



Anthropometric Status and Blood Glucose Level of Public Secondary School Teachers in Abeokuta South LGA, Abeokuta, Ogun State, South west, Nigeria

¹Adebayo, Yetunde O ²Akinsanya, Olubunmi Bose ³Lasabi, Oluwamilola Temitope ⁴Adebanjo, Hassanat Adeola

¹Alabata Road, Camp, Abeokuta

²Department of Food Science and Technology, Nutrition and Dietetics Unit, Bells University of Technology, Ota, Ogun State, Nigeria

³Institute of Food Security, Environmental Resources and Agricultural Research (IFSERAR), Federal University of Agriculture, Abeokuta, Ogun State, Nigeria

⁴Nutrition and Dietetics Department, Federal University of Agriculture, Abeokuta, Ogun State, Nigeria

*Corresponding Author: yetunde.adebayo0@gmail.com

ABSTRACT

Diabetes mellitus is a serious medical issue which is characterized by elevated plasma glucose levels and it has a crippling effect on humans. A descriptive cross-sectional study design involving one hundred and sixty-five (165) teachers was conducted to assess the anthropometric status and blood glucose level. A self-administered questionnaire was used to obtain information on sociodemographic and socioeconomic characteristics. Anthropometric measurements of weight and height were obtained and classified accordingly. Blood glucose test taken with a glucometer and food consumption pattern assessed using a Food Frequency Questionnaire (FFQ). Data was analyzed using SPSS V.20.0. Majority of the respondents were females (75.8%), between the ages 41-50years (54%), belong to Yoruba ethnic group (93.3%) and were married (83.6%). Anthropometric measurements indicated 30.3% and 21.2% as overweight and obese respectively. Blood pressure measurements showed 29.2% within normal blood pressure level. Blood glucose tests revealed 80.1% and 3.6% had normal and low blood glucose levels respectively while 1.8% were diabetic and 14.4% were pre-diabetic. More than half (66.7%) of the respondents skipped meals, and (64.2%) engage in snacking. There was significant association ($p < 0.05$) was observed between anthropometric status, blood glucose level and some socio-demographic characteristics. In conclusion, high prevalence of pre-diabetes, overweight, irregular blood pressure levels alongside poor dietary habits was observed among the teachers sampled. Therefore, there is a need to advance necessary awareness and enlightenment of the public about the risk factors associated with the development of diabetes.

Keywords: Diabetes; Blood Pressure; Obesity; Dietary Habits

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INTRODUCTION

Diabetes mellitus, marked by heightened plasma glucose levels, stands as a pressing metabolic concern. Its impact extends beyond individual health to encompass societal productivity and economic well-being, affecting a considerable portion of the workforce. The disease's prevalence is closely linked to factors like obesity, dietary habits, and sedentary lifestyles, all of which contribute substantially to its adverse effects *Onuoha et al. (2016)*.

The global prevalence of diabetes among adults aged 20 to 79 was projected to be 10.5% (536.6 million) in 2021 and is expected to rise to 12.2% (783.2 million) by 2045. This condition affects both genders equally and is most prevalent among individuals aged 75 to 79. Urban areas show higher prevalence rates (12.1%) compared to rural areas (8.3%) in 2021, with similar disparities observed between high-income (11.1%) and low-income (5.5%) nations.

Over the period from 2021 to 2045, middle-income countries are anticipated to witness the most significant relative increase in diabetes prevalence (21.1%), followed by high-income (12.2%) and low-income (11.9%) countries *Sun et al. (2022)*.

Diabetes, alongside other non-communicable diseases (NCDs) like hypertension, cancers, obesity, and chronic respiratory disorders, contributes significantly to increased adult mortality rates. These health challenges are linked to factors such as increased reliance on motorized transport, sedentary occupations like office work, elevated dietary risks, and poor lifestyle habits *Oladimeji et al. (2014)*. Nigeria stands as one of the countries significantly impacted by diabetes, with higher prevalence rates observed in urban areas (5%-10%) compared to rural regions (0%-2%) *Fasanmade and Dagogo-Jack (2015)*.

Teachers constitute a significant segment of Nigeria's workforce and play a crucial role in the nation's educational framework. Their occupation, characterized by prolonged periods of sitting, designates them as sedentary workers. As noted by *Adebayo et al. (2020)* these demographic faces various environmental challenges, including stress, physical inactivity, and unhealthy dietary habits, all of which heighten their susceptibility to cardiovascular diseases, with diabetes being a prominent risk factor.

In Nigeria, there's a notable scarcity of nutrition studies focusing on adults, particularly teachers. The majority of research and initiatives related to nutrition in schools prioritize the health and academic performance of students *Okudu et al. (2018)*. Additionally, there's a significant gap in our understanding of the health profile of public secondary school teachers in terms of their anthropometric status and blood glucose levels in the study area. It's imperative to assess teachers' health comprehensively to identify potential health risks that could affect their overall well-being and professional efficacy, considering their substantial impact on students' educational advancement.

Moreover, assessing a teacher's blood glucose level can provide crucial insights into their metabolic health. Elevated levels may indicate diabetes or prediabetes, conditions associated with a heightened risk of chronic diseases. Lifestyle factors such as diet, physical activity, and stress significantly influence blood glucose levels *American Diabetes Association (2020)*. Understanding a teacher's blood glucose levels can help identify individuals who could benefit from interventions like dietary adjustments, increased physical activity, or stress management techniques. Consequently, this research aimed to investigate the prevalence of overweight and diabetes among public secondary school teachers in Ogun State, Nigeria.

MATERIALS AND METHODS

Study Design

A cross-sectional descriptive study was adopted. Data was collected from subjects at the public schools during visitation, collated and then analyzed.

Study Area

The study was carried out in Abeokuta South Local Government Area of Ogun State, South west, Nigeria. The study area is located in the city of Abeokuta in Ogun State, Nigeria with latitude 7.0900°N and longitude 3.2100°E. *Wikipedia (2009)*.

Study Population

The study focused purposively on teachers in selected public secondary schools within Abeokuta South LGA. Apparently healthy teachers who consented to participate in the study were included.

Sample Size Determination

The sample size was based on the prevalence of diabetes, 11.4% *Adeniran et al. (2022)*

The sample size was calculated using the formula;

$$N = \frac{Z^2 P (1-P)}{d^2} \quad \text{Adeniran et al. (2022)}$$

N = Sample size of the subject

Z=Area under the normal curve (1.96)

d= desired level of precision (0.05)

P= prevalence rate of diabetes in Abeokuta is 11.4% *Adeniran et al. (2022)*

$$N = \frac{1.96^2 \times 0.114 (1-0.114)}{0.05^2}$$

N = 155.2 respondents

However, 5% of 155.2 (7.76) was added and rounded up to 165 respondents in order to account for non-responses.

Sampling Technique

A multi-stage sampling technique was used for the data collection procedure, which involves different sampling techniques at each stage of data collection.

Stage 1: Simple random sampling was used to select five wards from the 15 wards in the Local Government [Ago-Egun/Ijesa, Ake I, Ake III, Ake II, Erunbe/Oke Ijeun, Ibara I, Ibara II, Igbore/Ago-Oba, Ijaye/Idi-Aba, Ijemo, Imo/Isabo, Itoko, Keesi/Emere, Sodeke/Isale-Ijeun I, Sodeke/Isale-Ijeun II *Manpower (2023)*].

Stage 2: A random sampling technique was then adopted to select a school in each of the five wards selected out of a total of 8 schools in the five wards combined.

Stage 3: A systematic sampling technique was adopted to select 33 teachers from each school

Ethical Consideration

Before the study, written permission was obtained from the Nutrition and Dietetics Department of the Federal University of Agriculture, Abeokuta, Ogun State, Nigeria. Likewise, ethical approval was also obtained from the Federal Medical Centre, Abeokuta Health Research Ethics Committee (HREC) with the Reference No “NHREC/08/10-2015”. Consents were obtained from all the respondents who participated in the study.

Method of Data Collection

Data relating to socio-demographic characteristics, anthropometric measurement and blood glucose level were taken and documented using a structured questionnaire. Information on food

consumption pattern was also elicited using a Food Frequency Questionnaire. Anthropometric measurements of height and weight were taken in which weight was measured with a bathroom weighing scale in kilogram (kg) using the WHO STEPS Surveillance procedure. The weighing scale was placed on a firm and flat surface. The weighing scale was tarred to 0kg before measurement. Participants were asked to remove their shoes and instructed to step onto scale with one foot on each side of the scale.

Height was measured using height meter in centimeter (cm) and the WHO STEPS Surveillance procedure was followed. The subjects were asked to remove their footwear and head gear and they were asked to stand on the board facing the researcher. The subjects were instructed to stand with feet together, heels against the back board, knees straight while looking straight ahead and not up. Body Mass Index (BMI) of the subjects was calculated using the formula below:

$$BMI = \frac{Weight}{Height^2}$$

The Body Mass Index of the subjects was classified following *Linaker et al. (2020)*. Blood pressure (BP) was measured using a digital sphygmomanometer, following the WHO STEPS Surveillance procedure. It was taken on the right arm of the respondents in seated position. The measurements were taken twice, the mean calculated and compared to the *American Heart Association (2023)* standards.

The assessment of the blood glucose level involved measurement of either fasting blood glucose (FBS) level or the random blood glucose (RBG) level of the respondents. FBS was conducted on respondents who have not had anything to eat as at the time of the study while RBG was conducted on respondents that have eaten. Glucometer was used to measure the blood glucose level in mg/dl and classified according to the standards of *American Diabetes Association (2019)*.

The dietary habit of the respondents was determined using a dietary habit questionnaire which provided information on daily meal frequency, skipping of meals, meal usually skipped, reasons for skipping meal and intake of in-between meals. It also included the use of a Food Frequency Questionnaire (FFQ) which indicated the pattern of consumption of various food groups. The Food Frequency Questionnaire (FFQ) consisted of staple foods and foods in season within the locality based on the frequency of consumption on monthly basis.

Statistical Analysis

Data collected were analyzed using Statistical Package for Social Sciences (SPSS version 20.0.) Descriptive statistics such as frequencies, percentages, mean and standard deviation were used to analyze the socio-demographic/socio-economic characteristics, anthropometric characteristics and information obtained on food consumption pattern of the respondents. Test for significant relationship and differences among relevant variables were subjected to inferential statistics (Pearson correlation) at <0.05 level of significance.

Results

Socio-demographics and economic characteristics of the respondents

Table 1 indicated the socio-demographic and economic characteristics of the respondents. One hundred and sixty-five public secondary school teachers in the study area within Ogun State participated in the study. The age of the respondents ranged between 22 and 60 years with almost (54%) within the ages of 41 and 50 years while (13.9%) were between 21 to 30years of age. The mean age of the respondents was 43.7±9.0years. They were mostly (75.8%) females, 65.5%

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Christians and (34.5%) Muslims. Most of the respondents (87.9%) were from a monogamous family with (83.6%) married while only 0.7% are divorced. The years of experience among the respondents indicated that about 65% having been teaching for 11-20yrs, 21.8% had between 6months and 10years of experience while 13.4% had more than 20years teaching experience. The level of income showed that more than half (55.2%) earned between ₦51,000 and ₦100,000 and 44.8% earned more than ₦100,000 on monthly basis. Majority (80%) of the respondents reported no family history of related medical condition.

Table 1: Socio-Demographic and Socio-Economic Characteristics of the Respondents

Variables	Frequency	Percentage (%)
Age(yrs.)		
21-30	23	13.9
31-40	23	13.9
41-50	89	53.9
51-60	30	18.3
Mean ± S.D	43.7 ± 9.0	
Gender		
Male	40	24.2
Female	125	75.8
Religion		
Islam	57	34.5
Christian	108	65.5
Family Structure		
Monogamy	145	87.9
Polygamy	20	12.1
Family Size		
1-5	103	62.4
6-10	61	37.0
11-15	1	0.6
Marital Status		
Single	22	13.3
Married	138	83.6
Divorced	1	0.7
Widowed	4	2.4
Ethnic Group		
Yoruba	159	96.4
Igbo	6	3.6
Years of teaching Experience		
6months-10years	36	21.8
11-20 years	107	64.8
21-30 years	18	10.9
31-40 years	4	2.5
Monthly Income		
₦51,000-₦100,000	91	55.2
0,001-₦150,000	54	32.7
₦150,001 and above	20	12.1
Family History of Relevant Diseases		
Yes	33	20
No	132	80

The results of the anthropometric status of the respondents based on their weight and height are shown in Table 2. According to this table, about 44% were normal body mass index (BMI) of 18.5-24.9kg/m², 30.3% are overweight with values between 25.0 and 29.9kg/m², 21.1% are obese (BMI ≥ 30 kg/m²) while 4.8% are underweight with BMI less than 18.5kg/m². However, overweight and obesity was found to be more among age group 41-50years. The mean weight, height and BMI of the respondents are 70.16±15.02kg, 1.64±0.08m and 26.08±5.65 kg/m² respectively.

Table 2: Anthropometric Characteristics of the Respondents

Age (years)	Underweight < 18.5kg/m ²	Normal weight 18.5 – 24.99 kg/m ²	Overweight 25 – 29.99 kg/m ²	Obese ≥ 30 kg/m ²
21-30	6 (3.6%)	12 (7.3%)	2 (1.2%)	3 (1.8%)
31-40	1 (0.6%)	9 (5.5%)	7 (4.2%)	6 (3.6%)
41-50	0 (0%)	42 (25.5%)	26 (15.8%)	21(12.7%)
51-60	1 (0.6%)	9 (5.5%)	15 (9.1%)	5 (3.0%)
Variables	Minimum	Maximum	Mean ± S.D	
Weight (kg)	40.00	55.25	70.16 ± 15.02	
Height (m)	1.43	145	1.64 ± 0.08	
BMI (kg/m²)	16.63	55.25	26.08 ± 5.65	

Blood Pressure Pattern of the Respondents

The mean systolic blood pressure (SBP) of the respondents was 124 ± 21mmHg while the mean diastolic blood pressure (DBP) was 82 ± 13mmHg. More of the respondents (29.1%) were of normal blood pressure however, the prevalence of hypertension and pre-hypertension among the respondents was 21.8% and 26.1% respectively as depicted in Table 3. The table further indicated that hypertension was more among the respondents within the ages of 41-50yrs including those at the pre-hypertensive stage.

Table 3: Blood Pressure Pattern of the Respondents

Age (yrs.)	Hypotension < 115/75mmHg	Normal 115/75-120/80mmHg	Pre-hypertension 120/80-139/89mmHg	Hypertension >139/89mmHg
21-30	5(3.0%)	13(7.9%)	3(1.8%)	2(1.2%)
31-40	6(3.6%)	8(4.8%)	7(4.2%)	2(1.2%)
41-50	22(13.3%)	19(11.5%)	23(13.9%)	25(15.2%)
51-60	5(3.0%)	8(4.8%)	10(6.1%)	7(4.2%)
Variables	Minimum	Maximum	Mean ± S.D	
Systolic BP mmHg	84	191	124 ± 21	
Diastolic BP mm Hg	42	120	82 ± 13	

Blood Glucose level of the respondents

The results of the blood glucose level of the respondents assessed based on fasting blood sugar (FBS) and random blood sugar (RBS) measurements are indicated in Table 4. Fasting blood glucose level tests were conducted on 79 respondents while 86 respondents participated in random blood glucose testing. The results of the FBS showed that more than two-third of the

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respondents assessed had normal blood glucose level of 70-99mg/dl with only 1.3% diabetic while 20.3% were at pre-diabetic stage of ≥ 126 mg/dl. The same trend was observed with the random blood glucose testing of the respondents where most of the respondents accounting for more than three-quarter (88.4%) had normal blood glucose level while 2.3% and 9.3% were at diabetic and pre-diabetic stages respectively. The mean FBS was 92.76 ± 14.76 mg/dl and the mean RBG was 121.09 ± 47.22 mg/dl.

Table 4: Blood Glucose level of the respondents

Fasting Blood Sugar (FBS)	Hypoglycemic (< 70mg/dl)	Normal (70-99mg/dl)	Prediabetes (100-125mg/dl)	Diabetic (≥ 126mg/dl)
	3(3.8%)	8(10.1%)	1 (1.3%)	0
	0	7(8.9%)	2 (2.5%)	0
	2(2.5%)	31(39.2%)	6 (7.6%)	0
	1(1.3%)	10(12.7%)	7 (8.9%)	1(1.3%)
Random Blood Sugar (RBS)		Normal (70-139mg/dl)	Prediabetes (140-199mg/dl)	Diabetic (≥ 200mg/dl)
		9(10.5%)	2(2.3%)	0
		14(16.3%)	0	0
		45(52.3%)	3(3.5%)	2(2.3%)
		8(9.3)	3(3.5%)	0
Variables (mg/dl)	Minimum	Maximum	Mean \pm S.D	
FBS	47	126	92.76 ± 14.76	
RBS	76	506	121.09 ± 47.22	

Dietary Practices of the Respondents

The dietary practices of the respondents are summarized in Table 5. It shows that less than half (45.5%) had meal 3times on daily basis, 66.7% skipped meals especially lunch (46.1%). Reasons for skipping meal include busy work schedule (27.3%), weight loss management (23.6%), poor economic condition (11.5%) and fasting (4.3%). Majority admitted to eating in-between meals (64.2%) mostly snacks (50.9%) while others take fruits (13.3%).

Table 5: Dietary Practices of the Respondents

Variables	Frequency	Percentage
Frequency of daily eating		
Twice	82	49.7
Thrice	75	45.5
More than thrice	8	4.8
Skipping of meals		
Yes	110	66.7
No	55	33.3
Meals skipped		
Breakfast	30	18.2
Lunch	76	46.1
Dinner	4	2.4
Do not skip meals	55	33.3
Reasons for skipping meals		
Weight loss	39	23.6
Busy work schedule	45	27.3
Fasting	7	4.3
Poor Economic condition	19	11.5
Do not skip meals	55	33.3
In-between Meal Consumption		
Yes	106	64.2
No	59	35.8
In-between meal consumed		
Fruits	22	13.3
Snacks	84	50.9
No in-between meals	59	35.8

Food Consumption Pattern of the Respondents

Figure 1 shows the consumption pattern of the various food groups by the respondents. Cereals, roots and tubers as well as legumes were mostly consumed by 13.8%, 19.26%, and 17.33% respondents respectively 2-3 times on weekly basis. Vegetables and fruits were consumed by 24.24% and 14.82% respondents 2-3 times weekly. In addition, fish was consumed by 19.27% compared to eggs, meats and poultry (12.38%). About 38.41% rarely consumed beverages. Oils, Spices and condiments as well as sweets are consumed by 21.21%, 11.52% and 11.92% respectively.

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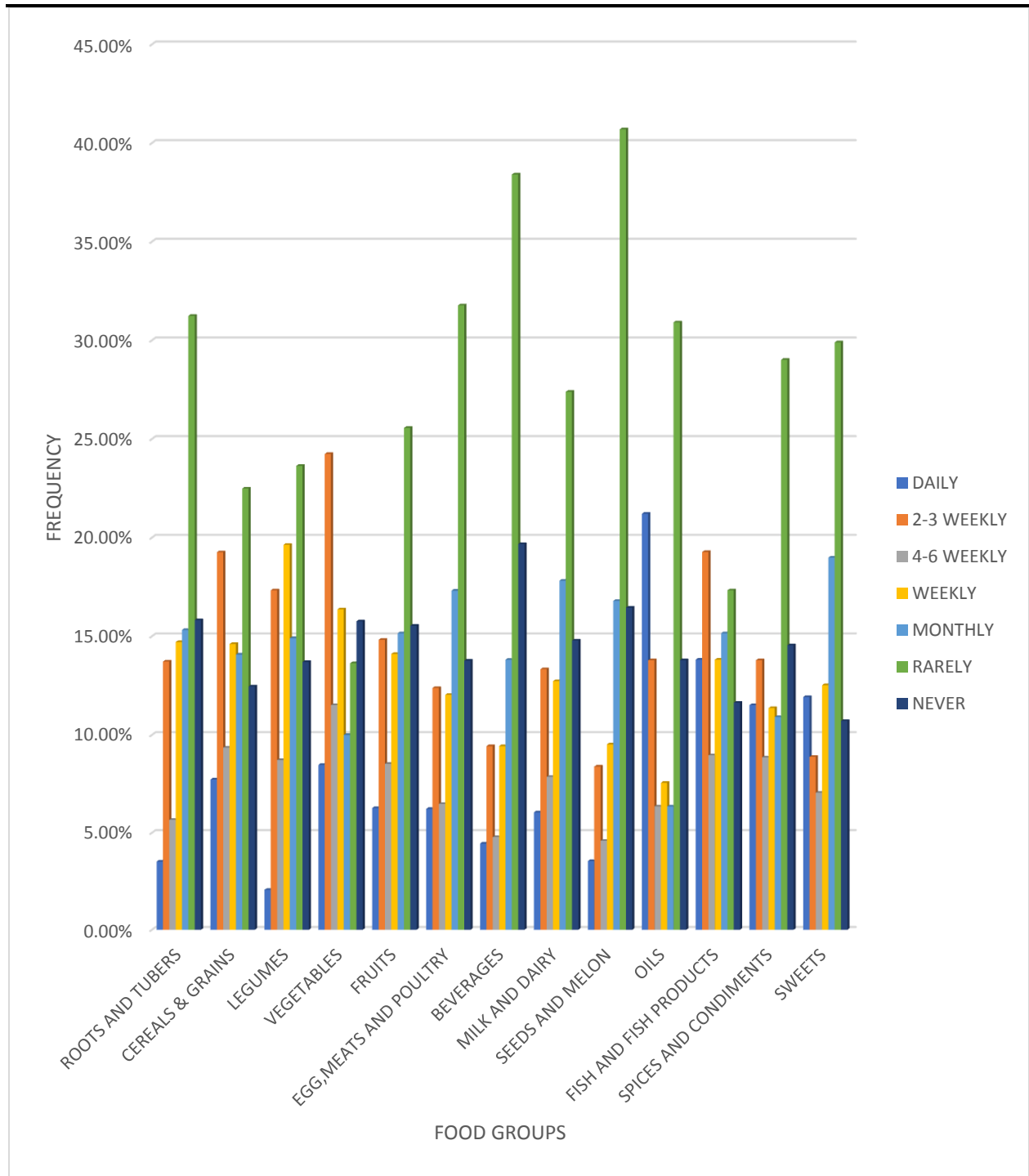


Figure 1: Food Consumption Pattern of the Respondents

Relationship between socio-demographic, socioeconomic characteristics and blood glucose level of the respondents

Table 6 shows the relationship between socio-demographic, socioeconomic characteristics and blood glucose level of the respondents. A significant relationship was observed between blood glucose level and age ($p = 0.015 < 0.05$), gender ($p = 0.018 < 0.05$) and family history of related

diseases ($p = 0.031 < 0.05$) among the respondents. However, there was no significant relationship between the blood glucose level, marital status and monthly income of the respondents at ($p > 0.05$).

Table 6: Relationship between Socio-demographic, Socioeconomic Characteristics and Blood Glucose Level of the Respondents

Variables	Hypoglycemic <70mg/dl	Normal 70-139mg/dl	Pre-diabetes 100-199mg/dl	Diabetic ≥126mg/dl	Pearson correlation	p-value
Age(yrs.)						
21-30	2	20	1	0	0.188	0.015*
31-40	0	20	3	0		
41-50	1	78	7	2		
51-60	5	20	8	1		
Gender						
Male	3	35	2	0	0.183	0.018*
Female	2	103	17	3		
Marital Status						
Single	2	17	3	0	0.016	0.837
Married	3	116	16	3		
Divorced	0	1	0	0		
Widowed	0	4	0	0		
Monthly Income						
₦51,000-₦100,000	3	78	8	2	0.050	0.522
₦100,001-₦150,000	0	47	6	1		
₦150,001 and above	2	13	5	0		
Family history of related diseases						
Yes	0	25	7	1	-0.168	0.031*
No	5	113	1	2		

*Significant at $p < 0.05$

Relationship between socio-demographic, socioeconomic characteristics and anthropometric characteristics of the respondents

Table 7 shows that significant relationship existed between anthropometric status of the respondents and their age ($p = 0.004 < 0.05$) and gender ($p = 0.000 < 0.05$). The marital status ($p = 0.009 > 0.05$), monthly income ($p = 0.291 > 0.05$) and family history of related diseases ($p = 0.893 > 0.05$) had no significant relationship with the anthropometric status of the respondents.

Table 7: Relationship between Sociodemographic, Socioeconomic Characteristics and Anthropometry Status of the Respondents

Variables	Underweight ($< 18.5\text{kg/m}^2$)	Normal weight ($18.5\text{-}24.99$ kg/m^2)	Overweight ($25\text{-}29.99$ kg/m^2)	Obese (≥ 30 kg/m^2)	Pearson correlation	p-value
Age(yrs.)						
21-30	6	12	2	3	0.221	0.004*
31-40	1	9	7	6		
41-50	0	42	26	21		
51-60	1	9	15	5		
Gender						
Male	2	29	8	1	0.315	0.000*
Female	6	43	42	34		
Marital Status						
Single	5	12	3	2	0.203	0.009
Married	3	58	45	32		
Divorced	0	0	1	0		
Widowed	0	2	1	1		
Monthly Income						
₦51,000 - ₦100,000	5	46	21	19	0.083	0.291
₦100,001- ₦150,000	1	21	19	13		
\geq ₦150,001						
Family history of related medical conditions						
Yes	0	14	15	4	-0.011	0.893
No	8	58	35	31		

*Significant at $p < 0.05$

Discussion

The research focused on evaluating the anthropometric measurements and blood glucose levels of public secondary school teachers in Ogun State, Nigeria. Notably, respondents aged 41-50 years constituted the majority, consistent with similar studies among civil servants in Ogun State *Adeniran et al. (2022)* and Oyo State *Ola et al. (2021)*. This age group aligns with the expected active workforce demographic within civil service organizations. Interestingly, the study comprised more female participants than male counterparts, a departure from findings in a study among secondary school teachers in Enugu State, where male teachers predominated *Okudu et al. (2018)*. However, overall, the socio-economic and demographic characteristics observed in the study mirror typical patterns within civil service institutions, reflecting the profile of the teachers under investigation.

From this study, most of the respondents exhibited normal body mass index (BMI) however there was a 30.3% prevalence of overweight and 21.1% of obesity which is an indication that overweight was higher than obesity among them especially among the age of 41-50years. Studies have also shown varying prevalence among different work groups and civil servants are particularly considered at risk *Oyerinde and Owojaiye (2008)*. Likewise, one of the bio-social factors influencing overweight and obesity have been identified to include age *Olatunbosun et al. (2011)*. The predominance of overweight and obesity among this age group is an indication of

possible health consequences among them which might affect their productivity in the course of their teaching profession. The effect of obesity has been reported to impair mental health thereby limiting productivity of employees while at work, placing large burden on the health system and even lead to premature mortality *Sanusi et al. (2015)*. The level of overweight and obesity observed among the study population could also be attributed to the believe that teaching profession is sedentary in nature comprising of limited physical activity coupled with the location of the schools in the urban part of the state characterized by adoption of western styles including nutrition transition. This has been corroborated by *Adebayo et al., (2020)* that presently people are becoming overweight and obese as a result of urbanization in the form of nutrition transition thus encouraging sedentary lifestyle and unhealthy eating.

Furthermore, an examination of the dietary habits of the participants unveiled a varied landscape with potential health consequences. About half of the respondents adhere to a twice-daily meal routine, while a notable segment skips meals, particularly breakfast and lunch, citing reasons such as weight management, hectic schedules, financial limitations, and fasting practices, which can affect nutritional intake and energy levels. Additionally, a significant proportion of participants indulge in between-meal snacks, often opting for less nutritious choices such as pastries, sugary drinks, and biscuits, exacerbating unhealthy eating patterns and potential weight control difficulties.

Diabetes is on the rise globally, with Nigeria at the forefront in Africa in terms of affected individuals *Uba et al. (2019)*. The **International Diabetes Federation (IDF) (2017)** reports a diabetes prevalence of 1.7% among Nigerian adults aged 20-69 years, attributing it to factors like population growth, poor dietary habits, obesity, and sedentary lifestyles *Adijat et al. (2021)*. This study found a diabetes mellitus prevalence of 1.8%, alongside a pre-diabetes mellitus rate of 14.4%. The presence of pre-diabetes suggests a potential impending diabetes epidemic, as diabetes typically follows a period of impaired blood glucose levels, often undiagnosed for years. Despite many respondents displaying normal blood glucose levels, sociodemographic factors such as age, gender, and family medical history were significantly linked to blood glucose levels. Females aged 41-60 years with relevant medical histories were more prone to pre-diabetes or diabetes, aligning with broader research indicating a higher prevalence among older females and those with familial predispositions *IDF (2017); Uba et al. (2019)*.

Compared to the 13.16% prevalence of hypertension reported by *Asekun-Olarinmoye et al. (2013)* in a rural adult population of Osun State, Nigeria, the participants in this study exhibited a higher prevalence of hypertension at 21.3%, consistent with findings from other studies among civil servants in Kaduna (29%) *Oladimeji et al. (2014)* and Addis Ababa (27.3%) *Angaw et al. (2015)*. Hypertension is a significant contributor to conditions such as stroke, heart diseases, and mortality, now recognized as a leading cause of cerebrovascular diseases in Africa, accounting for approximately 40% of cases *Angaw et al. (2015)*. The study revealed that hypertension risk increases with age, with older teachers (aged over 40 years) showing a higher prevalence compared to younger counterparts, consistent with previous research. This age-related trend may be attributed to physiological changes in blood vessels as individual's age, leading to decreased flexibility and increased risk of hypertension. Early intervention is crucial to prevent potentially life-threatening complications among this group of respondents.

Furthermore, the dietary patterns observed in the study indicated limited daily consumption of essential items such as vegetables and fruits, potentially resulting in inadequate nutrient intake. Additionally, only a small number of respondents reported daily consumption of staples like roots, cereals, and legumes. These dietary habits may have health implications, including

inadequate nutrient intake, potential issues with weight management, and suboptimal food choices.

Encouraging the adoption of balanced, nutritious diets and promoting regular meal consumption is essential to address these health concerns among the surveyed population.

CONCLUSION

Teachers in Ogun State were overweight, obese and mostly at pre-diabetic stage with limited consumption pattern of the healthy food groups. This calls for appropriate health education programs promoting engagement in physical exercises, regular routine screening for diabetes, hypertension and healthy dietary lifestyles.

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