

A STUDY ON KNOWLEDGE AND PRACTICE OF RISK FACTORS OF ISCHAEMIC HEART DISEASE AMONG TRIBALS OF CHHOTAUDEPUR DISTRICT

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INTRODUCTION

- According to Global Status Report on non-communicable diseases 2014, in 2012 56 million deaths occurred in the world of which 38 million were due to NCDs, principally cardiovascular diseases, cancer and chronic respiratory diseases.
- In India 61% of deaths occur from NCDs and 23% are at risk of premature death due to such diseases .cardiovascular diseases contribute to 45% of all NCD deaths. cancer, diabetes and heart diseases account for 55 %of premature mortality in the age group of 30-69 years.
- In Gujarat NCDs form 56.7 % of disease burden and ischemic heart disease is the major cause of DALYS in 2016.
- Modifiable behavioral risk factors such as tobacco use, physical inactivity, unhealthy diet and harmful use of alcohol all increase the risk of CVDs. an important way to control CVDs is to focus on reducing the risk factors associated with these diseases.

RATIONALE

- Cardiovascular diseases are the leading cause of death in India. Cardiovascular diseases are considered as lifestyle diseases and supposed to be restricted to urban setting. Tribal and rural areas mainly associated with poverty, illiteracy, malnutrition and assumed as free from these non-communicable diseases
- Studies like Study conducted by ICMR in 2007-08 in 7 states on NCDs provides evidence of risk factors associated with tribals due to their behavioural habits, culture, diet etc.
- Chhotaudepur is recently created tribal dominated district and in this district, it becomes essential to understand behavioural habits of the tribals, which makes them prone to ischemic heart disease and also take physical measurements like height, weight and blood pressure to substantiate the study.
- Knowledge of risk factors of Ischemic Heart Disease is important in prevention of the disease, checking such knowledge among tribal population, would provide data on knowledge of tribal population for the conduction of further IEC activities.

RESEARCH QUESTION

- What is the existing knowledge of tribals about ischemic heart disease and what are their current practices adding to risk of ischemic heart disease.

OBJECTIVES

- ❑ To study the existing knowledge on Ischemic Heart Disease of tribals
- ❑ To explore the current practices of tribals adding risk of Ischemic Heart Disease



METHODOLOGY

- **STUDY DESIGN:** Cross Sectional Descriptive Study
- **STUDY AREA:** Chhotaudepur District, Gujarat
- **DURATION OF STUDY:** 3 Months (February 2018 To May 2018)
- **STUDY POPULATION:**

Inclusion criteria: Population of 30 years and above and belonging to any schedule tribes in chhotaudepur dist.

Exclusion criteria: Persons currently having any cardiovascular disease were excluded.

SAMPLE SIZE: Assuming the prevalence of IHDs to be 4%.sample size was calculated using following formula

- Sample size = $z_{\alpha/2}^2 * p * (1-p) / d^2$
- $z_{\alpha/2}$ – standard normal variate (at 98% confidence interval 2.33)
- p- proportion (0.04)
- d- margin of error 4% (0.04)

using this formula **131** sample size was determined as minimum sample size for the conduction of study. and sample of **145** was collected considering non- response rate.

- **SAMPLING TECHNIQUE:** Convenience sampling was used to collect desired sample size. Sample was collected from the OPD patients visiting the district hospital based on inclusion and exclusion criteria.
- **DATA COLLECTION INSTRUMENT:**
 - Structured questionnaire based on WHO STEPS instrument
- **DATA COLLECTION PROCEDURE:**
 - Questionnaire was administered by taking interview of the respondent and filled by the interviewer.
 - Gujarati translator was used for the purpose of administration of the instrument.
 - Height was measured by using stadiometer.
 - Weight was taken by using manual weighing machine.
 - Blood pressure of the right arm of the respondent was measured using,mercury sphygmomanometer in sitting position.
 - Show cards were used to explain to the respondents about some complex questions.

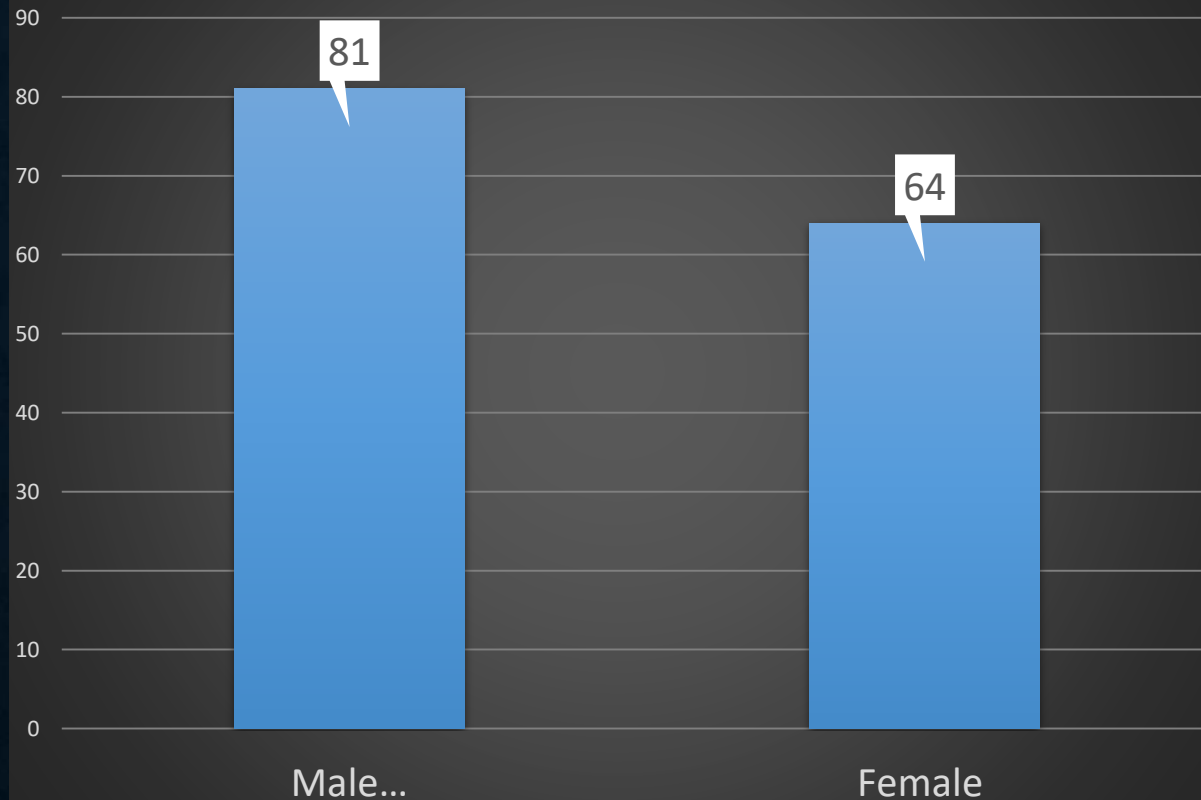
- **DATA ANALYSIS PROCEDURE:** Data was analysed using Microsoft Excel 2016.

Knowledge Score had following criteria

- 0-5 -No Awareness
- 6-10 -Partially Aware
- Above 10- Fully Aware
- Body mass index Range
- Underweight- Under 18.5 kg/m²
- Normal weight-18.5-25 kg/m²
- Overweight-25-30 kg/m²
- Obese-Over 30 kg/m²

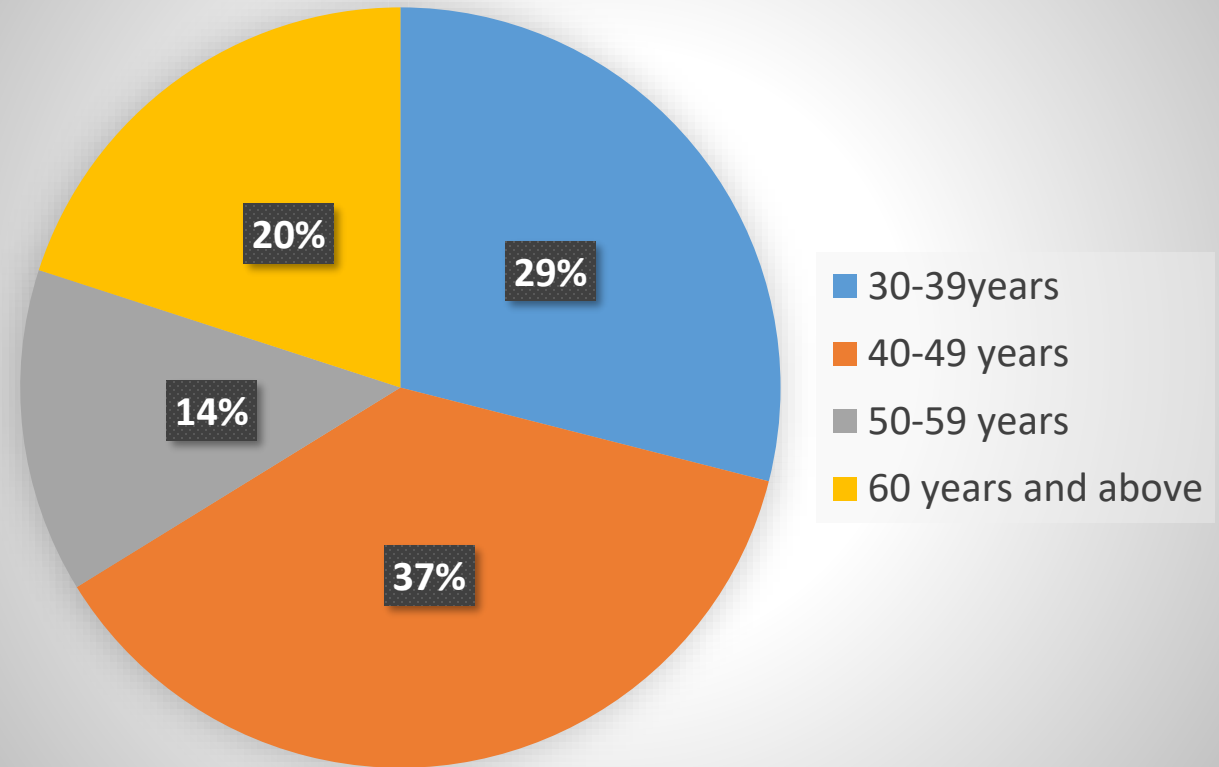
RESULTS

GENDER WISE DISTRIBUTION (N=145)



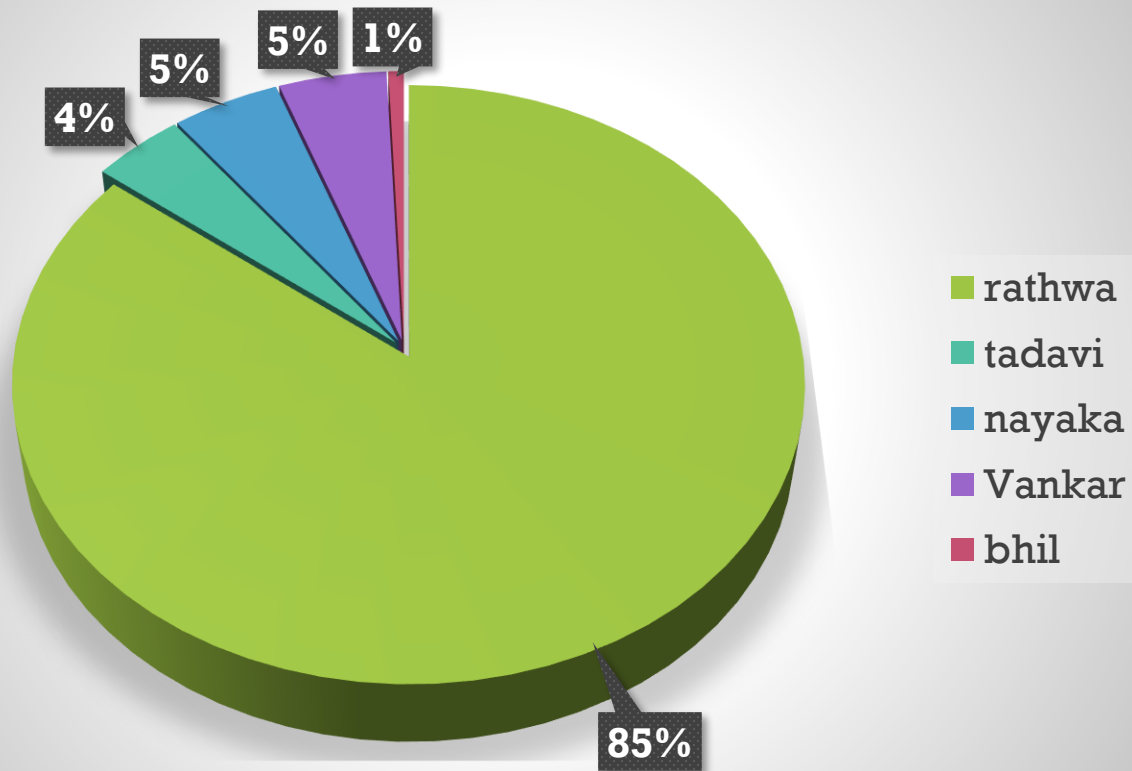
- Out of the total study population 55% were found to be male (81 in number) and 45% female (64 in number).

AGE WISE DISTRIBUTION (N=145)



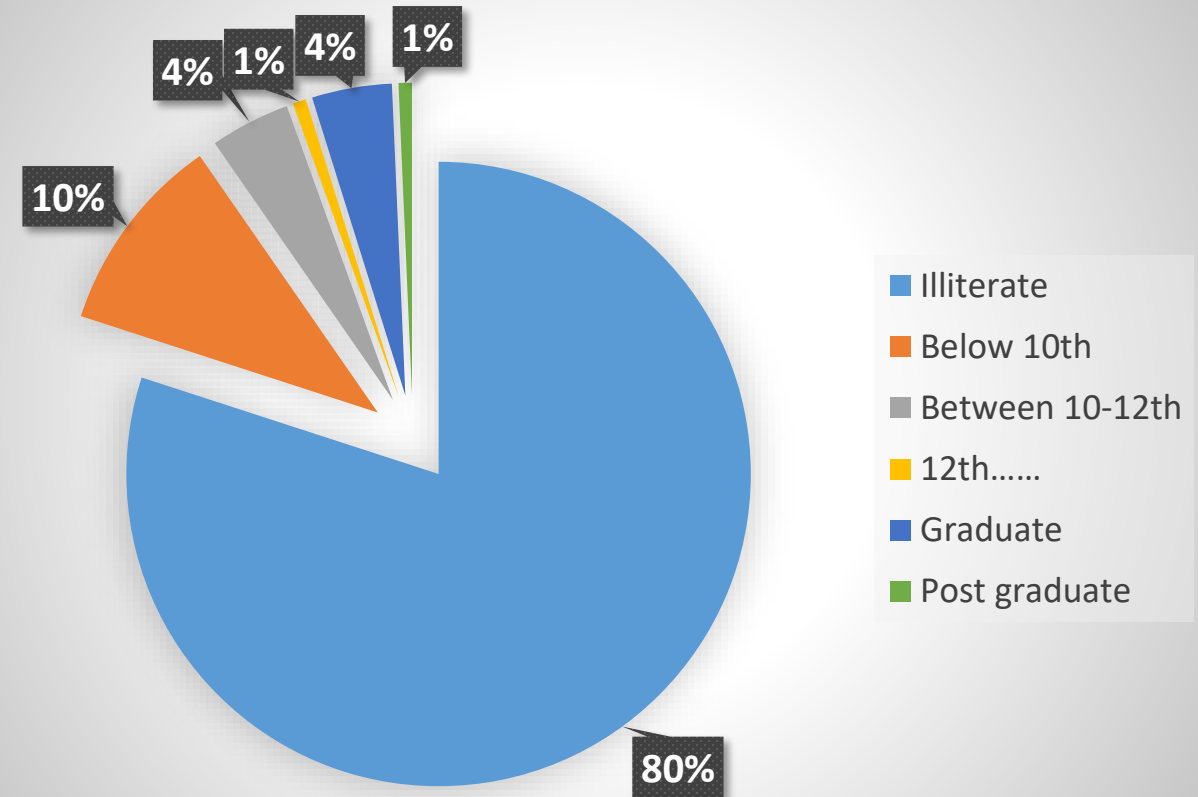
- Age wise distribution analysis showed that 37% of respondents were in age group of 40-49 years, 29% in age group of 30-39 years, 14% in age group of 50-59 years and 20% in 60 years and above.

TRIBES DISTRIBUTION (N=145)



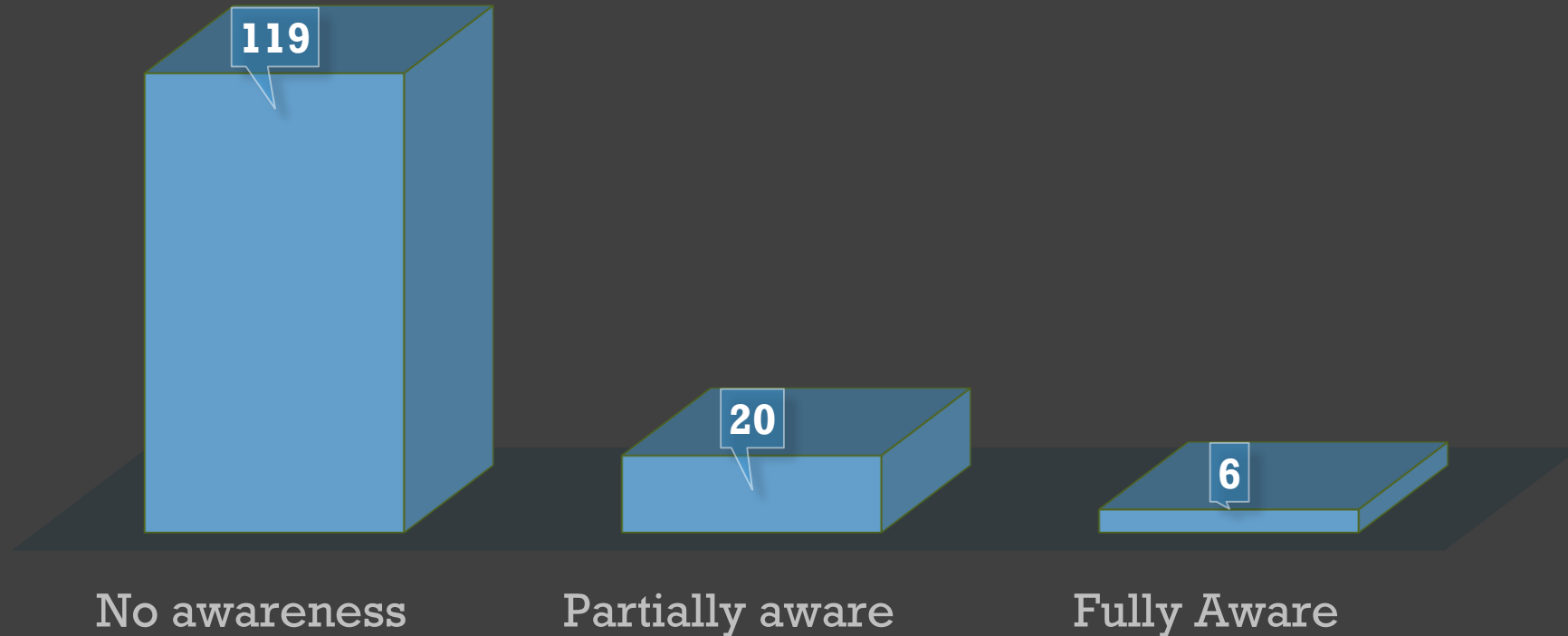
A Majority of the respondents i.e. 85% found to be of Rathwa tribe whereas Nayaka and vankar tribes were 5% each and tadavi tribe were 4%

EDUCATIONAL STATUS (N=145)



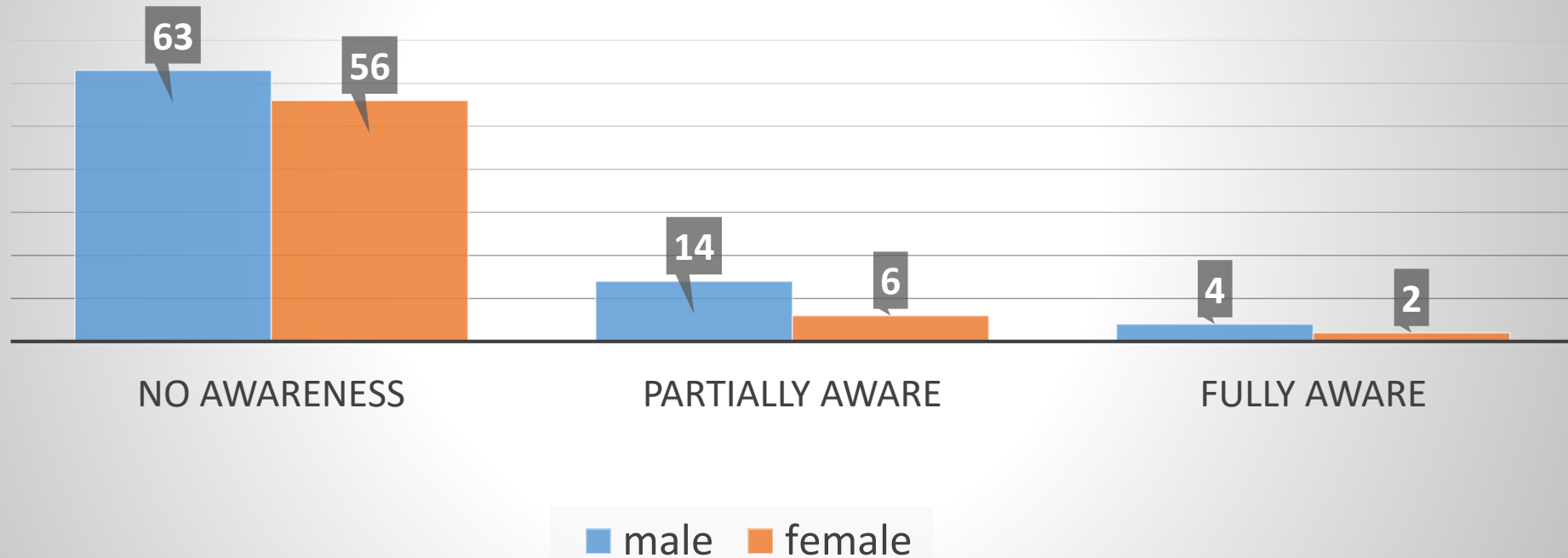
- A majority of the respondents i.e. four fifth of the respondents found to be illiterate and those in 10-12th education group and 12th were 4% and 1% respectively. graduates found to be 4% and post graduates at 1%

KNOWLEDGE LEVEL (N=145)



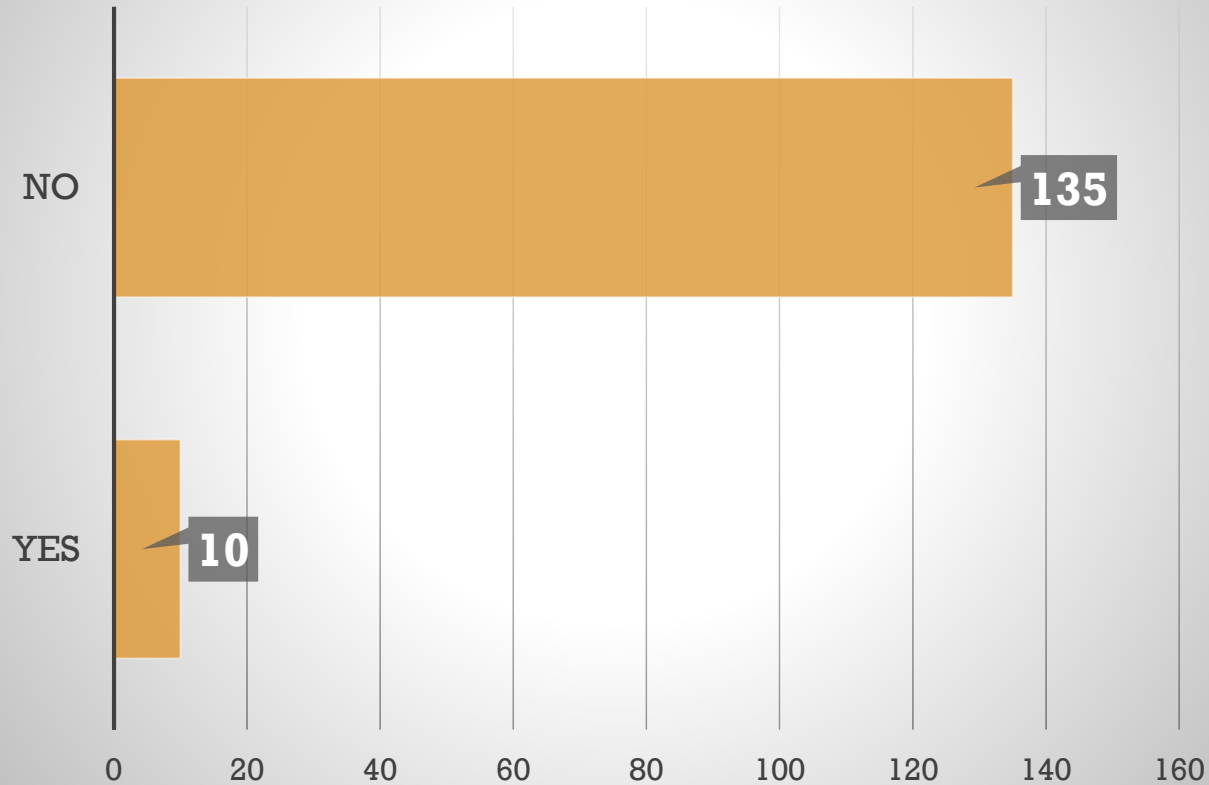
Respondents knowledge of risk factors of IHD was analysed based on the score from 15 questions. More than four fifth of the respondents (82%) had no awareness (i.e. score between 0-5) about risk factors of IHD whereas around 13% of respondents were partially aware (score between 6-10) and fully aware (score between 11-15) were at 4%

MALE AND FEMALE KNOWLEDGE SCORE COMPARISON [N=145(Male-81 Female-64)]



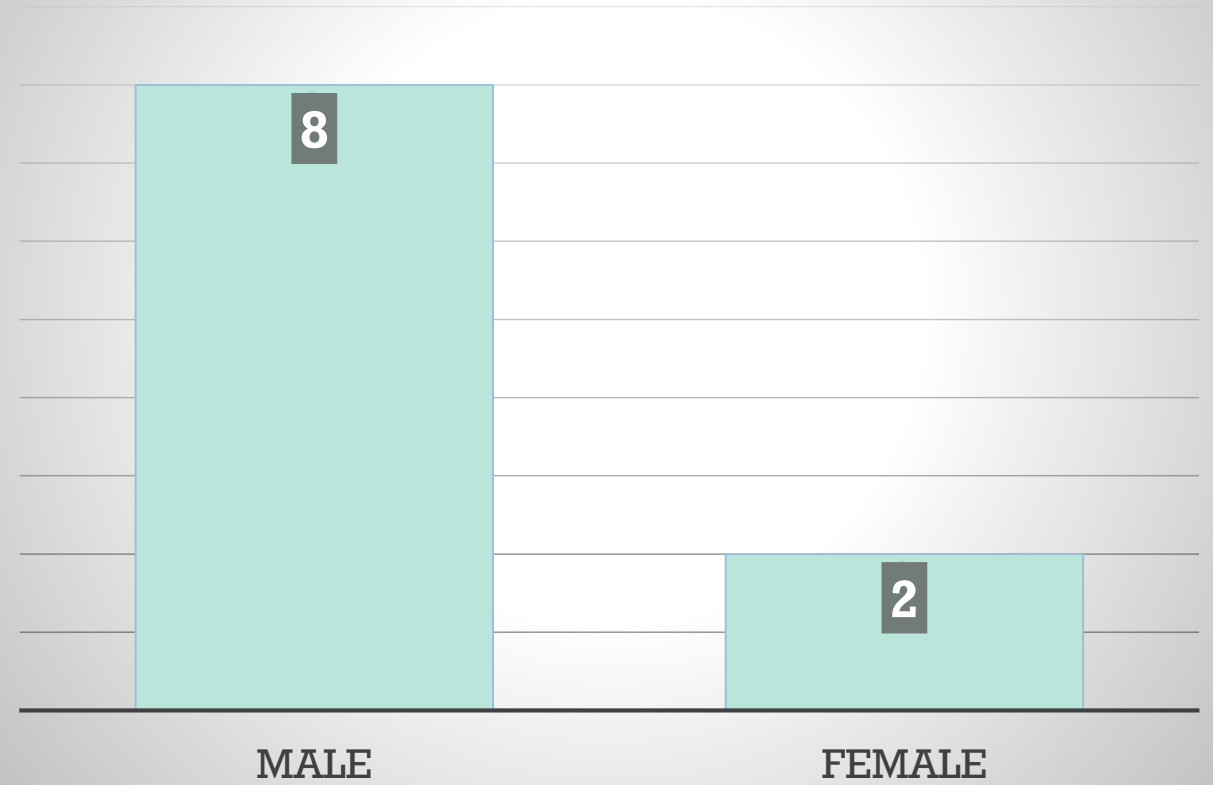
Gender wise analysis of Knowledge score showed that Males performed slightly better than females. Around 78 % of males and 88%of females had no awareness about risk factors of IHD. 17% of males and 9% females were partially aware and males and females having full awareness were at 5% and 3% respectively

CURRENTLY SMOKING STATUS (N=145)



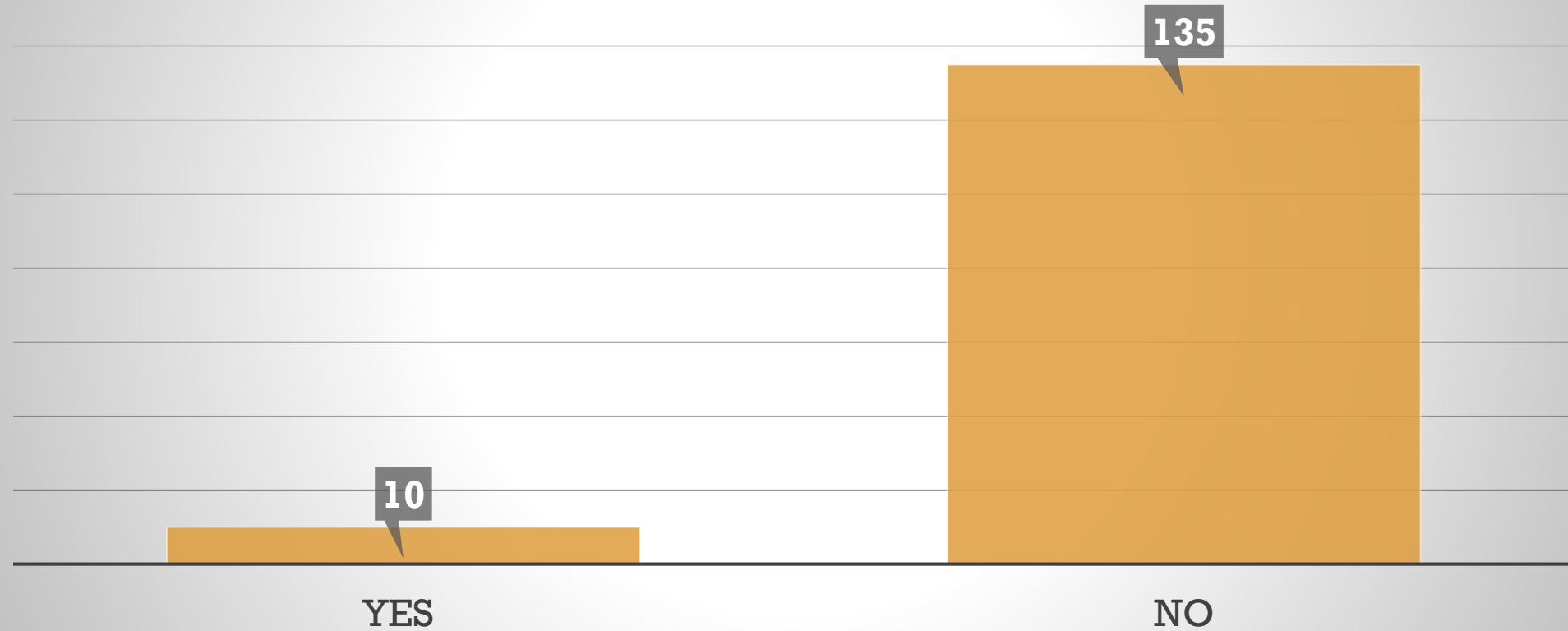
A majority of the respondents (93%) found to be not engaged in smoking any tobacco products.

SMOKING STATUS GENDER WISE DISTRIBUTION (N=10)



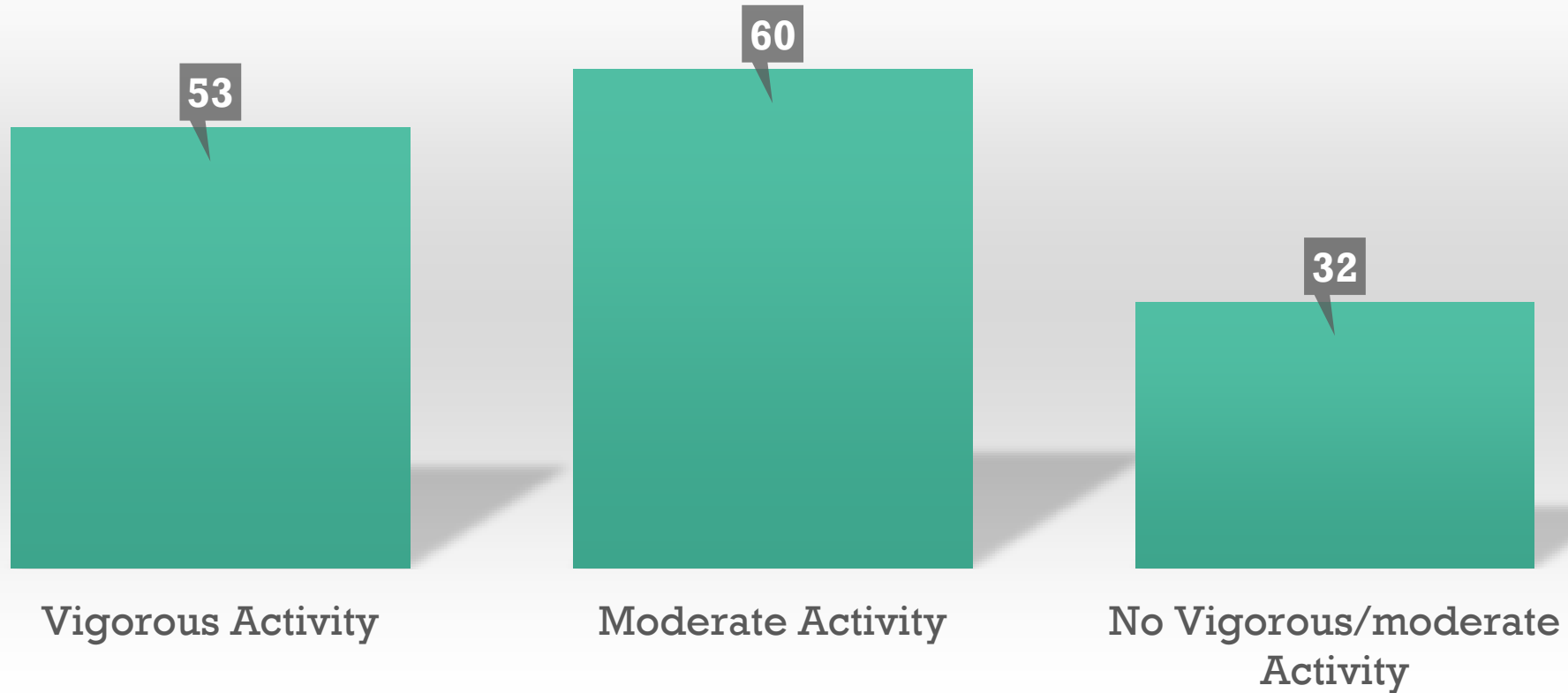
Respondents (10 in number) who smoke regularly 80% of them were males, all of them smoke bidi and around 1-2 bidis per day.

ALCOHOL CONSUMPTION STATUS (N=145)

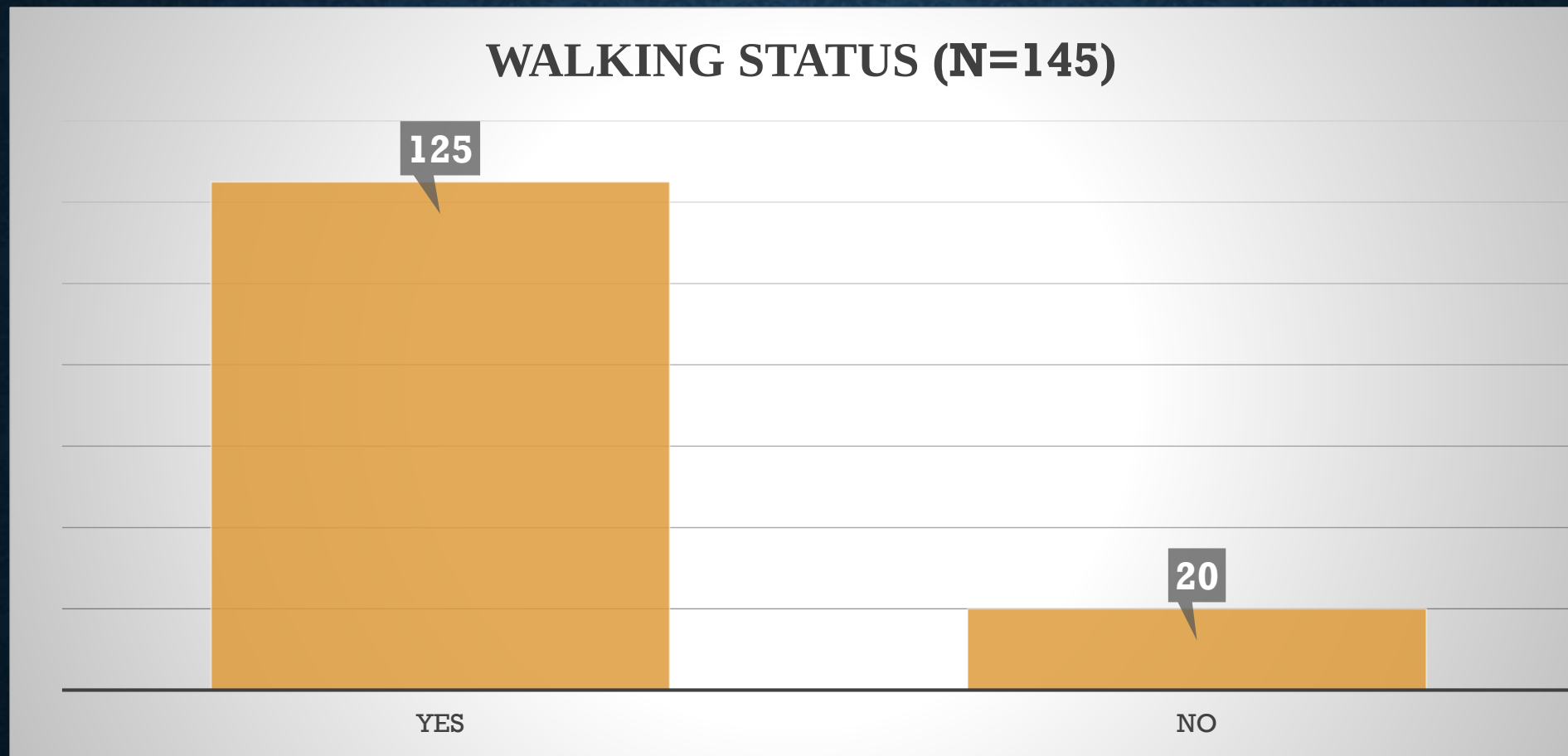


A majority of the respondents (89%) found to be not engaged in drinking any alcoholic drink and other 11% (15 in number). Those who drink all of them were males and majority of them (10 in number) consumed 'Tadi' as alcoholic drink.

PHYSICAL ACTIVITY STATUS (N=145)

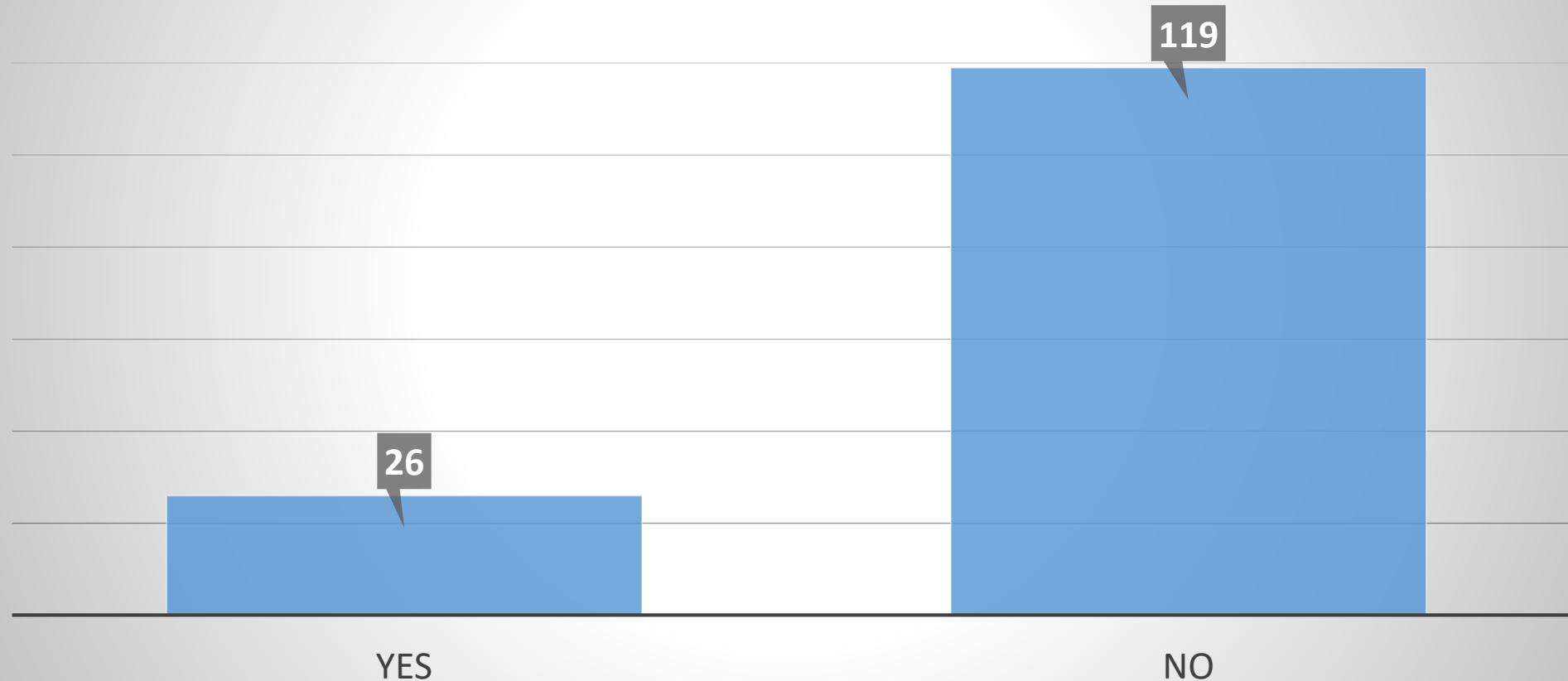


Data pertaining to physical activity was analyzed that it was found that more than two fifth of the respondents i.e.41 %of respondents are engaged in Moderate activity whereas around 37% of respondents engaged in Vigorous activity. The respondents who engaged in neither of those activities stood at 22%.

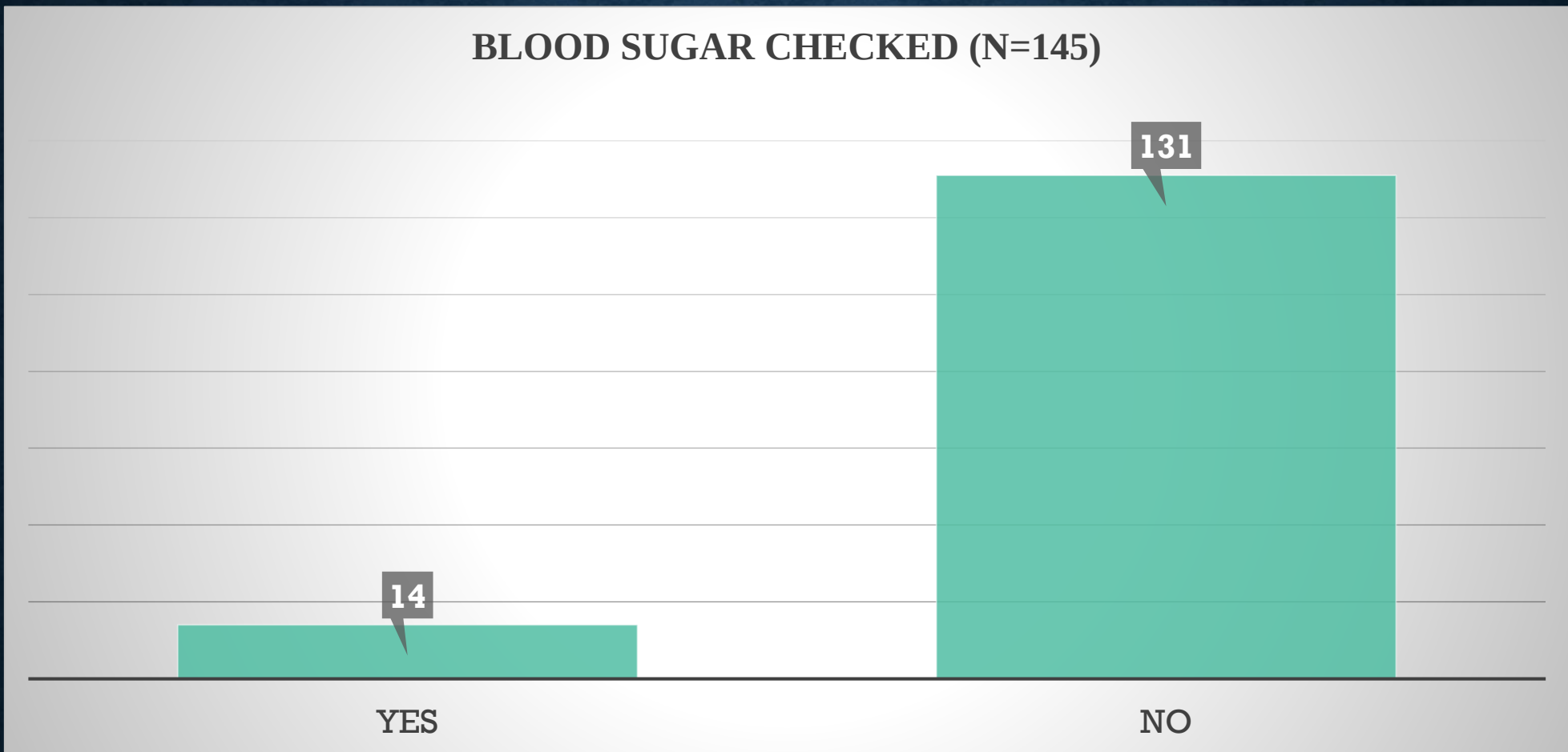


The respondents were asked whether they walk or use bicycle for at least 10 minutes. It was found that majority of respondents (86%) walk or use bicycle to get to and from places.

BLOOD PRESSURE MEASURED (N=145)

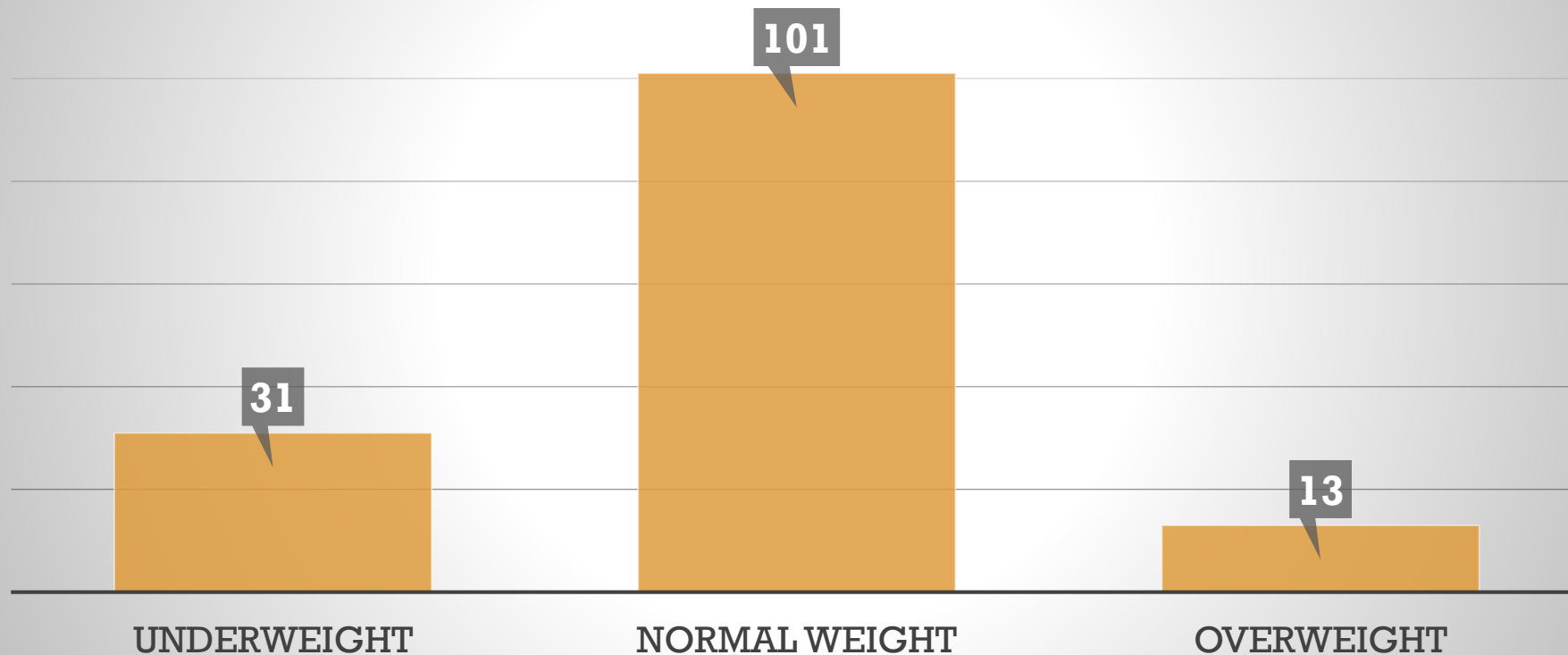


- It was found that Majority of the (82%) respondents never had blood pressure measured by Doctor or health worker.
- 26 of the respondent whose blood pressure was measured it was found that 13 of them had history of raised blood pressure in past 12 months and were on medications for HTN. And of those 13 people, 7 were females and 6 males.

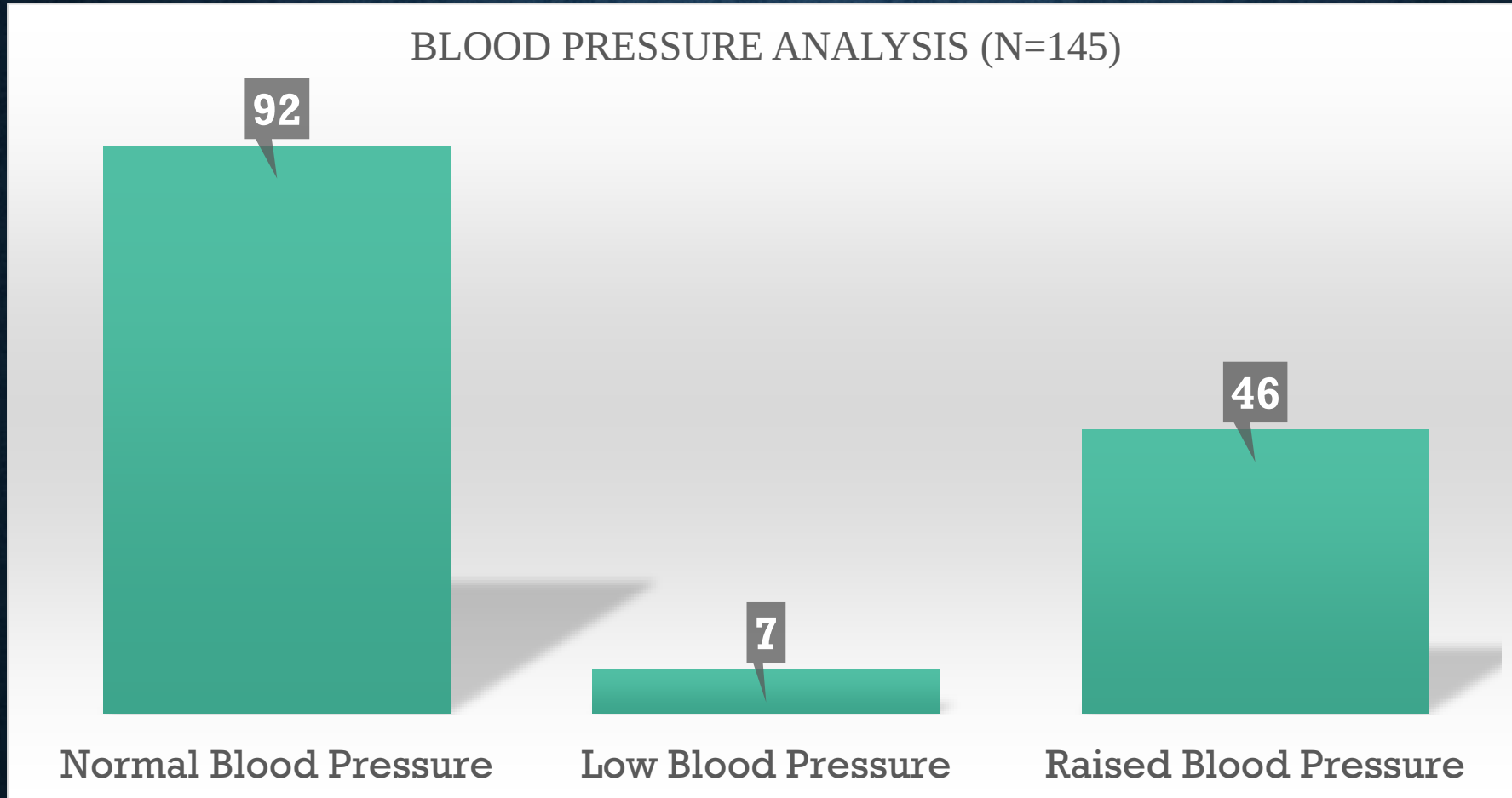


It was found that Majority of the (90%) respondents never had blood sugar measured by Doctor or health worker. 14 of the respondent whose blood pressure was measured it was found that 7 of them had history of raised blood sugar in past 12 months and were on medication for it. Of those 7 people, 6 female and 1 male.

BODY MASS INDEX ANALYSIS (N=145)



From BMI Index analysis, it was found that around 70% of respondents had normal weight. Whereas more than one fifth of the respondents (21%) were underweight while 9% respondents were overweight



Respondent's blood pressure was measured by using Mercury Sphygmomanometer, it was found that around 65% of respondents have normal blood pressure (120/80 mm of Hg) and around 32 % have raised blood pressure (140mm of Hg and or 90 mm of Hg)

RECOMMENDATIONS

- **A majority of population was not aware of any risk factors of Ischemic heart disease, females had less knowledge when compared with males. IEC activities about CVD need to be strengthened and should be disseminated properly at all levels. IEC activities should be conducted in local language and manner which is easily understandable and acceptable for the tribal.**
- **Analysis pertaining to blood pressure revealed that around one third of study population had raised blood pressure. There should be protocol established for the regular blood pressure and weight checkup of people above 30 years based on presence of risk factors in all health facilities.**

LIMITATIONS

- **Limited time period for the dissertation acted as major impediment to undertake comprehensive research on the subject.**
- **Considering respondents from only one health facility i.e. District Hospital.**
- **Spoken language of all the respondents was Gujarati, it was difficult to directly communicate with them without use of translator**

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THANK YOU