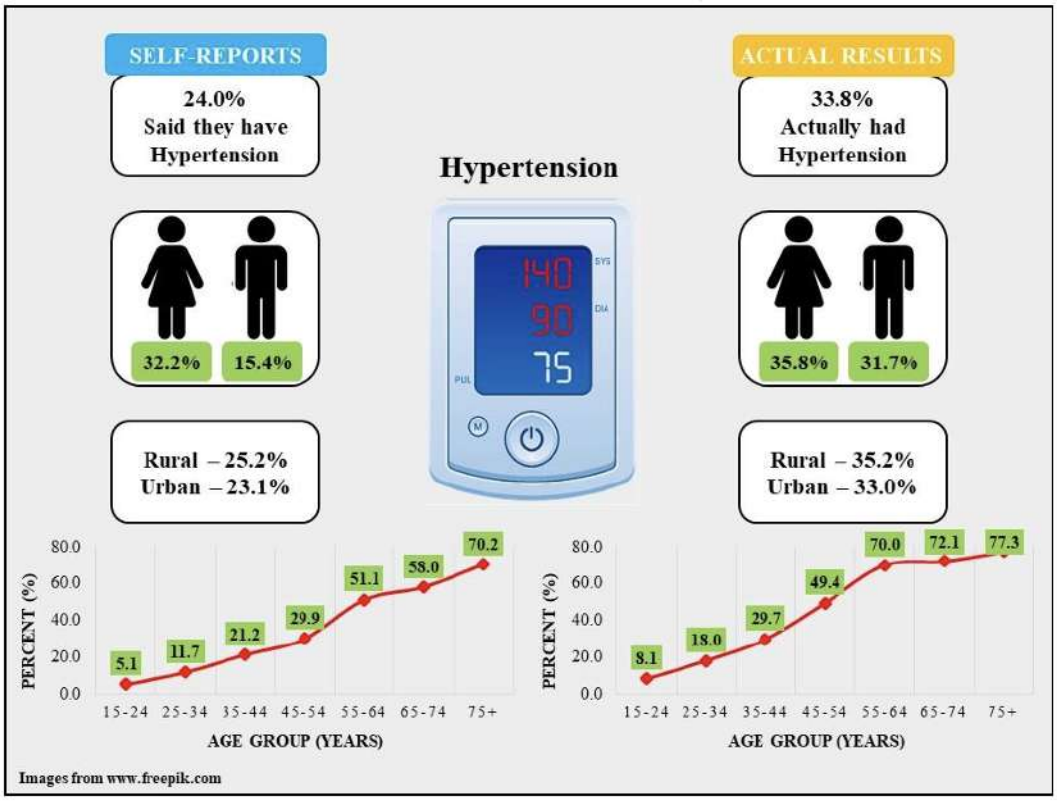
The proportion of Jamaicans that have selected conditions was assessed by both self-report as well as actual measurements. These were obtained from blood and urine tests, as well as, height and weight measurements on a sample of participants. When the proportion of self-reports were compared with actual measurements, a greater percentage of persons were found to have chronic diseases using results obtained from actual measurements. Chronic conditions explored in this analysis were diabetes, hypertension, high cholesterol, kidney disease, obesity and depression. The results suggest that many people did not know their health status. These can be seen below.

Self-Reports vs Actual Results: Diabetes



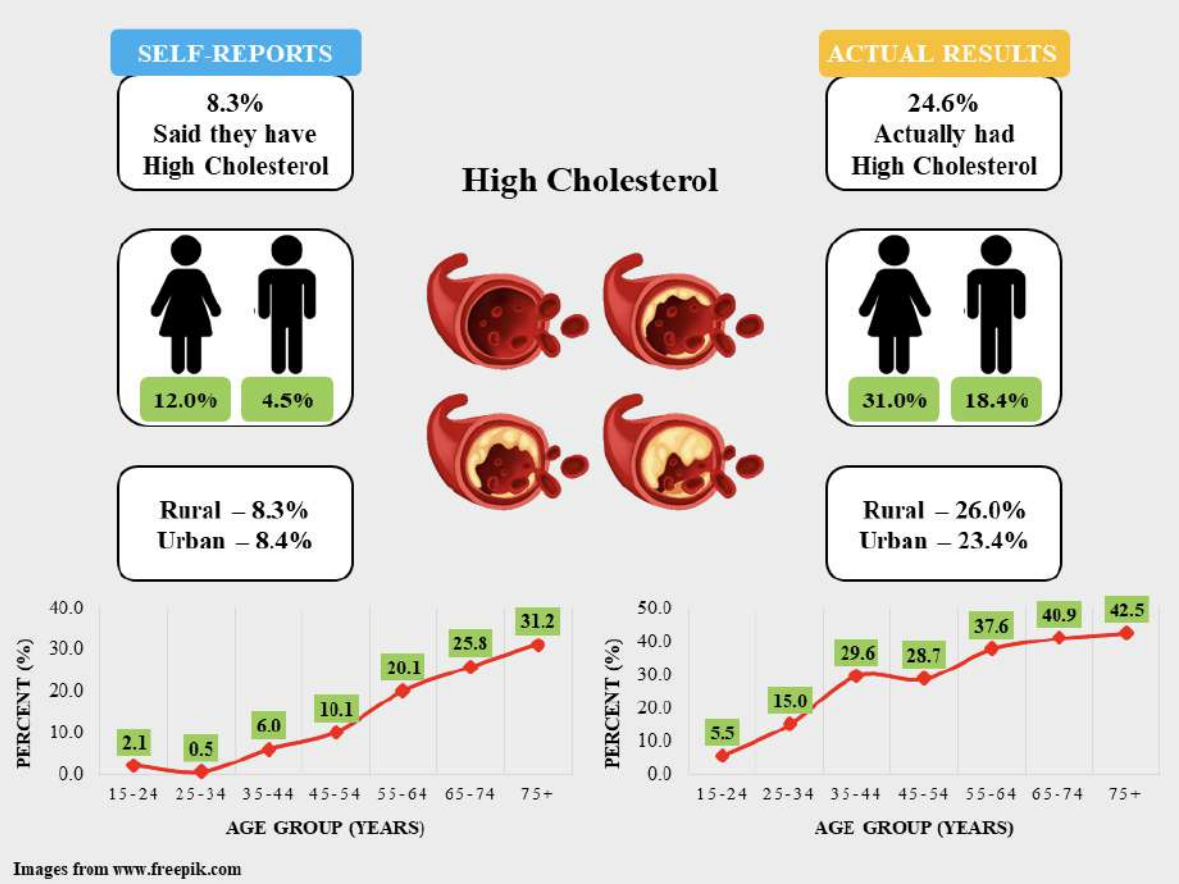
NB: **Self-report:** The percentage of Jamaicans who said they had a health condition, regardless of whether this was confirmed by a test.
Actual measurement: The percentage of Jamaicans whose samples (e.g. blood, urine etc.) were tested and found to have a health condition.

Self-Reports vs Actual Results: Hypertension



NB: **Self-report:** The percentage of Jamaicans who said they had a health condition, regardless of whether this was confirmed by a test.
Actual measurement: The percentage of Jamaicans whose samples (e.g. blood, urine etc.) were tested and found to have a health condition.

Self-Reports vs Actual Results: High Cholesterol



NB: **Self-report:** The percentage of Jamaicans who said they had a health condition, regardless of whether this was confirmed by a test.
Actual measurement: The percentage of Jamaicans whose samples (e.g. blood, urine etc.) were tested and found to have a health condition.

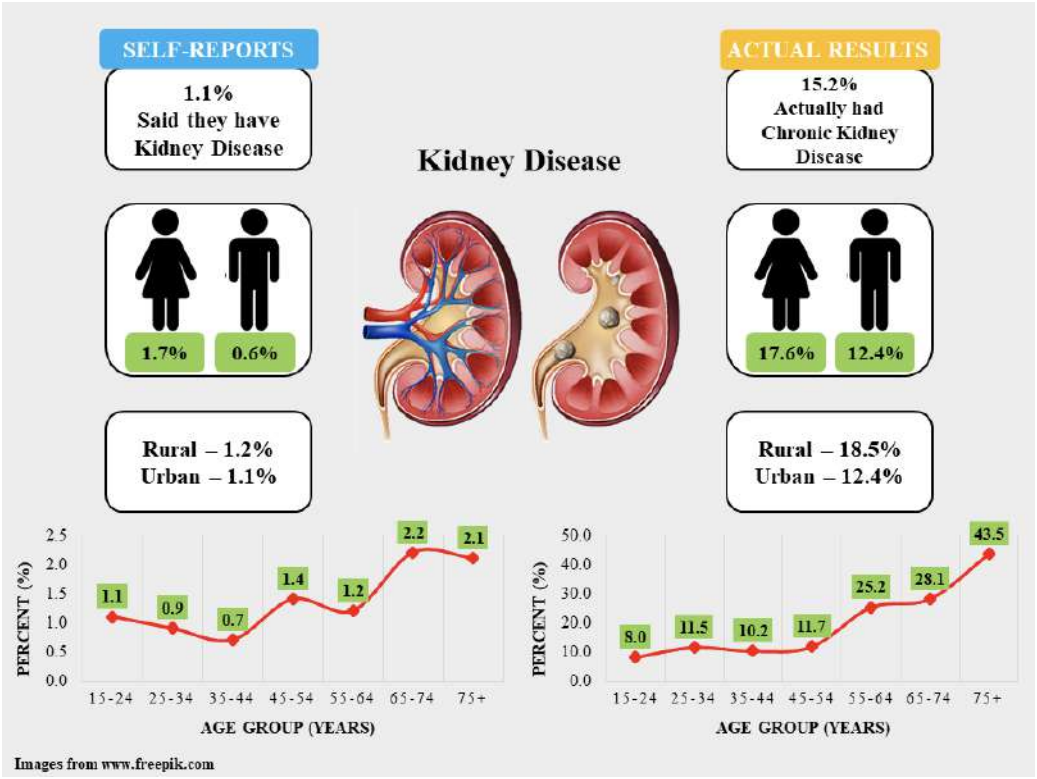
Cholesterol is a fat-like substance that is important for creating hormones and digesting fatty food [1]. However, too much cholesterol can lead to serious health issues, such as heart disease and stroke [2].

What do the results of the blood and urine tests show?

- Although there was no formal statistical comparison done between males and females,
  - Test results show that women had higher cholesterol levels compared to men
  - On average, women also had higher levels of sugar in their blood, as well as larger waist size (88.2 cm females vs. 81.4 cm males) and higher body mass index (29.3 kg/m2 females vs 24.8 kg/m^2 males) compared to men.
  - Men had higher levels of systolic blood pressure than women.

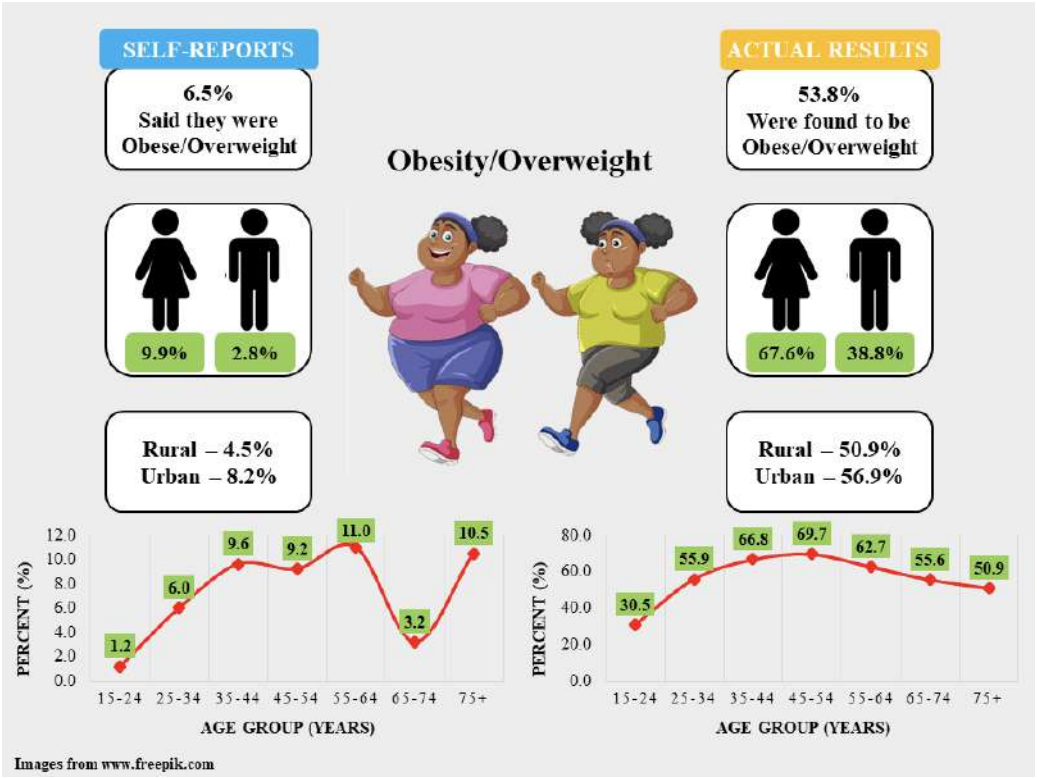
Sources:
1. Centers for Disease Control and Prevention. About cholesterol. Cholesterol [Internet]. Atlanta, Georgia: Centers for Disease Control and Prevention; [cited 2024 Dec 13]. Available from: https://www.cdc.gov/cholesterol/about/index.html#:~:text=What%20it%20is,Blood%20cholesterol%20is%20a%20waxy%2C%20fat%2Dlike%20substance%20made%20by,the%20blood%20cholesterol%20it%20needs.
2. World Health Organization. Raised cholesterol. The Global Health Observatory [Internet]. Geneva, Switzerland: World Health Organization; [cited 2024 Dec 13]. Available from: https://www.who.int/data/gho/indicator-metadata-registry/imr-details/3236

Self-Reports vs Actual Results: Kidney Disease



NB: **Self-report:** The percentage of Jamaicans who said they had a health condition, regardless of whether this was confirmed by a test.
Actual measurement: The percentage of Jamaicans whose samples (e.g. blood, urine etc.) were tested and found to have a health condition.

Self-Reports vs Actual Results: Obesity/Overweight



NB: **Self-report:** The percentage of Jamaicans who **said** they had a health condition, regardless of whether this was confirmed by a test.
Actual measurement: The percentage of Jamaicans whose samples (e.g. blood, urine etc.) were tested and found to have a health condition.

During the survey persons were asked whether they had a mental health problem. This included conditions such as major depression, anxiety and psychosis.

Self-report

The proportion of persons who reported having a mental health problem are as follows:

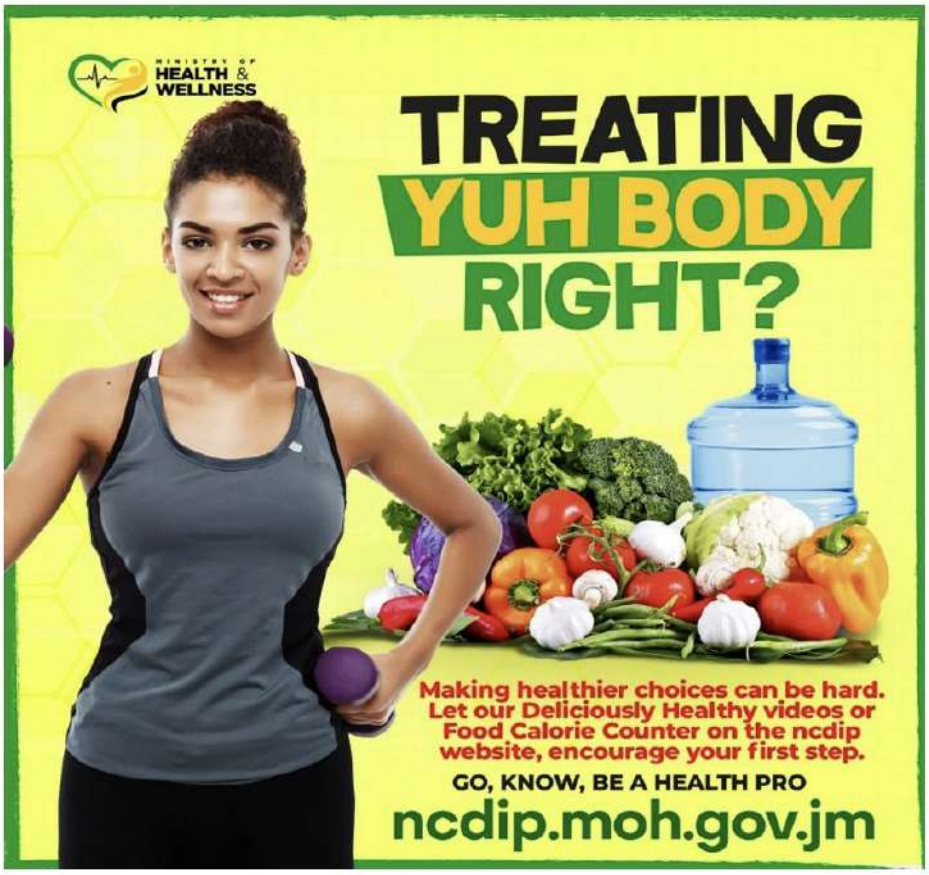
- Total Population: 3.1%
  - Males: 1.9%
  - Females: 4.3%
- Urban 3.2%
- Rural 3.0%
- Age 75 years and older: 5.4% (the highest reported percentage in age categories)
- Age 55 - 64 years: 1.1% (the lowest reported percentage in age categories)

Actual measurement:

The proportion of persons who had depression were as follows:

- Total Population: 14.3% (1 in 7 Jamaicans)
  - Males: 9.9% (1 in 10 Jamaican men)
  - Females: 18.5% (1 in 5 Jamaican women)

More females than males considered suicide (6.5% females vs. 2.2% males), while 2.1% of females and 0.5% males actually tried committing suicide.



MINISTRY OF HEALTH & WELLNESS

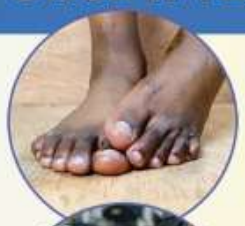
Diabetes Control Checklist

ASK YOUR DOCTOR OR NURSE ABOUT:

- ☐ The medication you are taking
- ☐ Your blood pressure
- ☐ Your blood sugar record
- ☐ Checking your weight
- ☐ Checking your feet
- ☐ Healthy eating habits
- ☐ Your exercise prescription

ASK YOUR DOCTOR OR NURSE FOR AN HbA1c TEST AT LEAST TWICE A YEAR.

ONCE A YEAR YOU SHOULD HAVE:



A COMPLETE FOOT EXAM
This will tell you if the nerves in your feet are working right.

LIPID PROFILE BLOOD TEST
This looks for fat in your blood, which can cause heart and circulation problems.

URINE TEST (microalbumin test)
This will help to detect early signs of kidney disease.

EYE EXAM
This will tell if there are any problems that need further treatment to prevent blindness.

Understand Diabetes & Take Control!

For further information:
Visit your doctor or nearest Health Centre ***OR***
Ministry of Health & Wellness
Website: www.moh.gov.jm

For additional support contact the **Diabetes Association of Jamaica:**

876-927-6774

876-862-3870 / 876-397-6021

diabetes.drs@gmail.com
diabetesclinicja@gmail.com
diabetesclinicja@yahoo.com

daj.thedirectiveedge.com

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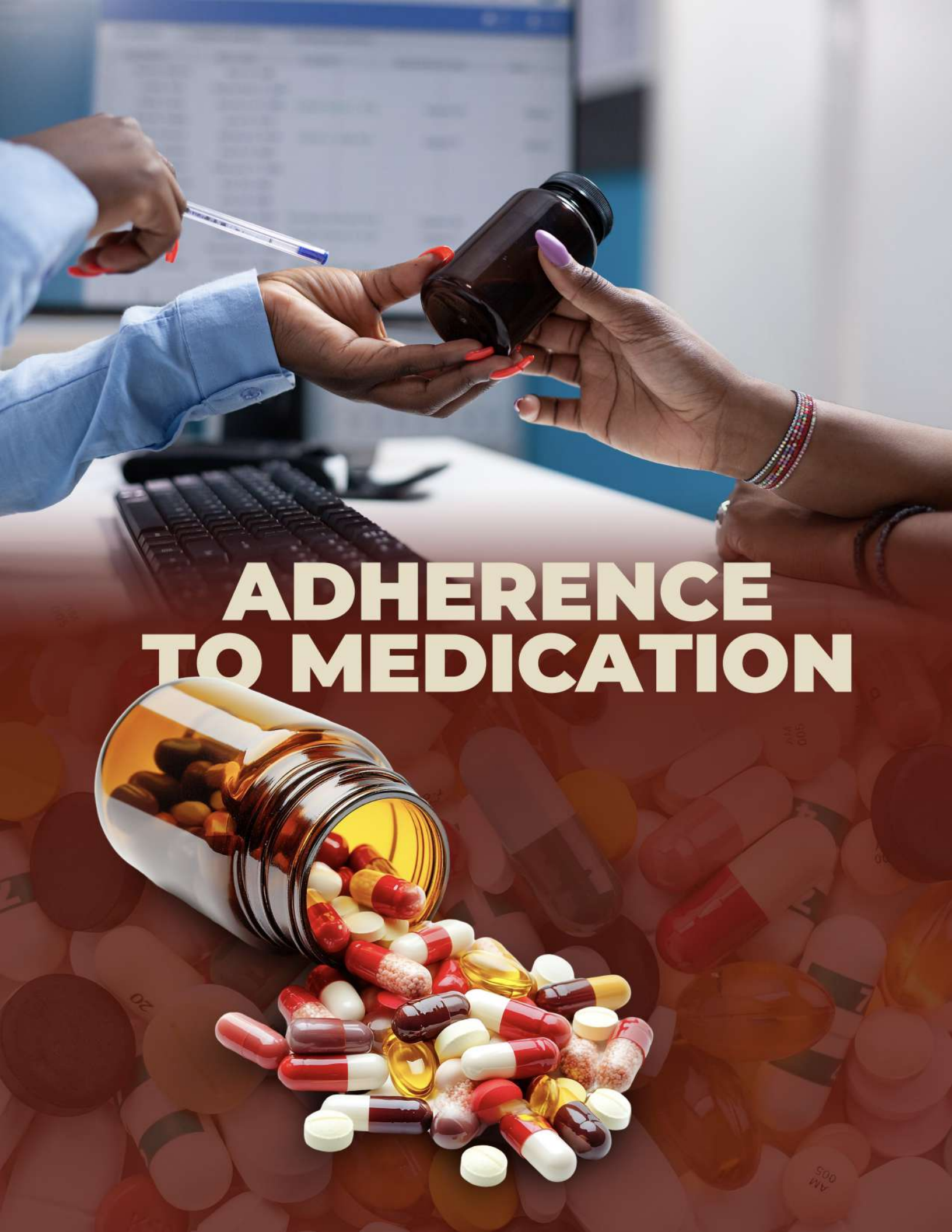
ADHERENCE TO MEDICATION

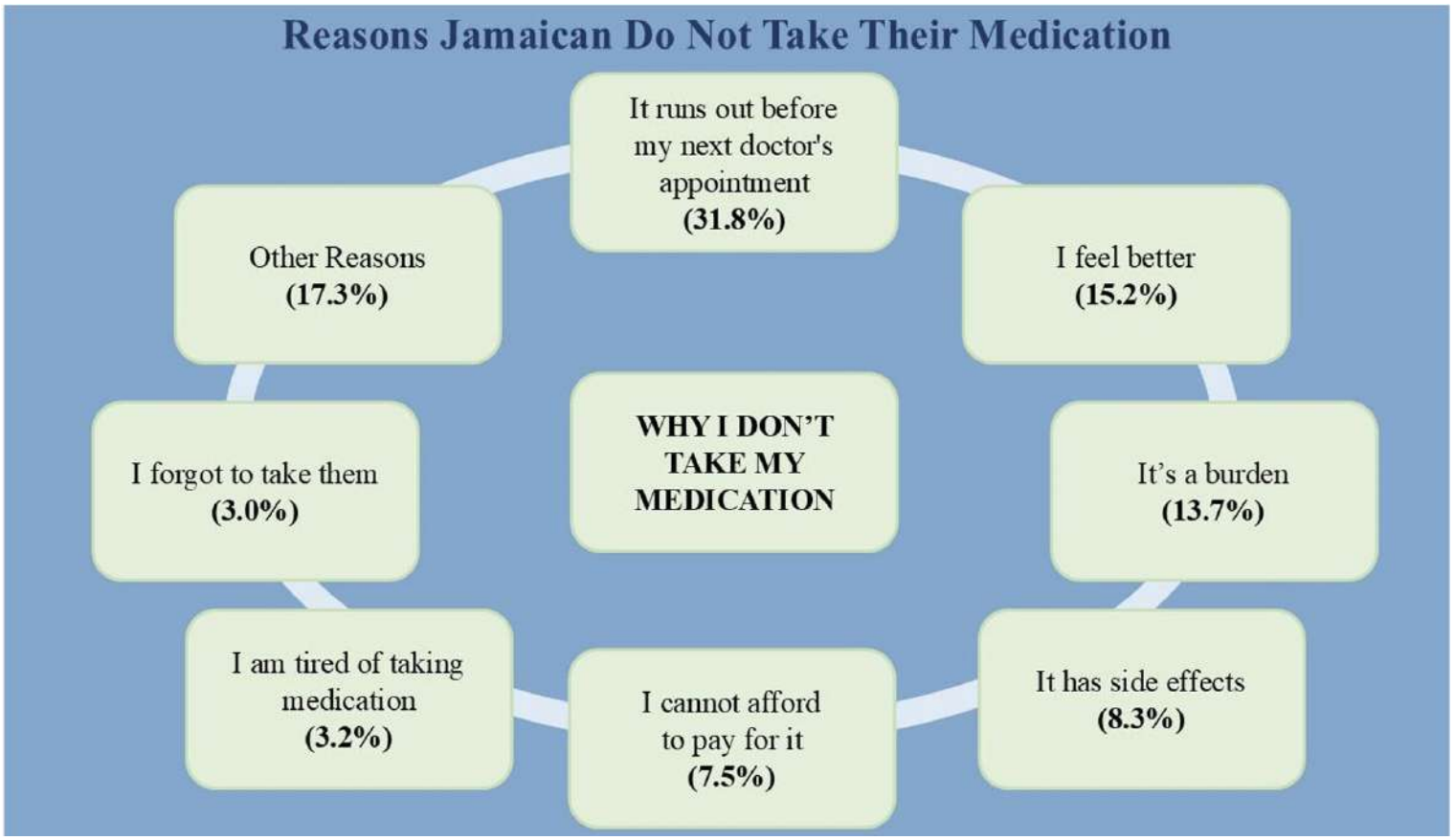


Adherence to Medication
Key Findings

- About half of Jamaicans who were on medication said they always took it
- More males than females reported that they always took their medication
- The main reason cited for not taking medication was that it ran out before the next doctors appointment
  - Other common reasons for not taking medication were: 'I feel better', 'It's a burden' and 'It has side effects'

Images from www.freepik.com

Reasons some Jamaicans do not take their medication – Quantitative findings



How often do Jamaicans take their medication?

- About half (46.0%) of Jamaicans who are on medication said they always took it
- More males (52.3%) than females (42.4%) said they always took their medication
- More persons living in rural (49.3%) compared to urban (42.9%) communities said they always took their medication

Reasons some Jamaicans do not take their medication

Reasons Females Did Not Take Their Medication:

Almost one in five (18.1%) females in the 45 - 54 year age group stopped taking their medication due to side effects.

- The majority of females in all age categories stopped taking their medication as it ran out before their next doctor's appointment
- Greater than one-third (37.7%) of females aged 25 - 34 years stopped taking their medication because they felt better. This compares to 7.3% of females aged 55 - 64 years who stopped taking their medication for the same reasons

Reasons Males Did Not Take Their Medication:

More males than females said:

- They could not afford their medication (14.9% vs. 4.1%)
- It was a burden (23.9% vs. 9.0%)
- More males younger than 35 years of age said that they ran out of medication before their next doctor or clinic visit
- Most of those 70 years and older believed it was a burden and so they did not take their medication
- The main reason males 45-54 years stopped taking their medication was because they believed they felt better and no longer needed it
- Less than 10% of all males except in the 45 - 64 years age group felt that the medications were just too expensive and so they could not afford to pay for it

Reasons by Age Group

- Almost sixty percent (55.9%) of persons aged 15 - 24 years said they did not take their medication because they ran out of it before their next doctor or clinic visit
- Another reason was that they just simply forgot to take it (8.5%)
- For those aged 25 - 34 years, the main reasons they gave were that they felt better (34.9%), the medication had side effects (15.3%) and they were tired of taking medications (10.2%)
- Of persons aged 45 - 64 years who did not take their medication 9.2% said it was too expensive

Qualitative findings

Who were the participants?

This involved thirty (30) persons who were placed in four (4) focus groups and asked how they felt about medication. These persons were selected from the participants of the quantitative study. They were also to tell whether they took their medication as often as the doctor said they should, and give reasons that could prevent them from doing so. Additionally, they were asked to share reasons they felt could be used (or they have used) to prevent them from getting NCDs or to reduce the effects of the ones they already had. The persons from each of the four (4) groups lived within urban communities and were from the working class. The four groups as well as the total persons in each of them can be seen in the figure below:

Focus Groups of Women or Mixed Groups including Women

These were:

- Only women with NCDs - 9
- Mixed groups of women with NCD and another person from the household - 8

Focus Groups of Men or Mixed Groups including Men

These were:

- Only men with NCDs - 6
- Mixed groups of men with NCD and another person from the household - 7

The Four (4) Focus Groups and the total number of persons in each group.
NB: Persons in the groups with **only men** and **only women** were 35 to 59 years old while those in the mixed groups were 18 years and older.

Why did they use focus groups and not interview persons by themselves?

Focus groups were used versus individual interviews because persons may more likely share their attitudes, feelings and beliefs in a group rather than individual setting [1].

Why did persons choose not to take their medication?

- some persons shared that the medication **made them sleepy** and so they did not take it as often as they should.
- others felt it **made them feel worse** and more sick than before they started taking it.
- some men who were supposed to take medication for believed it **made them have a weaker sex drive.** As a result, they believed they would lose their women and their reputation would be destroyed.
- women shared that sometimes **they felt so stressed and did not remember to take it** or even think about it.

Source:
1. Younger-Coleman, Novie, Webster-Kerr, Karen, Ferguson, Trevor , McFarlane, Shelly, Grant, Andriene,Bennett, Nadia, Wiggan, Jovan Cunningham-Myrie, Colette, Elias, Nicolas, Francis, Damian, Soares-Wynter, Suzanne,Williams-Lue, Shara, Edwards, Sharmaine E, O'Meally, Vanessa, Govia, Ishtar, Gordon-Strachan, Georgiana Davidson, Tamu, Guthrie-Dixon, Natalie, Charles, Christopher, Wilks, Rainford. Jamaica Health and Lifestyle Survey 2016-17 (JHLSIII). Kingston, Jamaica: Ian Randle Publisher; 2024.

Why do some persons choose natural remedies instead of their medication?

They do not trust medications and it is expensive and sometimes unavailable:

- Some persons felt that the medication doctors prescribe is bad for them and will "kill off people", and so they prefer to make their own natural remedies.
- Other persons thought that natural remedies were cheaper than the medication doctors prescribe
- Some thought natural remedies were more available because sometimes they cannot find the medication they were told to take.

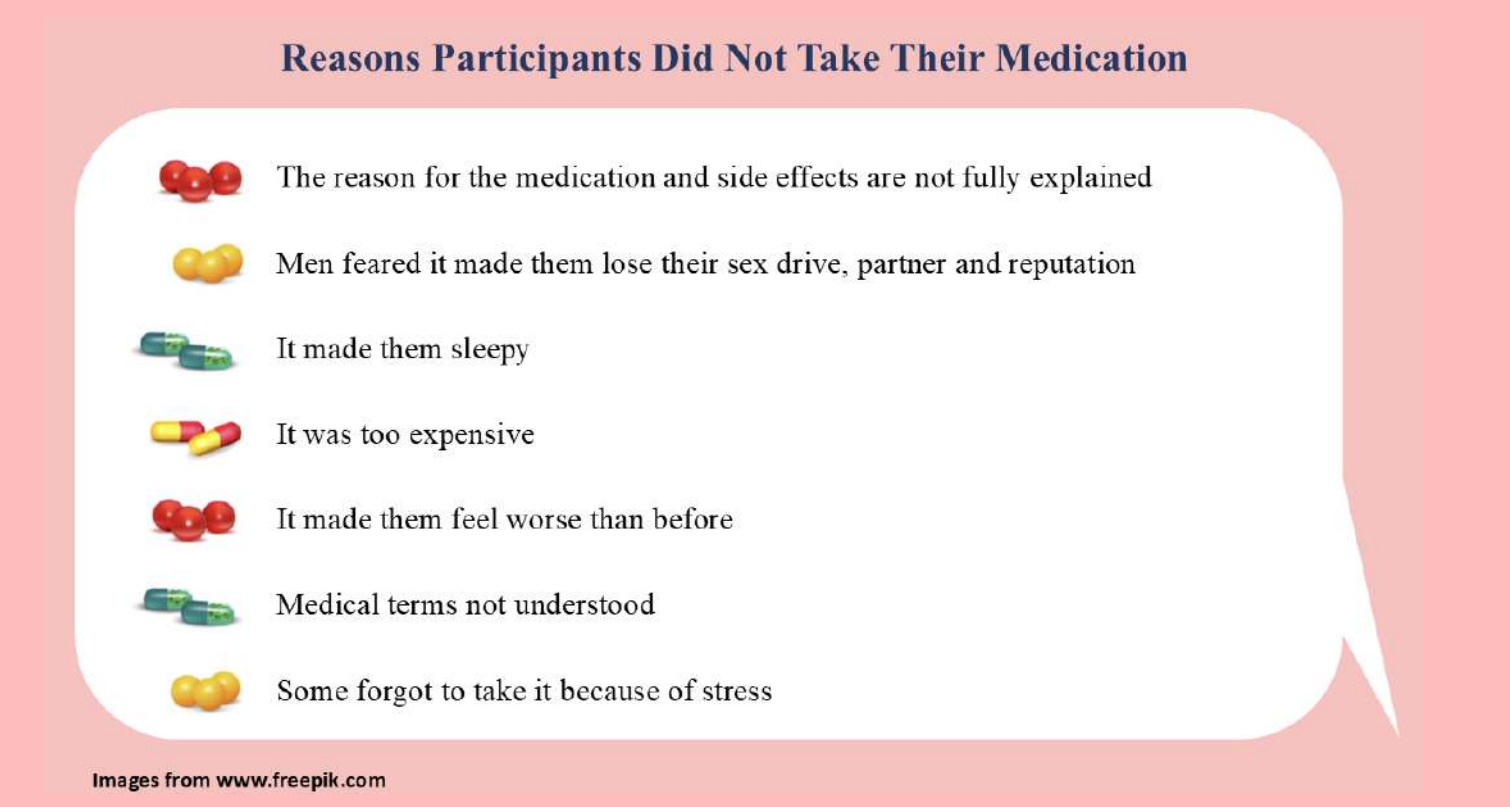
They do not understand medical terms doctors use:

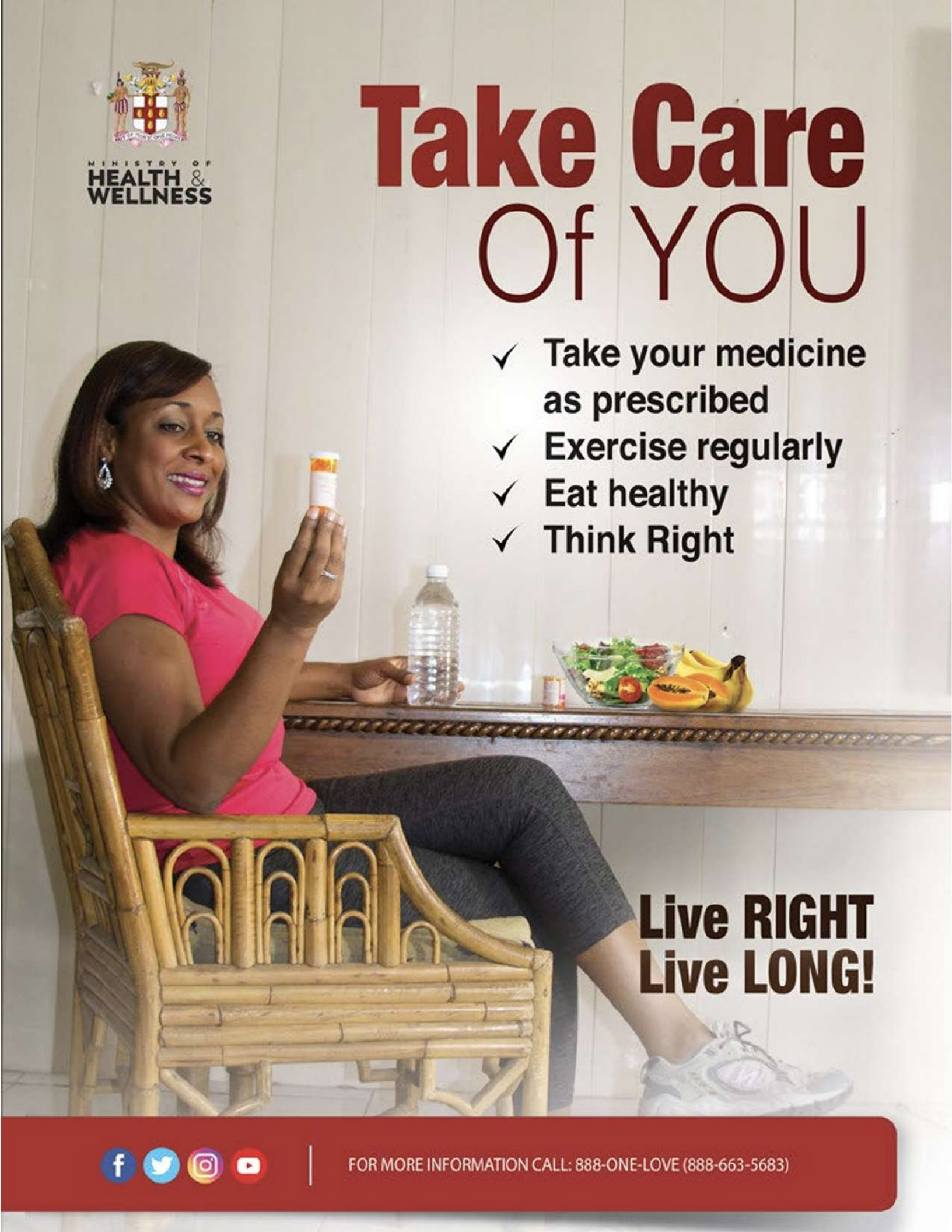
- Some persons do not understand medical terms used by doctors.
  - o For example, some women did not understand what "medical adherence" meant.

Doctors do not explain the purpose of the medication or possible side effects:

- Some men felt that doctors do not explain the purpose of the medication, as well as possible side effects.
  - o They stated that if the purpose of the medications or any possible side effects were clearly explained, they would not be so afraid to take them.

Reasons Participants Do Not Take Their Medication – Qualitative Findings

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✓ Exercise regularly
✓ Eat healthy
✓ Think Right
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DISABILITIES

Disabilities

According to the CDC a disability is "any condition of the body or mind (impairment) that makes it more difficult for the person with the condition to do certain activities (activity limitation) and interact with the world around them (participation restrictions)". [1]

There are physical disabilities such loss of limbs, sensory (related to senses) such as loss of sight and mental and or intellectual disabilities such as learning developments [2]. Disabilities may include those that affect a person's:

- Vision
- Movement
- Thinking
- Remembering
- Learning
- Communicating
- Hearing
- Mental health
- Social relationships

According to the World Health Organization, disability has three dimensions:[3]

1. **Impairment** in a person's body structure or function, or mental functioning; examples of impairments include loss of a limb, loss of vision or memory loss
2. **Activity limitation,** such as difficulty seeing, hearing, walking, or problem solving
3. **Participation restrictions** in normal daily activities, such as working, engaging in social and recreational activities, and obtaining health care and preventive services

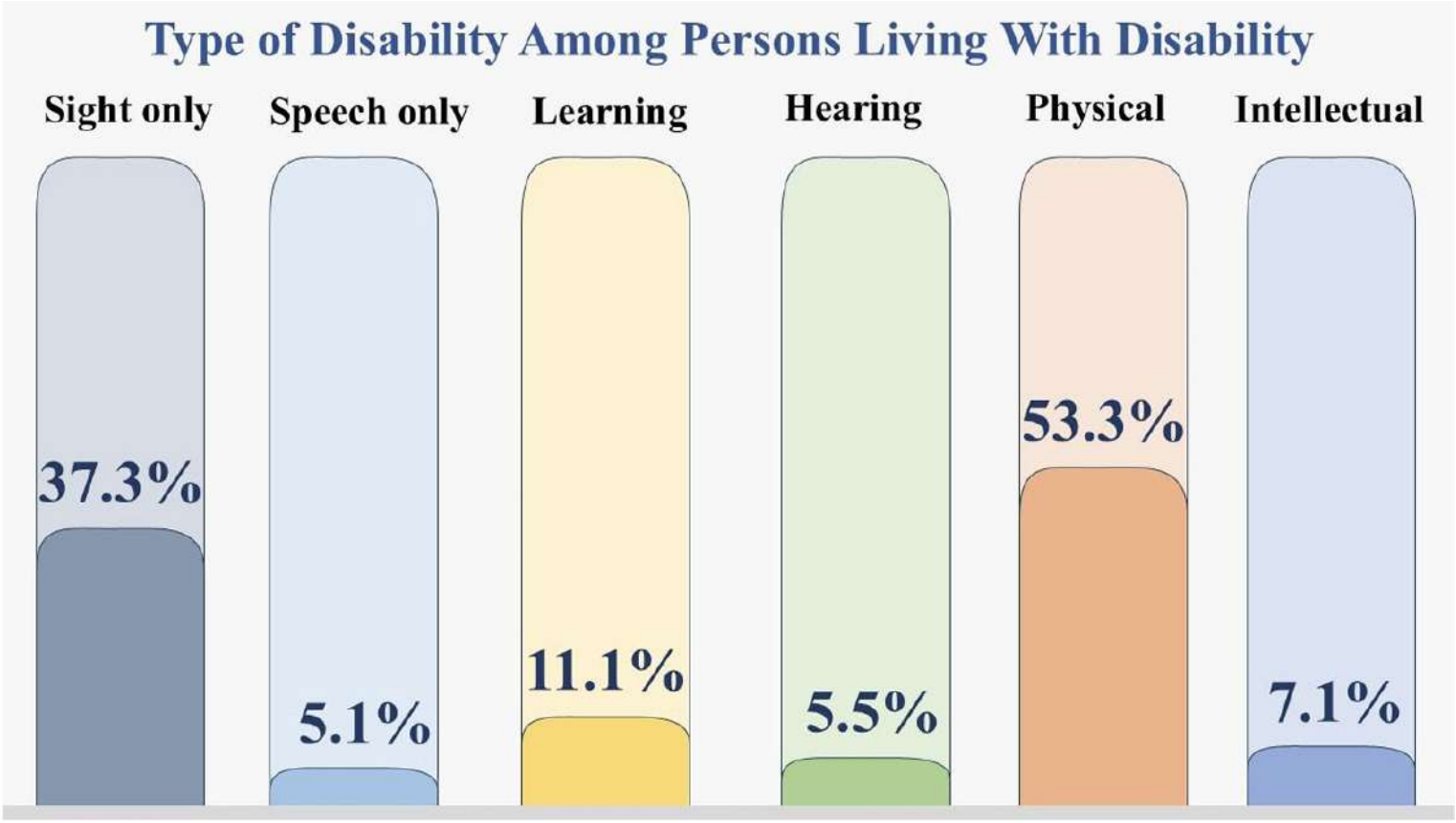
Sources:
1. Centers for Disease Control and Prevention. Disability and health [Internet]. Atlanta: CDC; 2023 [cited 2023 Dec 13]. Available from: https://www.cdc.gov/ncbddd/disabilityandhealth/disability.html#ref
2. I Am Able: Situational Analysis of Persons with Disabilities in Jamaica. Kingston (Jamaica): UNICEF, Digicel Foundation, Jamaica Council for Persons with Disabilities; 2018 [cited 2023 Dec 13]. Available from: https://www.unicef.org/jamaica/media/2221/file/I%20Am%20Able:%20Situational%20Analysis%20of%20Persons%20with%20Disabilities%20in%20Jamaica.pdf
3. World Health Organization. International classification of functioning, disability and health (ICF) [Internet]. Geneva: World Health Organization; 2001 [cited 2023 Dec 13]. Available from: https://www.who.int/standards/classifications/international-classification-of-functioning-disability-and-health

Any Disability

- One in thirty (3.3%) Jamaicans reported having any disability
- Having any disability varied by age, household possessions and education
- Among age groups, the highest proportion of any disability was found in persons aged 65 years and older
  o Five times more (12.3%), elderly persons (>65 years) had a disability compared to Jamaicans aged 15 - 24 years (2.4%)
- Among education levels, persons educated to the primary level or lower had the highest proportion of any disability
  o Education level: Primary or lower 8.0%, secondary 2.2%, and tertiary 1.2%
- Among those who reported number of household possessions, persons with the lowest number of household possessions had the highest proportion of any disability
  o Household possessions: 0 - 5 items 7.3%, 6 - 9 items 2.7%, and 10 - 20 items 0.7%

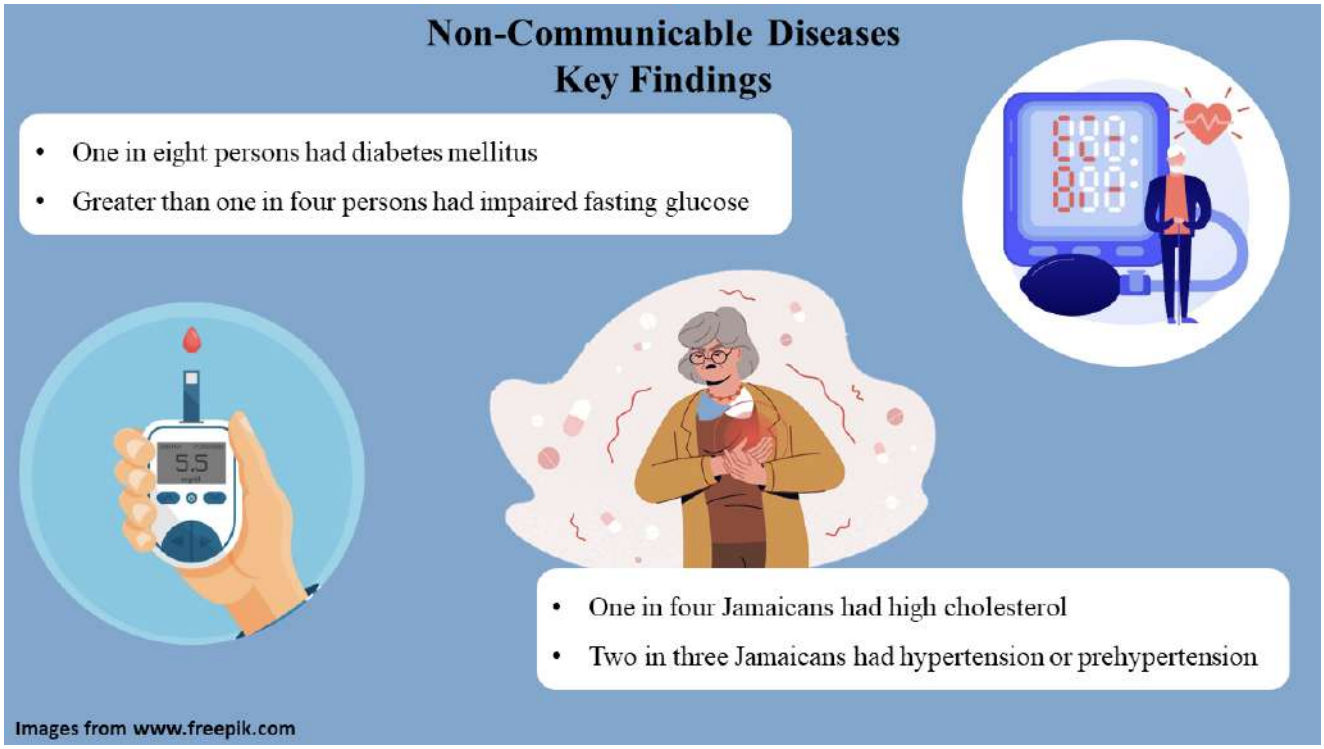
Types of Disabilities

- Physical disabilities such as loss of limb was the most common disability (53.3%) among persons with disabilities
- Among persons with disabilities, loss of sight only (37.3%) was the next highest disability



Proportion of Persons with any Disability among Jamaicans 15 Years or Older			
Socio-demographic Characteristic	Total	Male	Female
Any disability	3.3%	4.2%	2.4%
Age:			
15-24 Years	2.4%	3.1%	1.7%
25-64 Years	2.2%	2.9%	1.4%
65+ Years	12.3%	14.4%	10.0%
Household Possessions:			
0-5 items	7.3%	8.2%	6.2%
6-9 items	2.7%	3.6%	1.8%
10-20 items	0.7%	1.2%	0.2%
Highest Education Level			
Primary or lower	8.0%	8.7%	7.1%
Secondary	2.2%	2.9%	1.5%
Tertiary	1.2%	2.0%	0.6%
Other	2.0%	0.9%	2.5%

NON-COMMUNICABLE DISEASES



What are non-communicable diseases?

Non-communicable diseases (NCDs) occur over a long period of time and are not caused by an immediate infection[1]. These diseases result in long-term health consequences and often create a need for long-term treatment and care[1]. The main types of NCDs include cardiovascular diseases, cancers, chronic respiratory diseases and diabetes[2]. Injuries and mental health disorders are also considered NCDs[1].

NCDs are caused by genetic, and environmental factors, as well as lifestyle choices or behaviours. These can be broken down as follows:

Risk Factors for NCDs	
Tobacco Use	Raised blood pressure
Physical inactivity	Overweight/Obesity
Unhealthy diet	Hyperglycemia (raised blood sugar)
Harmful use of alcohol	Hyperlipidemia (high levels of fat in the blood)

Source:
1. Pan American Health Organization. Non-communicable diseases [Internet]. Available from: https://www.paho.org/en/topics/noncommunicable diseases#:~:text=The%20term%20NCDs%20refers%20to,diabetes%20and%20chronic%20lung%20illnesses. Accessed November 18, 2024.
2. World Health Organization. Non-communicable diseases [Internet]. Available from: https://www.who.int/news-room/fact-sheets/detail/noncommunicablediseases. Accessed November 12, 2024.

What are some of the NCDs that the JHLS III measured?

The JHLS determined the levels of specific NCDs and risk factors in the Jamaican population:

NCD/Condition	Description
Diabetes Mellitus	Insulin is a hormone that helps to control blood sugar levels. Diabetes mellitus occurs when the body becomes resistant to insulin or does not make enough insulin. This results in high levels of sugar in the blood. High blood sugar levels over time result in damage to the heart, eyes, kidneys and nerves[1].
Prehypertension	Prehypertension occurs when the blood pressure is a little above normal, but has not been diagnosed as hypertension. A systolic blood pressure of 120-139 mm Hg and a diastolic blood pressure of 80-89 mm Hg is considered prehypertension. Prehypertension will most likely progress to hypertension if left untreated[2].
Hypertension	Occurs when the pressure in the blood vessels becomes too high. A blood pressure of 140/90 mm Hg is considered hypertension. If high blood pressure is uncontrolled this may lead to heart disease, stroke and kidney damage[2].
Heart Attack	Occurs when the flow of blood that brings oxygen to the heart suddenly becomes blocked. This leads to inadequate supply of oxygen to the heart. The heart muscle will begin to die if this situation is not addressed immediately[3].
Stroke	Occurs when the blood supply to the brain is blocked or when a blood vessel to the brain bursts[4]. This can lead to brain damage, disability or death[4].
Chronic Kidney Disease	Kidneys are organs in the body that filter the blood to remove waste and excess fluid. This is then removed from the body in the urine. Chronic kidney disease results from the gradual loss of kidney function. If left untreated dangerous levels of waste and fluid can build up in the body[5].
Hyperlipidemia	Results from elevated lipid or fat levels in the body. Lipids in the body include cholesterol and triglycerides[6]. Cholesterol is fat-like substance produced by the liver which plays a role in digesting hormones and making fatty acids[7]. Triglycerides come from the food that we eat or from excess calories that are stored as triglycerides in fat cells in the body[8]. Hyperlipidaemia may lead to heart disease or stoke.

Sources:
1. World Health Organization. Diabetes [Internet]. Available from: https://www.who.int/health-topics/diabetes#tab=tab_1.
2. Pan American Health Organization. Hypertension [Internet]. Available from: https://www.paho.org/en/topics/hypertension#:~:text=Systolic%20pressure%20between%20120%20and,develop%20into%20high%20blood%20pressure.
3. National Heart Lung and Blood Institute. What is a heart attack? [Internet]. Available from: https://www.nhlbi.nih.gov/health/heart-attack.
4. Centers for Disease Control and Prevention. About stroke [Internet]. Available from: https://www.cdc.gov/stroke/about/index.html#:~:text=A%20stroke%2C%20sometimes%20called%20a,term%20disability%2C%20or%20even%20death. 5. Pan American Health Organization. Chronic kidney disease [Internet]. Available from: https://www.paho.org/en/topics/chronic-kidney-disease.
6. Hill MF, Bordoni B. Hyperlipidemia. [Updated 2023 Aug 8]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2024 Jan-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK559182/.
7. Centers for Disease Control and Prevention. About cholesterol. Cholesterol [Internet]. Available from: https://www.cdc.gov/cholesterol/about/index.html.
8. National Heart Lung and Blood Institute. High blood triglycerides [Internet]. Available from: https://www.nhlbi.nih.gov/health/high-blood-triglycerides.

Why are NCDs important?

NCDS are leading causes of sickness and death, globally regionally and locally. They are also a main cause of premature mortality. NCDs account for the top 5 leading causes of death in Jamaica [1]. In 2020, a 30 year-old individual living in Jamaica had a 21% chance of dying from four major NCDs before reaching 70 years of age (The NCD Vitals [2].

What did the JHLS find?

Details regarding the prevalence of NCDs and risk factors have been published [3]. In summary, selected study findings are given on the following page:

Sources:
1. Ministry of Health and Wellness, Jamaica. Non-communicable diseases [Internet]. Kingston: Ministry of Health and Wellness; [cited 2023 Dec 13]. Available from: https://ncdip.moh.gov.jm/non-communicable-disease/

2. Younger-Coleman, Novie, Webster-Kerr, Karen, Ferguson, Trevor , McFarlane, Shelly, Grant, Andriene,Bennett, Nadia, Wiggan, Jovan Cunningham-Myrie, Colette, Elias, Nicolas, Francis, Damian, Soares-Wynter, Suzanne,Williams-Lue, Shara, Edwards, Sharmaine E, O'Meally, Vanessa, Govia, Ishtar, Gordon-Strachan, Georgiana Davidson, Tamu, Guthrie-Dixon, Natalie, Charles, Christopher, Wilks, Rainford. (2024). Jamaica Health and Lifestyle Survey 2016-17 (JHLSIII). Kingston, Jamaica: Ian Randle Publisher; 2024.

3. Ministry of Health and Wellness, Jamaica. Vitals: NCDs MOHW April 2023. Kingston: Ministry of Health and Wellness; 2023 [cited 2024 Dec 13]. Available from: https://www.moh.gov.jm/wp-content/uploads/2023/07/Vitals-NCDs-MOHW-April-2023-1.5.23.pdf

Proportion (%) of Jamaicans aged 15 Years and Older with Non-Communicable Diseases (NCDs)			
Category	**Total**	**Male**	**Female**
Diabetes mellitus	11.9%	9.4%	14.4%
Impaired Fasting Glucose	27.5%	28.0%	27.0%
Hypertension	33.8%	31.7%	35.8%
Pre hypertension	34.0%	43.0%	25.7%
Chronic Kidney Disease	15.2%	12.4%	17.6%
High Cholesterol, Dyslipidaemia	24.6%	18.4%	31.0%
Heart attack	0.42%	0.52%	0.31%
Stroke	1.30%	1.01%	1.15%

HYPERTENSION : WHAT DO THE NUMBERS MEAN?

160+ / 100+ **Stage 2** Severe Hypertension (CRISIS)

140-159 / 90-99 **Stage 1** Hypertension

120-139 / 80-89 **Considered Pre-Hypertension**
This means you are at risk of developing hypertension

Your blood pressure is NORMAL!
Have it checked at least once a year to be sure it stays within the normal range

<120 / <80

HYPERTENSION

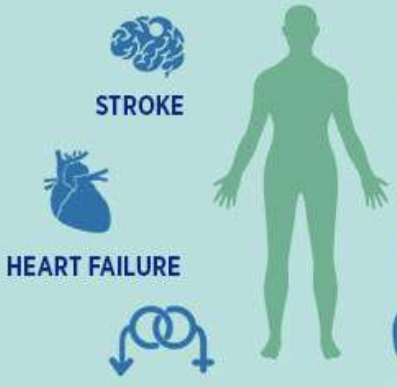
is called a 'silent killer' because persons whose blood pressure is elevated or high usually don't have any symptoms.

SYMPTOMS OF SEVERE HIGH BLOOD PRESSURE:

- SEVERE HEADACHE
- BLURRY VISION
- IRREGULAR HEARTBEAT
- FATIGUE OR CONFUSION
- SHORT OF BREATH
- CHEST PAIN
- NOSE BLEEDS OR BLOOD IN THE URINE

COMMON RISK FACTORS

COMPLICATIONS OF HYPERTENSION



HOW TO REDUCE MY RISK

EAT HEALTHY

REDUCE ALCOHOL INTAKE

REDUCE SALT INTAKE

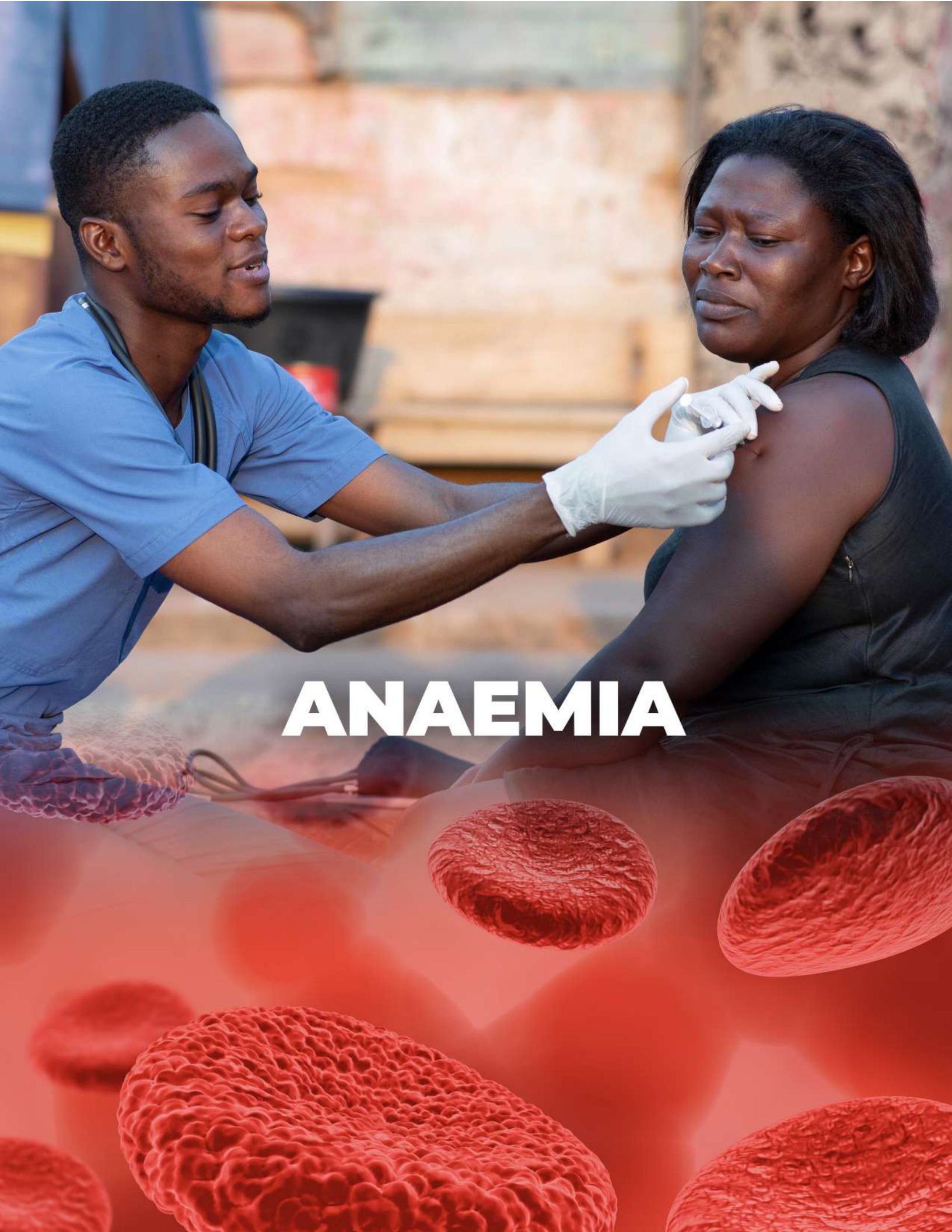
NO SMOKING

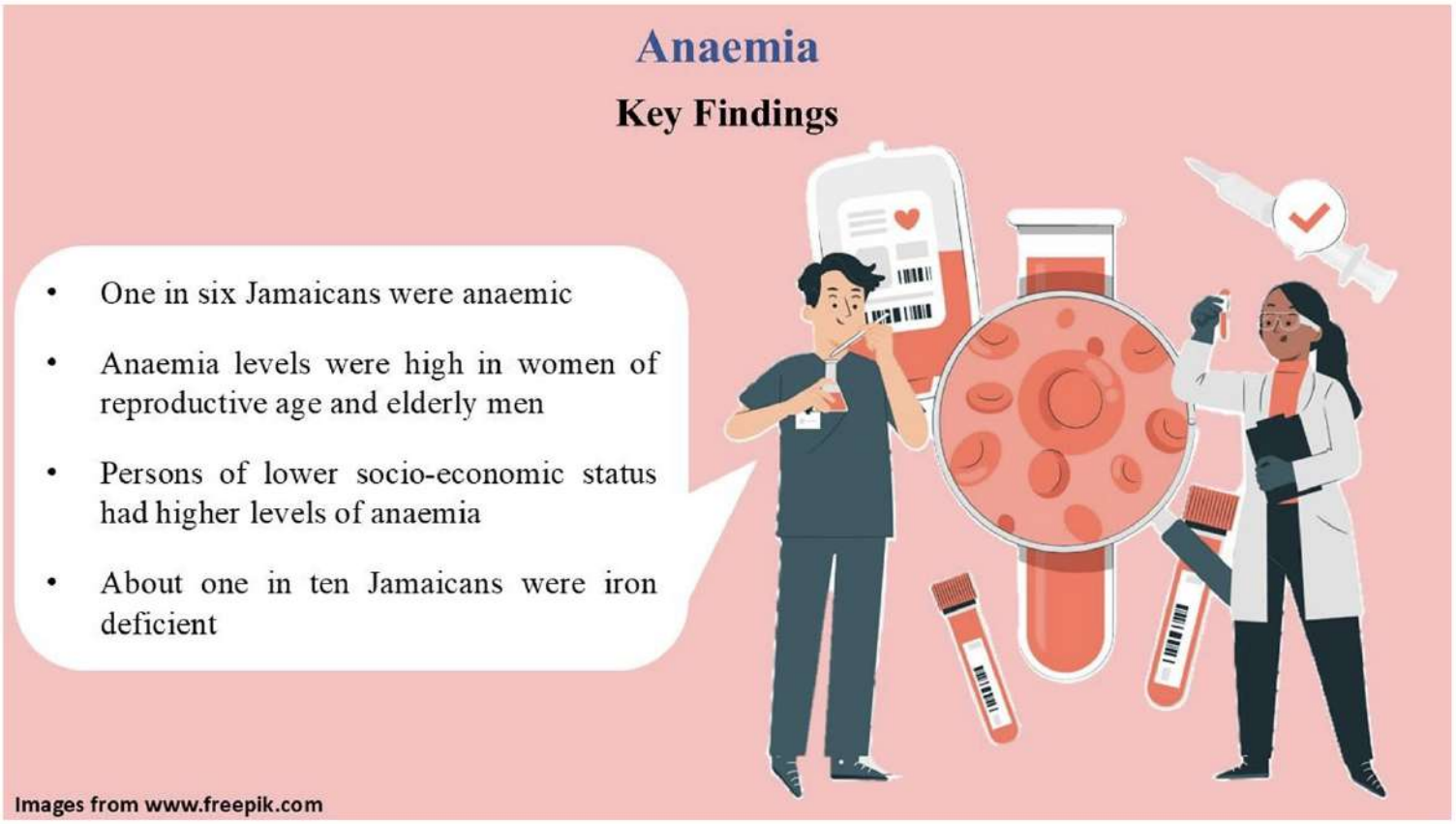
DRINK WATER

EXERCISE

KNOW YOUR NUMBERS | Get Regular Health Checks/Screening • Early Detection & Frequent Monitoring Are Key To Preventing Or Delaying Hypertension & Its Complications

MINISTRY OF HEALTH & WELLNESS | 888-ONE-LOVE (663-5683) | www.moh.gov.jm | @themohwgovjm


ANAEMIA



Why is anaemia important?

Red blood cells play an important role in our daily lives by carrying oxygen and carbon dioxide throughout the body[1]. Haemoglobin is an iron-containing protein found inside the red blood cell that carries oxygen from the lungs to tissues in the body. It then carries carbon dioxide from the tissues to the lungs to be exhaled [1]. Oxygen is critical to the functioning of our cells and helps to provide energy.

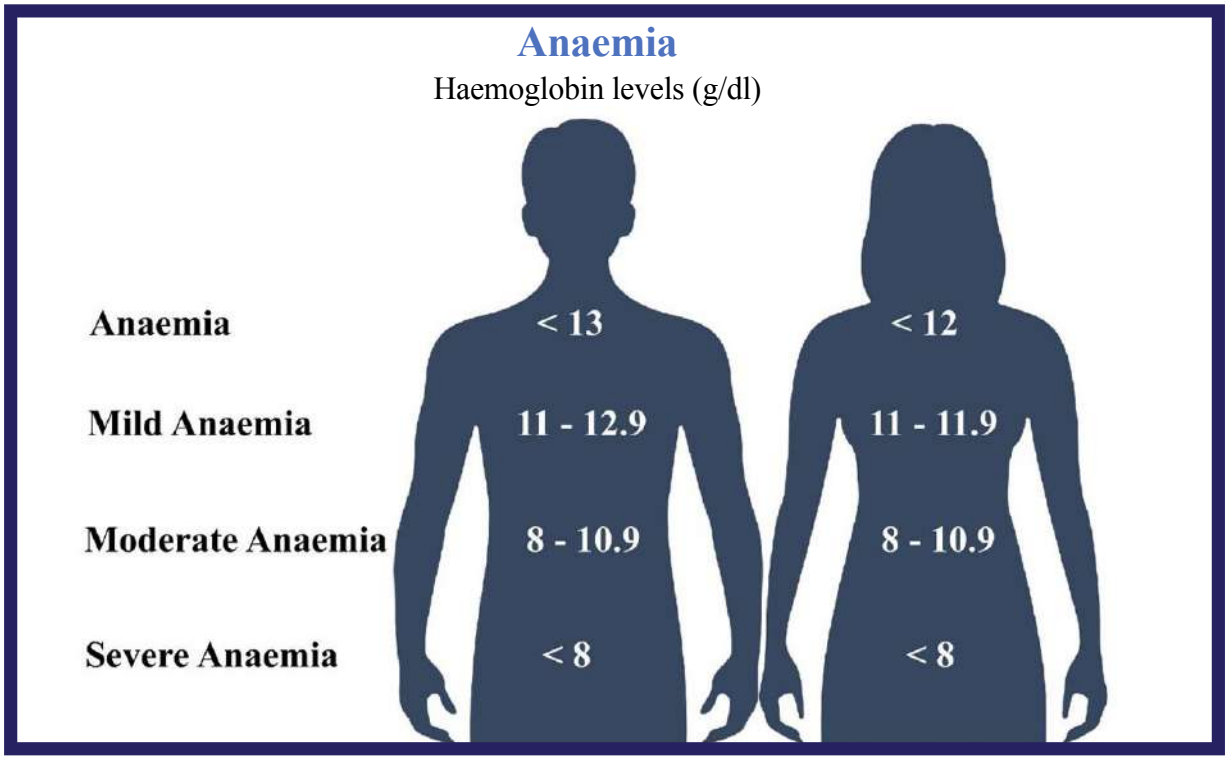
Anaemia occurs when the number of red blood cells or the haemoglobin concentration are lower than normal[3]. This may be caused by poor nutrition, infections, chronic diseases and heavy menstruation, among other reasons[4], Anaemia results in a reduced ability to transport oxygen. This may lead to symptoms such as tiredness, weakness, dizziness and shortness of breath[3].

Anaemia is a global public health problem, primarily affecting children, and menstruating and pregnant women. In severe cases it may affect school performance in children. Anaemia may also affect pregnant mothers and their babies; it may lead to premature birth, low birth weight and maternal mortality[4]. Anaemia is diagnosed according to the haemoglobin level in the blood. It may also be classified as mild, moderate or severe.

Sources:
1. Barbalato L, Pillarisetty LS. Histology, red blood cell. [Updated 2022 Nov 14]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2024 Jan-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK539702/.
2. National Cancer Institute. Hemoglobin. In: National Cancer Institute Dictionary of Cancer Terms [Internet]. Available from: https://www.cancer.gov/publications/dictionaries/cancer-terms/def/hemoglobin. Accessed November 8, 2024.
3. World Health Organization. Anaemia [Internet]. Available from: https://www.who.int/health-topics/anaemia#tab=tab_1.
4. World Health Organization. Anaemia [Internet]. Available from: https://www.who.int/news-room/fact-sheets/detail/anaemia.
5. Al-Nassem A, Sallam A, Choudhury S, Thachil J. Iron deficiency without anaemia: a diagnosis that matters. Clin Med (Lond). 2021;21(2):107-13.

The figure below displays the haemoglobin levels that are used to diagnose anaemia and its level of severity in males and females.

Haemoglobin Levels Used in the Classification of Anaemia



The World Health Organization defines Anaemia as a condition in which the number of red blood cells or the haemoglobin concentration within them is lower than normal.

What did the JHLS find?

- Approximately one in six (17.6%) Jamaicans was anaemic
- The proportion of Jamaican women with anaemia was twice that of Jamaican men. One in every four (25.0%) Jamaican women was anaemic. This compares with one in ten (9.5%) Jamaican men
- Most Jamaicans had mild anaemia
  - o About one in nine Jamaicans (11.5%) had mild anaemia
  - o In contrast, about one in twenty Jamaicans (5.3%) had moderate anaemia

Anaemia by Age Group

- Anaemia levels were highest in the youngest and oldest age groups in the total population.
  - o One in every 5 (20.5%) Jamaicans aged 15 - 24 years were anaemic
  - o About one in every three (29.4%) Jamaicans aged 75 years and older were anaemic
- Women of reproductive age were classified as females between the ages of 15 and 49 years.
  - o About one in every four (28.5%) women of reproductive age were anaemic
- One in every five (19.8%) elderly males aged 60 years and older were anaemic. This compares to one in every six (16.6%) elderly women with anaemia

Anaemia by Area of Residence

- There was no difference in anaemia levels between Jamaicans living in urban or rural areas

Anaemia by Socio-Economic Status

- In general, anaemia levels were highest in persons with the lowest socio-economic status
  - o About one in every four (23.0%) Jamaicans with 0-5 possessions were anaemic
  - o This compared with about one in every ten (11.5%) persons with 10 - 20 possessions who were anaemic

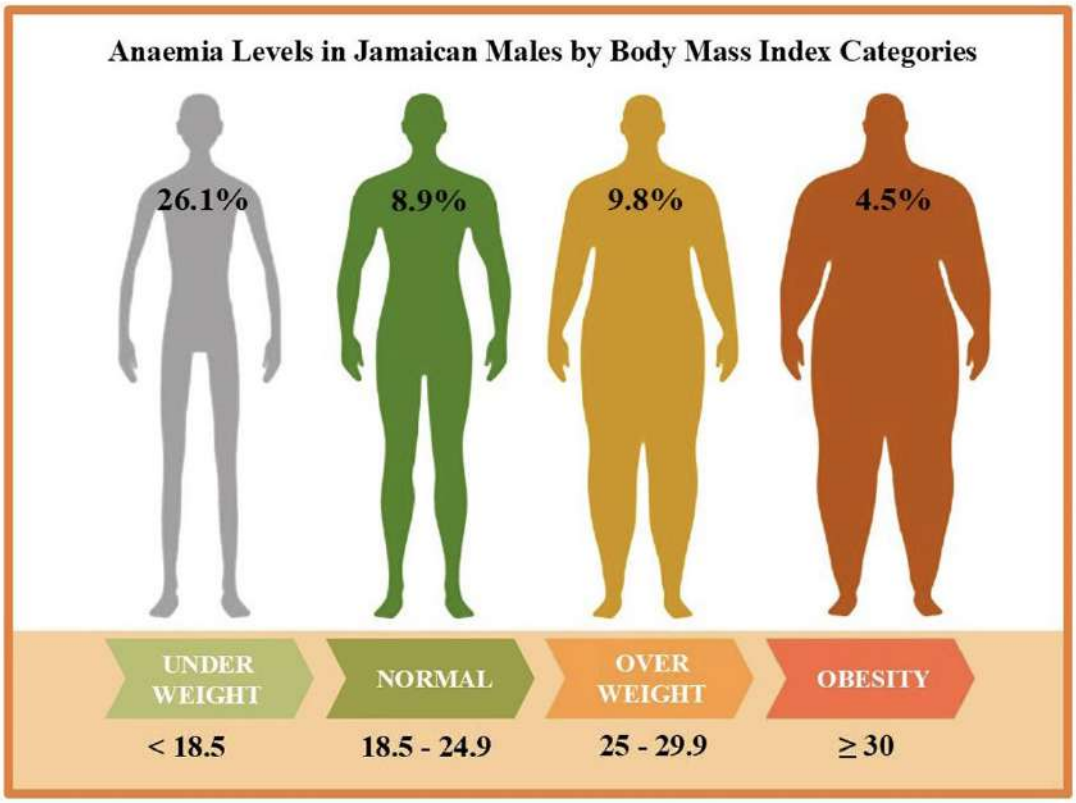
Eat iron rich foods such as lean meat, fish , poultry, legumes, fortified cereals and dark green leafy vegetables

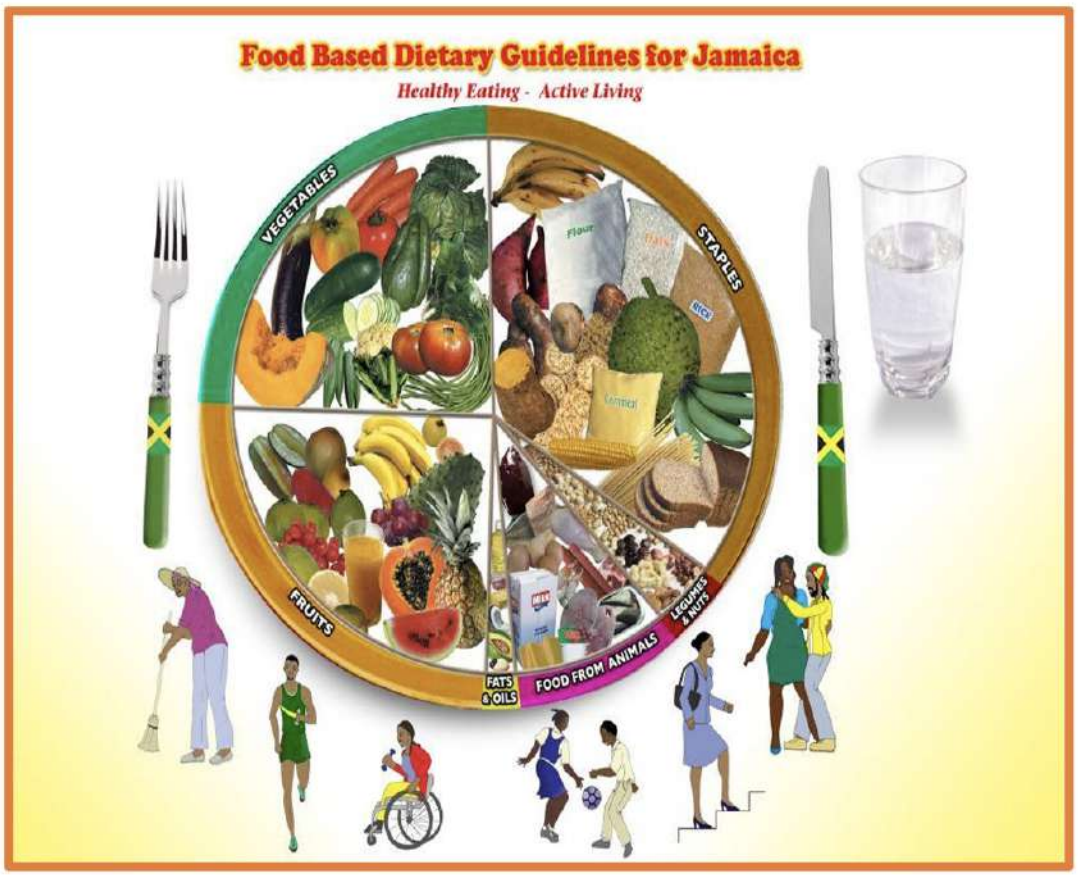
Images from www.freepik.com

Proportion (%) of Jamaicans 15 Years and Older with Anaemia by Characteristic			
Category	**Total**	**Male**	**Female**
Total Population: Anaemia	17.6%	9.5%	25.0%
Anaemia Categories: Mild	11.5%	7.9%	14.8%
Moderate	5.3%	0.7%	9.6%
Age Group: Youth 15-24 Years	20.1%	10.9%	29.0%
Reproductive Age 15-49 years	18.9%	8.0%	28.5%
Elderly >= 60 years	18.1%	19.8%	16.6%
Number of Possessions: Low Possessions (0-5)	23.0%	18.5%	27.4%
Middle Possessions (6-9)	18.7%	4.4%	32.9%
High Possessions (10-20)	11.5%	6.9%	15.3%

Anaemia by Body Mass Index

- The study found that among Jamaican men anaemia levels were highest in underweight individuals

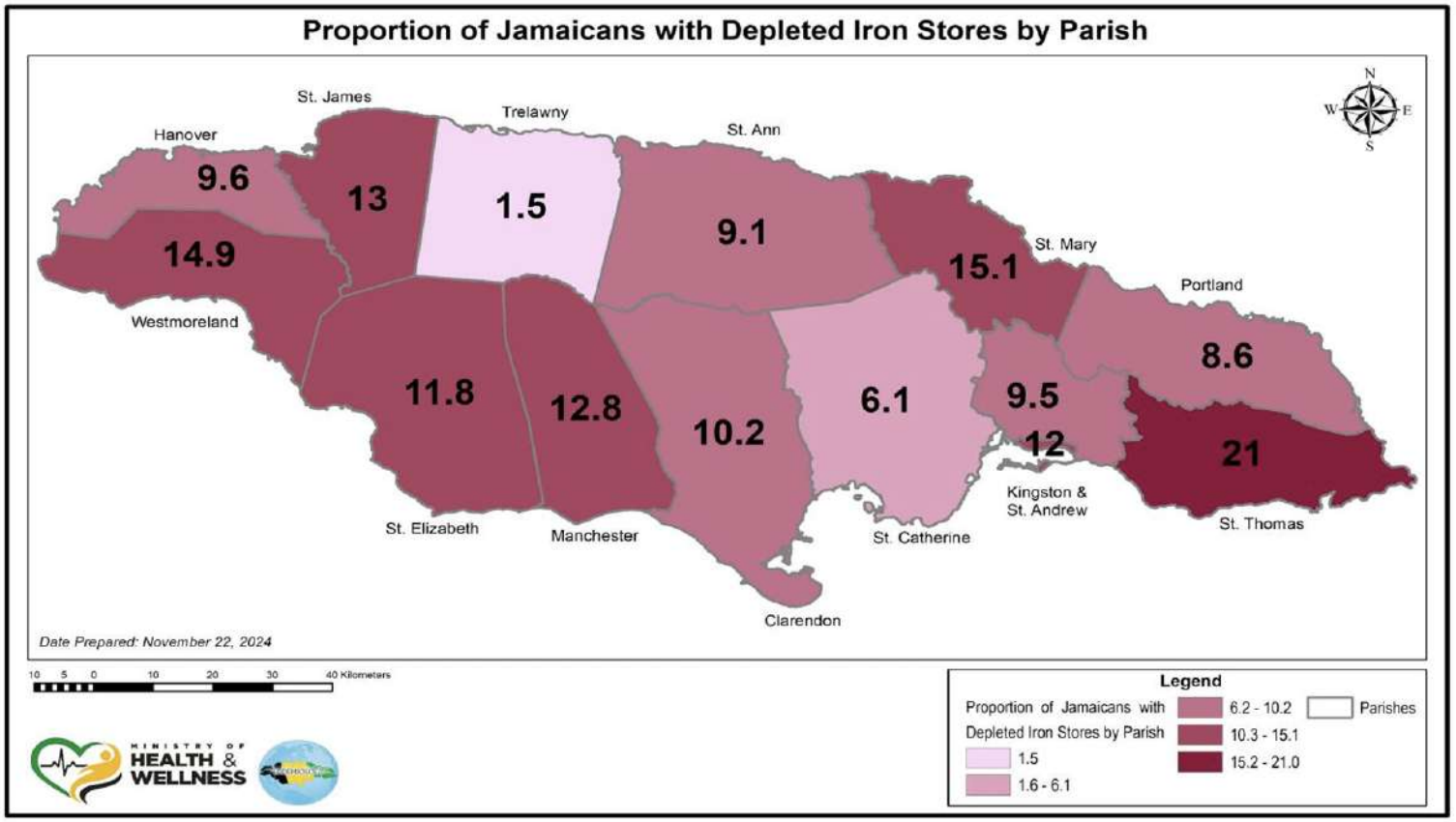




Iron Deficiency

Iron deficiency 'refers to low iron stores that do not meet the body's iron requirements, regardless of whether anaemia is present or not'[1]. Iron deficiency was measured using a serum ferritin test. Ferritin is a protein that stores and releases iron in the body. The World Health Organization called a ferritin level less than 15 µg/l 'depleted iron stores'. In the study depleted iron stores were used as a measure of iron deficiency.

- About one in every ten (9.9%) Jamaicans were iron deficient
  - o About one in every six (17.8%) Jamaican women were iron deficient
  - o 1.9% of Jamaican men had iron deficiency
- Depleted iron stores were high in women of reproductive age; about one in every four (24.4%) women of reproductive age had iron deficiency
- Iron deficiency varied by parish of residence. Parishes with the highest levels of depleted iron stores were St. Thomas (21.0%) followed by St. Mary (15.1%) and Westmoreland (14.9%). Parishes with the lowest levels of iron deficiency were Trelawny (1.5%), followed by St. Catherine (6.1%) and Portland (8.6%)
- Iron deficiency was found in persons who were not anaemic
  - o One in every twenty (4.9%) Jamaicans who were not anaemic had iron deficiency.
  - o About one in every ten (9.3%) women who were not anaemic had iron deficiency
- Among persons with anemia only 4 in 10 (37.2%) persons were iron deficient



Source:
1. Al-Nassem A, Sallam A, Choudhury S, Thachil J. Iron deficiency without anaemia: a diagnosis that matters. Clin Med (Lond). 2021;21(2):107-13.

Proportion (%) of Depleted Iron Stores (Iron Deficiency) Among Jamaicans 15 Years and Older by Anaemia Status

Category	Total	Male	Female
Not Anaemic	4.9%	1.2%	9.3%
Anaemic	37.2%	7.9%	49.2%

What Can I Do To Prevent or Manage My Anaemia?

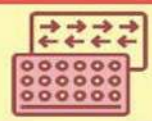
- Eat a healthy diet with a variety of foods
  - Eat iron rich foods such as lean red meat, fish and poultry, legumes, fortified cereals and dark green leafy vegetables
  - Eat foods rich in Vitamin C to help the body absorb iron
  - Avoid foods such as tea, coffee, cocoa and bran cereals which slow down the absorption of iron

- Take supplements if recommended by a health care provider. If taking calcium, take calcium and iron supplements at different times of the day

- Get vaccinated and practice good hygiene to avoid infections

- Manage chronic diseases

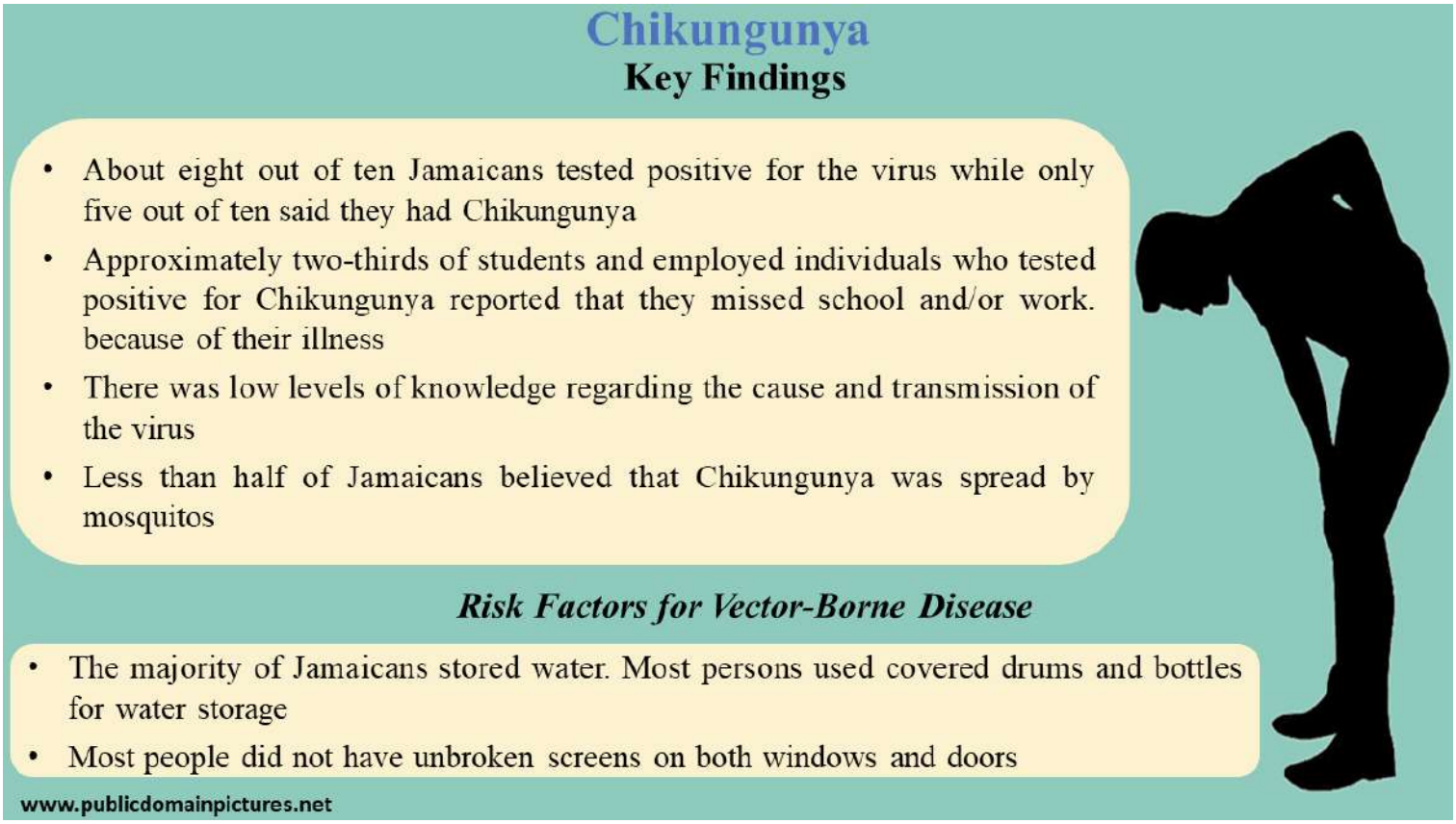
- Prevent and treat heavy menstrual bleeding. Women with heavy menstrual bleeding should see their doctor for treatment



- Wait at least 24 months between pregnancies and use birth control to prevent unintended pregnancies

Source:
1. Al-Nassem A, Sallam A, Choudhury S, Thachil J. Iron deficiency without anaemia: a diagnosis that matters. Clin Med (Lond). 2021;21(2):107-13.

CHIKUNGUNYA



What is the Chikungunya virus?

The Chikungunya virus causes Chikungunya disease. It is spread through the bites of infected mosquitos, specifically the *Aedes aegypti* and *Aedes albopictus* mosquitoes[1].

Chikungunya virus in Jamaica and the Americas

In 1827 - 28, an outbreak of a disease occurred in the Caribbean, including Jamaica, and the Gulf of Mexico. At first, it was believed to be dengue. But, after closer examination, it was found that the illness showed signs of what is now known as "classic chikungunya disease" [2]. This suggests that Chikungunya may have been in the Americas much earlier than previously thought, and it could have been in region almost 200 years before it was officially recognised.

The first recorded case of the Chikungunya disease came to the Caribbean in 2013 and to Jamaica in early August 2014 [3]. Thereafter, the disease spread rapidly across the island.

Sources:
1. Pan American Health Organization. Chikungunya [Internet]. Washington, DC: Pan American Health Organization; [cited 2024 Dec 13]. Available from: https://www.paho.org/en/topics/chikungunya

2. Brathwaite Dick O, San Martín JL, Montoya RH, del Diego J, Zambrano B, Dayan GH. The history of dengue outbreaks in the Americas. Am J Trop Med Hyg. 2012;87(4):584–93. doi:10.4269/ajtmh.2012.11-0770

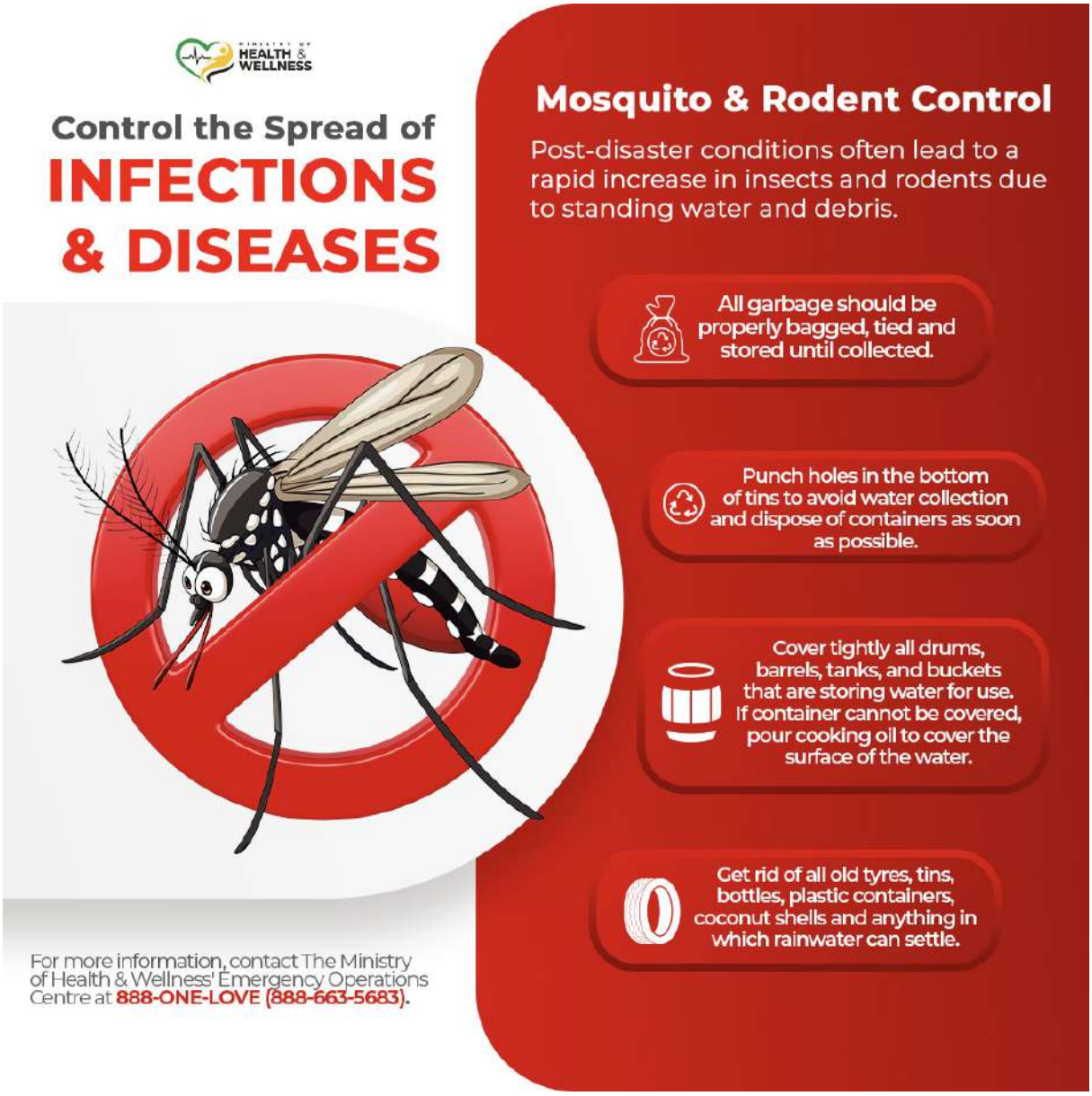
3. Christie CD, Melbourne-Chambers R, Ennevor J, Young-Peart S, Buchanan T, Scott-Brown P, McNeil-Beecher N, Fulford-Ramdial T, Richards-Dawson M, James-Powell T, Jackson ST. Chikungunya in Jamaica: Public health effects and clinical features in children. West Indian med. j. 2016:431-7.

Symptoms of the Chikungunya Disease

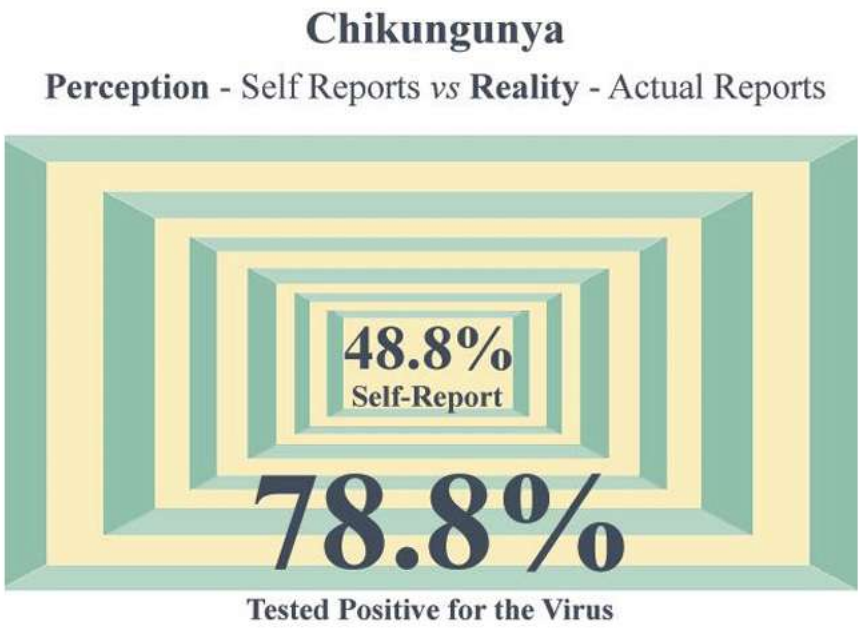
Common symptoms include [1]:

- High fever
- Severe joint pain
- Muscle pain
- Headache
- Rash
- Nausea
- Fatigue

Most people recover from the disease in about a week, but some may have joint pain that lasts for months or years[2].
It has been reported that Chikungunya leads to absenteeism and reduced productivity [3]. Severe complications of Chikungunya are rare, but can occur, in older adults, young children, pregnant women or those with pre-existing health conditions [2].



Chikungunya infection in Jamaica



- In 2017, almost half (48.8%) of Jamaicans 15 years and older said they experienced Chikungunya like symptoms.
- However, approximately 8 out of 10 (78.8%) persons tested positive for Chikungunya, indicating a past infection. This suggests wide spread infection among Jamaicans and a large proportion of persons who reported no symptoms.
- The virus was most common in two groups: young people aged 15-24 (84.3% positive) and persons 65 years and older (84.1% positive), and was lowest in the 25-34 year age group (72.5% positive).

Absence from school/work due to illness

- Persons who tested positive for Chikungunya
  - o About two-thirds of students (65.8%) and employed persons (63.8%) who tested positive for Chikungunya said they missed school and/or work due to illness
  - o Additionally, 71.1% of employed rural residents and 57.8% of employed urban residents who tested positive for Chikungunya missed school and/or work due to illness
- Self-reported cases of Chikungunya
  - o Less than three percent (2.4%) of mature students (35-44 years) said they missed school due to illness, compared to 66.3% of persons in the 15-24 year age group.
  - o A greater percentage of employed rural residents (69.6%) reported absence from work compared to employed urban residents (58.3%).

Sources:
1. World Health Organization. Chikungunya [Internet]. Geneva: World Health Organization; 2023 [cited 2024 Dec 13]. Available from: https://www.who.int/news-room/fact-sheets/detail/chikungunya

2. World Health Organization. Vector-borne diseases [Internet]. Geneva: World Health Organization; 2023 [cited 2024 Dec 13]. Available from: https://www.who.int/news-room/fact-sheets/detail/vector-borne-diseases

3. Pan American Health Organization (PAHO). Chikungunya: Questions and Answers. Pan American Health Organization. Available from: https://www.paho.org/en/topics/chikungunya/chikungunya-questions-and-answers

To protect ourselves from the disease, it is important to avoid mosquito bites by eliminating mosquito breeding sites, adding screens on doors and windows, using insect repellent, and wearing protective clothing [1].

Risk Factors for Vector Borne Diseases

- Vector-borne diseases are illnesses caused by viruses, bacteria, or parasites that are spread by carriers of diseases. These are called vectors. Examples include mosquitoes, ticks, flies, and other animals [2].
- Understanding factors related to the spread of vector-borne diseases is crucial for prevention and control efforts.
- Certain practices can enhance the risk of vector-borne disease by:
  - o Increasing vector breeding sites and exposure or
  - o Reducing the effectiveness of prevention and control measures.

According to PAHO, the following approaches can eliminate or destroy mosquito breeding sites [3]:

- Avoid storing water in outdoor recipients (plant pots, bottles, containers that can collect water) to prevent them from becoming mosquito breeding sites.
- Cover domestic water tanks or reservoirs so that mosquitoes do not get in.
- Avoid the build-up of garbage; put it in closed plastic bags and keep it in closed containers.
- Uncover/unblock drains to release stagnant water.
- Use mosquito mesh/netting in windows and doors to help reduce contact between mosquitoes and people

Water Storage Practices

- More than three quarters (76.2%) of Jamaicans said they stored water. Most persons used covered drums (44.6%), following by bottles (44.5%), and open kegs (21.1%).
- Although most parishes do not use open kegs to store water, it was the most common method in Westmoreland, where 75.1% of persons used this option. Many persons in Hanover (55.7%) and St. Mary (36.4%) also used open kegs.
- Among persons who used uncovered storage containers, 21.1% used open kegs, 5.9% used open drums, and 0.5% used open tanks.

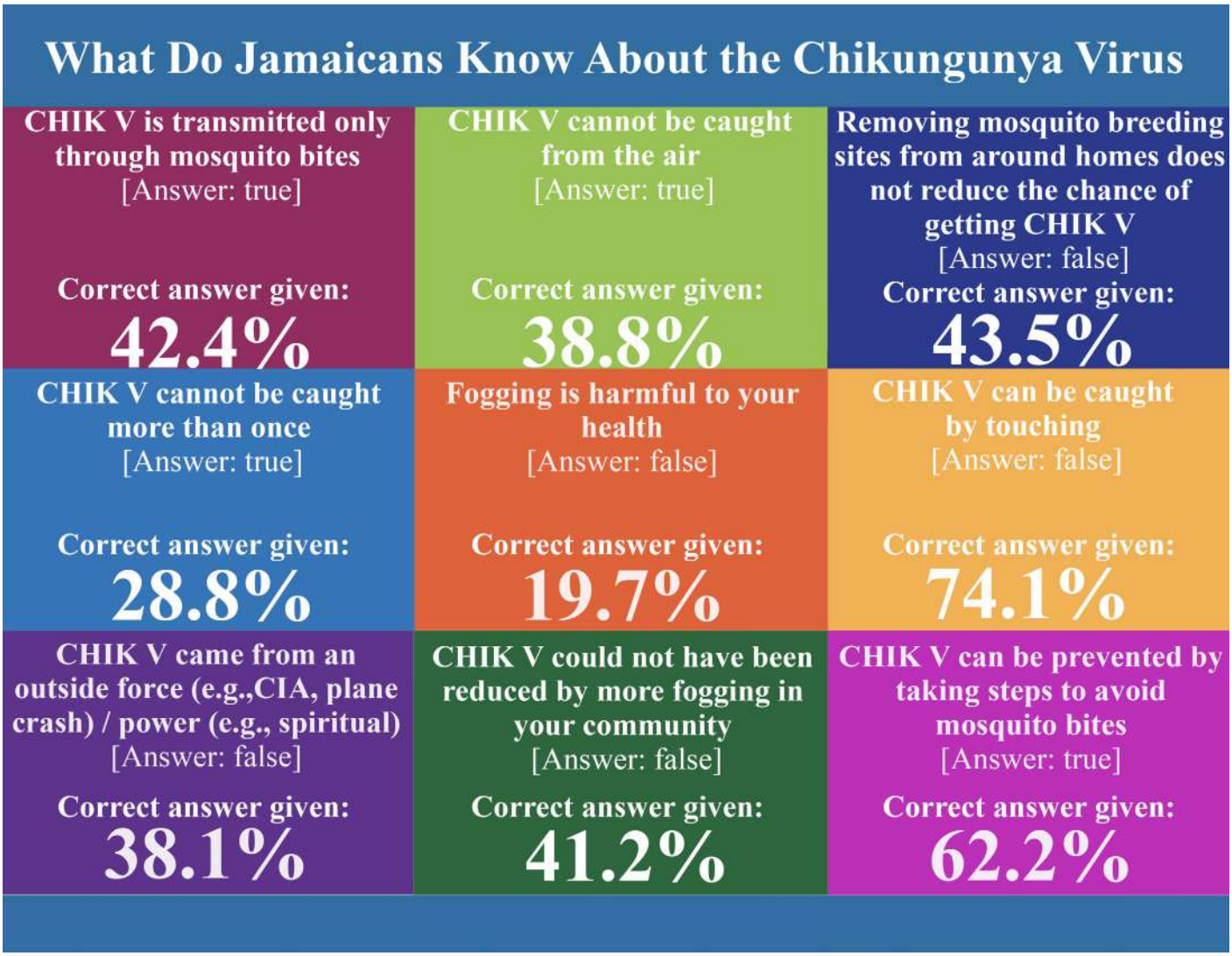
Garbage disposal

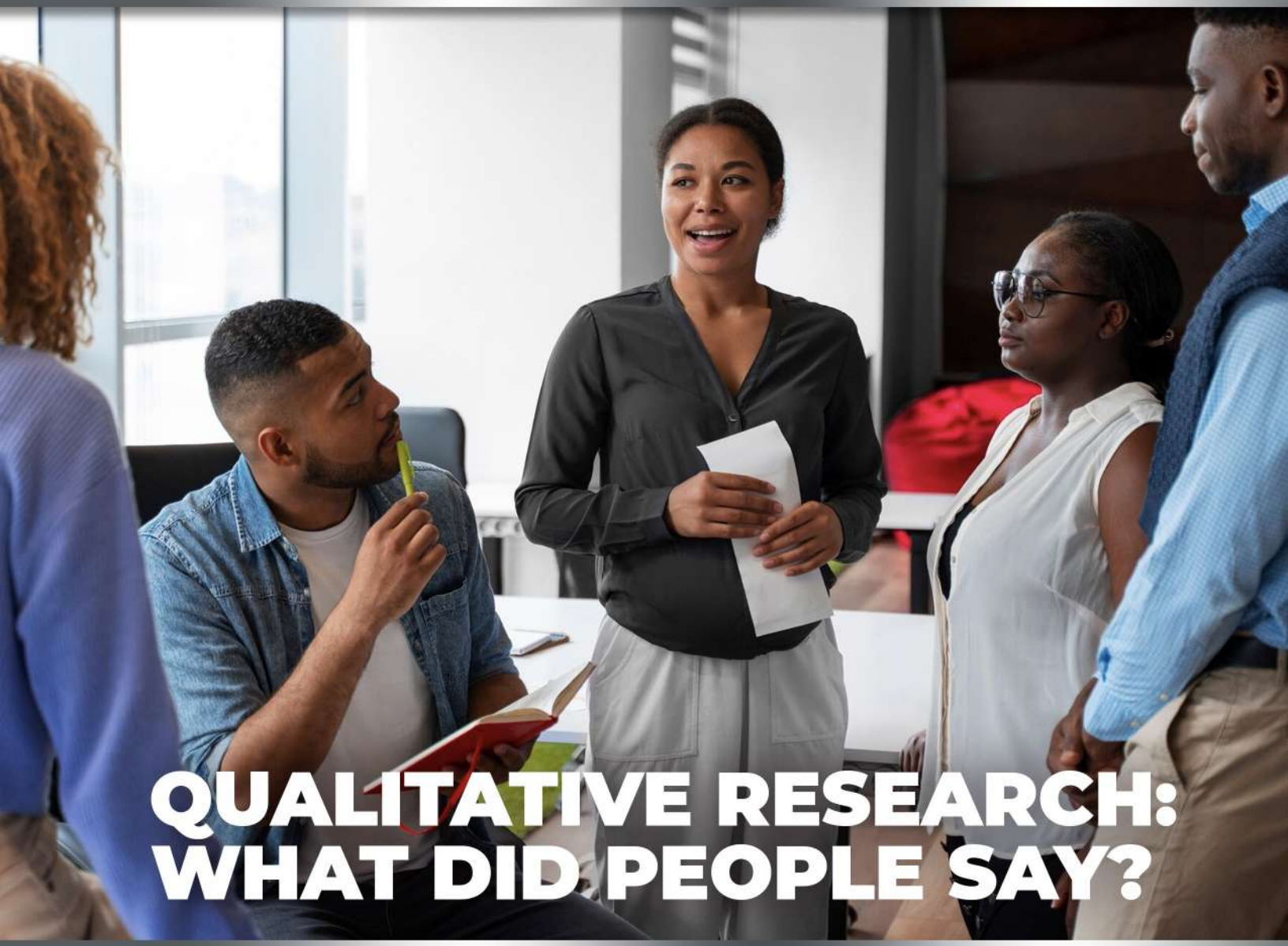
- Jamaicans who disposed of waste in vacant lots or gullies (85.3%) reported the highest proportion of Chikungunya disease. In contrast, only 38.3% of persons using public dumpsters, and 48.7% of those using garbage trucks said they had the disease.

Absence of unbroken screen doors and windows

- Most people did not have unbroken screens on both windows and doors.
- Clarendon (23.3%) and Kingston (11.4%) had the highest proportion of participants reporting homes with unbroken screens and doors, while St. Mary (0.5%) and Hanover (1.7%) had the least.

What do Jamaicans know about the Chikungunya virus?





QUALITATIVE RESEARCH: WHAT DID PEOPLE SAY?

Jamaica Health and Lifestyle Survey III, 2016-17
Qualitative Research Key Findings

1. NCD Awareness and Beliefs

- ✓ There are certain cultural perceptions and beliefs that may prevent effective management of NCDs.
- ✓ Some things that participants believed about NCDs were not true.

2. Health Seeking Behaviors

- ✓ Men behave differently from women when managing NCDs.
- ✓ Participants reported a culture of avoidance of health care and treatment among men in the community.

3. Dietary Practices

- ✓ Participants held health myths in relation to dietary practices.
- ✓ Generally, persons only changed their eating habits after being diagnosed with a non-communicable disease.
- ✓ Participants were not buying healthy foods because of affordability.

4. Physical Activity

- ✓ Some persons believed that housework, standing for long periods and job related activities were enough daily exercise.
- ✓ Persons reported that security concerns prevented them from participating in regular exercise.
- ✓ Participants expressed the need for greater access to community spaces and facilities for exercise.

5. Medication Adherence

Images from www.freepik.com

- ✓ Participants did not understand health-related jargon
- ✓ Some participants thought that their medication was ineffective.
- ✓ Some participants believed that natural remedies were more effective/less harmful to the body.
- ✓ Some persons spoke about their inability to afford medication.

What did the qualitative section of the JHLS III examine?

Over the years, Jamaica has conducted three JHLS III. These studies have focused primarily on measuring the proportion of Jamaicans who have a non-communicable disease (NCD).

During the implementation of the surveys, researchers observed that NCDs were increasing over time. These results motivated researcher to include a qualitative study component in the JHLS III study in 2017. The qualitative component aimed to understand the reasons why the levels of NCDs were increasing within the population. Further details regarding the qualitative study may be found in the Jamaica Health and Lifestyle Survey Technical Report [1].

What did the Qualitative Study Examine?

Who was Interviewed?

Interviewers selected a small community in Jamaica which had been identified specifically to conduct the qualitative component of the study. The identity of this community, which was called "Jamaica Town", remains anonymous.

How was Information Collected?

Four focus group sessions were conducted to help understand person's attitudes and behaviours around NCDs. Each focus group question was linked to a question in the quantitative study to better understand factors leading to increased levels of NCDs.

The members of the focus group were carefully selected to represent the population. There were four focus groups. One group had males only and another had females only. The third and fourth groups consisted of two persons living in the same household, with one person having a NCD.

Source:
1. Younger-Coleman, Novie, Webster-Kerr, Karen, Ferguson, Trevor , McFarlane, Shelly, Grant, Andriene,Bennett, Nadia, Wiggan, Jovan Cunningham-Myrie, Colette, Elias, Nicolas, Francis, Damian, Soares-Wynter, Suzanne,Williams-Lue, Shara, Edwards, Sharmaine E, O'Meally, Vanessa, Govia, Ishtar, Gordon-Strachan, Georgiana Davidson, Tamu, Guthrie-Dixon, Natalie, Charles, Christopher, Wilks, Rainford. Jamaica Health and Lifestyle Survey 2016-17 (JHLSIII). Kingston, Jamaica: Ian Randle Publisher; 2024.

Jamaica Health and Lifestyle Survey III, 2016-17
Quantitative and Qualitative Components

Quantitative Components	Qualitative Components
1. Prevalence of NCDs and risk factors	1. Increased knowledge and understanding of how attitudes, beliefs, experiences and practices may contribute to NCD risk factors and how health policy and practice can more directly impact NCD prevention
2. Levels of disease awareness and control by gender	2. Increased knowledge and understanding of underlying factors (such as cultural gender norms) affecting differences in levels of disease awareness and control by gender, and a better understanding of how to tailor health policy to address these differences
3. Levels of adherence to medication and behavioral recommendations	3. Increased knowledge and understanding of factors which support and/or prohibit individual medication adherence and increased understanding of how health practitioners can help improve adherence rates
4. Gender and SES differences in health-seeking behaviors	4. Increased knowledge and understanding of how gender and socioeconomic status may support and/or prohibit health-seeking

What were the findings of the qualitative study?

The findings can be placed in five main categories: (1) NCD awareness and beliefs (2) physical activity (3) dietary practices (4) medication adherence and (5) health-seeking behavior

I - NCD awareness and beliefs

Generally, participants were aware of the harmful effects of NCDS.

> 'I don't have [hypertension], so because I see what it does to my family and friends, so that's why I don't use salt period … yeah, I want to live to see my grandkids dem.' *P3, M, 42 yr, Self-employed*

Behaviour Change Motivators

Participants were motivated to change their behaviour after their family members became sick or they had their own health scares

Generally, persons only changed their eating habits after being diagnosed with a non-communicable disease. 'Me have high cholesterol, high cholesterol, so me stop eat certain meat like oxtail, cowfoot and all them ting deh. Me used to love them, me cyaan eat dem ting deh no more. Me stop.'

> *– HD P1, M, 63 yr, Unemployed*

Health Myths

Some things that participants believed about NCDs were not true. For example, some persons believed that they got diabetes after eating large amounts of food during a particular season of the year. It was rarely considered to be a hereditary disease or associated with other risk factors such as obesity. As a result, they also held to myths about how a disease could be treated.

For example, some persons believed that high amounts of salt or sugar in the body could be diluted by consuming large amounts of water. Persons also thought that it was possible to sweat out excess salt from the body.

> '… I did my own personal research to figure out, to find out how I could get rid of the salt out of my blood, and I found that ahm a lot of water and a lot of sweets would dilute the salt … but the physical exertion is best because you get to perspire the salt.'
>
> *– P1, M, 62 yr, Employed part-time*

II - Physical Activity

Health Myths Related to Physical Activity

Persons understood the important of physical activity. However, some persons believed that housework, standing for long periods and job-related activities were enough daily exercise.

Security Concerns Affecting Regular Exercise

Safety concerns were a major reason why participants were not exercising. Persons reported that security concerns prevented them from participating in regular exercise. While gang-related violence was a concern, persons also expressed concern about strangers who drive and walk through the community.

> '… is not safe for you to go out in the mawnin' and exercise.…'
> *– P7, F, 45 yr, Self-employed*

Access to Physical Space for Exercise

Participants expressed the need for greater access to community spaces and facilities for exercise.
This included an affordable community gym. Issues identified by males were:

- Perceived benefits of organised exercise groups and active community sports clubs
- The belief that exercise in facilities was more suited to young people. Older men suggested the development of outdoor spaces
- The belief that community members should take responsibility for creating spaces for recreation and physical activity for all ages

III- Dietary Practice

Health Myths Related to Dietary Practices

Participants also held health myths in relation to dietary practices. Women believed that portion control and taking their medication made it possible for people to eat anything.

> But I don't think what you eat affect the body. Is just how much you intake … You supposed to can eat everything dat is out dere to eat but is jus' how much of it you eat. Cause all of dese t'ings are good for yuh body.…'
> – P7, F, 45 yr, Self-employed

Stress and Dietary Practices

Women indicated that stress played a role in dietary practices. Issues such as financial challenges, the loss of loved ones, and physical abuse affected their eating habits and other health behaviours. It was easier to participate in smoking and alcohol misuse when under stress. Women mentioned that self-control and resisting unhealthy foods, such as fast food and foods high in sugar was sometimes a challenge.

III- Dietary Practices Cont'd

Financial Constraints and Dietary Practices

Participants were not buying healthy foods because of affordability. Most of the available and more affordable food options were processed and packaged foods. These were primarily sold in corner shops seen on most lanes and roads throughout the community.

The price of food was a main factor that influenced purchase of healthy food options. There was also inadequate space to engage in backyard gardening.

> 'That's why sometime … we know seh it nuh right fi wi suppose to eat but cyaan buythe right things so yuh jus eat what you have.'
> *– P2, F, 32 yr, Self-employed*

Communication Barriers Affecting Food Choices

Persons reported that sometimes food labels were in another language. This prevented them from understanding the nutritional content of foods before making a choice.

Effectiveness of Health Campaigns

Many women felt that Jamaicans do not pay close attention to the healthy diet campaigns. This includes campaigns encouraging reduced intake of sugar-sweetened beverages. However, some women believed that the campaigns encouraging increased consumption of water were effective.

> '… You realise that a lot of people cut down on sweets… now yuh frighten to see how them drinking they wata mostly you go on di road now.'
> *– P2, F, 32 yr, Self-employed*

Males suggested that healthy diet campaigns would be more effective if communicated by way of popular culture, reggae music or by respected 'health champions' in the society.

> 'So if you put it in the way that it's supposed to put in, in the context of yuh reggae music or some play or something that is gonna … grab the persons … They [Jamaicans] listening to someone who is uhm a shotta … or a uplifting person in society. They will listen. Trust me.' – P3, M, 42 yr, Self-employed

IV - Medication Adherence

Communication Barriers by Healthcare Professionals

Participants did not understand the typical health-related jargon shared during doctor-patient consultations, health education sessions and on posters at the health centres. Patients preferred information from physicians. However, their health decisions and behaviours were more influenced by family and friends due to the inability to understand health related jargon.

Health personnel were not effective at explaining the purpose of medication. Some persons also had difficulty understanding the package insert of medications. As a result, patients were not always aware to the negative impact of medication non-compliance on their health.

Adherence to Medication and Side Effects

Some participants thought that their medication was ineffective. They also spoke about unpleasant side effects.

> 'See all the medication you tekin,' you not getting betta … But when mi tek it it mek me jus' ah sleep. It mek me sleep and mi drowsy. Sometime mi cyaan boda wid di tablit … The tablet gi' yuh side effeck.'
> *– P1, F, 54 yr, Employed full-time*

Men, in particular, had unresolved questions about the impact of hypertension medication on sexual performance.

> Yes, but don't take it [medication] the way I should take it, reason I don't like it … like side effects … and even sexual way. From I started to take this medication it make me feel a way and is like it [sexual performance] going away and I say 'No this is not me'… I know my body and I know what I am capable of doing … I hear that when you take pressure tablet … it makes your sex drive goes down and it make you have problem with it … so you might have problem with yuh lady and yuh lady might gone leave you ….'
> *– P2, M, 47 yr, Unemployed*

Medication Adherence and Stress

Women believed that stress impacted their eating habits, alcohol use and medication adherence.

> '… most of the time we are so stress out. Sometime is like you don't even want to see the medication. Is like you mind not focus there, especially when you have something bothering you and it start to stress you ….'
> *– P5, F, 57 yr, Unemployed*

IV - Medication Adherence

Use of Non-Traditional Medicinal Approaches

Some participants believed that natural remedies were more effective and less harmful to the body than their medications.

> '… I am on an' off dat medication because sometime I goh to clinic I cannot get di medication when docta' look afta mi an' write di prescription. An' when I come out, I don' get di medication. I can't badda fi goh to Drug Serv, soh I jus' bwoil some tyme tea an' drink. Dat is my medication … Mi goh clinic weh day. When mi goh clinic docta tell mi seh mi ahright, everyt'ing ahright, mi mus' continue doing what mi doing. Soh obviously right about now my pressure ahright (laugh). Soh when mi feel like mi 'ead a hurt mi, mi jus' gwaan drink likkl tyme tea. So mi hahright soh far ….'
> *– HD P2, F, 46 yr, Unemployed*

Medication Adherence and Financial Constraints

Some persons spoke about their inability to afford medication. Public health facilities were also a concern. Others were concerned about the unavailability of medications at health centres which therefore had to be purchased at private pharmacies. The cost of healthy food options had to be weighed against the cost of household expenses and caring for dependents.

> '… cause I'm not gonna lie, sometimes me go to the docta ah UWI and me get some t'ings, me nuh buy dem. And me have my t'ree pickney dem, me fi buy eight and ten thousand dolla' worth a medication. Stay a mi yaad till me get betta, yeah, or buy weh mi can buy … true.'
> *– HD P8, F, 36 yr, Unemployed*

V- Health-seeking Behaviors

Health-Seeking Behavior and Gender

Men reported different behaviors from women when managing NCDs. Males tend to rely on the female in the household to make health-related decisions. Women decided which foods were consumed in the home and were usually the caregivers for men.

Participants reported a culture of avoidance of health care and treatment among men in the community. Female participants were more engaged with health services available in the public and private sectors than their male counterparts.

> "Yuh hard fi reach … especially the men. You see my wife, any how her head ah hot har, she reach ah doctor … You see man, man will sick … and him nah go no doctor"
> *– P6, M, 61 yr, Employed*

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