THE PREVALENCE OF METABOLIC SYNDROME AMONG MARKET WOMEN IN KANESHIE, ACCRA - GHANA

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BACKGROUND

The term "metabolic syndrome" is a subject that has received much attention in recent times, due to increasing awareness of its association with cardiovascular morbidity and mortality.

Metabolic syndrome **(MetS)** is considered a worldwide epidemic of important public health concern.

MetS predisposes individuals to the risk of developing cardiovascular diseases, type 2 diabetes, stroke, and coronary artery disease.

The International Diabetes Federation-IDF (2006) used the following criteria for diagnosing MetS; Central obesity plus any two of the following four factors: High blood glucose, Low levels of HDL ("good") cholesterol in the blood, High levels of triglycerides in the blood and High blood pressure

PROBLEM STATEMENT

It is estimated that about 20 -25% of the world's population have MetS and are three times more likely to die from a heart attack or stroke

Arthur et al. (2013) in a study stated an increased incidence of metabolic syndrome among Ghanaian women. This was attributed to the increasing adaptation of "Western lifestyle" coupled with an increase in body weight after child birth

Market related factors such as lack of physical activity and lack of proper nutrition due to preoccupation with trading activities may predispose market women to MetS.

AIM

The aim of the study was to explore the prevalence of MetS among market women in Kaneshie Accra, Ghana.

Specific objectives
The study specifically sought to:

◆ explore the prevalence of MetS among Kaneshie market women

◆ assess the prevalence of obesity among the market women

◆ assess the prevalence of hypertension, and type two diabetes among the market women

METHODS

Design: Descriptive cross sectional survey

Population: The study population was market women in Kaneshie, a suburb of Accra, Ghana. The total number of market women stood at 4,030

Sample size and Sampling technique: A sample size of 348 market women from Kaneshie was used. This was determined using the Raosoft sample size calculator. The simple random sampling procedure (Table of random numbers) was used in selecting respondents for the study

Research instrument: Anthropometric and physiologic measurements

Data analysis: The data from the field was cleaned and edited, and was captured on a Microsoft Excel spreadsheet and imported into Statistical software package "STATA".

RESULTS

Considering the socio-demographic data, the results suggest that the minimum and maximum age of respondents were 25 years and 65 years respectively, with a mean age and standard deviation of (46 3 10.64).
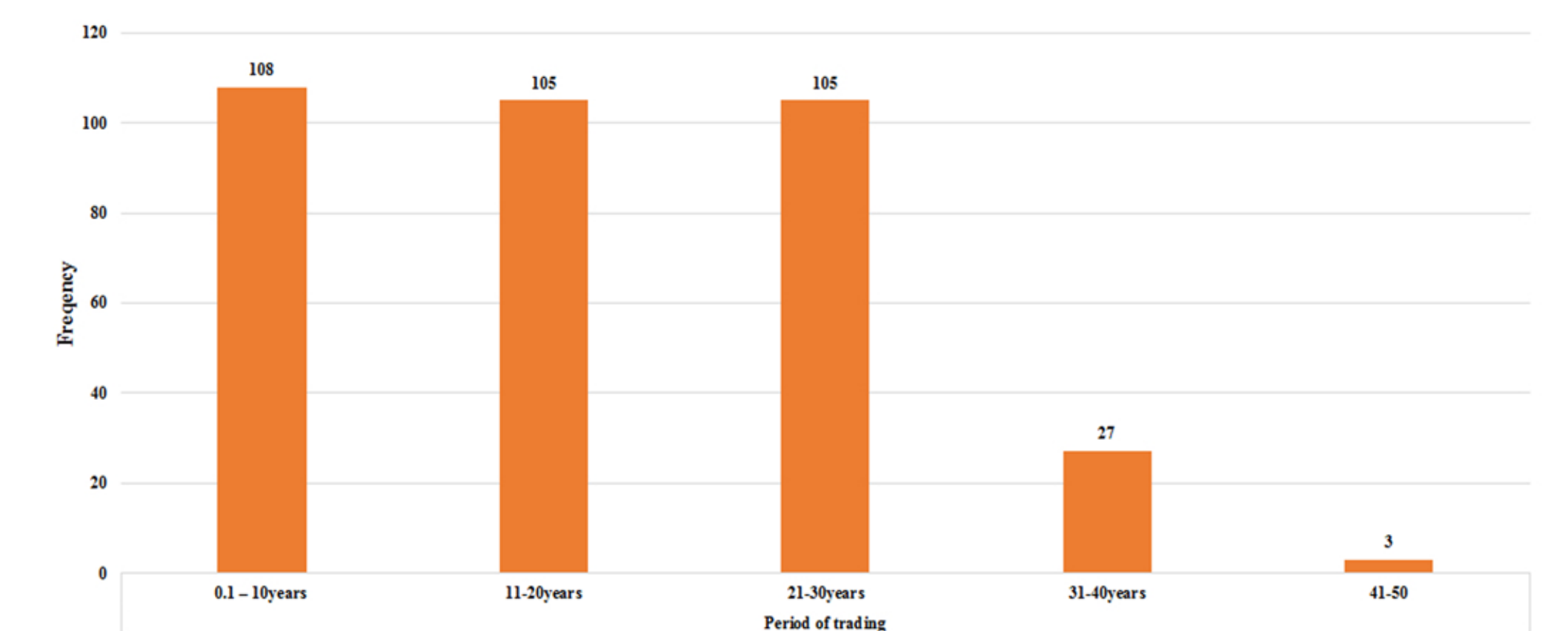
The population was moderately a literate populace (87%).

Participants had been trading in the market for a maximum of 47 years and a minimum of 0.7 years with a mean year of 18.48.
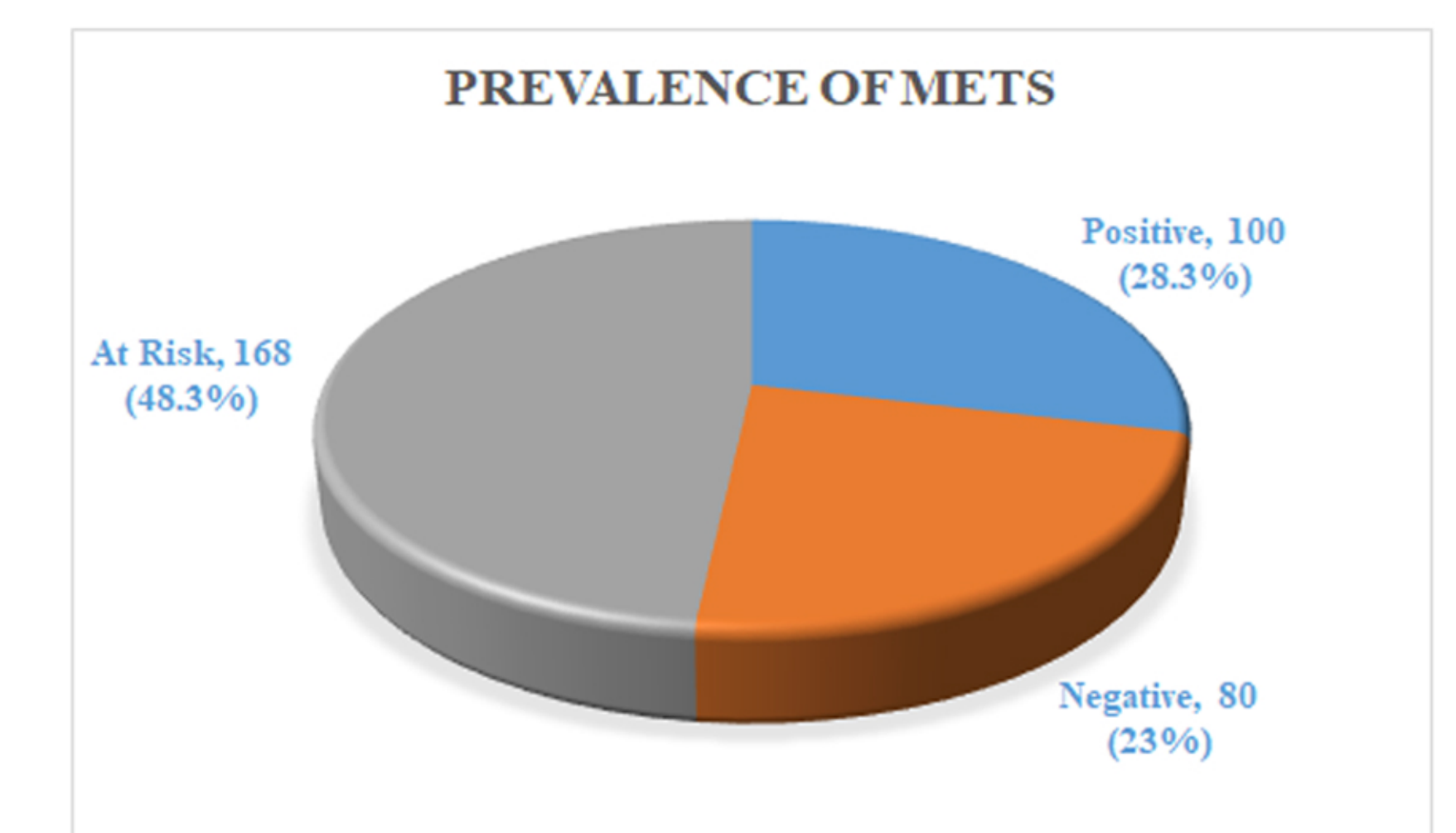

AGE DISTRIBUTION
Frequency in Number
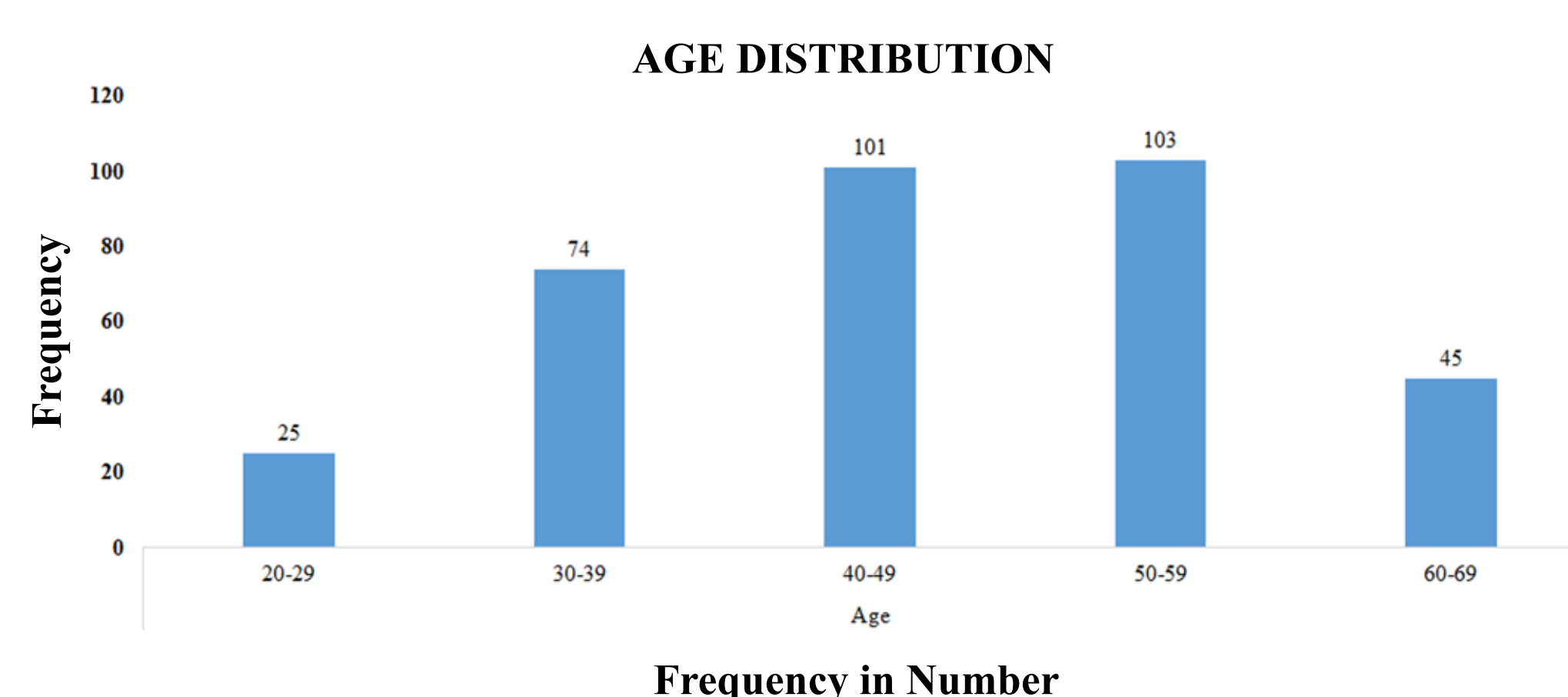
Educational Level
EDUCATIONAL LEVEL
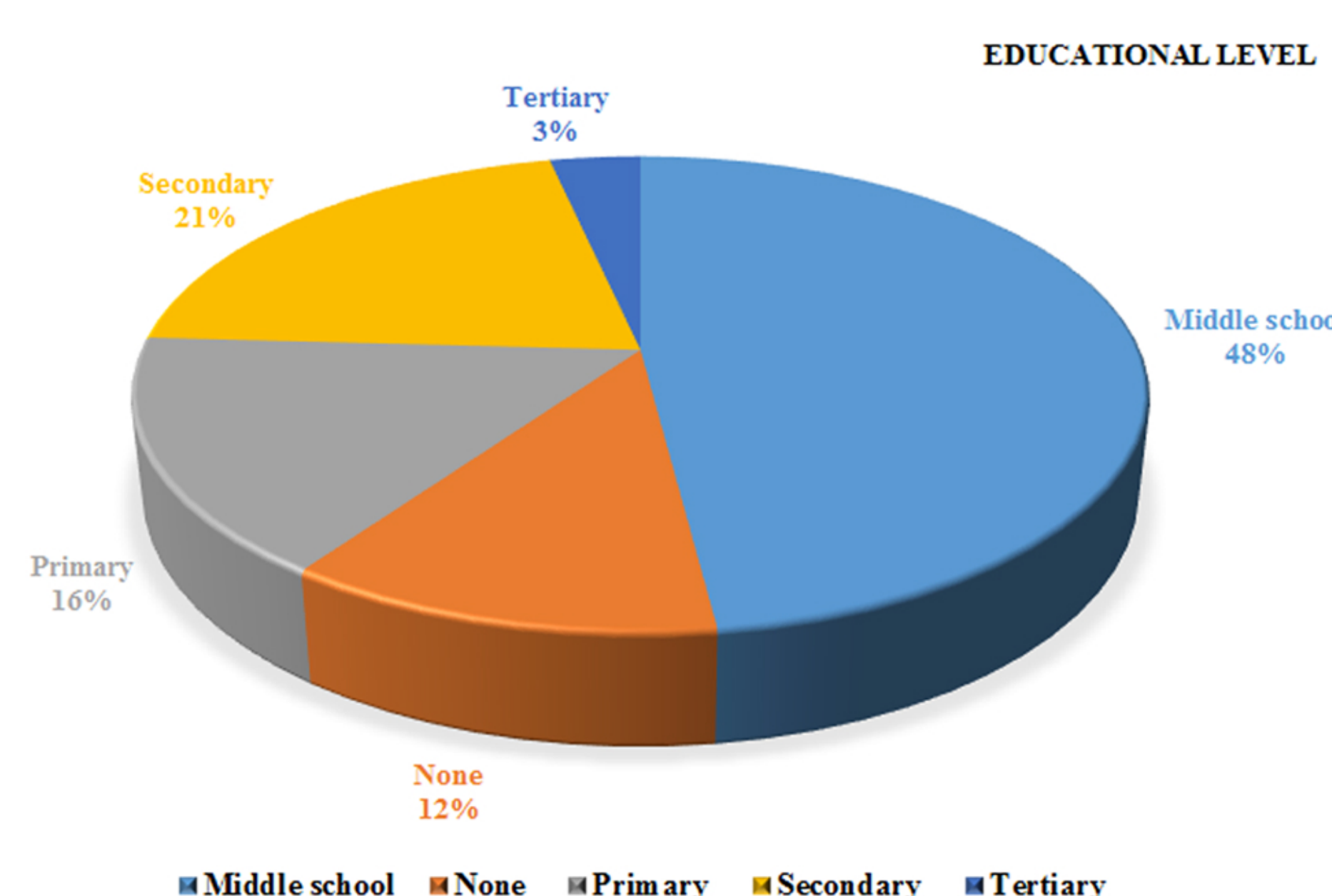
Period of Trading

Prevalence data of Participants

PREVALENCE OF METS

MAJOR FINDINGS AND CONCLUSION

The study revealed that a vast majority of 168 (48.3%) participants were at Risk for MetS per IDF criteria.

A significant minority of 100(28.7%) were Positive for MetS with only 80(23%) being Negative.

Out of the significant minority of 100(28.7%) that were Positive for MetS, 44 (42.7%) were between the age group of 50-59 years, 30 (29.7%) were within 40-49 years

A majority of 286 participants (67.8%) were centrally obese hence had high Waist Circumferences

A significant majority of 235 respondents (67.5%) had Abnormal High Density Lipoprotein (HDL) levels

A significant number of 124 participants (35.6%) had High BP level.

Most participants (175, 50.4%) were obese with their BMI values exceeding 30kg/m2.

The study however revealed that majority of participants (338, 97.1%) had normal levels of triglycerides (TGL) in their blood stream, and only 78(22.4%) participants had high fasting blood sugar (FBS)

The results suggest that mostly, the aged respondents suffered more of MetS than the young adult respondents. Thus MetS increases with age.

A vast majority of the market women were at risk and positive for MetS. This can be attributed to the fact that market women spend most of their time at the market and may not have the time to indulge in any physical activity or health screening.

The incidence of MetS among market women could be remedied with increased education, and a MetS wellness(intervention) programme