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IMPACT OF SOCIOECONOMIC STATUS ON NUTRITIONAL STATUS AND NUTRITION KNOWLEDGE OF MARKET WOMEN IN EDE TOWN, OSUN STATE

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Abstract
Dietary choices continue to be influence nutritional and health status of individuals. Nutrition knowledge is one of the factors that affect nutrition status and habits of individuals, families and societies. Women are key stakeholders in homes and nation building through their economic activities in various markets. This study explores the impact of socioeconomic characteristics on nutritional status and nutritional knowledge of selected market women in Ede town, Osun State. The cross-sectional study involved two hundred and fifty (250) market women who were randomly selected in Ede town, of Osun state. A structured questionnaire was used to obtain data from respondents. Information collected included socio-economic, and nutritional status, while association between socio-economic characteristics and nutritional status of the respondents was determined. Descriptive (mean, standard deviation, frequency and percentage) and inferential statistics (Chi-square was used to determine associations) were used to summarize data. Data collected were analyzed using as SPSS version 23. Socio-economic characteristics results showed that, majority (38.0%) of the respondents were between the ages of 21-30 year and (3.6%) above 50 years. Also, (56.4%) were married, (55.6%) earned above ₦50,000 while (8.0%) earned between ₦21,000-₦35,000. Educational qualification showed (26.4%) had primary school certificate while (4.8%) had HND. The mean anthropometry weight and height for above 50 years, below 20 years were (69.00±11.124) weight, (1.586±0.767) height and (59.91±13.315) for weight, (1.5838±0.0631) for height respectively. Also, Body Mass Index (BMI) results indicated that (11.2%) underweight, (47.2%) normal weight, (25.6.0%) overweight and (16.0%) obese. Significant association ($p<0.05$) exits between BMI and age and also between anthropometric measurements (weight) and age. It could be concluded that overweight and obesity is on the high side among market women in Ede town and dietary control may be more effective in the treatment of obesity.

Keyword: Nutritional knowledge and status, Obesity, Dietary choices, Market Women

INTRODUCTION

Malnutrition can lead to low productivity and increase future risks of poor maternal health which consequently increases the nation's health burden (KNBS and ICF Macro, 2010). Market women spend most hours of the day sitting down and involve in many other sedentary activities and consume diets with mean daily energy intake higher than recommended levels (Afolabi *et al.,* 2004). World Health Organization discovered that there is a global shift in diet towards increased intake of energy dense foods that are high in fat and sugar but low in vitamins, minerals and other micronutrients (WHO, 2005). Women constitute the greatest percentage of traders found in various markets where they stay

from dawn to dusk. Their dietary habits may lead to poor and even dangerous lifestyle and their market activities may influence lifestyle or determine the lifestyle which may eventually affect their nutritional status. Obesity and overweight have become a global epidemic problem. According to World Health Organization (WHO) Overweight and obesity are the fifth leading risk of deaths, resulting in around 2.8 million deaths of adults globally every year. Promotion of nutrition knowledge therefore play a key role in enhancing positive attitudes with focus to influence healthy dietary habits and consequently improved nutritional and health status (Worsely, 2002). There are major and predisposing factors like lack of physical activity, genetic susceptibility, dietary habits, and lifestyle choices (Afolabi *et al.,* 2004). Nutrition knowledge could be important for dietary choice in other ways, for example, by having direct effects on food choice, without food label information, or by impacting attitudes or beliefs. In addition, food label use could be a moderator of the association between nutrition knowledge and dietary behaviors (Fitzgerald *et al.,* 2008, Satia *et al.,* 2005). There have been excellent reviews conducted addressing knowledge effects on dietary intake (Spronk, Kullen, Burdon, & O'Connor, 2014) as well as a broad range of consumer attributes and behaviors such as attitudes, perceptions, and food choice (Bonsmann, Wills, 2012, Campos *et al.,* 2011, Hieke, Taylor, 2012, Lähteenmäki, 2013, Wills *et al.,* 2012). Studies conducted among traders across various parts of Nigeria revealed prevalence of obesity to be 16.3% in Ibadan (Balogun and Owoaje, 2007), 12.3% in Lagos (Odugbemi *et al.,* 2012), 28.1% in Sokoto (Awosan *et al.,* 2014), 21.0% in Ilaro (Agwo *et al.,* 2019), 31.7% in Umuahia (Ukegbu *et al.,* 2015), 33.3% in Abia (Munonye *et al.,* 2019) and, 69.0% in Abeokuta (Mebude, 2010). As at the time of this study, checking through literature no work assessed the nutritional status of market women in Ede a reason for this study.

The study is therefore necessary to assess the socioeconomic characteristics and nutritional status of selected market women in Ede town, Osun State. However, there is shortage of information or study on market women in this area, hence, a need for the study in this area. Also, information provided would further continue to serve as a reference for any form of intervention program for decision makers.

METERIALS AND METHODS

AREA OF STUDY

The study was conducted at Ede Town, Osun State. Ede is a town in Osun State, southwestern Nigeria. It lies along the Osun River at a point on the railroad from Lagos, 180 kilometers (110 mi) southwest, and at the intersection of roads from Oshogbo, Ogbomosho, and Ile-Ife. The 2 local government areas in Ede are Ede-South and Ede North. Ede is one of the older towns of the Yoruba people. It is traditionally said to have been founded about 1500 by Timi Agbale, a hunter and warlord sent by Alaafin (Alafin; “King”) Kori of Old Oyo (Katunga), capital of the Oyo empire, to establish a settlement to protect the Oyo caravan route to Benin (127 miles [204 km] to the southeast). Ede is a local trading centre for cotton, palm produce, yams, corn (maize), cassava (manioc), pumpkins, okra, and kola nuts, and it has been a major exporting point for cocoa and palm oil and kernels since the construction of the railway from Lagos in 1906. Ede is also the site of a teacher-training college.

STUDY DESIGN

The study was cross-sectional and descriptive study of market women in Ede, a South West community in Nigeria.

STUDY POPULATION

The study population comprised of female traders in Ede Town, Osun State. These women sells foodstuffs, clothing and textile materials, provision, cosmetics, and boutiques. Those women who are under 18 years of age and those who were less than 6 months in the market was excluded from the study.

SAMPLING TECHNIQUES

A multistage sampling procedure was adopted in selecting the market women. The first stage involved the selection of two largest out of four markets in the community. In the second stage, the two selected markets was each partitioned into five sections and 25 market women was randomly selected from each sections. A sampling interval of three was used and the first woman was selected between one and three, and this was followed by selecting every third woman to obtain the needed sample size (Ukegbu *et al.*, 2015).

SAMPLE SIZE DETERMINATION

Sample size (n) was determined using Fisher's formula (Fischer *et al.,*1991) as the population from which sample was drawn was more than 5,000. The strength of this formula is that acceptable degree of accuracy is set.

$$\text{sample size (n)} = \frac{z^2 \times pq}{d^2}$$ (Fischer *et al.*,1991).

Where:
n = the desired sample size
z = the standard normal deviate at the required confidence level (95%) = $\pm$1.96
p = the proportion in the target population estimated to have characteristics being measured. National prevalence of overweight women in Nigeria is 17%, 2014.
q =Proportion not expected to be suffering from overweight and Obesity 1-p = (1- 0.17= 0.83).
d = the degree of accuracy set 0.05

$$\text{Therefore; Sample size (n)} = \frac{(1.96)^2 \times (0.17 \times 0.83)}{(0.05)^2} = 217$$

Considering Non response rate of 10%
Total desired sample size = the obtained sample size/ (1- Non response rate)

$$= \frac{217}{(1-0.1)} = 241$$

DATA COLLECTION METHOD

A validated structured questionnaire was administered to the market women and it has three sections. They include:

SECTION A: Socio- demographics (Age, ethnic group, religion, family type, number of children, marital status) and economic (monthly income) characteristics of the respondents.
SECTION B: Dietary and nutritional knowledge of respondents
SECTION C: Anthropometric measurements which involves weight and height to the body mass index (BMI kg/m^2). Body weight was measured using a bathroom weighing scales, with the person wearing light clothes and no shoes. Body weight was expressed in kilograms. The bathroom weighing scales was calibrated before and during the study and readings was taken to the nearest 0.5kg. Height was measured using a calibrated stadiometer with the respondent standing barefoot. Height was expressed in meters and readings were taken to the nearest 0.5m. The body mass index was calculated from weight and height using the formula: BMI = weight (kg) / height (m^2). This was used as an indicator of nutritional status based on the following WHO criteria (WHO, 2000).

DATA ANALYSIS

Data was analyzed using Statistical Package for the Social Sciences version 20 (SPSS Inc, Chicago, IL, United States). Data from questionnaire was represented using descriptive statistics (frequency, percentages, mean values and Standard Deviation). Chi-square was used to establish association between socio economic and demographic status and Body Mass Index (BMI). Statistical significance was set at $p< 0.05$.

RESULTS AND DISCUSSION

SOCIO-ECONOMIC CHARACTERISTIC OF THE RESPONDENTS

Table 3 below shows the socio-demographic and socio-economic characteristics of the respondent. Majority of the respondents (38.0%) were between the ages of 21-30 years, some of the respondent (32.0%) were less than 20 years. (19.6%) were between 31-40 years, (6.0%) were between 41-50 years, while few (3.6%) of the respondents were above 50 years. Nearly all the respondents (66.8%) were Igbo, (29.6%) were Yoruba, and (3.6%) were Hausa. Majority (56.4%) of the respondents were married, (27.2%) were single, (8.8%) were widow and (7.6%) were divorced. In regard to the income (55.6%) earned ₦50,000 and above, (36.4%) earned between ₦36,000 - ₦50,000 daily and (8.0%) earned between ₦21,000 - ₦35,000) daily. Majority (24.8%) had two children, (17.6%) had one, (17.2%) had three, (16.0%) had four, (12.4%) had more than four and (12.0%) had none. In regard to Education Qualification, about (26.4%) had primary school certificate, (24.0%) had no formal education, (22.8%) had S.S.C.E certificate, with (19.6%) being an OND certificate holder, (4.8%) had HND certificate while few (2.4%) had NCE certificate. Majority (41.2%) came from extended family, with (30.8%) from polygamous family and (28.0%) from monogamous family. In regard to the business, (44.4%) engaged in foodstuff business, (21.2%) engaged in cosmetic and clothing and textile business and (13.2%) engaged in provision business.

TABLE 1: Socio-Economic Characteristics of the Respondents

Variable	Frequency	Percentage	Variable	Frequency	Percentage
Age (years)			**No. of children**		
< 20	82.0	32.8	None	30.0	12.0
21-30	95.0	38.0	One	44.0	17.6
31-40	49.0	19.6	Two	62.0	24.8
41-50	15.0	6.0	Three	43.0	17.2
>50	9.0	3.6	Four	40.0	16.0
Total	**250.0**	**100.0**	> Four	31.0	12.4
Ethnic Group			**Total**	**250.0**	**100.0**
Igbo	74.0	29.6	**Income (₦)**		
Yoruba	167.0	66.8	21,000–35,000	20.0	8.0
Hausa	9.0	3.6	36,000-50,000	91.0	36.4
Total	**250.0**	**100.0**	>50,000	139.0	55.6
Marital status			**Total**	**250.0**	**100.0**
Married	141.0	56.4	**Type of business**		
Single	68.0	27.2	Foodstuff	111.0	44.4
Divorced	19.0	7.6	Provision	33.0	13.2
Widowed	22.0	8.8	Cosmetics	53.0	21.2
Total	**250.0**	**100.0**	Clothing	53.0	21.2
Education			**Total**	**250.0**	**100.0**
No education	60.0	24.0	**Type of family**		
Primary	66.0	26.4	Monogamous	70.0	28.0
SSCE	57.0	22.8	Polygamous	77.0	30.8
NCE	6.0	2.4	Extended	103.0	41.2
OND	49.0	19.6	**Total**	**250.0**	**100.0**
HND/BSc	12.0	4.8			
Total	**250.0**	**100.0**			

NUTRITION KNOWLEDGE OF THE RESPONDENTS

Table 2 below shows the dietary pattern and nutrition knowledge of the respondents. Nearly all the respondents (75.6%) took in-between meal, while (76.0%) snacked daily. Majority (74.8%) of the respondents ate thrice daily while (23.2%) ate twice daily and few (2.0%) ate once daily. Almost (72.0%) all the respondents do not skip their meal while (28.0%) skipped their meal. Also, half of the respondents (55.6%) agreed fruits and vegetables are high in fat and (44.4%) negates the answer,

(51.2%) said that rice can give sufficient protein and (48.8%) do not believed that rice can give sufficient protein. In regards to protein foods being body builder, (58.0%) believed this statement while (42.0%) of the respondents did not. About (56.0%) agreed fruits and vegetables should be consumed daily while (44.0%) do not belief it. Majority (52.4%) do not believed that fatty foods are good for the body while (47.6%) believed that they are good for the body. Almost all the respondents (79.2%) said fatty foods can be consumed frequently while few (20.8%) said they should not be consumed frequently. More than half of the respondents (66.4%) do not believed that cereals need to be consumed most in a daily diet while (33.6%) believed it. Fat and butter needed to be consumed frequently in a diet, (63.6%) said the statement is not true and (36.4%) said it is true. In regards to beans being a legume, (55.2%) believed this statement while (48.8%) of the respondents do not. Also, (53.6%) said that a yam is an example of root and tuber while (46.4%) said it is not true. Almost all the respondents (81.2%) knows that meat is rich in protein while few (18.8%) negates the answer. About (56.0%) and (52.8%) knows that fruits and vegetables have a high fibre content and are good sources of vitamins respectively while (44.0%) and (47.2%) do not know that fruits and vegetables have a high fibre content and are good sources of vitamins respectively.

Table 2: Dietary and Nutritional Knowledge of Respondents

Variable	Frequency	Percentage	Variable	Frequency	Percentage
In-between meals			**Fat is good for the body**		
Yes	189.0	75.6	Yes	119.0	47.6
No	61.0	24.4	No	131.0	52.4
Total	250.0	100.0	**Total**	**250.0**	**100.0**
Snacking daily			**Cereal eaten daily**		
Yes	190.0	76.0	Yes	84.0	33.6
No	60.0	24.0	No	166.0	66.4
Total	**250.0**	**100.0**	**Total**	**250.0**	**100.0**
Times eaten daily			**Beans is protein**		
Once	5.0	2.0	Yes	138.0	55.2
Twice	58.0	23.2	No	112.0	55.8
Thrice	187.0	74.8	**Total**	**250.0`**	**100.0**
Total	**250.0**	**100.0**	**Yam is carbohydrate**		
Skip meal			Yes	134.0	53.6
Yes	70.0	28.0	No	116.0	46.4
No	180.0	72.0	**Total**	**250.0**	**100.0**
Total	**250.0**	**100.0**	**Meat is protein**		
Fruits and vegetables			Yes	203.0	81.2

are high in fat?					
Yes	139.0	55.6	No	47.0	18.8
No	111.0	44.4	**Total**	**250.0**	**100.0**
Total	**250.0**	**100.0**	**Fruits are rich in fibre**		
Rice give sufficient protein			Yes	140.0	56.0
Yes	128.0	51.2	No	110.0	44.0
No	122.0	48.8	**Total**	**250.0**	**100.0**
Total	**250.0**	**100.0**	**Daily consumption of fruit & veggies**		
Proteins are body builder			Yes	140.0	56.0
Yes	145.0	58.0	**No**	110.0	44.0
No	105.0	42.0	**Total**	**250.0**	**100.0**
Total	**250.0**	**100.0**			

CLASSIFICATION OF NUTRITION KNOWLEDGE

Fig 1 shows the classification of nutritional knowledge among the respondents. Majority (54.4%) of the respondents had moderate knowledge on nutrition, (33.6%) had high nutrition knowledge and (12.0%) with low nutrition knowledge.

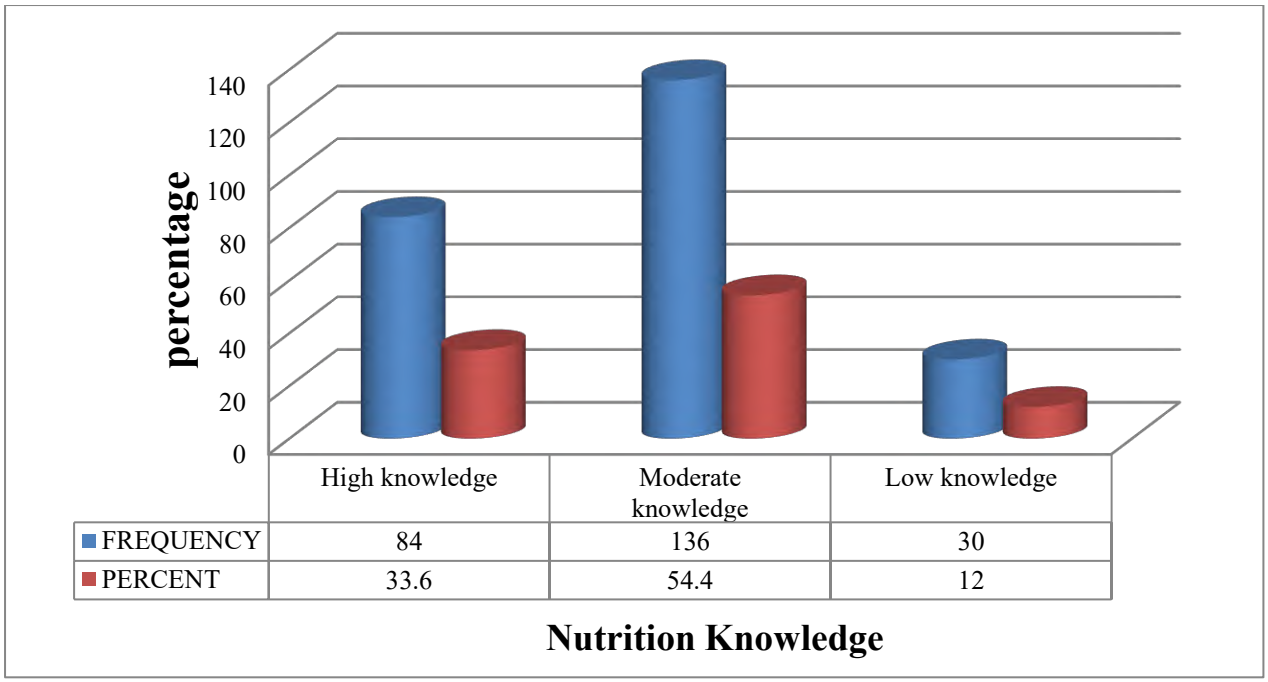


Fig 1: Nutrition Knowledge of the Respondents

NUTRITIONAL STATUS OF THE RESPONDENTS

Fig 2 shows the nutritional status of the respondents. Majority (47.2%) of the respondents had a normal weight, (25.6%) of the respondents were overweight, (16.0%) were obese and (11.2%) were underweight

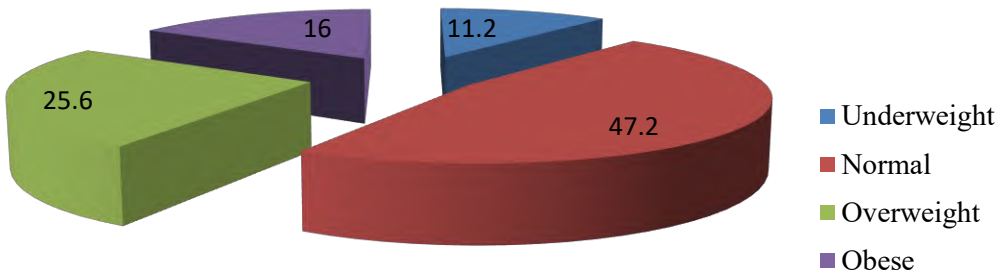


Fig 2: Nutritional status of the respondent

ANTHROPOMETRIC MEASUREMENT OF THE RESPONDENTS

This table shows the anthropometric measurement of the respondents. Majority of the respondents above 50 years had (69.00±11.124) weight and (1.586±0.767) height. Respondents below 20 years of age had the mean score (1.5838±0.0631) for height and (59.91±13.315) for weight. Respondents between 21-30 years, 31-40years, and 41-50years had height of (1.593±0.959), (1.578±0.651), and (1.586±0.767), and weight of (63.94±14.78), (56.22±13.92), and (66.00±12.53) respectively. It reveals that there is a significant association at ($p<0.05$) between age and anthropometric measurements (weight).

Table 3: Anthropometric Measurement of the Respondents

Variable	AGE (Mean± S.D)					x^2	p-value
	<20 years	21-30 years	31-40 years	41-50 years	>50 years		
Height	1.584±0.0631	1.593±0.959	1.578±0.651	1.588±0.534	1.586±0.767	0.38	0.8
Weight	59.91±13.315	63.94±14.778	56.22±13.920	66.00±12.530	69.00±11.124	3.8	0.005*

Statistically significant ($p<0.05$)"

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ASSOCIATION BETWEEN SSOCIO-ECONOMIC CHARACTERISTICS AND NUTRITIONAL STATUS OF RESPONDENTS

Table 4 below shows the association between socio-economic characteristics and the nutritional status of the respondents. It reveals that there is a significant association at ($p<0.05$) between nutritional status and socio- demographic characteristics (age). While there are no significant association with other variables.

Table 4: Association Between Socio-Economic Characteristics and Nutritional Status Of Respondents

Variable	Body Mass Index (BMI)				χ^2	p-value
	Underweight	Normal	Overweight	Obese		
Age (years)						
< 20	9(3.6)	41(16.4)	23(9.2)	9(3.6)	26.140	0.010*
21-30	6(2.4)	44(17.6)	24(9.6)	21(8.4)		
31-40	13(5.2)	23(9.2)	9(3.6)	4(1.6)		
41-50	0(0.0)	8(3.2)	4(1.6)	3(1.2)		
>50	0(0.0)	2(0.8)	4(1.6)	3(1.2)		
Ethnicity						
Igbo	18(7.2)	78(31.2)	42(16.8)	29(11.6)	2.369	0.883
Yoruba	10(4.0)	35(14.0)	19(7.6)	10(4.0)		
Hausa	0(0.0)	5(2.0)	3(1.2)	1(0.4)		
Marital status						
Married	15(6.0)	75(30.0)	30(12.0)	21(8.4)	14.494	0.106
Single	6(2.4)	27(10.8)	23(9.2)	12(4.8)		
Divorced	1(0.4)	9(3.6)	4(1.6)	5(2.0)		
Widowed	6(2.4)	7(2.8)	7(2.8)	2(0.8)		
Education						
No education	9(15.0)	27(10.8)	11(4.4)	13(5.2)	18.132	0.256
Primary	4(1.6)	31(12.4)	19(7.6)	12(4.8)		
SSCE	4(1.6)	26(10.4)	19(7.6)	12(4.8)		
NCE	1(0.4)	1(0.4)	2(0.8)	2(0.8)		
OND	8(3.2)	24(9.6)	12(4.8)	5(2.0)		
HND/BSc	2(0.8)	9(3.6)	1(0.4)	0(0.0)		
Income (₦)						
21,000–35,000	3(1.2)	11(4.4)	6(2.4)	0(0.0)	9.914	0.128
36,000-50,000	12(4.8)	38(15.2)	29(11.6)	12(4.8)		
>50,000	13(5.2)	69(27.6)	29(11.6)	28(11.2)		

Mean values are statistically significant at p<0.05

DISCUSSION

This study assessed the socio-demographic and nutritional status of market women in Ede. The result in this study revealed that about (25.6%) of the respondents were overweight while (16.0%) were obese. This result is similar to a study carried out in Nigeria which reflected that (20.4% and 31.3%) overweight and (12.3% and 48.0%) obese (Oladoyinbo *et al.,* 2015). Also, Oladoyinbo *et al.* (2015) in a study of traders in South west Nigeria reported a prevalence of 83.9% for abdominal obesity among female traders. This could mean that market women in ede are at risk of obesity since the percentage of overweight is high. The prevalence of overweight and obesity among market women in this study could also be due to cultural norms in Africa where being fat is associated with affluence, beauty and healthy living (Okafor *et al.,* 2015). Ojo *et al*. (2011) reported that waist size reflects growing evidence of visceral fat surrounding the abdominal organs and also increases the rate of heart diseases.

There was an association between socio-demographic characteristics and the nutritional status of the respondents. It reveals that there is a significant association at ($p<0.05$) between nutritional status and age. While there is no significant association with other variables.

Majority (75.6%) of the market women takes in-between meals and which 59.6% of them take snacks which contains high sugar and high fatty foods. Consumption of snacks, baked products and fat and oil was on the high side as many of them consumed one form of high fat dense snack or the other on a daily basis. This could be due to its ready availability in the market. Market women while waiting for their customers may want to take snacks in-between meals either to satisfy their appetite or enjoyment for food. Consumption of snacks high in saturated fat could lead to deposition of dietary fat in the fat stores of the adipose tissues and thus increase the chances of an individual getting overweight or obese. This agreed with (Poulain, 2002; Piernas and Popkin, 2010) which found that frequent consumption of snacks is strongly associated with the rising rates of obesity. Also, WHO (2010) noted that people may become overweight or obese due increased consumption of foods which contain high levels of sugar and fat. Also, consumption of fruits (7.6%) was low among the respondents and this correlates with the results of Ganasegeran *et al.* (2012) which reported that most of their respondents consumed fruits less than three times a week. As pointed out (Oniango *et al.,* 2003), low consumption of fruits among Africans from infancy to adulthood could be attributed to factors such as income, educational level, place of residence (rural or urban), ignorance and seasonality.

Based on the result, the anthropometric assessments showed that most of the market women were overweight and obese (25.6% and 16.0% respectively). This result agreed to the findings of (Abubakari *et al*., 2008) and (Wolfe, 2010) which reported high prevalence of overweight and obesity in their studies (10% and 21% respectively). The rate of obesity reported in this study was lower than 69% reported among a group of market women in Abeokuta (Mebude, 2010), but higher than 12.3% reported among female traders in Lagos (Odugbemi *et al*., 2012). This may be due to the differences in genetic make-up and socio-demographic and socio-economic status of the different ethnic groups of market women.

The prevalence of overweight and obesity among market women may be as a result of high fatty street food, sugar and starchy food from vendors, which is contributing to increasing prevalence of obesity and overweight. This result agreed with the work of (Popkin, 2012) who reported that most of the market women sit in their shops and eat food that are high in calorie diet. This also agreed with Afolabi *et al*., 2004 who reported that market women spend most hours of the day sitting down and involve in many other sedentary activities and consume diets with mean daily energy intake higher than recommended levels. This study agree with the review that dealt with the possible predisposing

factors of overweight and obesity and these include sedentary lifestyle, age above 40 years and a high energy diet (Amira *et al*., 2011, Oyeyemi *et al*., 2012, Adedoyin *et al*., 2009, Desalu *et al*., 2008). This study also relates to the study of (Abdulai, 2010) and the Nigeria National Survey which showed that 11% of woman were underweight and 25% were obese (NPC, 2013).

This study indicated that the prevalence of overweight and obesity among market women in Nigeria is on the increase. There is a need for promotion of nutrition knowledge which will play a key role in enhancing positive attitudes with focus to influence their healthy dietary habits and consequently their improved nutritional and health status.

CONCLUSION AND RECOMMENDATION

CONCLUSION

In Nigeria, Women are responsible for generating food security for their family members in developing countries and they constitute the greatest percentage of traders found in various markets where they stay from dawn to dusk (Akinloye, 2010). In conclusion, 25.6% of the respondents were overweight while 16.0% were obese. Majority, 54.4% of the respondents had moderate knowledge, 33.6% had high knowledge while 12.0% had low knowledge. Their dietary habits may lead to poor and even dangerous lifestyle and their market activities may influence lifestyle or determine the lifestyle which may eventually affect their nutritional status. Women are usually responsible for producing and preparing food for the household, so their knowledge of good nutrition or lack of it can affect the health and nutritional status of the entire family. Studies from Nigeria have revealed a high prevalence of both under nutrition and over nutrition, as well as nutrients deficiencies including; iron, folate, vitamin D and vitamin A among women (Berti *et al*., 2016). Obesity result from over-nutrition, low physical activity, change of dietary habit. There exist both a pressing need to act on the problem of obesity and a large gap between the type and amount of evidence needed to act and amount of available to meet that need. Exercise can help a patient reach a target weight. Dietary control may be more effective for the treatment of obesity. Also, it was noted that obesity could be as a result of poverty, genetics and lack of credible information about obesity.

RECOMMENDATIONS

Based on the results of this research there is need for nutrition education to be emphasized through community healthcare and all other possible opportunities should be utilized more effectively to increase awareness of healthy nutrition amongst market women to improve their feeding habit and practice. This would reduce malnutrition and other related disease such as hypertension, diabetes mellitus etc. Nutrition education should be in all areas that contributes to poor nutrition which may include agriculture, food shortage and marketing, health, hygiene, cultural problem, customs and taboos.

Also, the study underscores the need for educational campaigns regarding healthier lifestyles, diversification of diet, weight management and control to be conducted regularly in various markets. Regular Health check-up programme should be conducted for women in the community as well as in the market.

Production of food crops with particular focus on livestock, legumes and vegetables should be promoted as well as improved method of food processing, preservation, preparation and consumption. There should be sustainable and health promoting food systems, elevation of nutrition in the national

development agenda, improved accessibility, quality and implementation of nutrition services across public health programs and settings. To manage obesity, restricting food intake and engaging in physical fitness are necessary. Inclusion of green leafy vegetables and fresh fruits should be in the diet should be advised.

Government should promote nutrition education through media such as television, radio, articles and paper, this would aid proper nutrition education.

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