

# NON COMMUNICABLE DISEASES RISK FACTORS

## STEPS SURVEY KENYA 2015

Official Launch  
Panafric Hotel  
08/April/2016

Karibuni...



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# Steps



# NON COMMUNICABLE DISEASES RISK FACTORS

## STEPS SURVEY KENYA 2015

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## Introduction

Dr. Joseph  
Kibachio



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# INTRODUCTION

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- The 2015 STEP Survey is the first Non Communicable Survey to be conducted in Kenya.
- Non-communicable diseases (NCDs) are the leading causes of morbidity and mortality globally
- They kill 38 million people each year , 63% of deaths
- NCDs are responsible for 27% of all deaths in Kenya
- 
- Leading NCDs in Kenya
- Risk Factors



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# NON COMMUNICABLE DISEASES RISK FACTORS

## STEPS SURVEY KENYA 2015

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## Survey Methods

Mr.  
Macdonald  
Obudho



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# OBJECTIVES

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1. To determine the prevalence and determinants for the four major behavioral risk factors for NCDs in Kenya
2. To determine the prevalence and determinants for the four key biological risk factors for NCDs in Kenya



# OBJECTIVES CONT.

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- To determine the prevalence and determinants of unintentional injuries in Kenya.
- To determine the prevalence and determinants of oral diseases in Kenya
- To investigate potential links between different risk factors and determinants of health (socio-economical status, demographic factors, gender, age)



# SURVEY METHODOLOGY

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- The 2015 Kenya STEPs survey was a national cross-sectional household survey
- It was designed to provide estimates for indicators on risk factors for NCDs for persons age 18 – 69 years
- The sample size was 6,000 individuals
- The survey used the fifth National Sample Surveys and Evaluation Programme (NASSEP V) master sample frame



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# SURVEY METHODOLOGY CONT'D

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- A three-stage cluster sample design was adopted:
- **First Stage:** 200 clusters (100 urban and 100 rural) were selected
- **Second:** A uniform sample of 30 households from the listed HHs in each cluster was selected
- **Third stage:** one individual was randomly selected from all eligible listed household members using a programmed KISH method of sampling



# SURVEY METHODOLOGY CONT'D

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- The tools and structure for the survey was adapted from the WHO STEPwise approach to chronic disease risk factor surveillance (STEPS)
- This was modified to suite the Kenyan situation
- The approach was a sequential process consisting of three 'steps' of information gathering as follows:



# SURVEY METHODOLOGY CONT'D

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- ◆ **Step 1** Interviews on demographic information and selected major health risk behaviors
- ◆ **Step 2** Anthropometric measurements on Blood Pressure and heart rate, height, weight, waist and hip circumference.
- ◆
- ◆ **Step 3** Biochemical measurements of fasting blood glucose, triglyceride, and cholesterol levels



# SURVEY METHODOLOGY CONT'D

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## Training of Data Collectors

- A six-day training workshop was held
- The training programme included sessions on:
  - STEPS survey background
  - sampling methods
  - cluster-level sampling of households
  - questioning skills including obtaining informed consent
  - how to use PDAs
  - questionnaire completion
  - blood taking
  - testing and referral procedures



# SURVEY METHODOLOGY CONT'D

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## Fieldwork

1. Fieldwork took place over a period of 60 days from 9<sup>th</sup> April 2015 to 10<sup>th</sup> June 2015
  2. It was conducted by the trained 20 teams (1 supervisor, 2 interviewers, 2 health workers and 1 driver)
  3. In addition, a team of six technical coordinators and regional coordinators were in charge of the teams to ensure that quality data was collected
- ◆ Data was collected using PDA



# SURVEY METHODOLOGY CONT'D

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- The STEPS survey data was backed up every day by the supervisors using laptops
- They retrieved the data from SD cards
- They then emailed the zipped folders to a provided central address every two days



# NON COMMUNICABLE DISEASES RISK FACTORS

## STEPS SURVEY KENYA 2015

### STEP 1

- Tobacco
- Alcohol
- Unhealthy diets
- Physical Activity

Ms. Dorcas  
Kiptui



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# Tobacco

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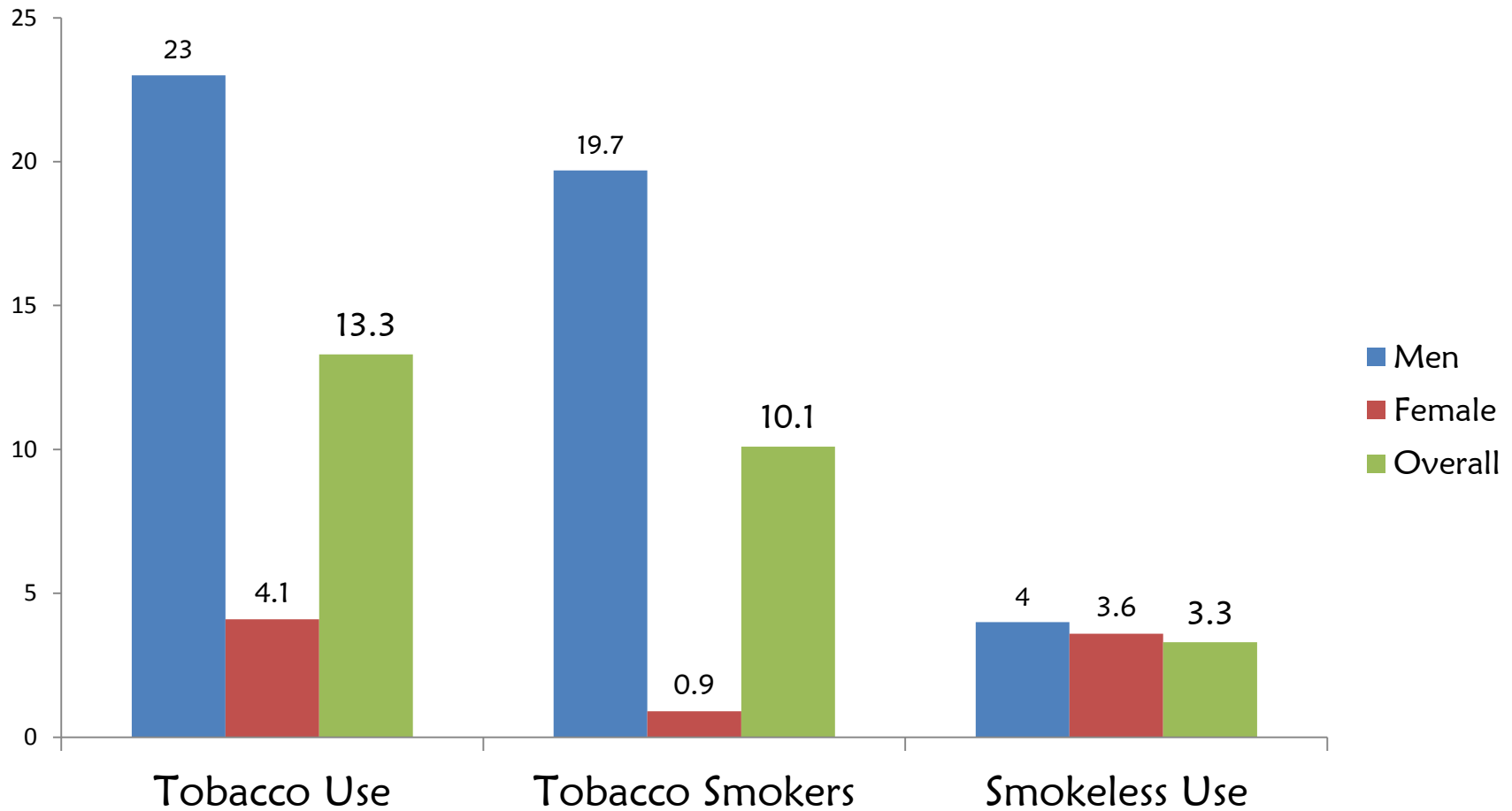


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# Current Tobacco Use



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# Daily Tobacco Smokers

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	Percentage/Number
Percentage of daily tobacco smokers	8.3%
Average age started smoking (years)	20.8
Percentage of daily smokers smoking manufactured cigarettes	93.1%
Mean number of manufactured cigarettes smoked per day	7.1
Current smokers have tried to stop smoking in the past 12 months	35.1%



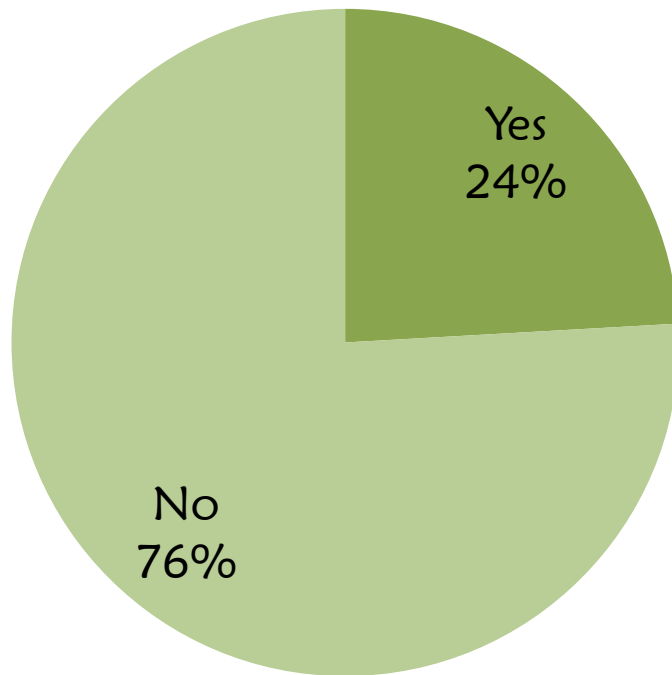
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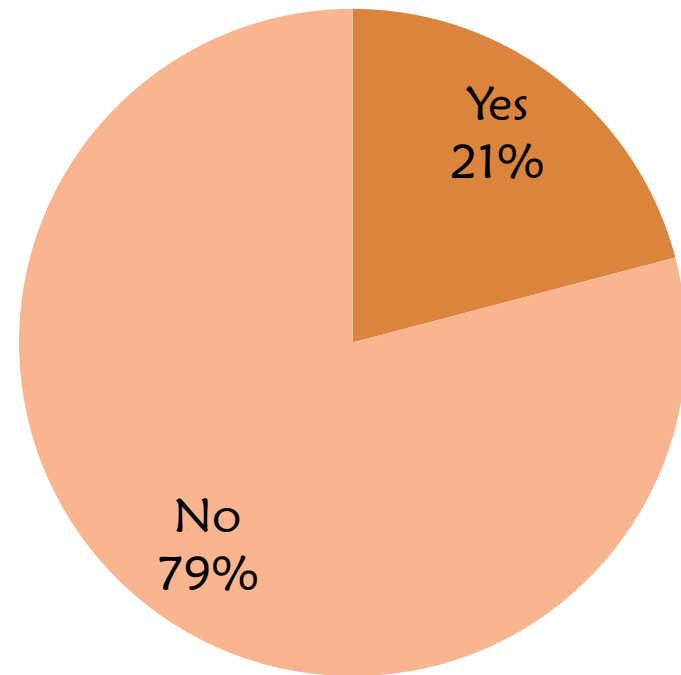
# Exposure to Second Hand Smoke

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Exposure to SHS at Home



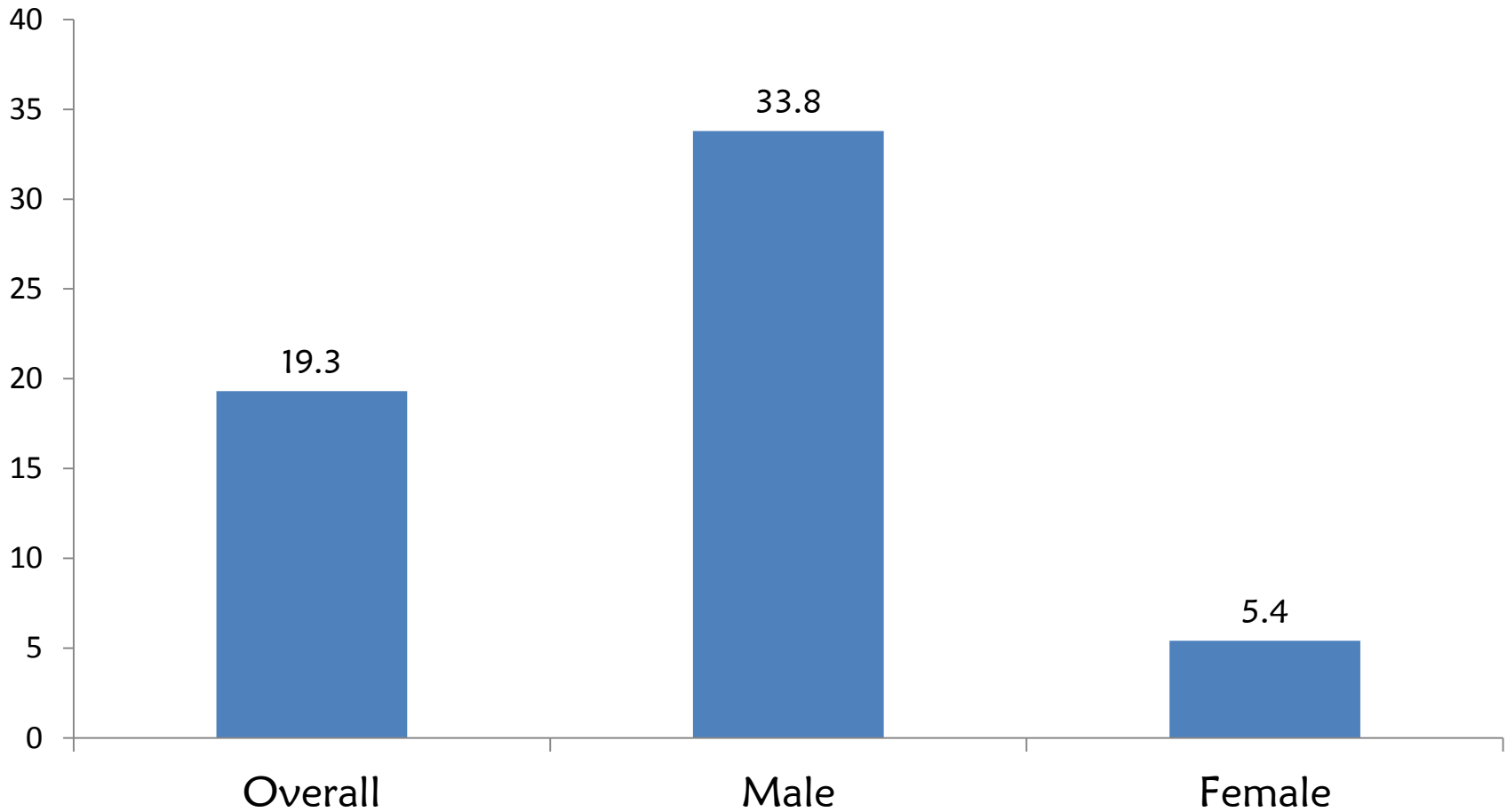
Exposure to SHS at Work



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# Alcohol

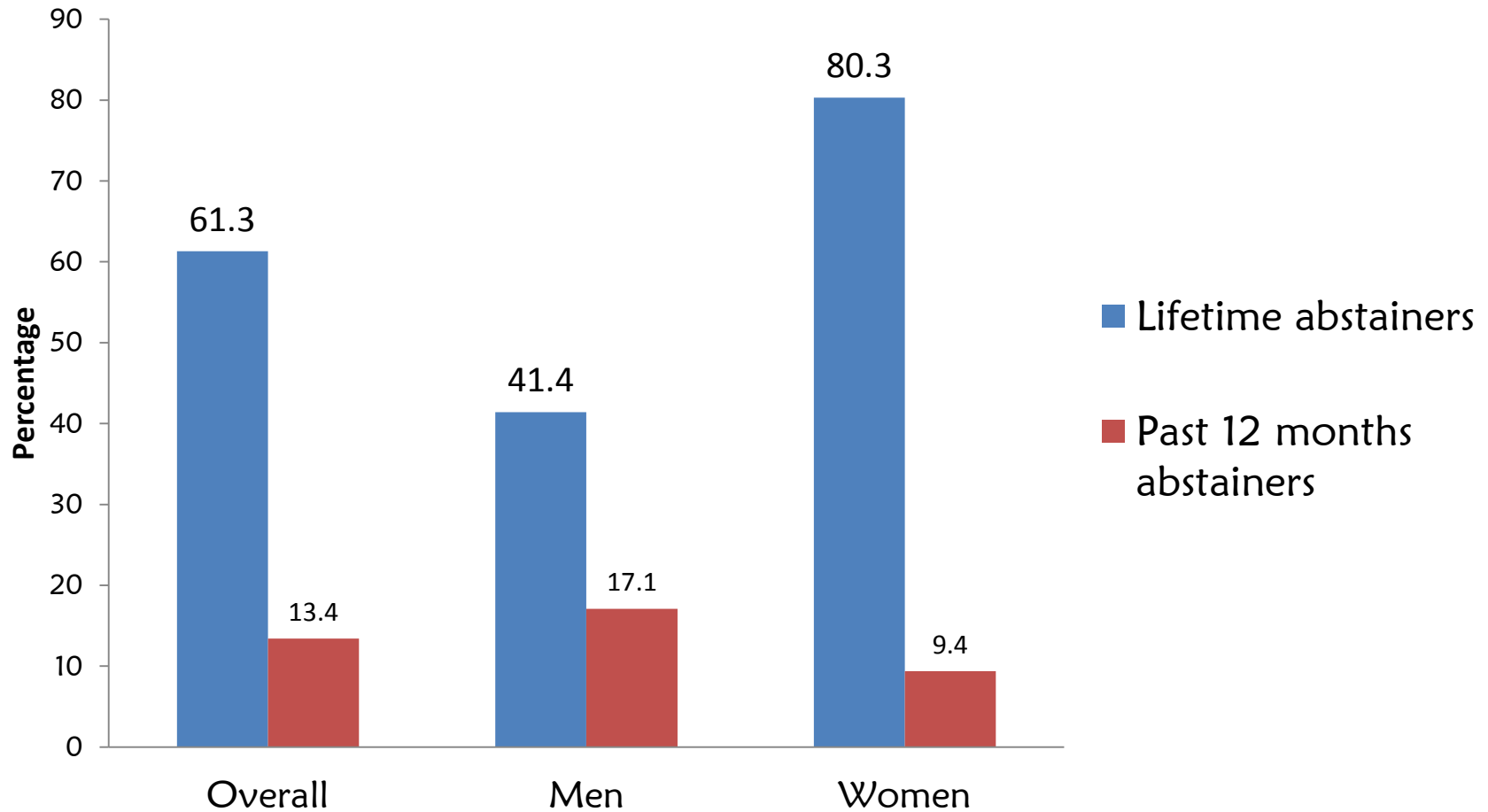
# Current Alcohol Drinkers



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# Alcohol Abstainers



# Harmful Use of Alcohol

	Percentage
Heavy episodic drinking	12.7
Drinking of unrecorded alcohol	35.5
Stopped drinking in the past 12 months	17.2



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# Diet

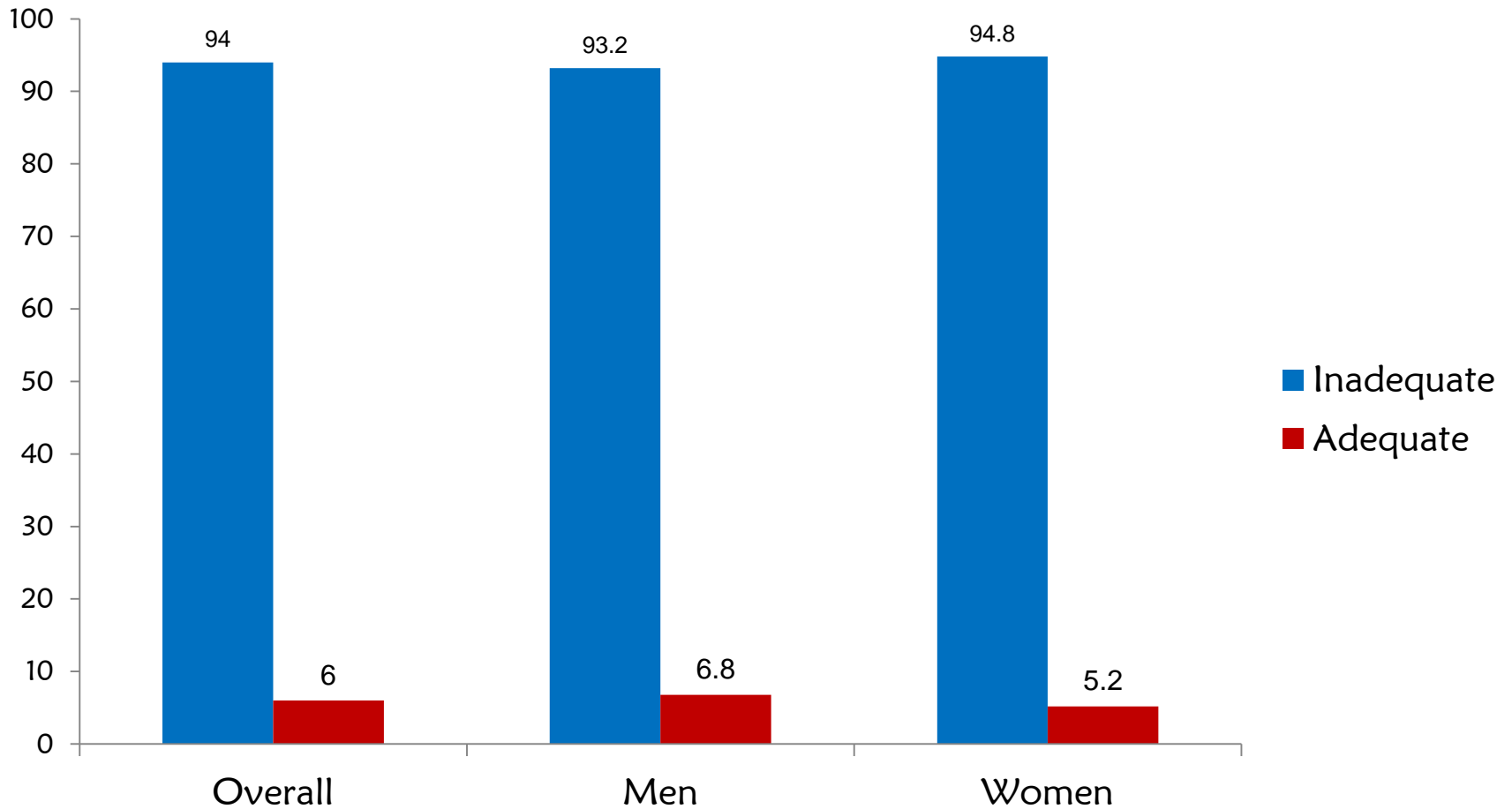


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# Low consumption of fruits and vegetables



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# Pattern of Consumption

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Mean number of days fruit consumed in a typical week	2.5
Mean number of days vegetables consumed in a typical week	5.0
Percentage who always or often add salt or salty sauce to their food before eating or as they are eating	23.2%
Percentage who always or often eat processed foods high in salt	4.3%
Percentage who always or often add sugar when cooking or preparing food and beverages at home	83.9%

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# Physical Activity

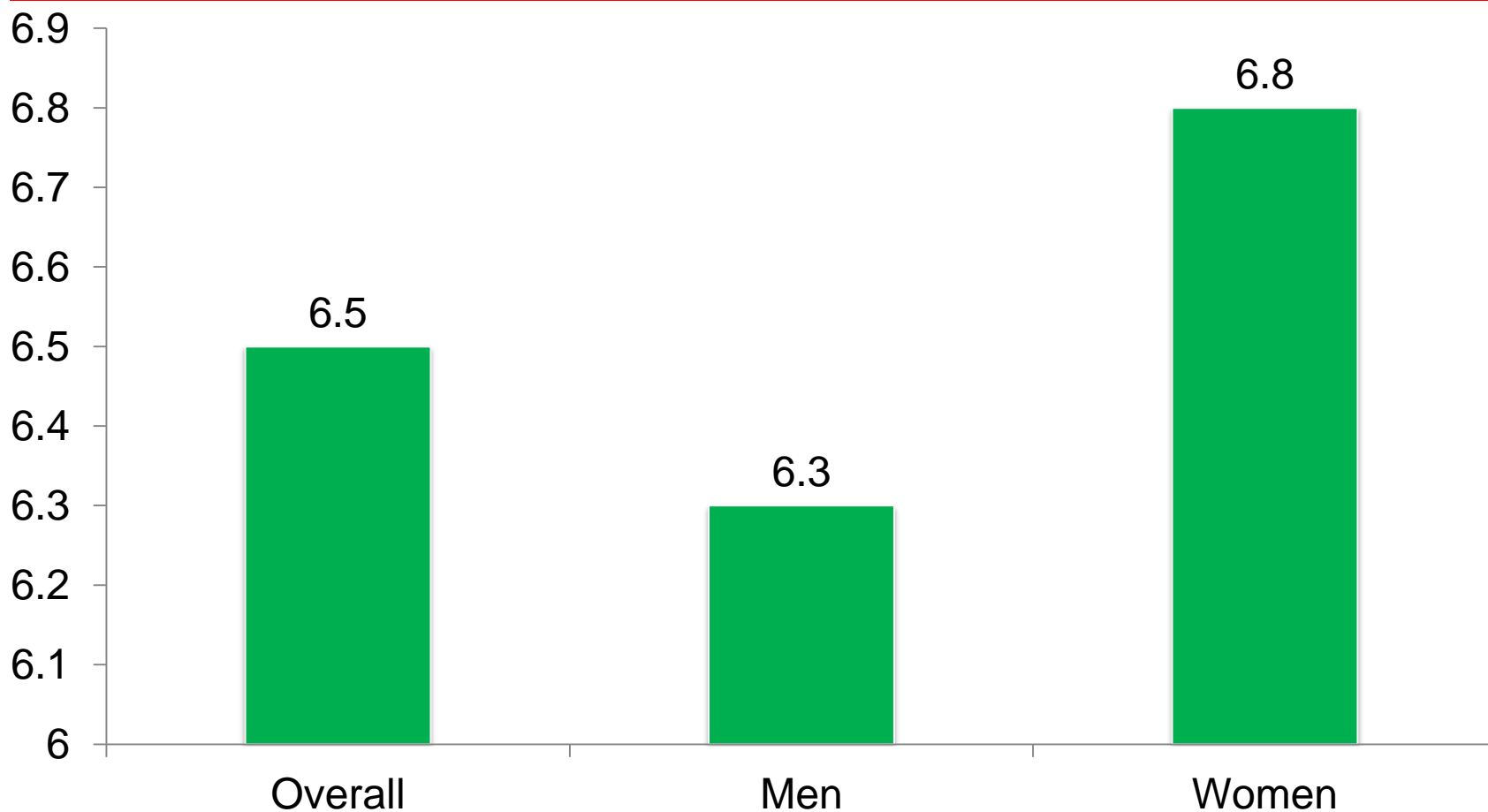
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# Percentage with insufficient Physical Activity



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# NON COMMUNICABLE DISEASES RISK FACTORS

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## STEP 2 & 3

- Past Medical History
- Physical measurements
- Biochemical measurements

Zachary  
Ndegwa



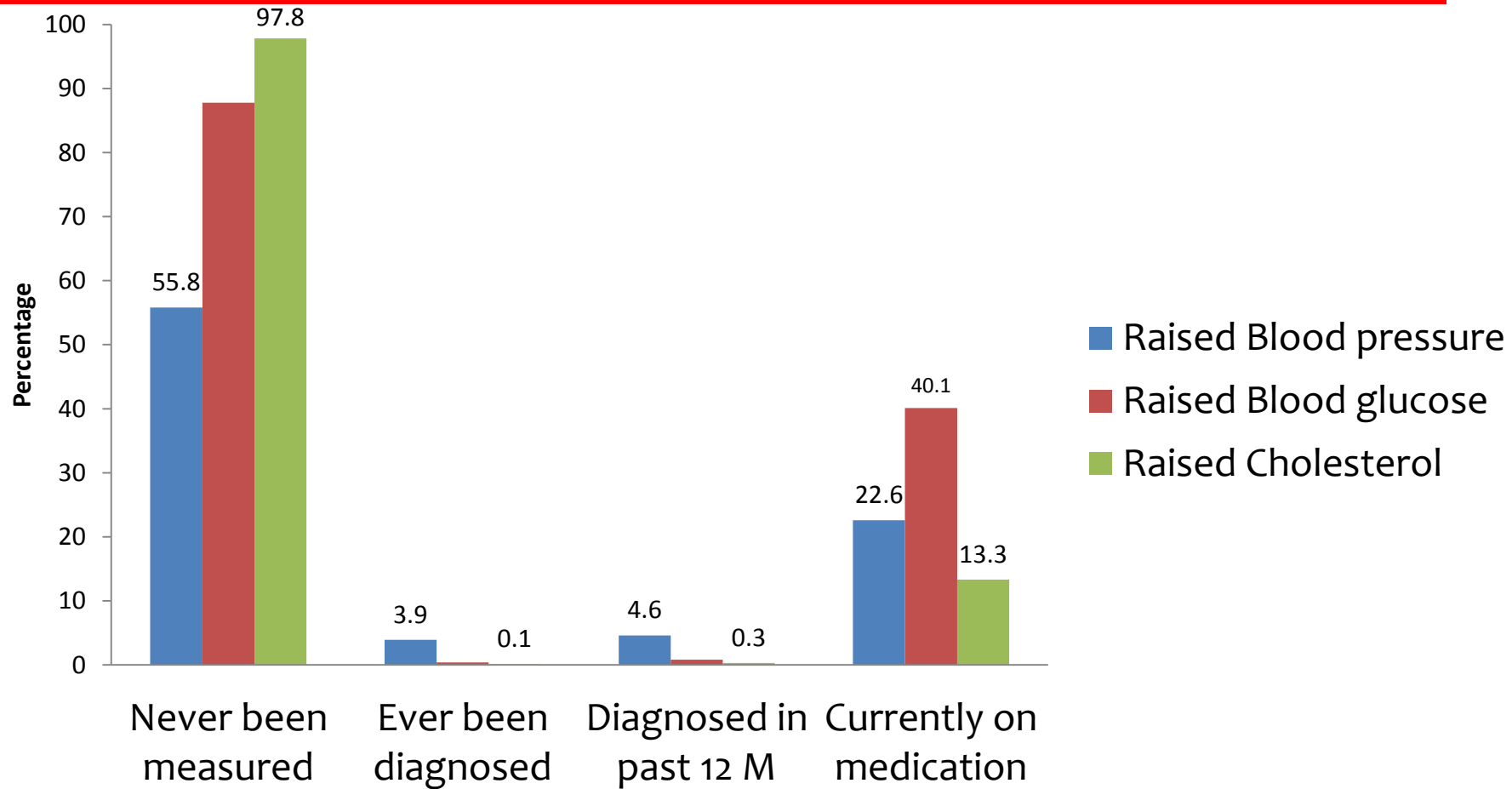
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# Steps 2 and 3



# Past Medical History

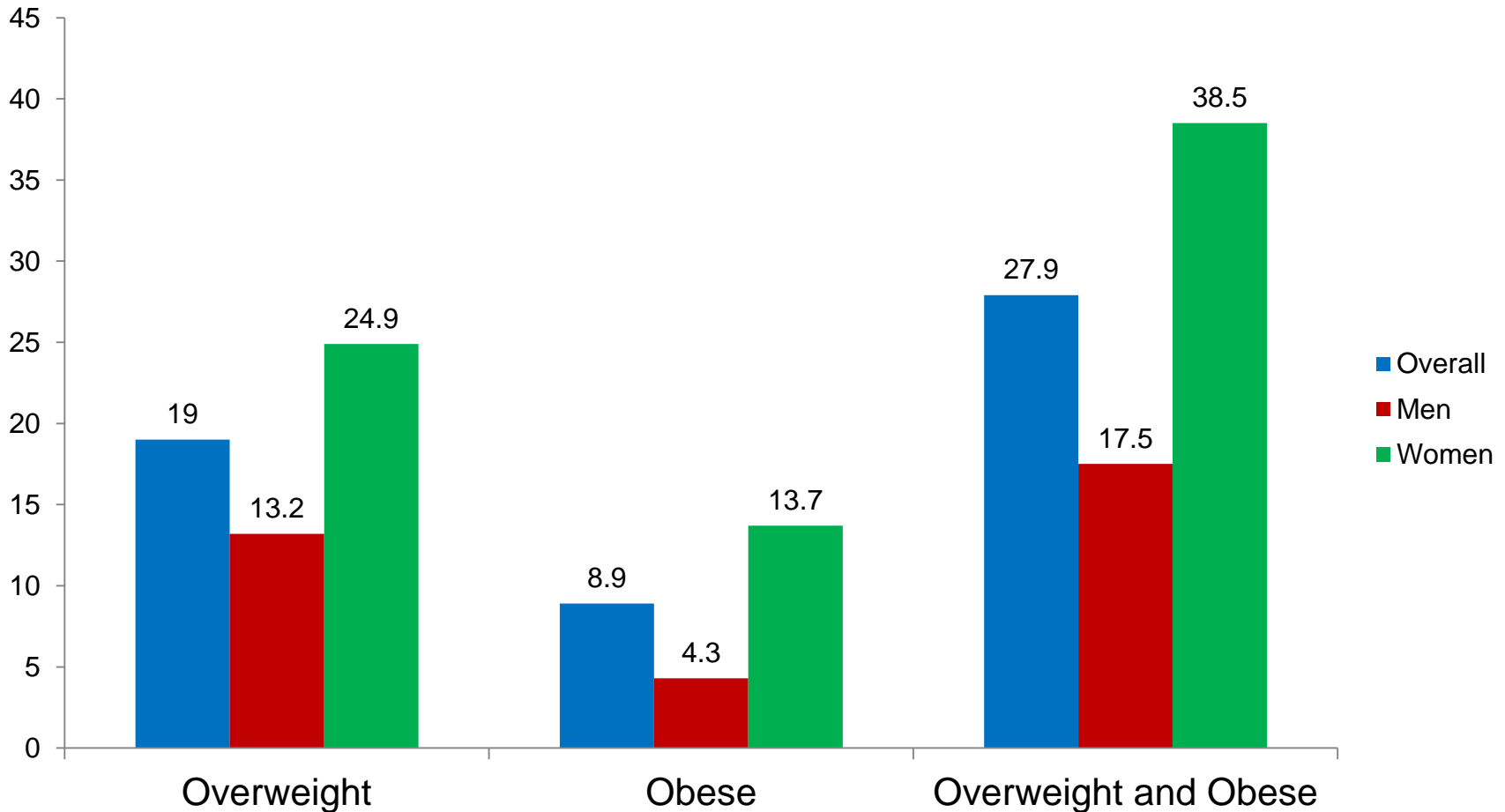


# Step 2 : Physical Measurement





# Prevalence of Overweight and Obesity

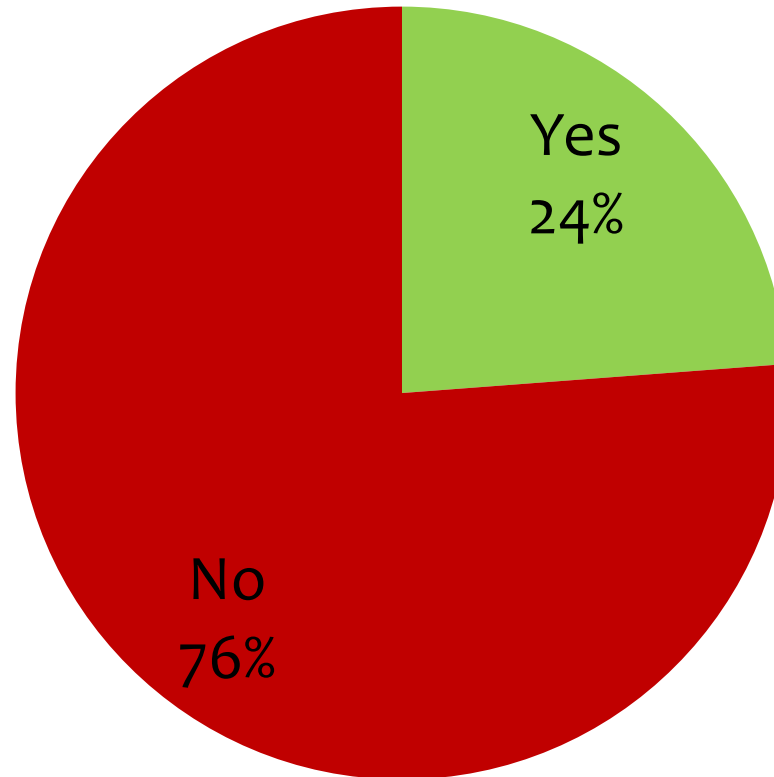


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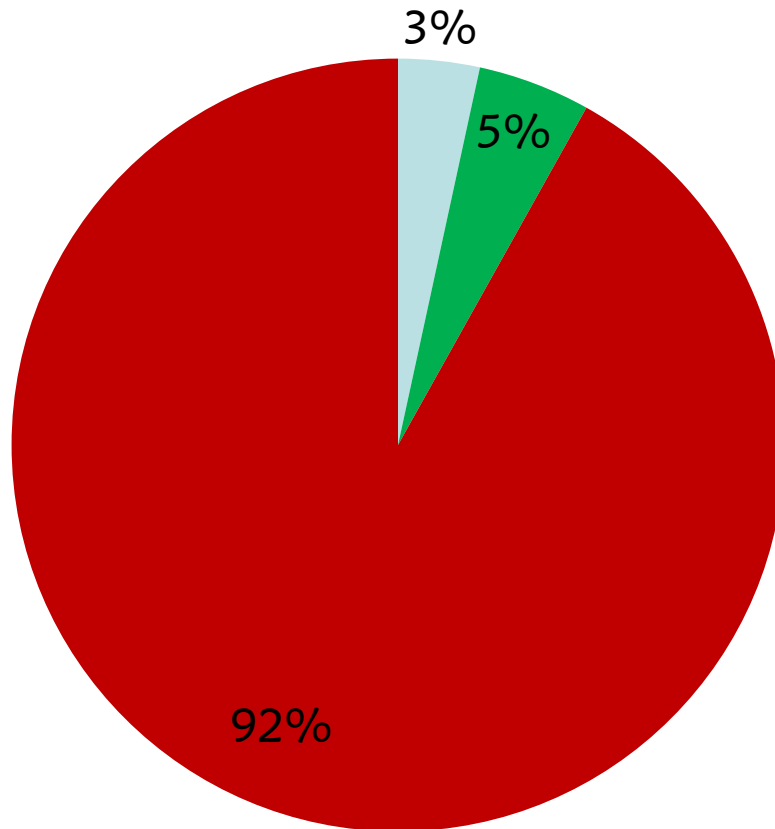
# Prevalence of Raised Blood Pressure/Hypertension

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# Status of Respondents with Raised Blood Pressure

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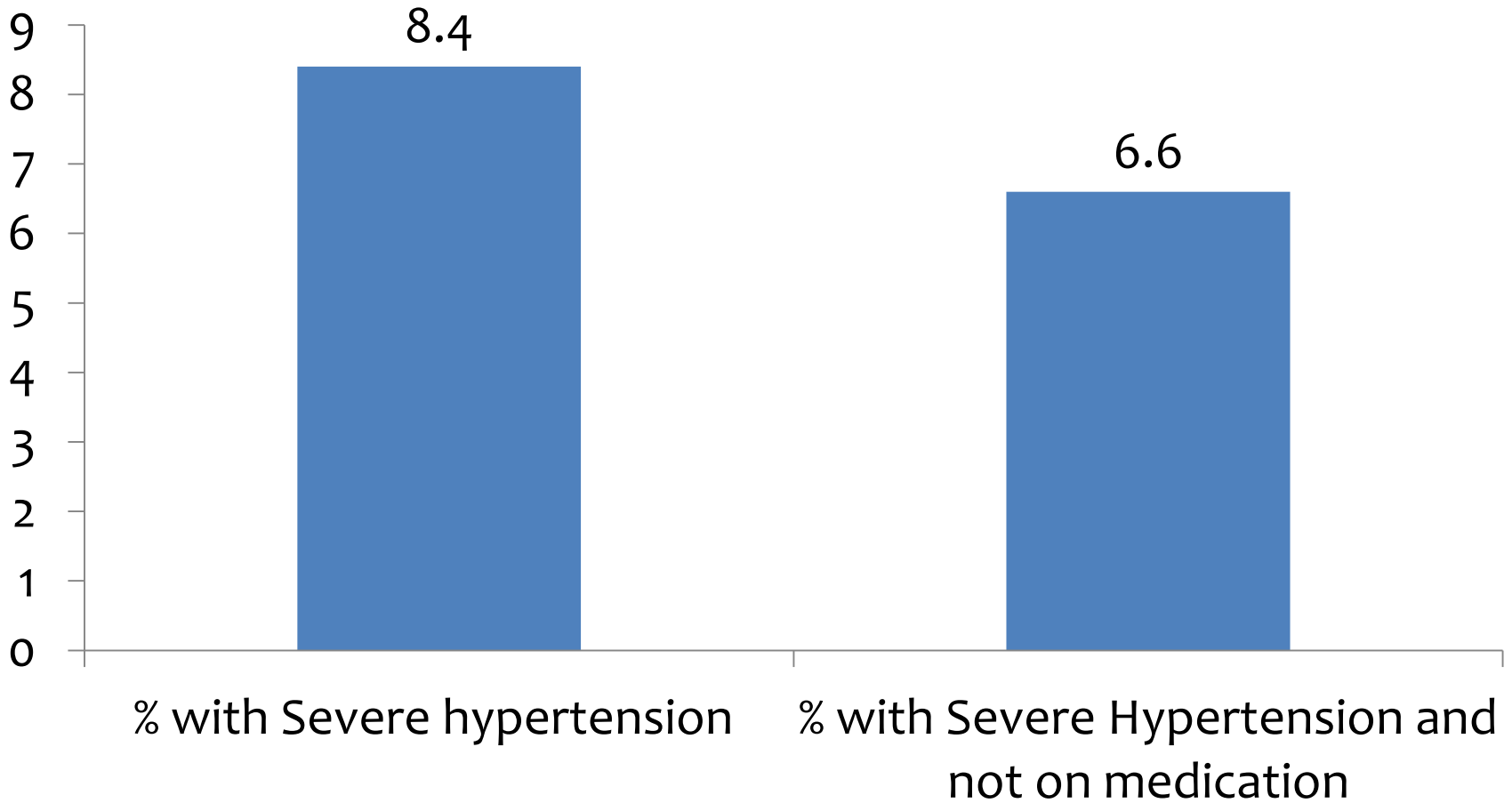
- On medication and have normal BP
- On medication have raised Bp
- Not on medication and have raised BP



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# Severe Hypertension

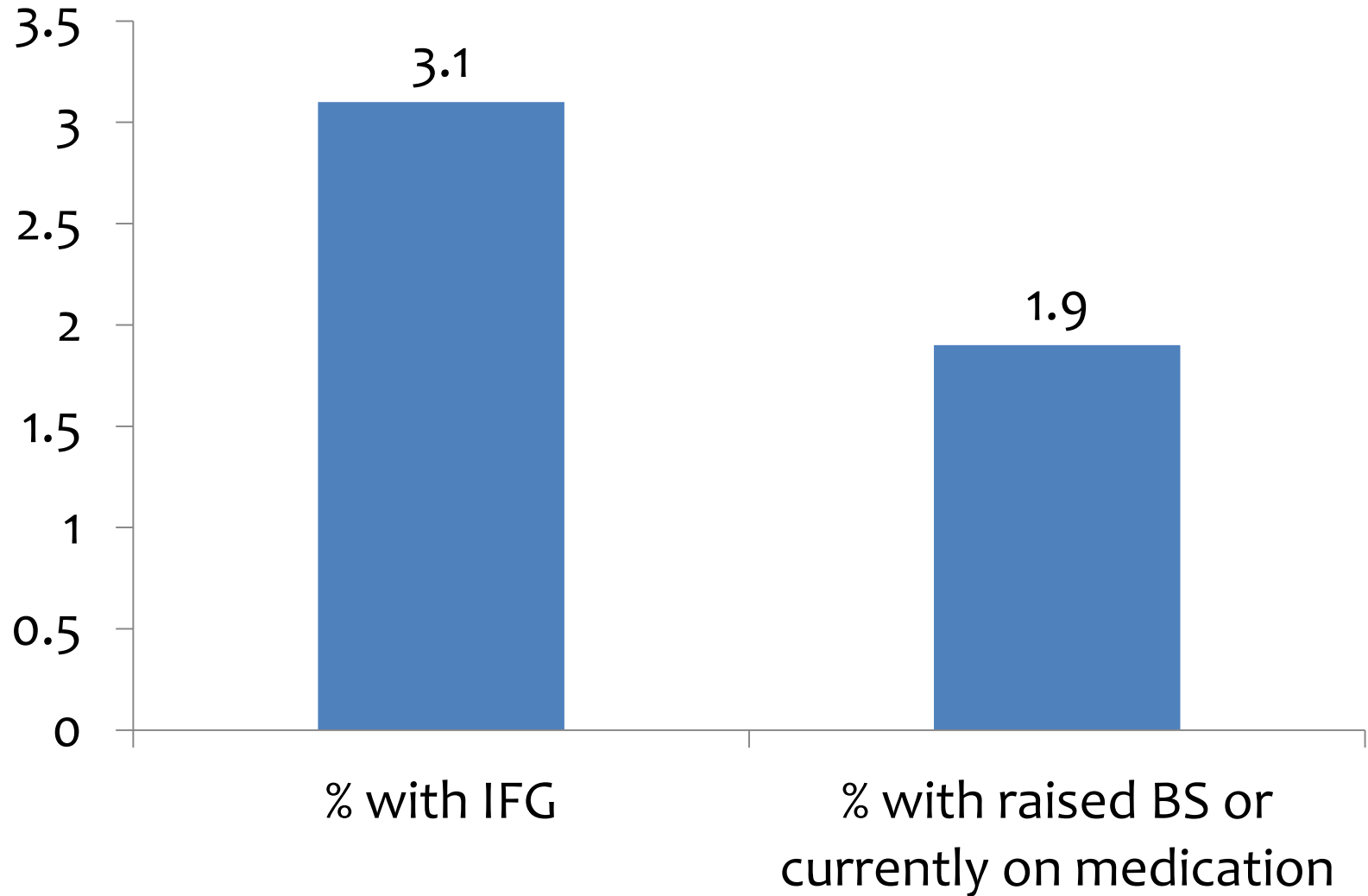


# Step 3: Biochemical Measurement



# Prevalence of IFG, raised BS or currently on medication

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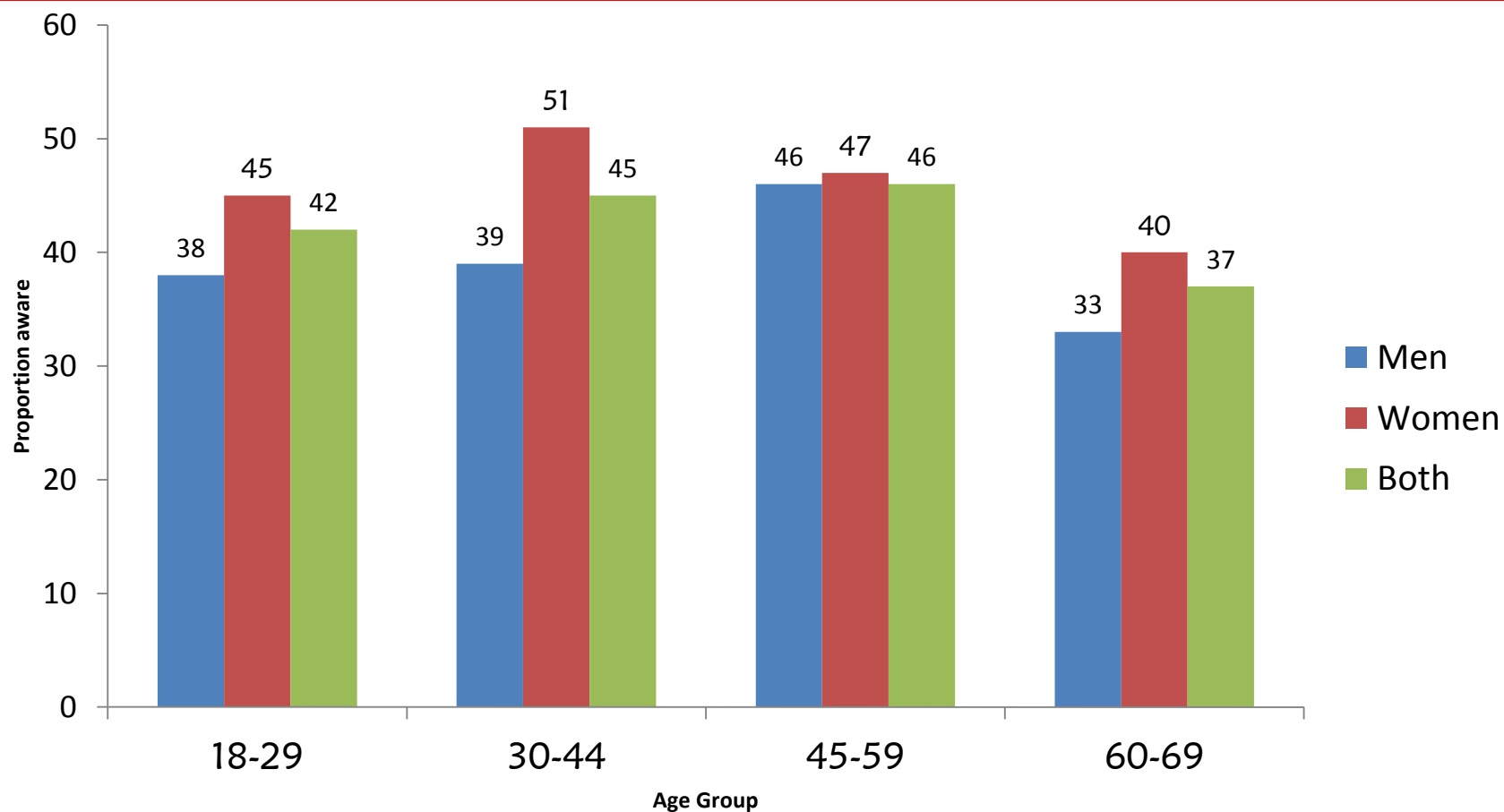


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# Cervical Cancer, CVD Risk and Lifestyle Advice

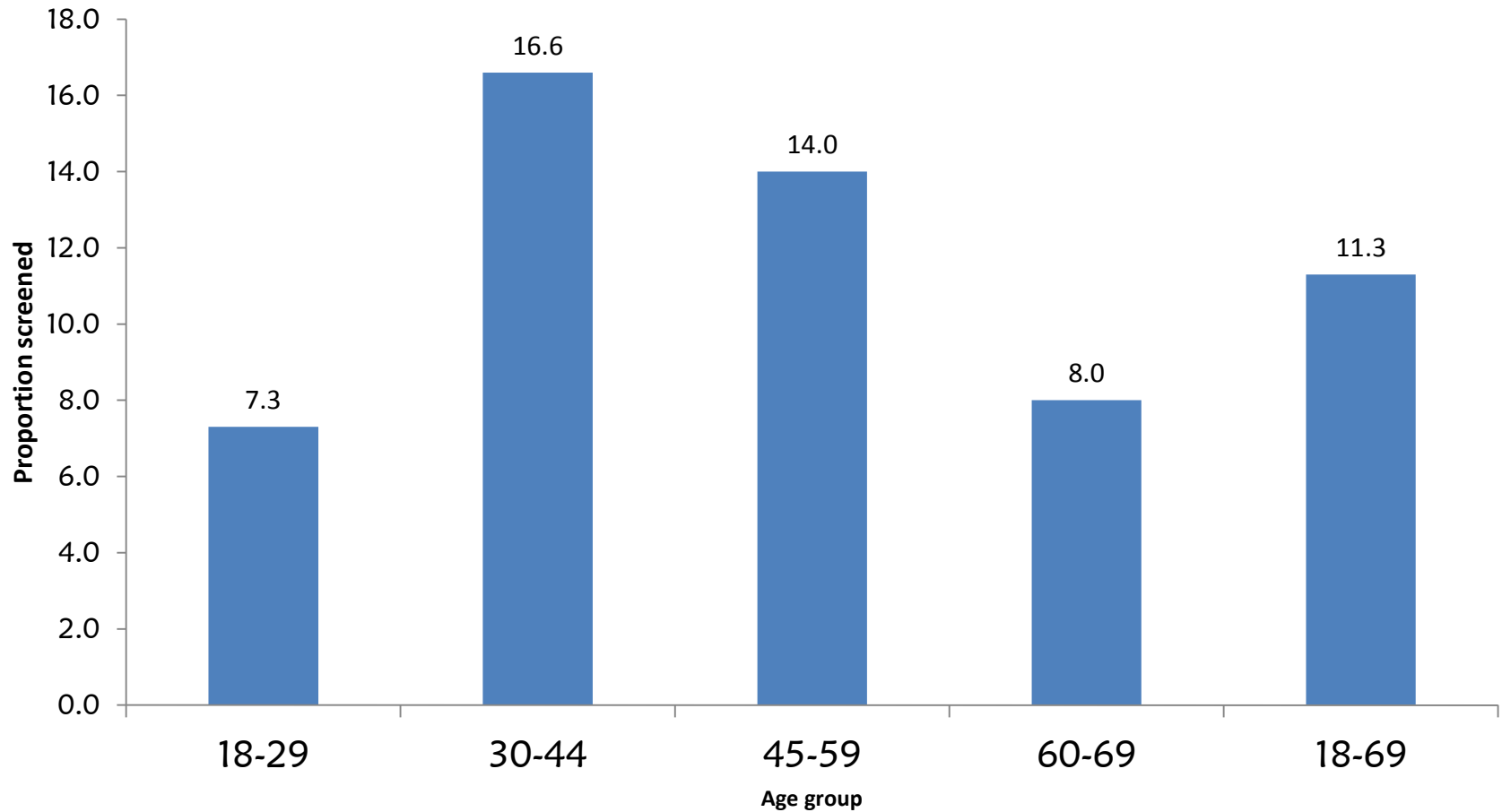
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# Awareness of screening methods for cervical cancer





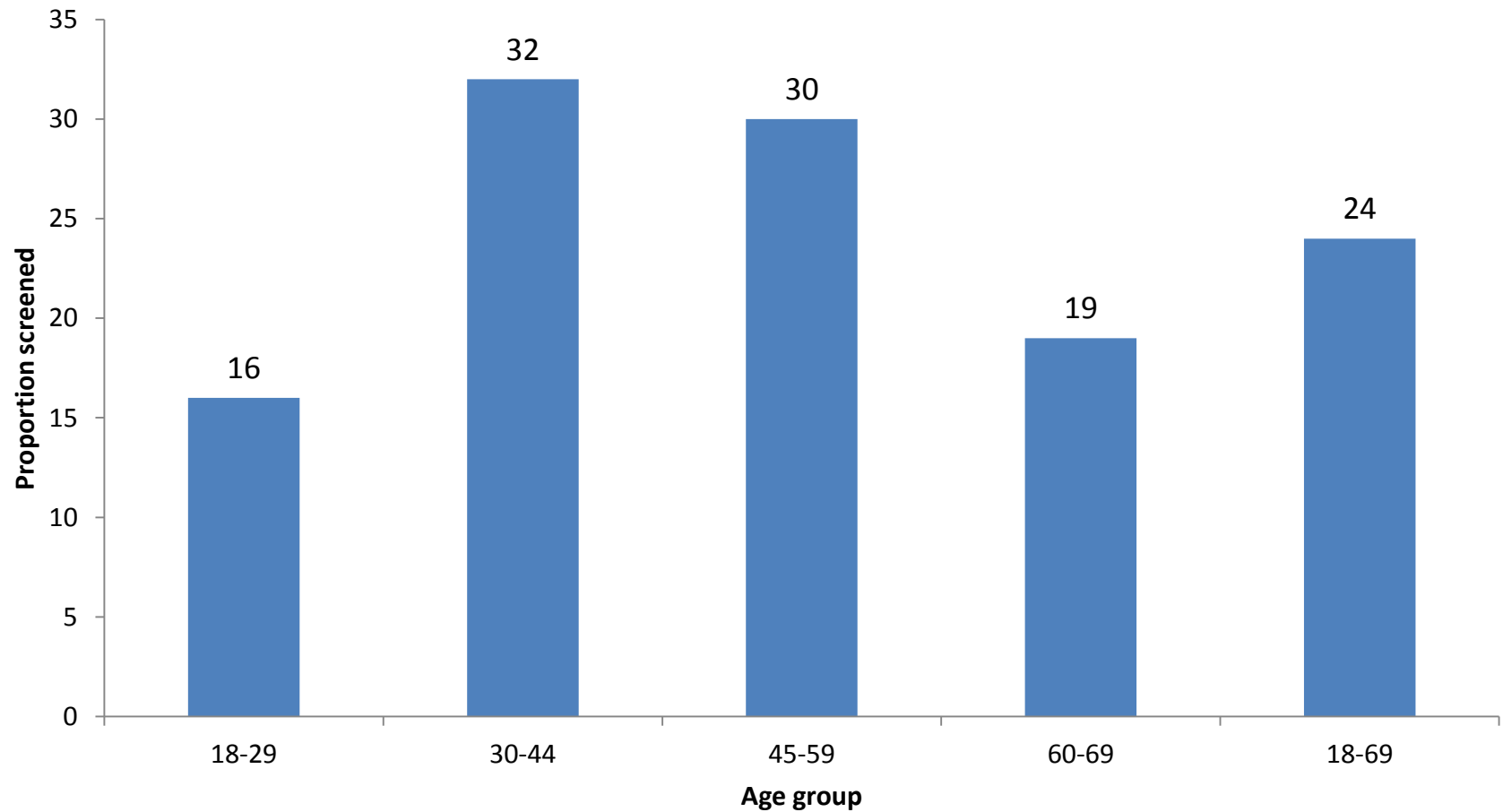
# Ever screened for cervical cancer



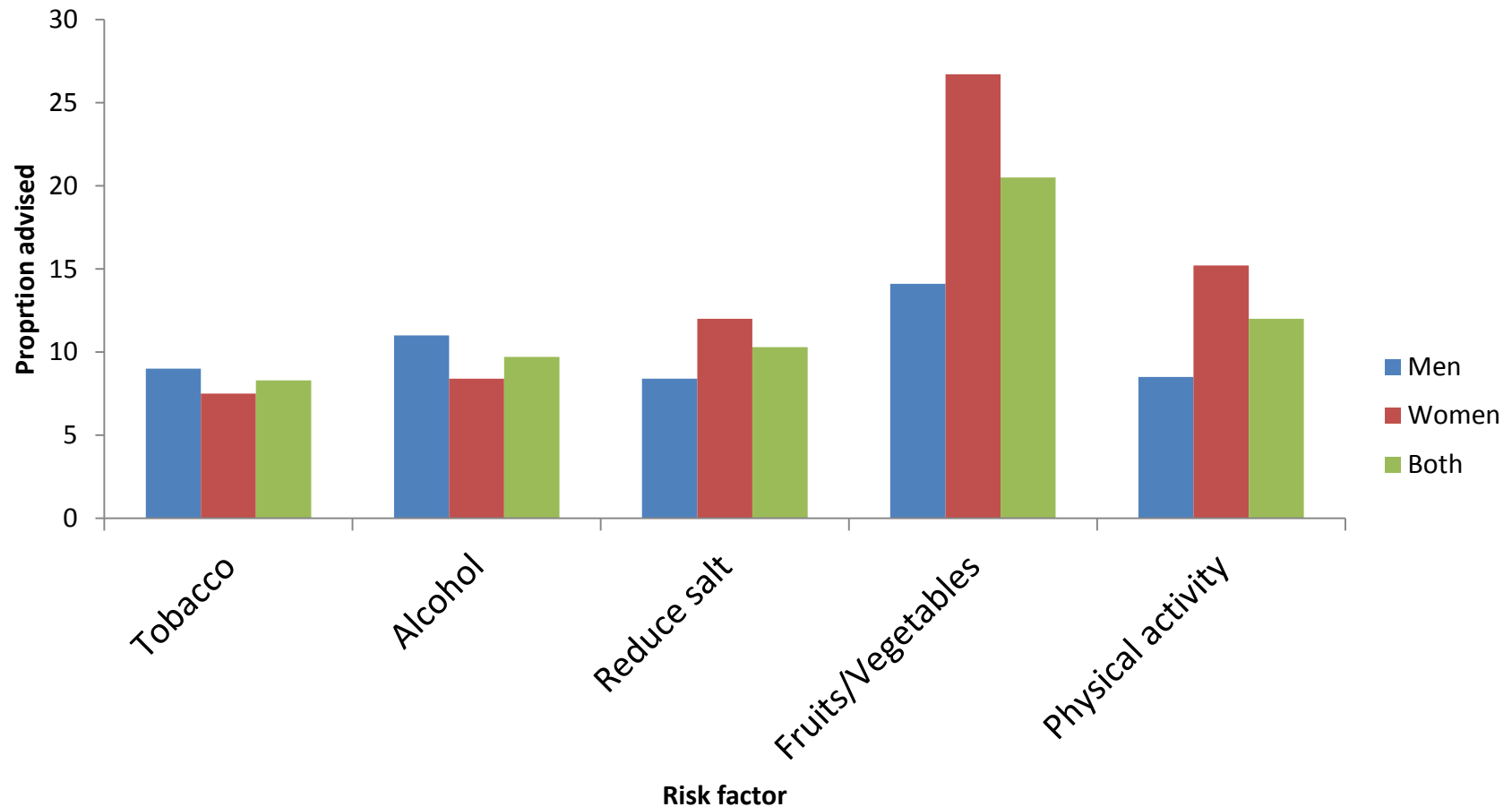
# Lifetime Screening among 30-49 yrs

Residence	Frequency	Percentage
Urban	652	13.9
Rural	529	22.5
Education level		
No formal schooling	199	3.2
Primary school incomplete	323	13.9
Primary school complete	405	17.6
Secondary school and above	254	27.8
<b>Total</b>	1181	<b>16.4</b>

# Awareness of screening methods and ever screened



# Healthy Lifestyle Advice by Health Worker



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# 10-year CVD Risk\*

Age Group	Male	Female	Both
40-54	6.5	7.9	7.2
55-69	6.7	10.5	8.6
40-69	6.6	8.8	7.6

\*Based on age, sex, blood pressure, smoking status, total cholesterol and diabetes



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# Total NCD Risk\*\*

Age group	Male	Female	Both
18-44	10.4	10.9	9.8
45-69	25.9	25.3	26.5
18-69	13.8	14.0	13.6

**\*\*3 or more risk factors**

- Current daily smoker
- Less than 5 servings fruits/vegetables per day
- Insufficient physical activity
- Overweight
- Raised BP



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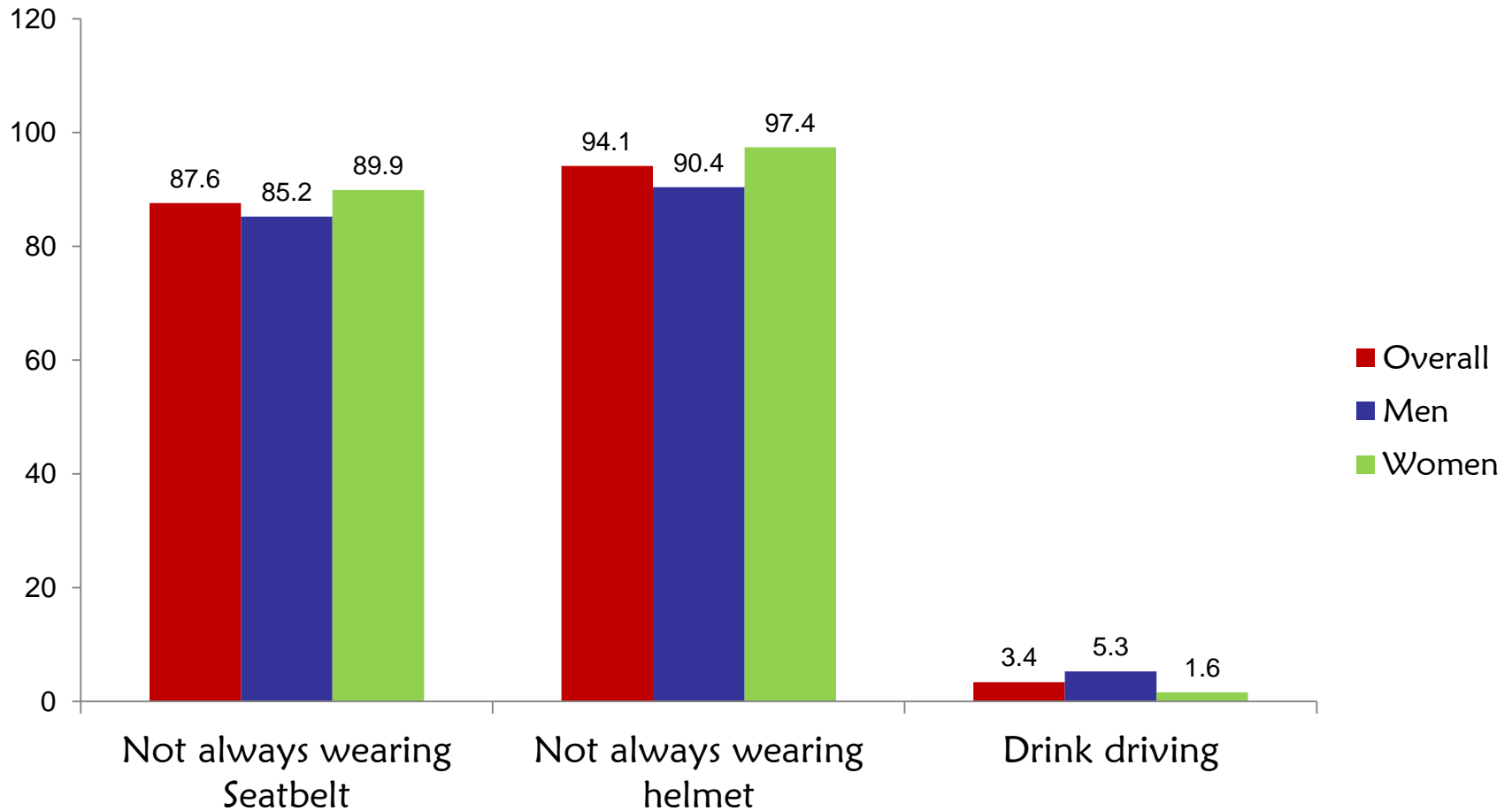




# **Violence and Injury**



# Road User Behaviour



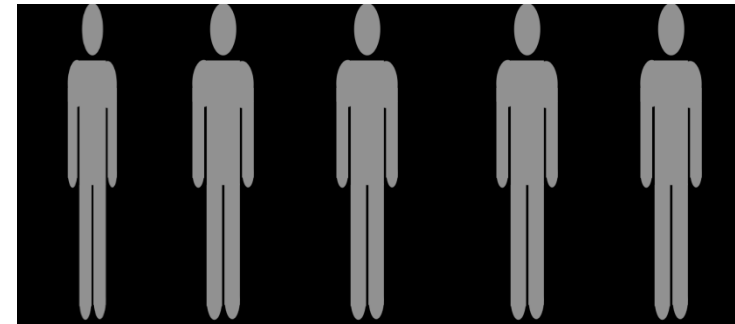
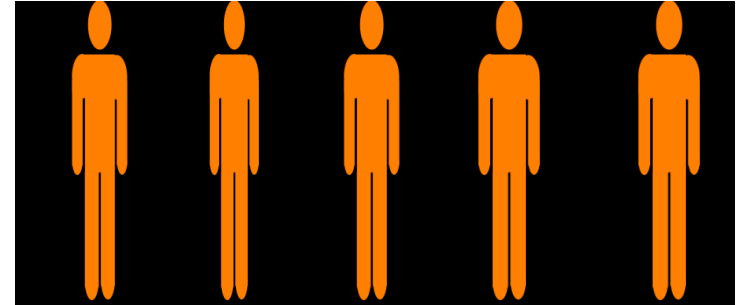
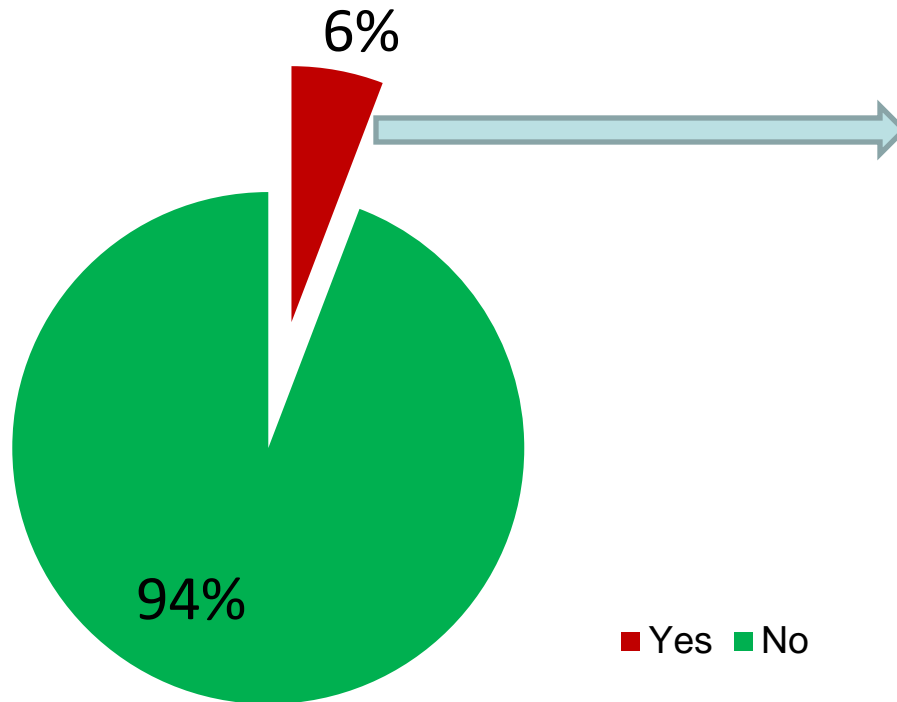
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# Road Traffic Crash

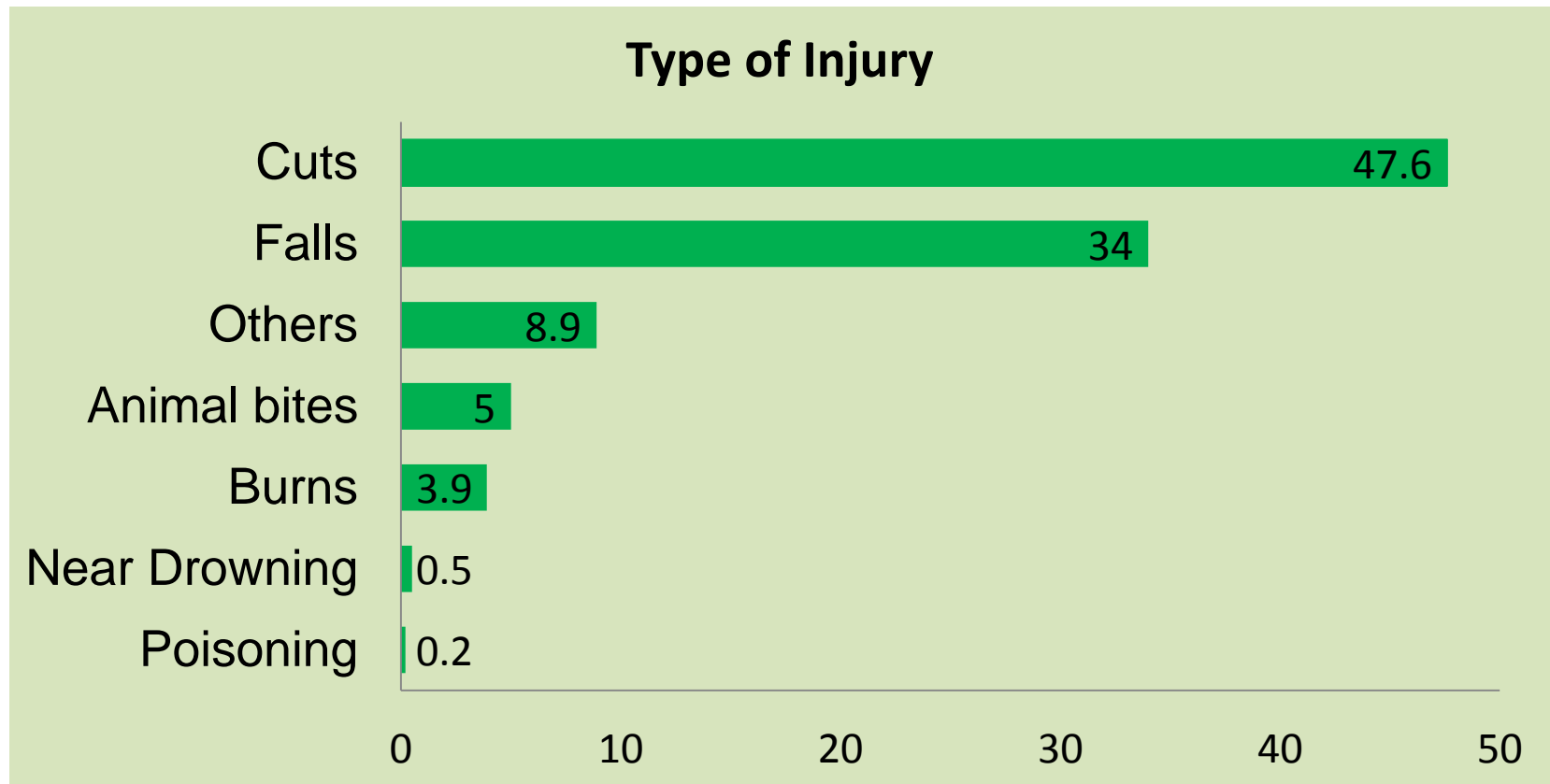
History of Road Traffic Crash in past 12 months



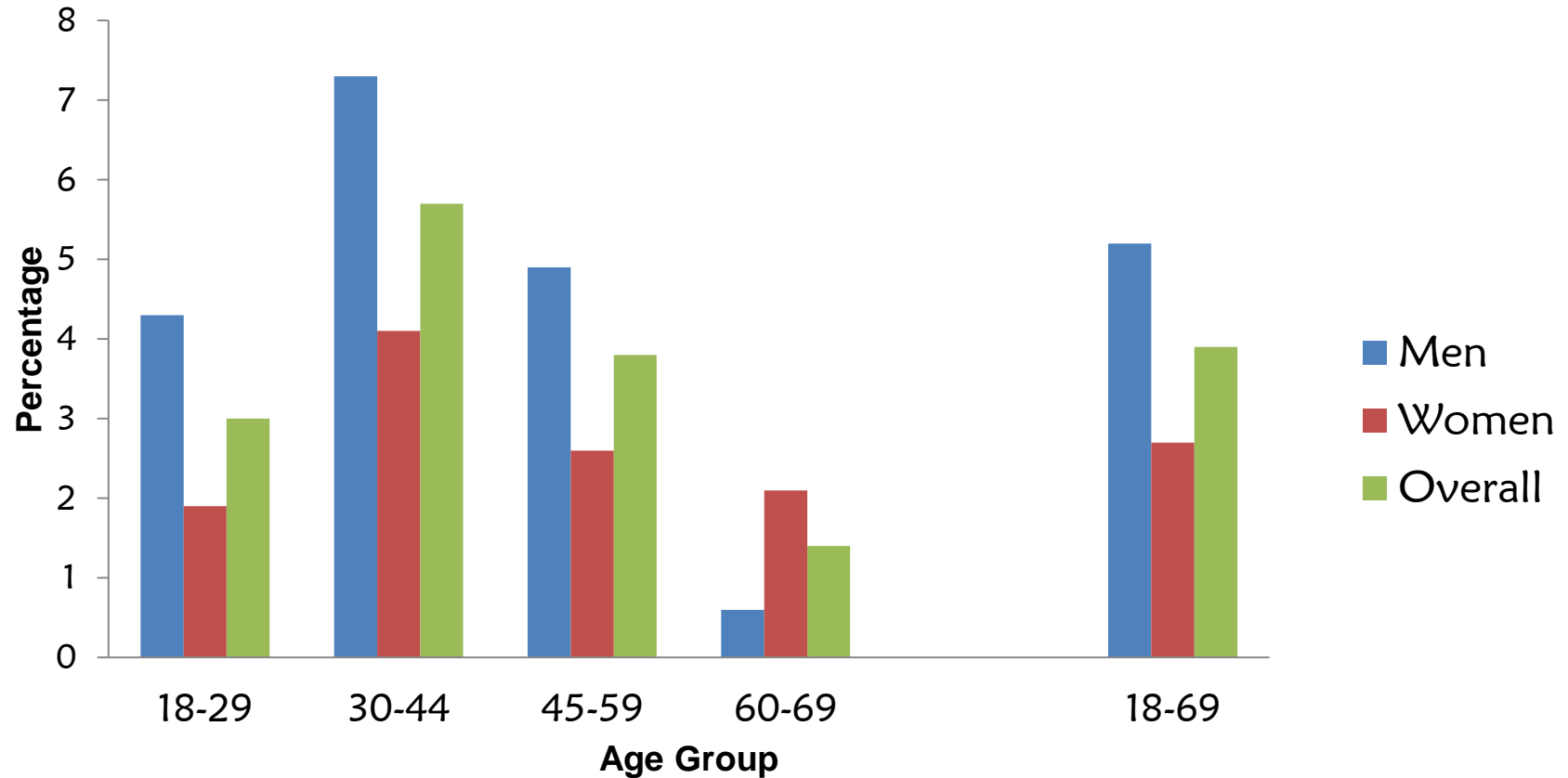
Five in ten of the respondents involved in a RTC had serious injuries

# Non Road Traffic Injuries

- ◆ 10% involved in non RTI in past 12 months that required medical attention



# Prevalence of Violence



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# Oral Health

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**KNBS**  
KENYA NATIONAL  
BUREAU OF STATISTICS  
*Keeping you informed*



World Health  
Organization

# Oral Hygiene Status

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	Percentage
Have 28 or more teeth	88.9
Describe teeth as poor or very poor	11.8
Describe gums as poor or very poor	7.2
Have removable dentures	4.6

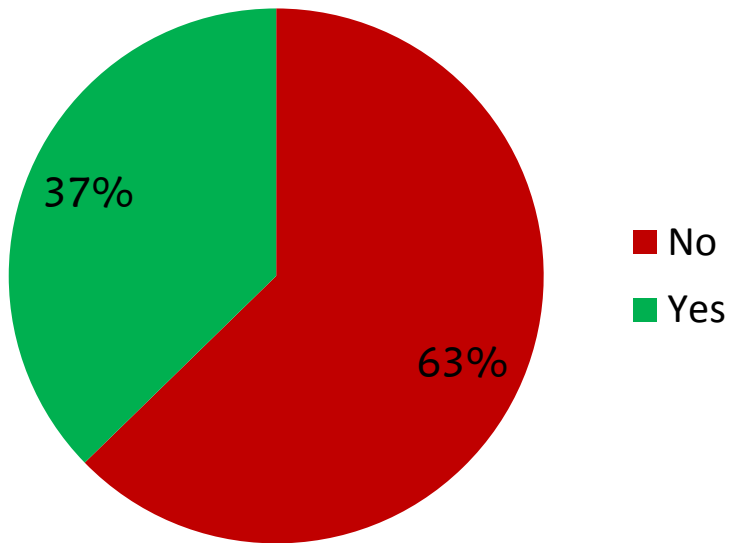
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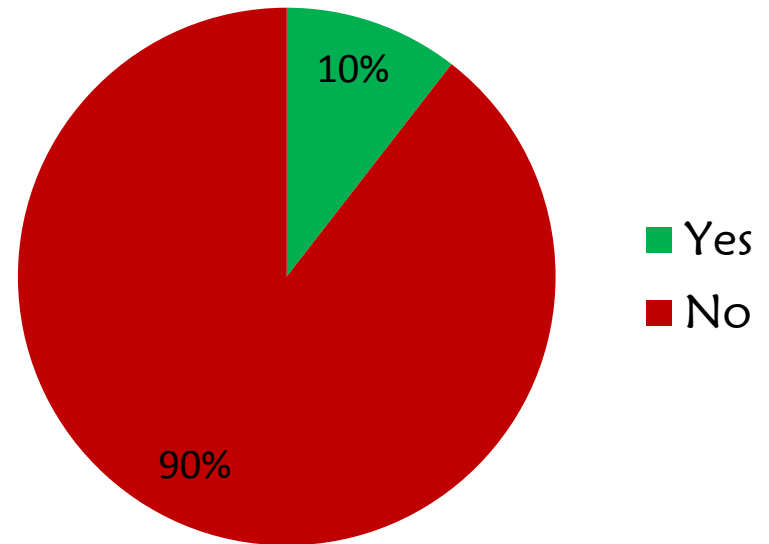
# Oral Health Seeking Behavior

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Responenents who have ever visited a Dentist

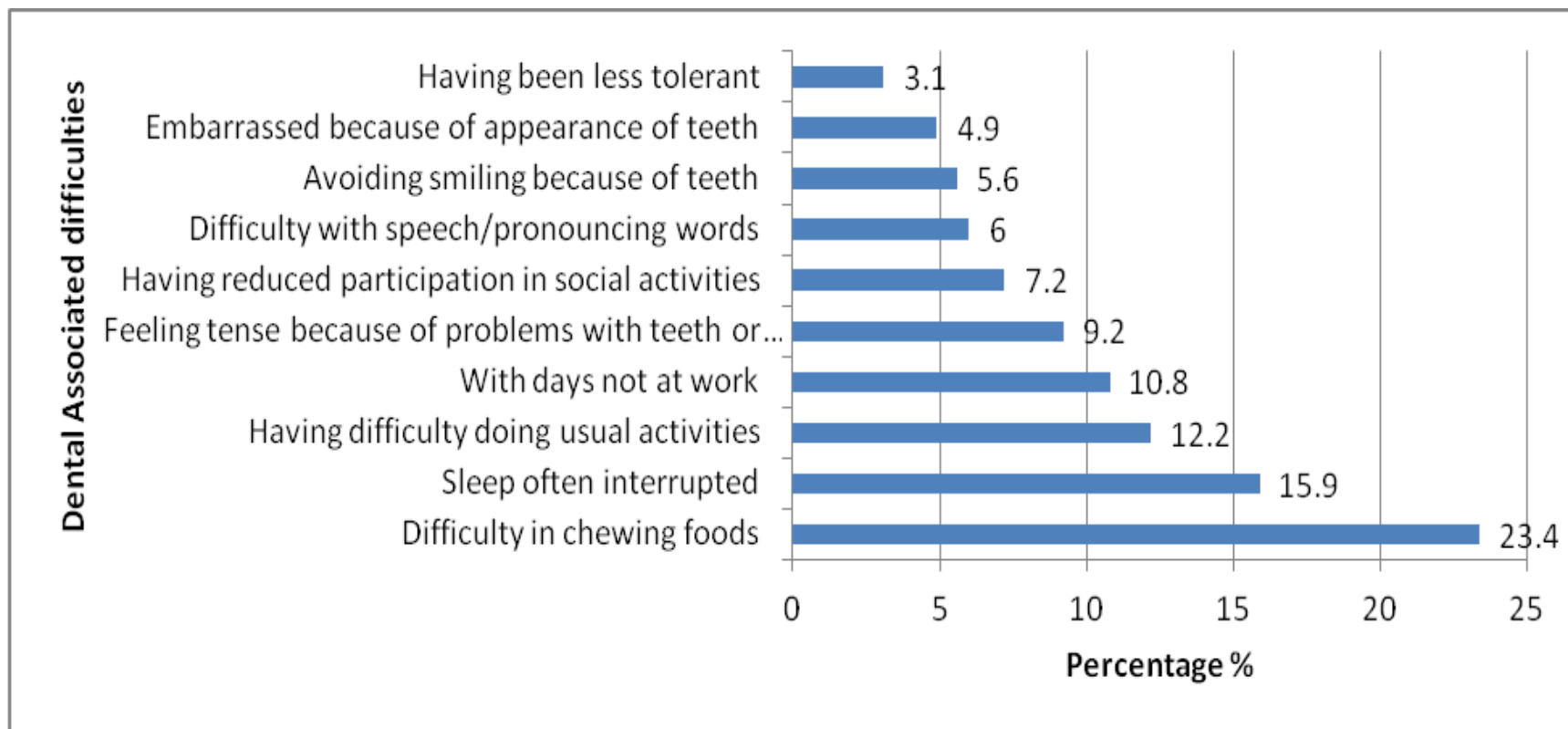


Visited Dentist in Past 12 months



The major reason (82%) for visiting dentist was pain and discomfort

# Oral health related quality of Life



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◆ *Thank You*



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