Knowledge of the Risk Factors and Practice of Prevention of Obesity Among Undergraduates of Babcock University, Ilishan-Remo, Nigeria.

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DOI: 10.56201/ijhpr.vol.10.no5.2025.pg62.90

Abstract
Background: *Non-communicable diseases have surpassed communicable diseases as the leading causes of morbidity and mortality in Nigeria, and among these non-communicable diseases is obesity. Obesity does not only impair the physical and mental health of people but also impairs economic wealth of most communities hence, posing a threat to the world's stability at large.* ***Aim:*** *The main objective of this study was to assess the level of knowledge of the risk factors and practice of prevention of obesity, among undergraduate students of Babcock University, Ilishan-Remo, Ogun State, Nigeria.* ***Method****: This was a descriptive cross-sectional study. Convenience sampling method was used to pick 152 participants in Babcock University, Ilishan-Remo, Ogun State, Nigeria. A 30-item, semi structured questionnaire was used to collect data and the data was analyzed using Statistical Package for Service Solution (SPSS) version 21.* ***Result:*** *Majority of the respondents 61.8% were, ages 21-25, most the respondents were females (70.4%.). 61.2% respondents strongly agreed that choices of food can affect obesity. 48.7% respondents exercised regularly while, 61.2% of the respondents in this study take soda or soft drinks less than 3 times a week. This study found that the respondents, have good knowledge (74.3%) of the risk factors of obesity. Furthermore, the study found that, the respondents' practices of the prevention of obesity is moderately good as it was discovered, that 50.7% practice good health habits.* ***Conclusion:*** *The knowledge of the participants regarding risk factors of obesity was found to be generally good. The respondents' practices of the risk factors of obesity was found to be, generally low.*

KEYWORDS: *Non-communicable diseases, Obesity, Knowledge, practices.*
Words count: *258*

INTRODUCTION

Non-communicable diseases have surpassed communicable diseases as the leading causes of morbidity and mortality in Nigeria [Sani, 2010]. The changing disease pattern has been traditionally attributed to recent advances in medicine resulting in the development of drugs and vaccines for the effective control of communicable diseases [Sani, 2010]. Other factors driving this change include changes in diet, cigarette smoking, alcohol consumption, and inadequate exercise. There is also fetal malnutrition, which is a key factor in the development of non-communicable diseases in adulthood. Among these non-communicable diseases is obesity.

Obesity, which is characterized by excess accumulation of body fat accompanied by minimal physical work or exercise, is a danger to the good health and well-being of a person (WHO, 2000). While under-nourishment is of concern to most people, over-nourishment is as well dangerous.

Obesity is defined as abnormal or excessive fat accumulation with a Body Mass Index (BMI) of 30 kg /m2 or more that represents a risk to health (Han & Bchir 2013). BMI is the most common screening measure used to determine whether an individual may be overweight or obese. The BMI does not measure body fat directly, but is used as a surrogate measure since it correlates with direct measures of body fat, especially at high BMI levels, and is inexpensive and easy to obtain in a clinical setting.

BMI	**Classification**
< 18.5	Underweight
18.5–24.9	normal weight
25.0–29.9	Overweight
30.0–34.9	class I obesity
35.0–39.9	class II obesity
≥ 40.0	class III obesity

"BMI classification". *World Health Organization*. Retrieved 15 February 2014.

Furthermore, overweight and obesity is the fifth risk factor for mortality worldwide, causing approximately 2.8 million deaths per year (WHO 2013).

A study conducted by (Amugsi, 2017) found significant differences between African countries. In the latest survey by Amugsi (2017), Egypt has the highest prevalence of obesity by far, two out of every five Egyptians (39%) are obese, followed by Ghana at 22%. Egypt and Ghana also

experienced a significant increase in obesity over the past 25 years — from 34% to 39% (13% increase) in Egypt and 8% to 22% in Ghana (65% increase). The increase in obesity doubled in Kenya, Benin, Niger, Rwanda, Ivory Coast and Uganda, while Zambia, Burkina Faso, Mali, Malawi and Tanzania experienced a three-fold increase.

In Nigeria, the prevalence of overweight individuals ranged from 20.3%–35.1%, while the prevalence of obesity ranged from 8.1%–22.2%. (Chukwuonye, 2013). While, among university students in Nigeria, the prevalence of overweight/obesity is reported to be 10% (Peltzer, 2014).

Young adults between the ages of 18–25 are in a period of transition from adolescence to adulthood. Until recently, it was perceived that obesity mostly affected middle age adults. However, a steadily increasing trend of obesity among young adults, especially college and university students, is becoming evident [Anderson, 2003]. Many young adults experience significant lifestyle changes from leaving home to going off to university/college to starting work, developing relationships, possibly cohabiting or marrying etc. These notable changes are seen as a time of dis-placement, when young people feel a sense of 'loss' and 'dis-continuity of their identity' as they leave behind familiar con-texts and take on new ventures [Scanlon, 2007].

Furthermore, Obesity being interconnected with some diseases like: hypertension, diabetes mellitus, atherosclerosis, as well as certain types of cancer, could pose a threat to the overall wellness of young adults and the world at large (Chukwuonye, 2013).

Therefore, Obesity does not only impair the physical and mental health of people but also impairs economic wealth of most communities. The heavy burden of treatment cost and reduction in effective labor power leads to financial losses all over the world. Hence, posing a threat to the world's stability at large.

This study therefore seeks to determine the level of knowledge of the risk factors and practices of prevention of obesity amongst undergraduates as there are limited data on the severity of overweight and obesity; and their associated risk factors among young adults in Nigeria [Ejike, 2012], which of course, posits a gap in knowledge and hopefully, the findings of this study will help provide useful data, for programs that target primary prevention of obesity and its comorbid conditions in Nigeria and the world.

AIM AND OBJECTIVES OF THE STUDY

AIM

The aim of this study is to assess the level of knowledge of the risk factors and practice of prevention of obesity, among undergraduate students of Babcock University, Ilishan-Remo, Ogun State, Nigeria.

SPECIFIC OBJECTIVES

1. To assess the respondent's knowledge, of the risk factors of obesity.
2. To assess the practice of prevention of obesity by the respondents.

Research question

- Are the undergraduate students knowledgeable of the risk factors of obesity?
- To what extent do the undergraduates in the university practice prevention of obesity?
- What are the socio-demographic characteristics of the undergraduate students in Babcock university?

HYPOTHESES

The hypotheses are as follows:

$H_0$1. Undergraduates in the university are not knowledgeable about the risk factors of obesity.
H_A1. Undergraduates in the university are knowledgeable about the risk factors of obesity.
$H_0$2. Undergraduates in the university practice prevention of obesity.
H_A2. Undergraduates in the university do not practice prevention of obesity.

OPERATIONAL DEFINITION OF TERMS

For the study, the following will be the operational definition of terms

Obesity: This is an abnormal or excessive fat accumulation with a BMI of 30 kg /m2 or more that represents a risk to health

Awareness: knowledge that something exists, or understanding of a situation or subject at the present time based on information or experience.

BMI: Body Mass Index (BMI) is a measurement of a person's weight with respect to his or her height.

Undergraduates: A student at a college or university who has not received a first and especially a bachelor's degree.

METHODOLOGY

RESERCH DESIGN

This study adopted a descriptive cross-sectional design

STUDY SETTING

The study was carried out in Babcock University in Ogun state. The institution being a private Christian co-educational University, is situated in the town of Ilishan-Remo, Ogun state, Nigeria. It is owned and run by the Seventh-day Adventist Church in Nigeria. Over 70 programs are offered in the institution, including the postgraduate programs. All of these programs are operated under 9 different schools.

TARGET POPULATION

The undergraduate students in Babcock university, Ilishan-Remo, Ogun state.

INCLUSION CRITERIA

Participation in the study was open to every interested undergraduate in the university.

EXCLUSION CRITERIA

The following group of people were excluded from the study:

- Postgraduate students.
- Undergraduate students who were not interested in participating due to one reason or the other.

SAMPLING TECHNIQUE

The Non-probability; Accidental sampling method was used, to allow for easy and time-bound access to respondents.

SAMPLE SIZE DETERMINATION

Sampling size for the study will be calculated by using Leslie Kish's formula:

$$\text{Sample size } n=\frac{Z^2\,pq}{d^2}$$

Where n is the minimum sample use, Z^2 is the confidence interval at 95%, with a constant value of 1.96, p= population at risk, q=1-p and the sampling error (d) is used as 5%

$$n=\frac{Z^2\,pq}{d^2}$$

where: $Z^2=1.96$

p=0.10 (Peltzer, 2014).

q=1-0.10

d=0.0025

= 138.2

10% of sample size for missing or incomplete data

: 10% of 138.2 = 13.82

n= 138.2+13.82

n= 152

Therefore, a total sum of 152 questionnaires will be administered.

INSTRUMENTS FOR DATA COLLECTION

Data was obtained using a 30-item semi structured questionnaire, containing three (3) sections. The self-administered questionnaires were developed based on the information gotten from previous studies on the knowledge and practices of the risk factors of obesity. Data was collected via google forms due to the inability to administer questionnaires physically.

The title of the questionnaire is: Assessment of the knowledge of the risk factors and practices of prevention of obesity among undergraduates of Babcock University.

The questionnaire comprises of 3 sections:

Section A: Sociodemographic characteristics of respondents.

Section B: Knowledge of the risk factors of Obesity.

Section C: Practice of prevention of Obesity.

VALIDITY OF THE RESEARCH INSTRUMENT

The validity of the research instrument was assessed by the research supervisor. The relevance of each item in relation to the objectives of the study, the hypotheses to be tested as well as, the comprehensibility of each item in relation to the cognitive level of the respondents were assessed. The research supervisor validated the instrument by effecting necessary corrections, examining the contents and ascertaining clarification of ideas as well as appropriateness of the items.

RELIABILITY OF THE RESEARCH INSTRUMENT

Reliability is aimed at testing for how consistent and reliable the instruments to the study are (i.e. ability of instrument to test for the same results over time). The fact that the instrument will be previewed by other contemporaries and even the project supervisor will therefore give credence to its reliability.

DATA ANALYSIS

Analysis was done using Statistical Package for Social Sciences (SPSS) version 21. The computation was done using tables, charts, means and simple percentages. The research statistics was tested at 0.05% level of significance.

DATA MANAGEMENT

Utmost care was taken to maintain privacy and confidentiality, as we ensured proper organization, documentation and security of the responses.

ETHICAL CONSIDERATION

We made sure informed consent was obtained from the respondents and they were assured of their confidentiality.

RESEARCH LIMITATIONS

Possible bias in responses due to the inability to administer questionnaires physically. There could also be bias, due to the use of the convenience sampling method.

RESULTS AND DISCUSSION

This chapter focuses on the results of this research. The results were divided into three sections:

a) Section 1 covers the Socio-demographic information of the respondents.
b) Section 2 covers the respondents' knowledge of the risk factors of obesity.
c) Section 3 covers the responses of the respondents on the practice of prevention of obesity.

A total of 152 questionnaire forms were filled by respondents and the entire 152 questionnaire forms were retrieved, giving a total response rate of 100%.

Socio-demographic Characteristics

VARIABLES	FREQUENCY (%)
AGE **16-20** **21-25** **26-30** **35**	 51 (33.6) 94 (61.8) 6 (3.9) 1 (0.7)
SEX **Female** **Male**	 107 (70.4) 45 (29.6)
RELIGION **Christianity** **Islam**	 139 (91.4) 13 (8.6)
ETHNICITY **Igbo and Hausa** **Yoruba** **Others**	 24 (15.8) 109 (71.4) 19 (12.8)
SCHOOL **Babcock Business School.** **College of Health & Medical Sciences.** **School of Agriculture & Industrial Technology.** **School of Basic & Applied Science (formerly Science & Technology).** **School of Computing &Engineering Sciences.** **School of Education and Humanities.** **School of Law & Security Studies.** **School of Nursing.** **School of social science**	 23 (15.2) 16 (10.5) 4 (2.6) 7 (4.6) 23 (15.2) 5 (3.3) 34 (22.4) 15 (9.9) 25 (16.3)

The results in the table above shows that out of the 152 respondents that filled the questionnaires, most of them 94(61.8) were ages 21-25 while, 51(33.6) were within the age bracket 16-20. Only 6(3.9) of the respondents were ages 26-30.
Majority of the respondents were females:107 (70.4%) while, 45(29.6%) were males.

A large number of the respondents were Yoruba 109 (71.7%), ss24 (15.8%) were Igbo and Hausa while, 19(12.8%) respondents were from other several ethnic groups.
Most of the respondents were Christians 139(91.4%) while, 13(8.6%) respondents were Islam.
Out of 152 respondents, 34 (22.4%) were from the School of law & security studies; 25 (16.4%) were from School of social sciences, 23 (15.2%) were from School of computing & Engineering sciences, 16 (10.5%) were from College of health and medical sciences, 15 (9.9%) were from School of Nursing, 7 (4.6%) were from School of Basic & applied sciences (formerly sciences &technology), 5 (3.3%) were from School of Education & Humanities, 4 (2.6%) were from School of Agriculture & Industrial Technology.

Knowledge of the risk factors of obesity

Table 2: Showing the respondents' knowledge of the risk factors of obesity

VARIABLES	**FREQUENCY (%)**
OBESITY INCREASES WITH AGE	
Agree	62 (40.8)
Disagree	45 (29.6)
Don't Know	18 (11.8)
Strongly Agree	11 (7.2)
Strongly Disagree	16 (10.6)
PHYSICAL INACTIVITY LEADS TO OBESITY	
Agree	87 (57.3)
Disagree	18 (11.8)
Don't Know	9 (5.9)
Strongly Agree	35 (23)
Strongly Disagree	3 (2)
PHYSICAL ACTIVITY OF 30 MIN/ DAY OR AT LEAST 5 DAYS A WEEK IS RECOMMENDED TO REDUCE THE RISK OF OBESITY	87 (57.3)
Agree	9 (5.9)
Disagree	6 (3.9)
Don't Know	49 (32.2)
Strongly Agree	1 (0.7)
Strongly Disagree	
CHOICE OF FOODS (DIET) CAN AFFECT OBESITY	
Agree	52 (34.2)
Disagree	4 (2.6)
Don't Know	2 (1.3)
Strongly Agree	93 (61.2)
Strongly Disagree	1 (0.7)

EATING IN BETWEEN MEALS, PREFERENCE FOR SWEETS, REFINED FOOD, FATS INCREASES THE RISK OF OBESITY	
Agree	75 (49.3)
Disagree	8 (5.3)
Don't Know	5 (3.3)
Strongly Agree	64 (42.1)
NOT SLEEPING ENOUGH IS A KEY PREDISPOSITION TO OBESITY	
Agree	55 (36.2)
Disagree	39 (25.7)
Don't Know	38 (25)
Strongly Agree	18 (11.8)
Strongly Disagree	2 (1.3)
EATING DUE TO STRESS CAN INCREASE THE RISK OF OBESITY	
Agree	67 (44.1)
Disagree	17 (11.2)
Don't Know	22 (14.5)
Strongly Agree	44 (28.9)
Strongly Disagree	2 (1.3)

Table 2 shows that majority of the respondents 62 (40.8%) agreed that obesity increases with age. While, 45 (29.6%) disagreed. 18 (11.8%) respondents claimed not to know if obesity increases with age and 16 (10.5%) of them strongly disagreed that obesity increases with age.

Regarding, physical inactivity leading to obesity: a large number of the respondents 87 (57.3%) agreed to physical inactivity leading to obesity, 18 (11.8%) respondents disagreed, 9 (5.9%) claimed not know, 35 (23%) respondents strongly disagreed and 3 (2%) strongly disagreed.

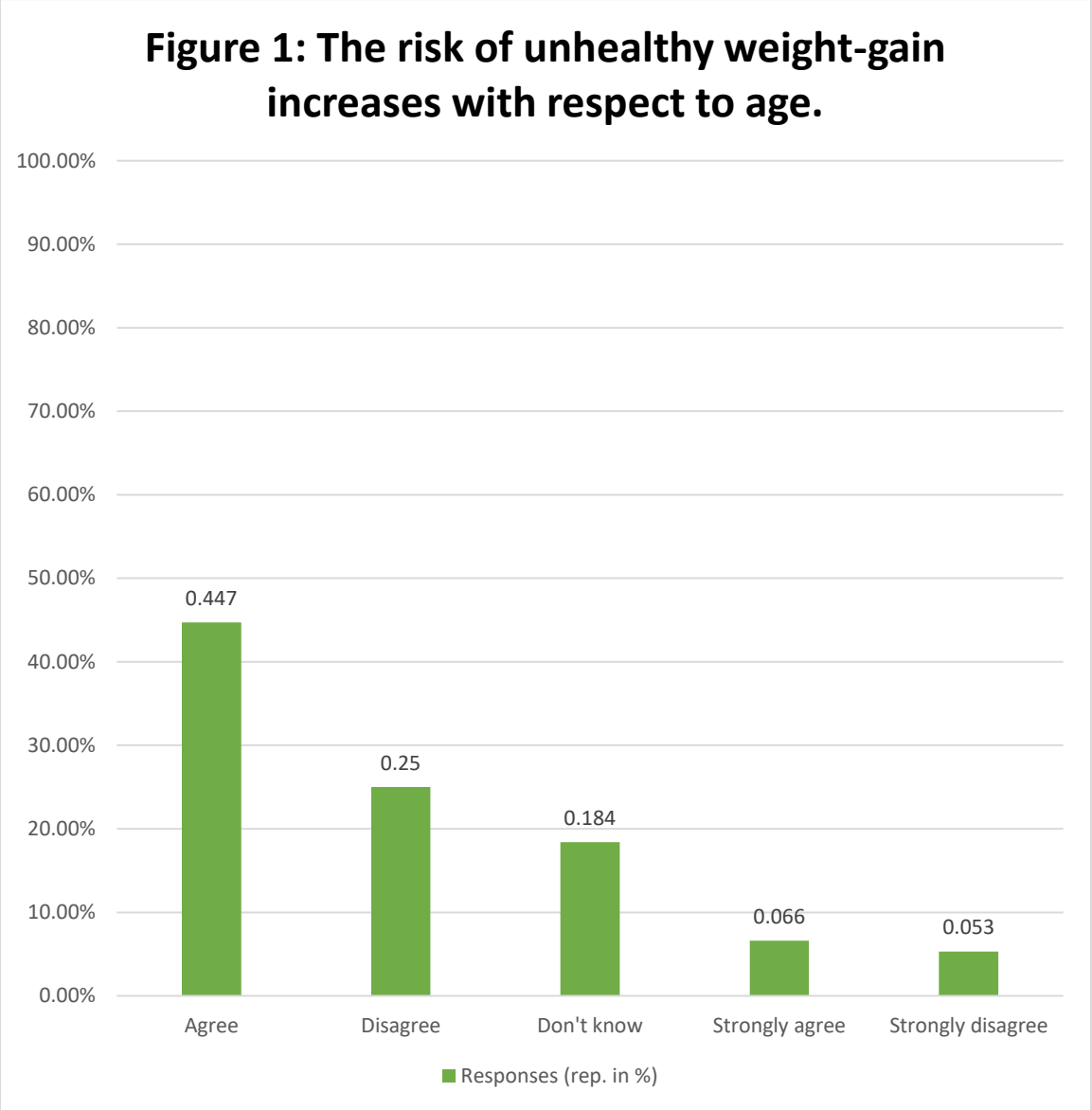
Majority of the respondents 87 (57.3%) agreed that physical activities of 30 minutes per day helps to reduce the risk of obesity while, 9 (5.9%) respondents disagree.

93 (61.2%) respondents strongly agreed that choices of food can affect obesity and 4 (2.6%) respondents disagreed.

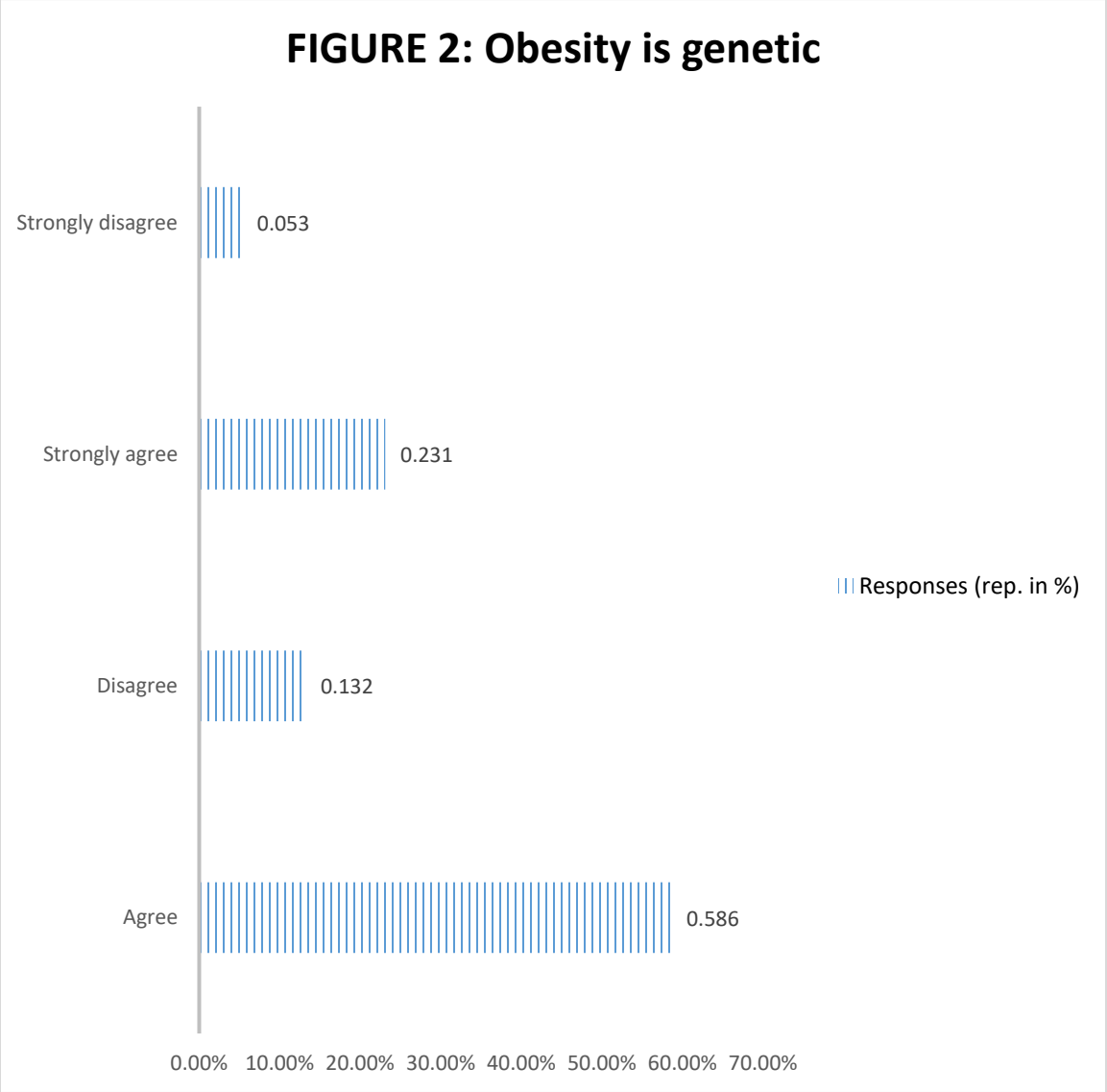
75 (49.3%) respondents out of the total of 152 agreed that, eating in between meals increases the risk of obesity while a chunk of the respondents 64 (42.1%) strongly disagreed.

Although, most of the respondents-55 (36.2%) agreed that, not sleeping enough is a key predisposition to obesity, 39 (25.7%) of them disagreed while, 38 (25%) chose the "I don't know" option.

67(44.1) respondents affirmed that eating due to stress can increase the risk of obesity while, 17 (11.2%) respondents disagreed and 22 (14.5%) of did not know.



The chart above shows that, most of the respondents: 68 (44.7%) agreed to the premise that, the risk of unhealthy weight-gain increases with respect to age while, 38 (25%) disagreed and 28 (18.4%) respondents did not know. Nevertheless, 10 (6.6%) of the respondents strongly agreed while, 8 (5.3%) respondents strongly disagreed.



The figure above shows that, 89 (58.6%) respondents agreed that Obesity is genetic, 20 (13.2%) respondents disagreed, 35 (23.1%) respondents strongly agreed while, 8 (5.3%) respondents strongly disagreed.

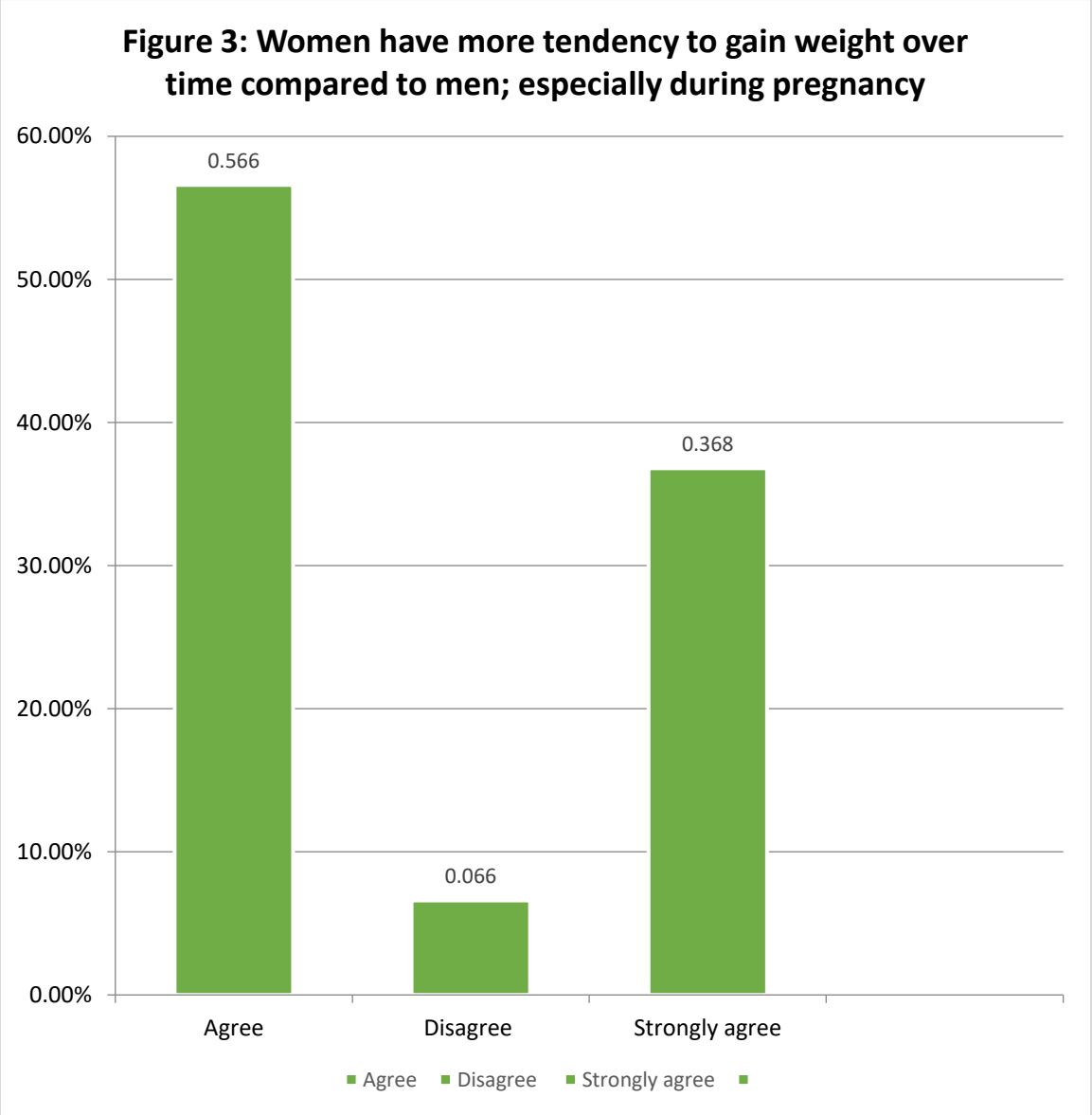
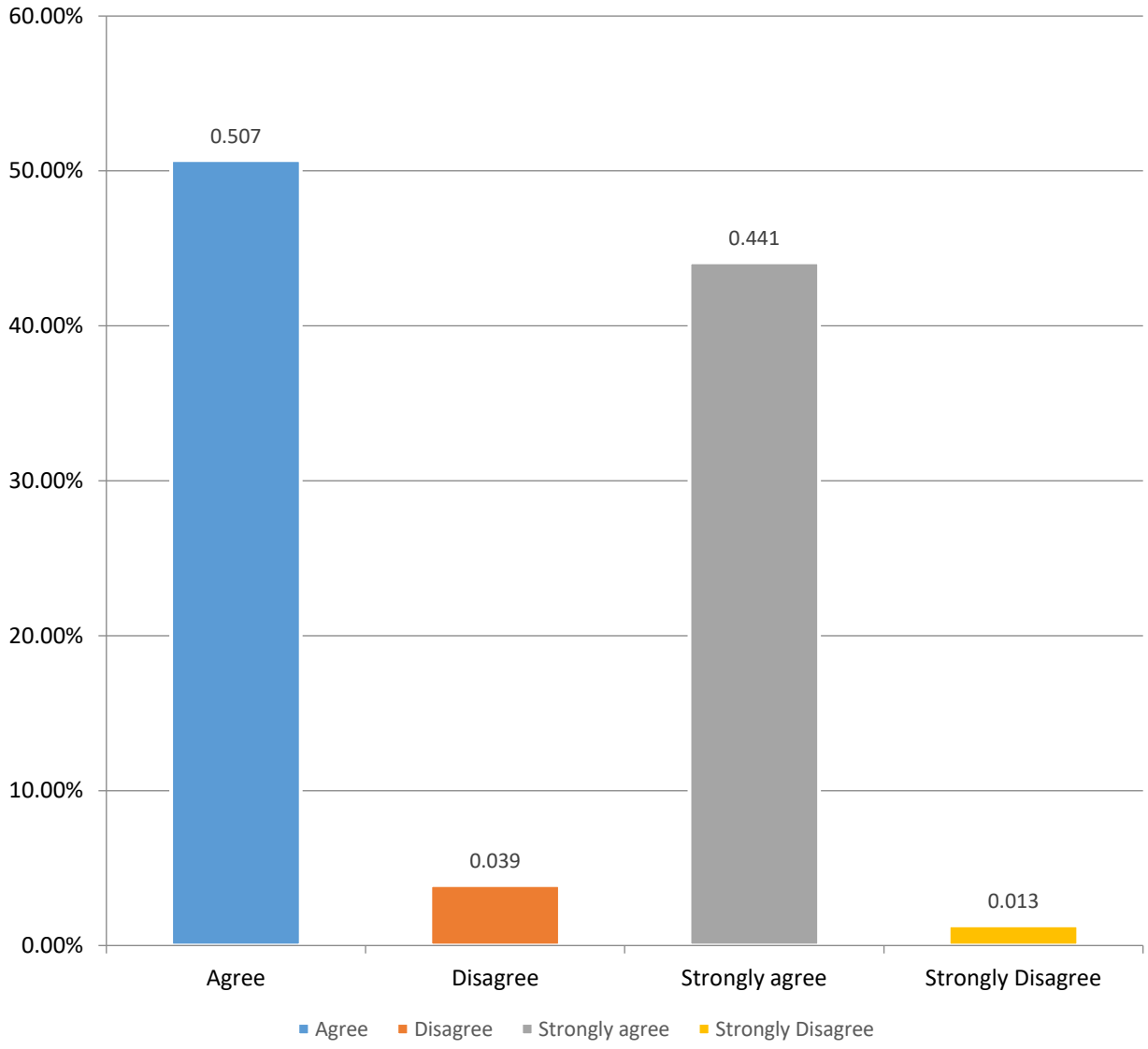
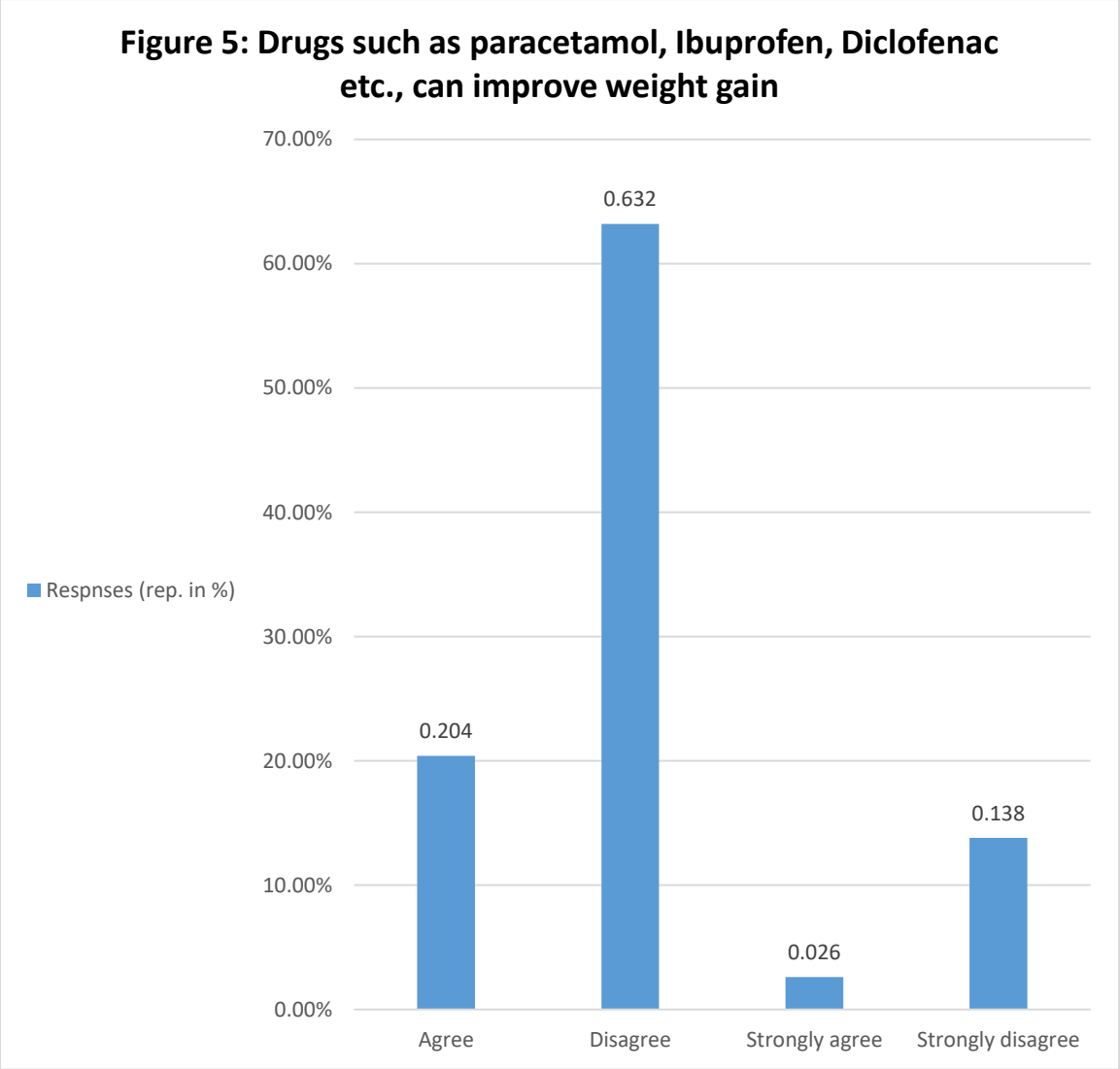


Figure 3. shows that 86 (56.6%) respondents agreed that women have more tendency to gain weight over time compared to men; especially during pregnancy, 10(6.6%) respondents disagreed while, 56 (36.8%) respondents strongly agreed.

Figure 4: Easy access to unhealthy fast foods and limited access to recreational facilities allows for increase in the risk of obesity



From the chart above, 77 (50.7%) respondents agreed that, easy access to unhealthy fast foods and limited access to recreational facilities allows for increase in the risk of obesity, 6 (3.9%) disagreed, 67 (44.1%) respondents strongly agree while, 2 (1.3) strongly disagreed.



The figure above shows that, a large number of the respondents 96 (63.2%) disagreed that, drugs such as paracetamol, ibuprofen, diclofenac etc. can improve weight gain. Although, a number of 31 (20.4%) respondents agreed, 4 (2.6%) strongly agreed and 21(13.8%) strongly disagreed.

Summary of the knowledge score

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor Knowledge	39	13.6	25.7	25.7
	Good knowledge	113	39.4	74.3	100.0
	Total	152	53.0	100.0	

The table above shows the overall score of the knowledge of the respondents of, the risk factors of obesity. The table indicates that; the respondents have a very good knowledge (74.3%) of the risk factors of obesity

Practices of prevention of obesity

Table 3 above displays the responses of the respondents concerning the practices of the risk factor of obesity.

TABLE 3: Showing the respondents' responses on the practices of the prevention of obesity

VARIABLES	FREQUENCY (%)
DO YOU EXERCISE	
No	10 (6.6)
Sometimes	68 (44.7)
Yes	74 (48.7)
TELEVISION VIEWING (HOURS/DAY)	
<1	37 (24.3)
>4	31 (20.4)
1-2	50 (32.9)
3-4	34 (22.4)
USE OF LAPTOP (HOUR/ DAY)	
<1	34 (22.4)
>4	47 (30.9)
1-2	48 (31.6)
3-4	23 (15.1)
SLEEP DURATION (HOUR/ DAY)	
<8	97 (63.8)
>10	12 (7.9)
9-10	43 (28.3)
HOW MANY TIMES DO YOU WATCH TV/DAY?	
Once	72 (47.4)
Twice	56 (36.8)
Thrice	24 (15.8)
DO YOU EAT BETWEEN MEALS?	
No	54 (35.5)
Yes	98 (64.5)
HOW MANY TIMES DO YOU TAKE FRUITS (DAYS/WEEK)?	
Less than 3	83 (54.6)
More than 3	68 (44.7)
Declined to answer	1 (0.7)
HOW MANY TIMES DO YOU TAKE VEGETABLES (DAYS/ WEEK)?	
Less than 3	72 (47.4)
More than 3	80 (52.6)
HOW MANY TIMES DO YOU TAKE MILK OR DAIRY PRODUCT (DAYS/ WEEK)?	
Less than 3	83 (54.6)
More than 3	69 (45.4)

Among the 152 respondents, 74(48.7) exercise regularly while, 68 (44.7) of them engage in exercises sometimes. Only 10 (6.6) of the respondents ticked the option of not exercising at all.

The table above reveals that most of the respondents 50 (32.9) view television for 1-2 hours in a day; 37 (24.3) respondents view the television less than an hour in a day; 34 (22.4) respondents watch the television for 3-4 hours/day and 31 (20.4) of the respondents watch the television for more than 4 hours in a day. Furthermore, 72 (47.4)/152 respondents admitted to watching television once a day as opposed to the, 56 (36.8) and 24 (15.8) respondents that claimed to watch television twice and thrice a day respectively.

Also, the trend of laptop use according to the table above shows that, 48(31.6) of the respondents use their laptop for 1-2 hours per day, 47 (30.9) of the respondents use their laptops for more than 4 hours in a day, 34 (22.4) of the respondents claimed to use their laptops for less than an hour in a day while, 23 (15.1) of the respondents use their laptops for 3-4 hours per day.

Out of 152 respondents, 97(63.8) respondents answered to, sleeping less than 8 hours per day, 43 (28.3) picked the option of sleeping 9-10 hours in a day while, 12 (7.9) respondents sleep more than 10 hours a day.

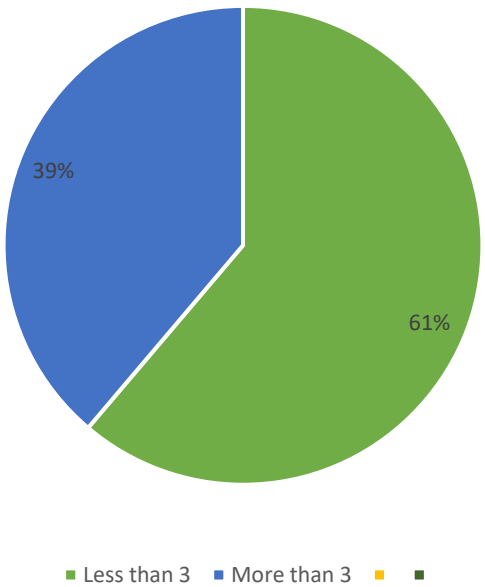
98 (64.5) respondents admitted to eating between meals, while 54 (35.5) of the respondents picked "no" to eating between meals.

More than half of the respondents; 83 (54.6) take fruits less than 3 times a week while, 68 (44.7) take fruits more than 3 times a week.

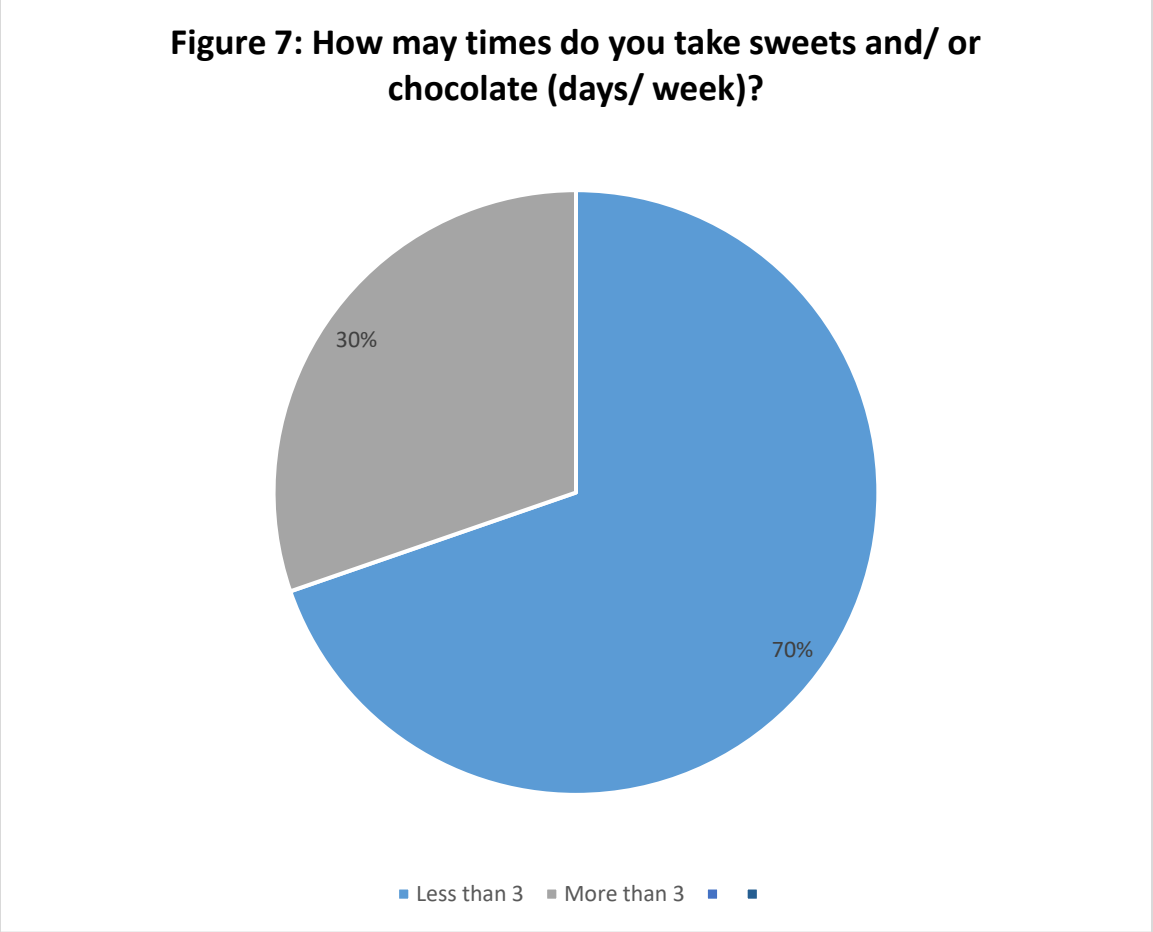
Many of the respondents 80 (52.6), take vegetables more than 3 times a week unlike 72 (47.4) that take vegetables less than 3 times a week.

Table 3 shows that, most of the respondents 83(54.6) /152, take milk or diary product less than 3 times a week while, 69 (45.4) of the respondents take milk or diary product more than 3 times a week.

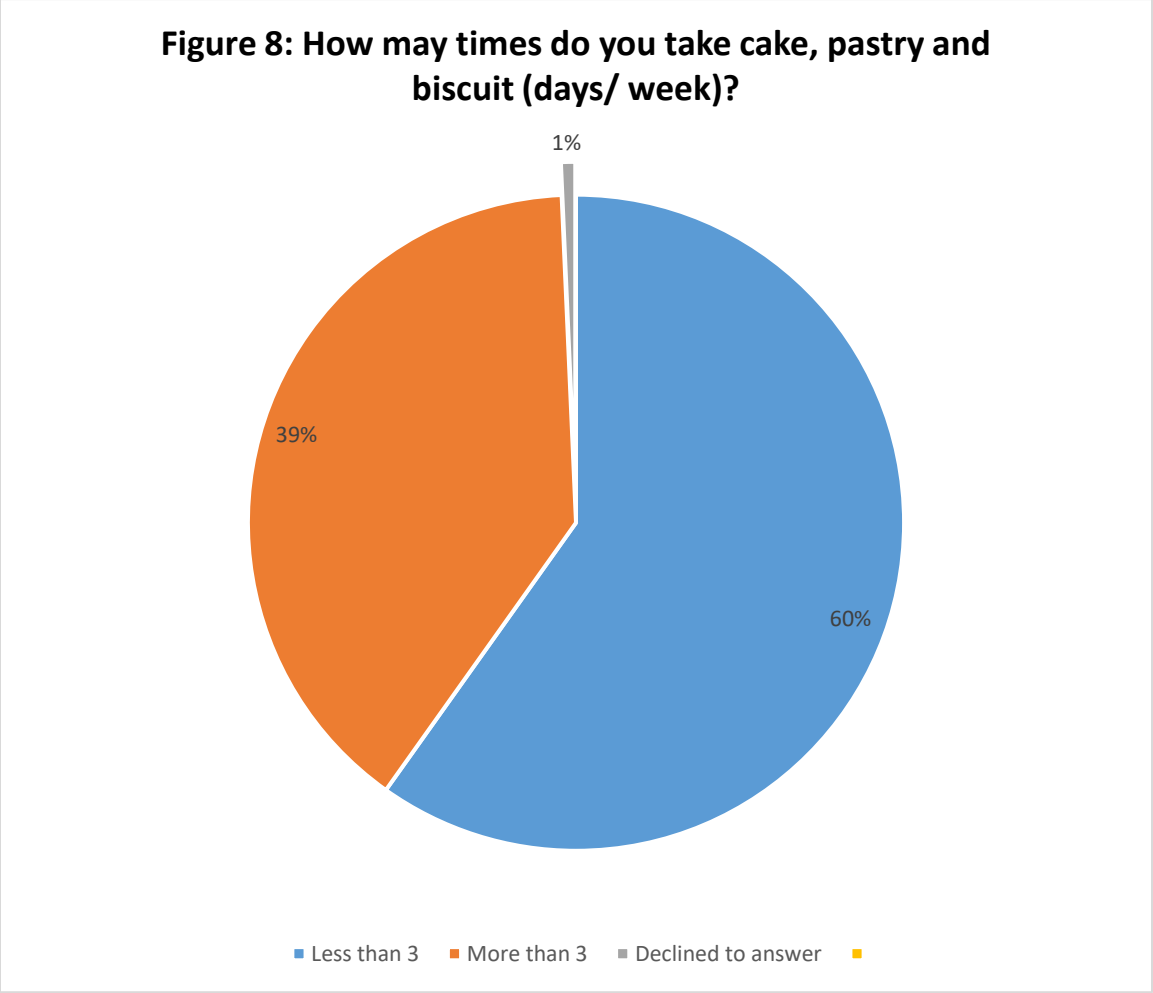
Figure 6: How many times do you take soda or soft drinks (days/ week)?



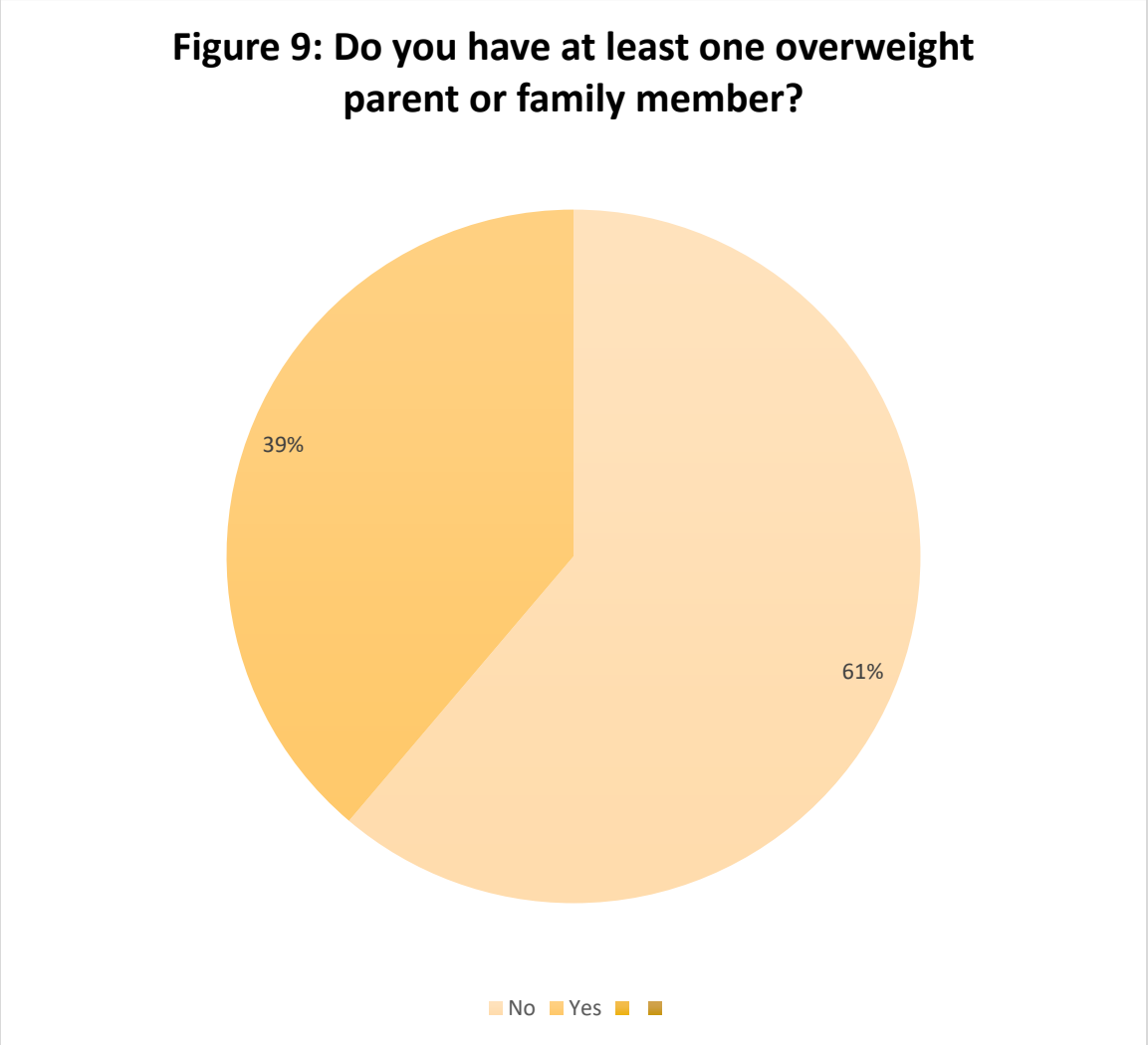
According to the figure above, most of the respondents in this study 93 (61.2%) take soda or soft drinks less than 3 times a week while, 59(38.8%) take soft drinks more than 3 times a week.



The figure above depicts that, 106 (69.7) respondents take sweets or chocolate less than 3 times a week, while 46 (30.3%) of the respondents take sweets or chocolate more than 3 times a week.



According to the chart above, while 91 (59.9%) respondents take cake, pastry or biscuit less than 3 times a week, 60 (39.5%) of the respondents responded to taking cake, pastry or biscuits more than 3 times a week while, 1(0.7) respondent declined to respond.



The figure above shows that, a large number of the respondents 93 (61.2%) does not have, at least one family member that is overweight while, 59 (38.8%) of them have at least one overweight parent or family member.

4.5 Summary of the score of; the prevention practices

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor Practice	73	25.4	49.3.	49.3
	Good Practice	75	26.1	50.7	100.0
	Total	152	53.0	100.0	

The table above shows the overall score of the respondents' practices of, the prevention of the risk factors of obesity. The table indicates that; the respondents' practices of the prevention of obesity is moderately good as it was discovered, that 50.7% practice good health habits.

4.6: Factors influencing knowledge of the risk factors of obesity

	Field of Study									
	Business	Med science	Agric	Science	Computer	Education	Law	Nursing	Social science	Total
Physical activity of 30 min a day reduces risk of obesity										
Agree	14	6	3	5	11	4	19	11	12	85
Disagree	1	0	0	3	0	1	1	1	2	9
Don't know	1	1	0	0	1	0	2	0	1	6
Strongly agree	7	8	1	1	10	0	10	3	9	49
Total	23	15	4	9	22	5	32	15	24	**149**

4.7: Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	924.328[a]	91	.000
Likelihood Ratio	453.088	91	.000
N of Valid Cases	287		

The table above reveals the relationship between respondents' field of study and their knowledge of the risk of obesity. From the chi-square table above, it is revealed that the chi-square calculated value at degree of freedom 12 with p-value (0.000) which is less than or equal to 0.05 is 924.328. chi-square calculated value (924.328) is greater than the chi-square tabulated value 114.27, thus shows that there is a relationship between respondents' school in terms of their field of learning and their knowledge of the risk of obesity.

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

Obesity is well documented as a risk factor for numerous chronic conditions, such as diabetes, hypertension, hyperlipidaemia and CVDs; making it a disease condition of public health concern. The main objective of this research is to assess the knowledge of the risk factors and practice of prevention of obesity among undergraduates in Babcock University, Ilishan-Remo. This chapter will focus on discussing the findings of this particular study as well as; similar studies conducted by other researchers. In addition, the conclusion and recommendations of the study will be included in this chapter.

5.1. SOCIO-DEMOGRAPHIC STATUS

In this study, the age range of the respondents is 16-35years and most of the respondents (61.8%) were within the range of 21-25 years. Majority of the respondents were females (70.4%) and this correlates with a study carried out by Andy et al. (2015), they discovered that majority of the respondents who were females were, aged 21-25 years. (Andy et. al., 2015)

Majority of the respondents (22.4%) were students of the College of law and Humanities which is different from findings from some other studies, carried out by (Gupta, 2009; Obirirkorang, 2017; Gopalakrishnan et al., 2012; Mogre et al., 2014) who stated in their studies on the prevalence and risk factors of obesity among undergraduates that a higher proportion of students in the Medical sciences and other science-related courses participated in the study.

5.2. KNOWLEDGE OF THE RISK FACTOR OF OBESITY

The knowledge of the risk factors of obesity was assessed in this study. The risk factors considered include: age, physical activity, dietary pattern and nutrition; sleep, stress, sex, genes and use of drugs.

Most of the respondents (40.8%) possessed a reasonable level of knowledge of, the fact that obesity risks increase with age. This correlates with the research conducted by Peltzer et al (2014) among, undergraduate students in 22 countries which discovered a strong link between the prevalence of overweight/obesity and the age of the study population.

Physical activity: a key risk factor of obesity was explored in this study and, it was discovered that, the majority respondents (57.2%) are well informed of the fact that physical inactivity increases the risk of obesity and that, physical activity of 30mins/day is recommended to reduce the risk of obesity. This is in agreement with some studies, of Peltzer et al. (2014) and Issa (2015) whose studies showed an association between the level of physical activities among students and overweight/obesity.

This study also revealed that there is a high level of awareness (61.2%) of the link between the choice of foods eaten and obesity among the respondents. As explained by Issa (2015), this might be due to the unavailability of high quality food in the students' environments which of course, has an extension to eating fast foods which are most times unhealthy.

This study also showed the high knowledge rate (50.7%) of the respondents on the risk of eating fast foods which, most times are readily accessible and available which is in line with a study conducted by Islam &Ullah (2010) that posited that easy access, among other factors is the causes of fast food preference among students in Bangladesh.

This study also discovered that most of the respondents (36.2%) were aware that not sleeping enough can lead to weight gain and 44.1% were aware that stress is also a risk factor of overweight/obesity. This is in correlation with a study by Gupta (2009) that found that, stress may be a major risk factor of weight gain among students as the burden of academic work and its affiliates may lead to irregularity in diet, lack of exercise and proper sleep, each being considered independent factors leading to obesity.

The knowledge of the participants regarding risk factors of overweight and obesity was found to be generally good as majority (74.3%) of the respondents were well informed about the risk factors of Overweight/Obesity although few (27.5%) of the respondents had poor knowledge of the risk factors of Overweight/Obesity.

5.3. PRACTICE OF THE RISK FACTOR OF OBESITY

According to this study, 63.8% of the respondent sleep duration is less than 8 hours, 48.7% of the respondents said they exercise, 53.3% of the respondent eat vegetables more than 3 times weekly, 61.2% drink soft drinks less than 3 times weekly, while 53.3% of the respondent drink milk or dairy products less than 3 times weekly.

This contradicts the research carried out a study carried out by Awad Mohammed, Al-Qahtani et al. (2017) in Najran university, Saudi Arabia 50% student's duration of sleep is 4-6hours, 29% of the students engaged in regular exercise (compare to 46% of American College Students, AHCA, 2009), whereas another 25% stated that they never or hardly ever perform physical exercise.71.67% eat vegetables from time to time in a week, 36.34% drink soft drinks less than 7 times weekly.

The respondents' practices of the prevention of obesity was found to be moderately good as it was discovered, that a little over half of the respondents (50.7%) practice healthy living which, in turn reduce their risks of unhealthy weight gain while the other half of the respondents were found to practice bad health habits. This does not correlate with the study carried out by Tapera (2017), in a university in Botswana where, it was shown that students engage in unhealthy dietary practices and lifestyle.

5.4. CONCLUSION

This study reveals that the undergraduate students of Babcock University, Ilishan Remo have good knowledge on the risk factors of obesity and that they practice good health habits. University

students are assumed to be the main proportion of the socio-economic elite of the future. However, their current behavioral patterns and habits are most likely to become the norm. Hence, it is essential that, every required stakeholder (Policy makers, School based managements, International organizations, Non-governmental organizations (NGOs), Parents, Caretakers and individuals), vehemently throw all their weight into health education and promotion strategies that can help prevent Obesity.

5.5. RECOMMEDATIONS

Health education in schools should include various lifestyle discussions such as proper dietary intake, risk of sedentary lifestyle, risk of developing insomnia, importance of eating fruits, and vegetables and engaging in regular exercise.

Public health programs creating awareness on; the risk factors and prevention of obesity should begin with schools and extend to the entire community.

Nutrition education should be introduced to schools' curriculum to help improve students' knowledge about the right foods to eat for good health and healthy living.

Parents should also ensure to; provide healthy foods and adequate rations in the home; encourage physical activities, limit the amount of time spent viewing televisions; and using laptops. Parents should also take part in physical activities so as to motivate their wards.

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