

Analysis of Women Attitude and knowledge toward health related complication

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Abstract:

A lot of ladies don't know that one of the main causes of death is coronary heart disease. Rather, their biggest fear is breast cancer. It is concerning that medical professionals don't seem to have a basic grasp of cardiovascular disease in women. Women are typically 20 years older when they experience their first myocardial infarction and 10 years older when heart disease is discovered. Many people think that delaying the process of lowering their risk may delay the onset of coronary heart disease because it is more common in older women. The purpose of this study is to evaluate Nigerian women of reproductive age's awareness of risk factors linked to cardiac illnesses. The study's design was cross-sectional. A self-administered structured questionnaire was used to gather data, which was then analyzed using version 25 of the Statistical Package for Social Sciences and shown using the relevant tables. The significance level is set at $P < 0.05$. The study's results indicate a significant correlation with respondents' overall health-related knowledge at $\chi^2 = 23.173$, $p = 0.000$, and $\chi^2 = 18.260$, $p = 0.000$, respectively, and a non-significant correlation with respondents' age, religion, economic status, and occupation at $\chi^2 = 1.158$, $p = 0.561$, $\chi^2 = 2.689$, $p = 0.101$, $\chi^2 = 1.417$, $p = 0.841$, and $\chi^2 = 7.276$, $p < 0.05$. All things considered, the study's participants were well-informed on the risk factors for cardiovascular disease and the warning signs of CVD events. In the joint efforts to reduce heart attacks, community education on CVDs, with a focus on low socioeconomic status groups, may be helpful.

Keywords: awareness, risk factors, heart disease,

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Introduction

The leading cause of mortality worldwide is heart disease, which is mostly brought on by cardiovascular risk factors like smoking, poor eating habits, obesity, inactivity, high blood pressure, diabetes, and dyslipidemia. To avoid heart disease, these risk factors must be addressed and treated (Akintunde et al., 2015). Heart disease and stroke have been the leading causes of death in recent years. The majority of fatalities from cardiovascular disease occur in low- and middle-income countries, such as Nigeria. Additionally, according to Okunola et al. (2012), the death rate for women is greater than that for men. According to the World Health Organization (WHO), high blood pressure, which is frequently linked to heart disease, is responsible for 9.4 million deaths each year, or 16.5% of all fatalities. The number of deaths from cardiovascular diseases, including heart attacks and strokes, is predicted to increase to 23.3 million by 2030 (Mathers & Loncar, 2006). These diseases will remain the leading cause of death worldwide (Lim et al., 2012). Cardiovascular disease (CVD) is becoming more prevalent in developing countries, where it is more common among working-age individuals and accounts for twice as many deaths as HIV, malaria, and tuberculosis combined. This results in a substantial social and economic burden on the afflicted countries (Gaziano, 2007). The incidence of cardiovascular disease (CVD) risk factors has increased, primarily contributing to the rise in CVD cases in developing countries.

The burden of cardiovascular disease (CVD) is rising in both developed and developing countries, but through different means (Gaziano, 2007). The main causes of this increase are a rise in risk factors and a lack of access to the aforementioned therapies (Omoronyia et al., 2020). As a result, cardiovascular disease is becoming more common in younger people, which leads to a rise in deaths from ischemic heart disease and stroke in some developing countries. The number of deaths among working-age individuals has increased because many women are unaware that coronary heart disease is the leading cause of death for women (Dele-Ojo et al., 2021).

But breast cancer is their primary concern. Even more concerning is the apparent ignorance of medical professionals regarding cardiovascular disease in women (Woodward, 2019). On average, women are diagnosed with heart disease 10 years earlier than males, and experience their first myocardial infarction 20 years earlier. Due to the higher likelihood of coronary heart disease in older women, a significant number of them hold the belief that risk reduction can be delayed (Gao et al., 2019). The increasing incidence of cardiovascular disease in low- and middle-income countries (LMICs) can be attributed to the rapid urbanisation and the subsequent adoption of westernised lifestyles. In addition to consuming more sugar, salt, and saturated fats, these lifestyles also include less physical exercise. This tendency is also influenced by behaviors like smoking and binge drinking (Yusuf et al., 2001). The likelihood of acquiring metabolic cardiovascular disease risk factors, including obesity, hypertension, diabetes, and high cholesterol, increases when one engages in these risky behaviors (Steyn et al., 2005). Numerous cardiovascular disease risk factors are present in Nigeria (Amadi et al., 2018). According to Odunaiya et al. (2021), heart disease accounted for 38% of all noncommunicable illness-related deaths in Africa. Growing urbanization, lifestyle changes, and a host of modifiable risk factors, such as obesity, sedentary behavior, smoking, unhealthy eating, high cholesterol, and excessive alcohol use, are all contributing contributors to the increase in prevalence (Odunaiya et al., 2015).

The death rate from cardiovascular disease (CVD) and its risk factors is alarmingly high among young people in developing countries. In developed countries, the opposite is true. The high rate of poverty in these countries, together with a lack of knowledge and effective solutions, are the causes of this (Odunaiya et al., 2015). In Africa, 38% of all noncommunicable disease-related fatalities were attributable to cardiovascular disease (CVD). This number has risen by more than 100 percent since 1990. Increased urbanization, lifestyle modifications, and a variety of modifiable risk factors, such as obesity, physical inactivity, smoking, poor eating, high cholesterol, and excessive alcohol use, are some of the reasons contributing to the rise in cardiovascular disease (Gaziano, 2007). The death rate from cardiovascular disease (CVD) and its risk factors is alarmingly high among young people in developing countries. In developed countries, the opposite is true. This is because poverty is so common in many countries, and there is a dearth of information and effective solutions to the problem (Thom et al., 2006). In the study of cardiac disease, women are still underrepresented. Women comprise less than 30% of participants in most cardiology studies and trials.

It is so challenging to make definite conclusions about the treatment of cardiovascular disease in women. Women are still given the same therapies as males, even though their risk factors, symptoms, and reactions to treatment differ. This study evaluates Nigerian women's awareness of risk factors linked to documented heart disease because there aren't many studies that concentrate on better understanding the natural history, management, and prevention of CVD in women.

Method

Study environment and tool In Nigeria, a self-administered online survey was carried out from February to May 2021. Three social media and instant messaging sites were used to disseminate invitations to participate in the poll, which was hosted by poll Monkey. WhatsApp, Twitter, and Facebook. There were many components to the survey. An informed consent page and research details were included in the initial introduction section. The next parts could only be opened by those who consented to participate. The questions in the following sections were designed to gather data on participants' awareness of risk factors for cardiac illnesses in women of reproductive age, as well as demographic variables. The study's goals guided the quantitative analysis of the data. IBM Statistical Packages for Social Sciences (SPSS) Version 25 was used to process the data. We calculated and tallied frequency distributions, percentages, mean scores, standard deviations, and charts. For bivariate and regression analysis of the gathered data, chi square was used. A significance level of $P < 0.05$ was established.

Result

According to the respondents' sociodemographic characteristics, the table's age-based sociodemographic variable reveals that 92 (20.0%) were between the ages of 18 and 25, 280 (60.7%) were between the ages of 26 and 35, and 89 (19.3%) were between the ages of 35 and 49. The respondents' religions reveal that 333 (72.2%) were Christians, 128 (27.2%) were Muslims, 318 (69.0%) were Yoruba, 107 (23.2%) were Igbo, 36 (7.8%) were Hausa, and the majority were artisans and civil servants (Table 1). According to figures 1 and 2, 205 (44.5%) had at least one prior medical history, with 50 (10.8%) reporting diabetes, 57

(12.4%) indicating hypertension, 36 (7.8%) reporting low back pain, 46 (10.0%) reporting malaria, and 16 (3.5%) reporting pynonephritis.

Table 2 shows that almost two-thirds of the participants knew a lot about women's health concerns. Figure 3 shows 28 (6.1%) signs of headache, stress, and blurred vision, 213 (46.2%) signs of chest discomfort and weakness, 56 (12.1%) signs of headache, 22 (4.8%) signs of obesity and hypertension, and 28 (%) signs of stress linked to heart disease. Figure 5 displays the respondents' general understanding of health-related topics; 331 (71.8%) had high knowledge of diseases connected to health, whereas 130 (28.2%) have poor knowledge of heart disease (figure 3). According to Figure 5, 331 (71.8%) of the respondents had strong awareness of health-related diseases, whereas 130 (28.2%) had poor understanding of heart disease.

The sociodemographic characteristics of the respondents based on their tribe and marital status show a significant association with their overall knowledge of health-related issues at $\chi^2=23.173$, $p=0.000$, and $\chi^2=18.260$, $p=0.000$, respectively, as $p<0.05$ in each case, and a non-significant association with their age, religion, economic status, and occupation at $\chi^2=1.158$, $p=0.561$, $\chi^2=2.689$, $p=0.101$, ($\chi^2=1.417$, $p=0.841$), and ($\chi^2=7.276$, $p=0.064$) as $p<0.05$ each (Table 3); almost half of the respondents report never experiencing chest pain or discomfort in their arm or shoulder, and the majority check their blood glucose levels frequently (Table 5); 290 (62.9%) have a positive attitude toward health-related issues (Table 4).

The correlation between the respondents' sociodemographic characteristics and their attitude toward health-related issues reveals that age, religion, tribe, marital status, and monthly income all significantly influenced respondents' attitudes toward health-related issues at $\chi^2=18.720$, $p=0.000$, $\chi^2=5.130$, $p=0.024$, $\chi^2=39.644$, $p=0.000$, $\chi^2=33.049$, $p=0.000$, and $\chi^2=15.570$, $p=0.004$), respectively, as $p<0.05$ in each case (Table 5). Tables 6 and 7 show respondents' perceptions of health-related issues and their quality of life; most participants had a positive view of the risk factors linked to heart disease, and the majority indicated that heart disease could be prevented by maintaining a healthy diet and lifestyle (Table 9). Additionally, 24.5% of respondents had a history of hypertension.

Table 1: Socio demographic characteristic of the respondents (n=461)

Variable	Categories	Frequency	Percent
Age (years)	≥18-25	92	20.0
	26-35	280	60.7
	35-49	89	19.3
Religion	Christianity	333	72.2
	Islam	128	27.8
tribe	Yoruba	318	69.0
	Igbo	107	23.2
	Hausa	36	7.8
marital status	Married	239	51.8

Monthly income	Single	167	36.2
	Widow	19	4.1
	Separated	36	7.8
	<20,000 naira	44	9.5
	21,000-40,000 naira	259	56.2
	41,000-60,000 naira	91	19.7
	61,000-80,000 naira	43	9.3
	100,000 naira and above	24	5.2
occupation	Unemployed	79	17.1
	Student	20	4.3
	Artisans	210	45.6
	Civil servant	152	33.0

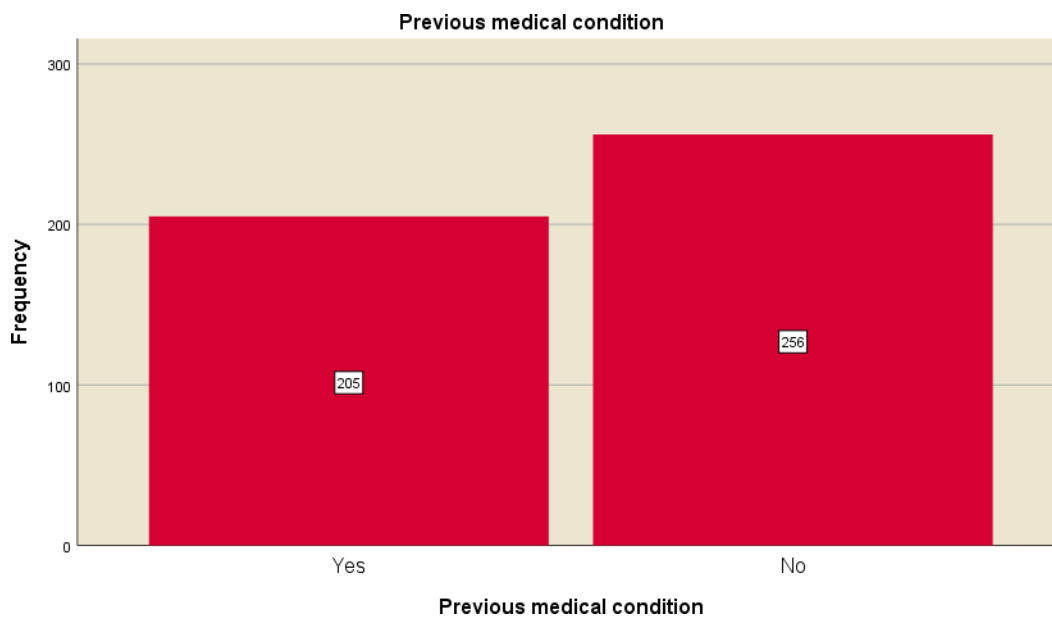


Figure 1 Previous history of any medical condition

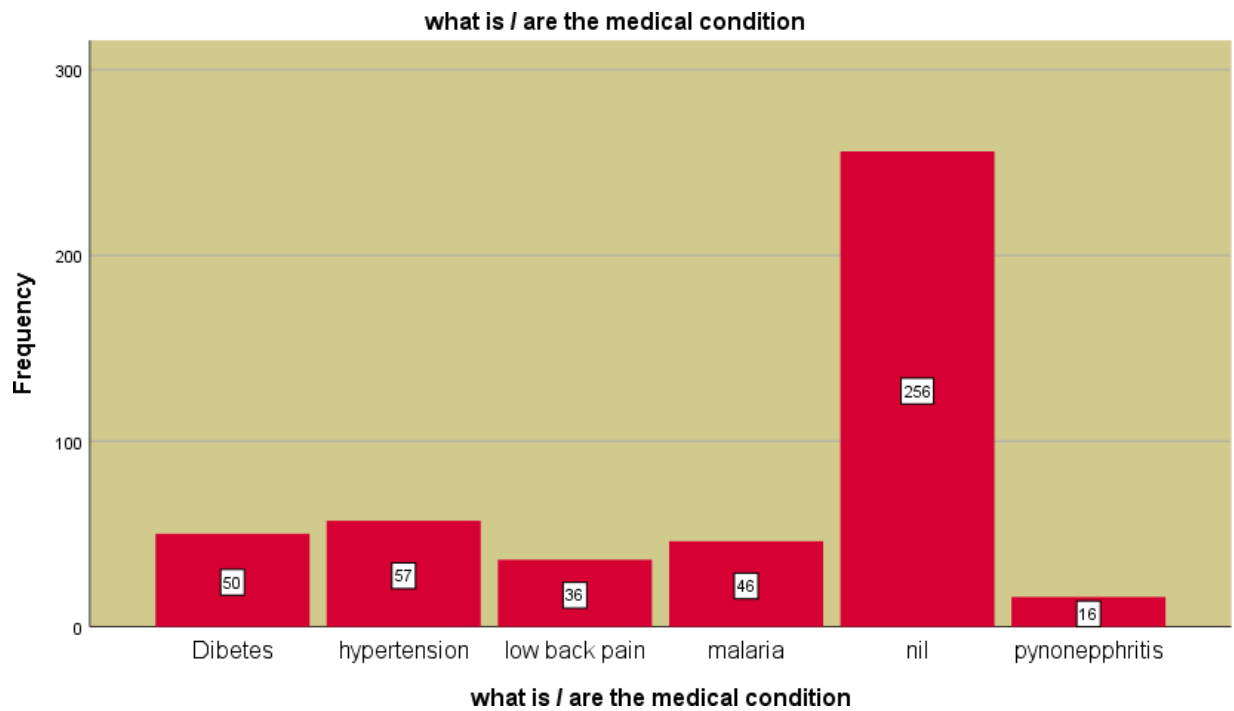
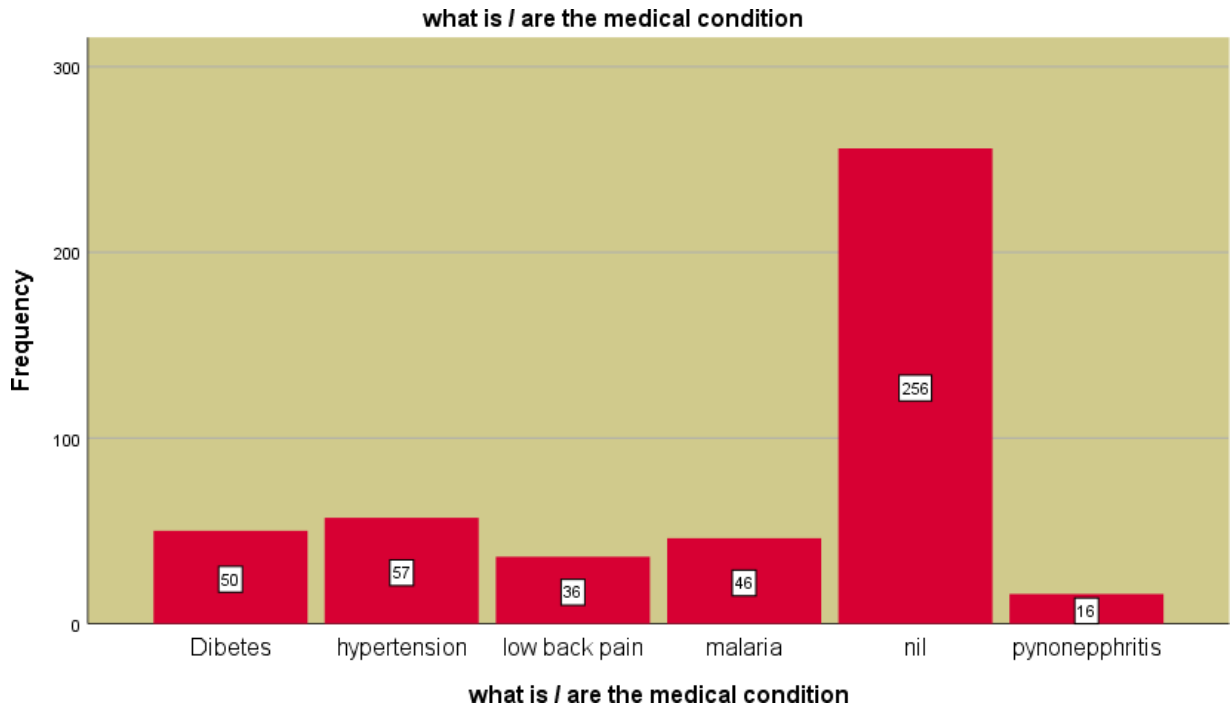
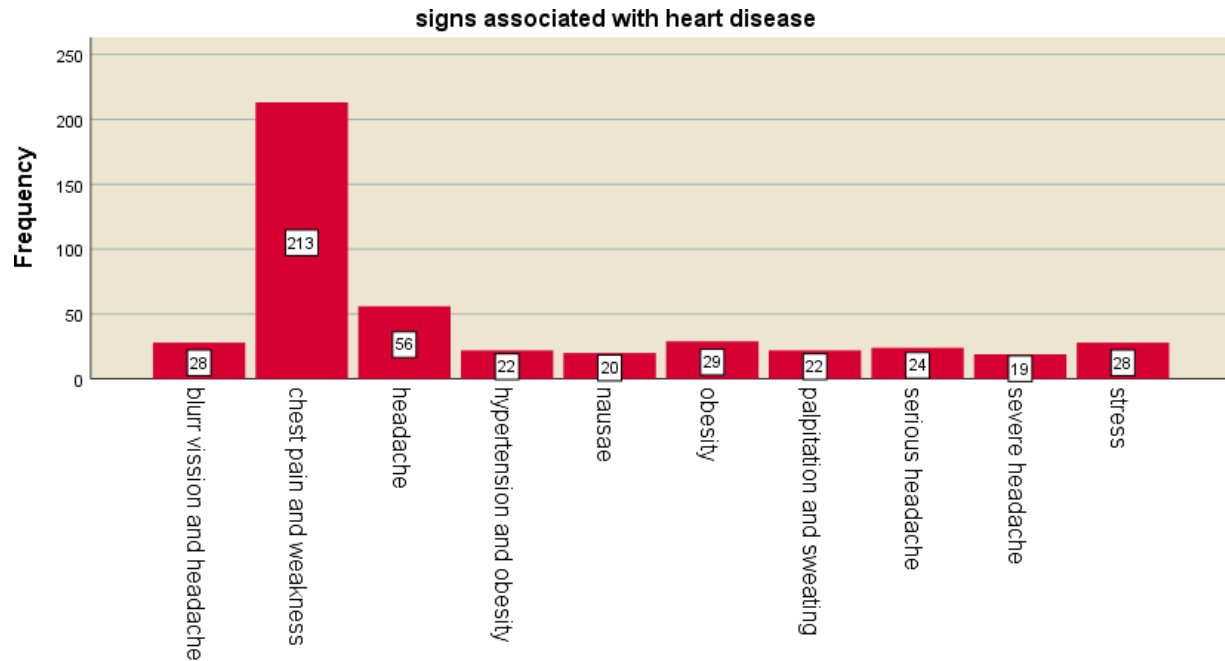


Figure 2: Previous history of health complications

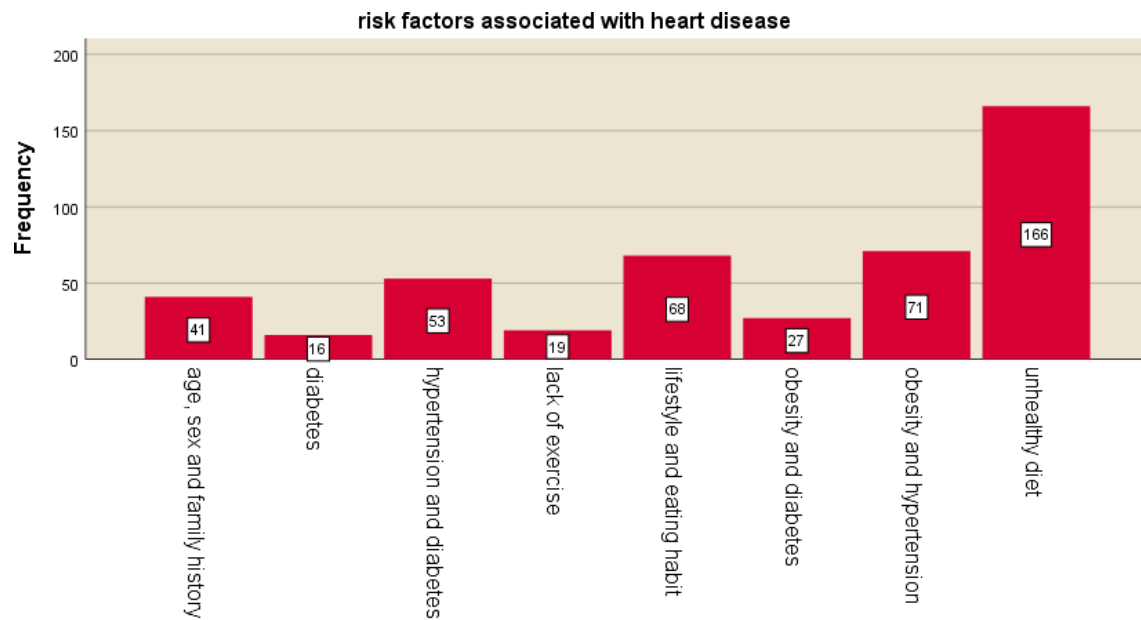
Table 2: knowledge of the respondents on health related issues (n=461)

Variable	Categories	Frequency	Percent
What did you understand by	abnormal function of the heart	21	4.6

heart disease among women	chest pain	19	4.1
	disease that affect heart	81	17.6
	heart related problem	210	45.6
	hypertension	110	23.9
	I don't know	20	4.3
Causes of heart disease among women	anxiety and sleeplessness	41	8.9
	depression and mental stress	16	3.5
	hereditary and lifestyle	208	45.1
	stress	65	14.1
	oral contraception	52	11.3
	stress and hypertension	22	4.8
	stress and oily food	36	7.8
	stress and pregnancy	21	4.6
Knowledge on Heart attack	abnormal breathe	23	5.0
	heart failure	76	16.5
	shock	22	4.8
	sudden fall of healthy person	46	10.0
	sudden stop of the heart	294	63.8
Did diet influence progress of coronary heart disease	Yes	210	45.6
	No	251	54.4
Which of the following medical condition can prevent you from exercising	Stress	234	50.8
	Age	69	15.0
	High blood pressure	22	4.8
	Hypertension	136	29.5
What are the means or ways by which heart disease can be prevented	check up	55	11.9
	diet and exercise	21	4.6
	maintaining healthy lifestyle	323	70.1
	take balance diet	38	8.2
	taking adequate diet	24	5.2



signs associated with heart disease
Figure 3: Signs associated with heart disease



risk factors associated with heart disease
Risk factors associated with heart disease

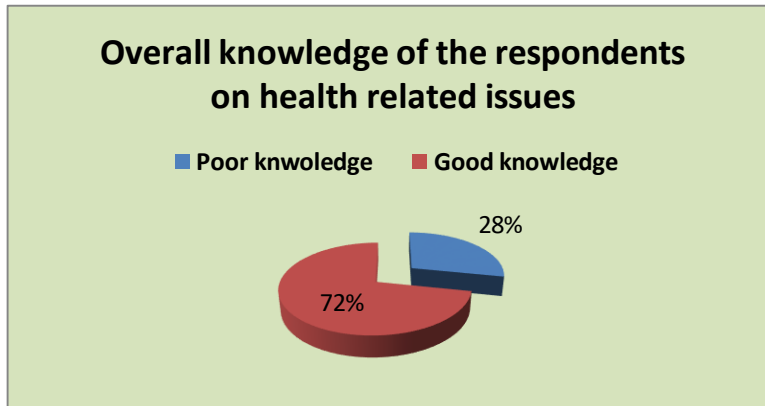


Figure 5: Overall knowledge of the respondents on health related issues

Table 3: Association between socio demographic characteristics and Overall knowledge of the respondents on health related issues (n=461)

Variable	Categories	Poor knowledge	Good knowledge	Total	Pearson Chi-Square	Likelihood Ratio	P value
Age (years)	≥18-25	23(5.0%)	69(15.0%)	92(20.0%)	1.158	1.168	0.561
	26-35	84(18.2%)	196(42.5%)	280(60.7%)			
religion	35-49	23(5.0%)	66(14.3%)	89(19.3%)	2.689	2.324	0.101
	Christianity	101(21.9%)	232(50.3%)	333(72.2%)			
	Islam	29(6.3%)	99(21.5%)	128(27.8%)			
tribe	Yoruba	86(18.7%)	232(50.3%)	318(69.0%)	23.173	32.259	0.000
	Igbo	44(9.5%)	63(13.7%)	107(23.2%)			
	Hausa	0(0.0%)	36(7.8%)	36(7.8%)			
marital status	Married	73(15.8%)	166(36.0%)	239(51.8%)	18.260	27.639	0.000
	Single	48(10.4%)	119(25.8%)	167(36.2%)			
	widow	9(2.0%)	10(2.2%)	19(4.1%)			
Monthly income	Separated	0(0.0%)	36(7.8%)	36(7.8%)	1.417	1.368	0.841
	<20,000 naira	11(2.4%)	33(7.2%)	44(9.5%)			
	21,000-40,000 naira	74(16.1%)	185(40.1%)	259(56.2%)			
	41,000-60,000 naira	24(5.2%)	67(14.5%)	91(19.7%)			

occupatio n	61,000-80,000 naira	12(2.6%)	31(6.7%)	43(9.3%)	7.276	6.771	0.064
	100,000 naira and above	9(2.0%)	15(3.3%)	24(5.2%)			
	Unemployed	27(5.9%)	52(11.3%)	79(17.1%)			
	Student	10(2.2%)	10(2.2%)	20(4.3%)			
	Artisans	55(11.9%)	155(33.6%)	210(45.6%)			
	Civil servant	38(8.2%)	114(24.7%)	152(33.0%)			

Table 4: Attitude of the respondents on health related issues (n=461)

Variable	Categories	Frequency	Percent
	3 months ago	16	3.5
When last did you experienced chest pain or discomfort in the arm or shoulder	6 months ago	40	8.7
	a month ago	99	21.5
	a year ago	84	18.2
	last year	22	4.8
How often did you check your blood glucose level	never	200	43.4
	Every week	55	11.9
	once in a month	203	44.0
	once in six month	145	31.5
warning signs associated with heart disease	Never	58	12.6
	Every week	19	4.1
	once in a month	29	6.3
	once in six month	114	24.7
	Never	299	64.9

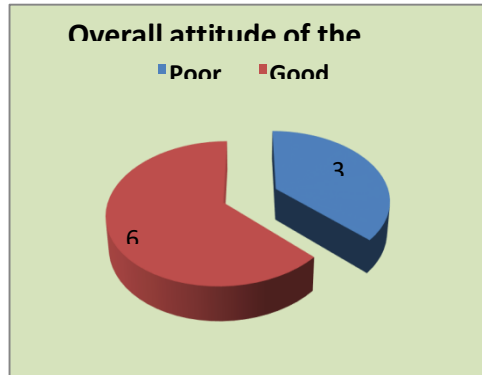


Figure 6: Overall attitude of the respondents on health related issues

Table 5: Association between socio demographic characteristics and Overall attitude of the respondents on health related issues (n=461)

Variable	Categories	Poor attitude	Good attitude	Total	Pearson Chi-Square	Likelihood Ratio	P-value
Age (years)	≥18-25	25(5.4%)	67(14.5%)	92(20.0%)	18.720	18.328	0.000
	26-35	96(20.8%)	184(39.9%)	280(60.7%)			
religion	35-49	50(10.8%)	39(8.5%)	89(19.3%)	5.130	4.654	0.024
	Christianity	113(24.5%)	220(47.7%)	333(72.2%)			
	Islam	58(12.6%)	70(15.2%)	128(27.8%)			
tribe	Yoruba	94(20.4%)	224(48.6%)	318(69.0%)	39.644	39.237	0.000
	Igbo	48(10.4%)	59(12.8%)	107(23.2%)			
marital status	Hausa	29(6.3%)	7(1.5%)	36(7.8%)	33.049	32.662	0.000
	Married	83(18.0%)	156(33.8%)	239(51.8%)			
	Single	55(11.9%)	112(24.3%)	167(36.2%)			
Monthly income	widow	4(0.9%)	15(3.3%)	19(4.1%)	15.570	17.150	0.004
	Separated	29(6.3%)	7(1.5%)	36(7.8%)			
	<20,000 naira	9(2.0%)	35(7.6%)	44(9.5%)			
	21,000-40,000 naira	109(23.6%)	150(32.5%)	259(56.2%)			
	41,000-60,000 naira	37(8.0%)	54(11.7%)	91(19.7%)			
	61,000-80,000 naira	13(2.8%)	30(6.5%)	43(9.3%)			
occupation	100,000 naira and above	3(0.7%)	21(4.6%)	24(5.2%)	6.743	6.739	0.081
	Unemployed	23(5.0%)	56(12.1%)	79(17.1%)			
	Student	8(1.7%)	12(2.6%)	20(4.3%)			

Artisans	72(15.6%)	138(29.9%)	210(45.6%)
Civil servant	68(14.8%)	84(18.2%)	152(33.0)

Table 6: Perception of the respondents on health related issues (n=461)

Variable	Categories	Frequency	Percent
What will you do first when someone have a heart attack	apply first aid	81	17.6
	call for help	97	21.0
	no ideal	95	20.6
	rush to hospital	97	21.0
	shout	22	4.8
	stop and rest	19	4.1
	visit hospital	50	10.8
how can diet influence progress of coronary heart disease	eating balance diet	38	8.2
	eating too much excess	48	10.4
	cholesterol intake	48	10.4
	inactivity	36	7.8
	nil	251	54.4
	unhealthy diet	40	8.7
	relax	259	56.2
What will you do if you have pain or discomfort while walking	rest	106	23.0
	resting	23	5.0
	slow down and rest	24	5.2
	stand and wait	28	6.1
	take drug	21	4.6
	check up	55	11.9
	diet and exercise	21	4.6
What are the means or ways by which heart disease can be prevented	maintaining healthy lifestyle	323	70.1
	take balance diet	38	8.2
	taking adequate diet	24	5.2
	eating well	19	4.1
	hypertension	19	4.1
	it block heart	140	30.4
	it increase it	106	23.0
How dose diet high in cholesterol influence the progress of heart disease in women	no ideal	156	33.8
	too much intake	21	4.6

Table 7: Quality of life of the respondents (n=461)

Variable	Categories	Frequency	Percent
How would you describe your mobility	I have problem in walking about	68	14.8
	I am confined to bed	331	71.8
	I am confined to bed	62	13.4
problem relating to your self-care	Yes	46	10.0
	No	415	90.0
problem relating to usual activities	Yes	41	8.9
	No	420	91.1
previous history of health related condition	Yes	209	45.3
	No	252	54.7
If yes state the health condition	body pain	42	9.1
	diabetes	29	6.3
	hypertension	57	12.4
	malaria	19	4.1
	nausea	18	3.9
	nil	280	60.7
	stomach ulcer	16	3.5
How often do you feel anxious or depress	Often	256	55.5
	Never	205	44.5

Table 8: Risk factors associated with heart disease among the respondents (n=461)

Variable	Categories	Frequency	Percent
Does diet influences the progress of coronary heart disease	Yes	413	89.6
	No	48	10.4
If yes, what are those diet that can cause coronary heart disease	diet high in sugar	61	13.2
	fat and oil	21	4.6
	fatty food	171	37.1
	fried food	46	10.0
	high cholesterol diet	16	3.5
causes of high blood glucose levels/diabetes	nil	48	10.4
	salty food	56	12.1
	sugar and butter	42	9.1
	diabetes and hypertension	19	4.1
	eating junks	28	6.1
	food high in carbohydrate	181	39.3
	hypertension and obesity	22	4.8
	insufficient insulin	16	3.5
	obesity	48	10.4



causes of heart diseases	smoking	28	6.1
	stress	44	9.5
	sugar	75	16.3
	age hereditary and hypertension	127	27.5
	hypertension and obesity	90	19.5
means/ways heart disease can be prevented	hypertension and diabetes	49	10.6
	lack of exercise	22	4.8
	stress	150	32.5
	stress and depression	23	5.0
	healthy eating and style	211	45.8
	lifestyle	28	6.1
	reduce stress and depression	23	5.0
	regular checkup	64	13.9
	regular exercise	84	18.2
	regular medical checkup	24	5.2
	routine check up	27	5.9

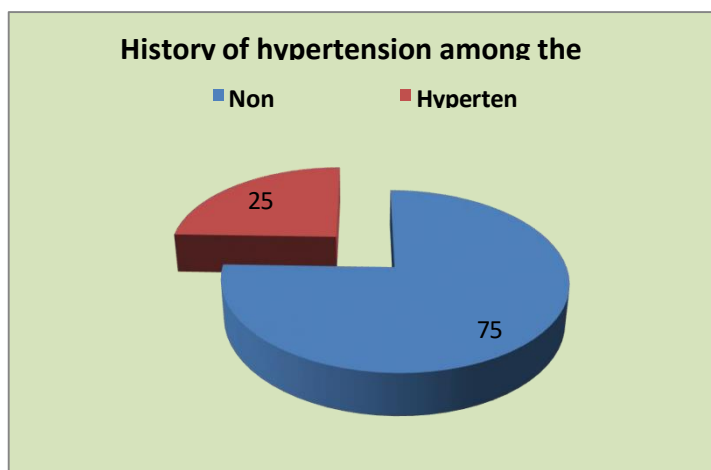


Figure 7: History of hypertension among the study subjects

Discussion

According to the poll, almost two-thirds of respondents said they "knew enough about age as a risk factor for cardiovascular disease." This indicates a lack of awareness about age as a persistent risk factor for heart disease. Additionally, fewer participants knew that abdominal obesity posed the greatest risk for heart disease, even though the great majority were aware that being overweight raised their risk. According to the study Trends in Obesity and Abdominal Obesity Among Adults (Lakka et al., 2002), abdominal obesity simultaneously raised the risk of coronary heart disease. This may indicate that individuals are putting off addressing risk factors for coronary heart disease because of personal circumstances. Amadi et al. (2018) state that just under one-fifth of research participants knew much about the

heart disease risk factors. Most research participants were not aware of the risk factors for heart disease, even though they worked in the academic environment. Respondents' sociodemographic characteristics, including their religion, tribe, marital status, and monthly income, were linked to higher odds of having a positive attitude and being knowledgeable about health-related topics. According to Jafar et al. (2005), participants' awareness of risk factors ranged from moderate to good; ironically, this was the case when they reported poor diets and/or lifestyles, which may have increased the incidence of CVDs in the community.

Participants scored well overall on their awareness of CVD risk factors. This study is consistent with the submission of Mukhtar et al. (2021), who identified stress and hypertension as common risk factors for CVD. Approximately two-thirds of the population could identify smoking, unhealthy diet (low in fruits and vegetables and high in salt and saturated fats), stress, high blood pressure, obesity, and lack of exercise as potential risk factors for CVD. This study found that a higher level of education does not lower the risk of cardiovascular disease. Compared to those with less education, individuals with a basic or secondary education had a lower likelihood of having risk factors for cardiovascular disease. Studies from various locations have shown that persons with greater levels of education had a lower frequency of CVD risk factors, which may help them make better choices about their food and physical activity level (Cai et al., 2013). According to research by Braveman et al. (2005), in some cases, a college education would not have been sufficient to guard against cardiovascular disease risk factors. For example, sufficient actions to advance public health education and awareness might not have been taken at all levels. Groups, companies, educational institutions, the government, and non-governmental organizations must be convinced to set up frequent health education programs in order to increase people's awareness of their health and motivate them to seek care when needed. Most respondents believed that a balanced diet and lifestyle might prevent heart disease, and most participants had a favorable assessment of the risk factors associated with the causes of heart disease. According to research by Nnate et al. (2021), people who live in cities and come from wealthy socioeconomic backgrounds are more likely to have underlying conditions like obesity, hypertension, and high cholesterol levels. They also found that heart disease risk factors include poor diet, insufficient exercise, smoking, excessive alcohol consumption, and inactivity.

According to this study, smoking, high blood pressure, and high cholesterol are the main risk factors for cardiovascular disease. According to Mosca et al. (2013), this corroborates the findings that these risk factors are becoming more widespread, more people are aware of them, they may be monitored and treated in developing nations, and their prevalence is rising. Awad and Al-Nafisi (2014) found that the Kuwaiti group understood the risks associated with smoking, being overweight, eating poorly, and not exercising. This may be due to the media's frequent and extensive coverage of particular risk factors, including high blood pressure, diabetes mellitus, stress, high cholesterol, and a family history of cardiovascular disease (Petrie et al., 2018). This may be due to the fact that news from different sources differs. To obtain correct information from reliable sources, people require health education and support.



Conclusion

According to the study's findings, over two-thirds of the participants are well-informed on the risk factors linked to the development of cardiovascular disease. This can be the consequence of a rise in awareness of the risk factors or information related to cardiovascular disease risk. Therefore, a significant effort should be made to increase the knowledge and understanding of people who were previously unaware of the contributing variables linked to cardiovascular disease. Innovative, focused prevention programs are desperately needed in at-risk groups. Initiatives to raise awareness may encourage the public and high-risk individuals to actively prevent heart disease, lead healthy lifestyles, and participate in regular activities. Among the risk factors for heart disease that need to be addressed nationally through the development and execution of efficient health treatments and educational initiatives are sedentary behavior, dietary changes, and regular testing to identify at-risk persons. Raising public knowledge of self-care practices is essential for controlling heart disease and averting complications.

References

- Akintunde, A. A., Akintunde, T. 'Sade, & Opadijo, O. G. (2015). Knowledge of heart disease risk factors among workers in a Nigerian University: A call for concern. *Nigerian Medical Journal : Journal of the Nigeria Medical Association*, 56(2), 91–95. <https://doi.org/10.4103/0300-1652.150688>
- Amadi, C. E., Lawal, F. O., Mbakwem, A. C., Ajuluchukwu, J. N., & Oke, D. A. (2018). Knowledge of cardiovascular disease risk factors and practice of primary prevention of cardiovascular disease by Community Pharmacists in Nigeria: A cross-sectional study. *International Journal of Clinical Pharmacy*, 40(6), 1587–1595. <https://doi.org/10.1007/s11096-018-0744-3>
- Awad, A., & Al-Nafisi, H. (2014). Public knowledge of cardiovascular disease and its risk factors in Kuwait: A cross-sectional survey. *BMC Public Health*, 14(1), 1131. <https://doi.org/10.1186/1471-2458-14-1131>
- Braveman, P. A., Cubbin, C., Egerter, S., Chideya, S., Marchi, K. S., Metzler, M., & Posner, S. (2005). Socioeconomic status in health research: One size does not fit all. *JAMA*, 294(22), 2879–2888. <https://doi.org/10.1001/jama.294.22.2879>
- Cai, L., He, J., Song, Y., Zhao, K., & Cui, W. (2013). Association of obesity with socio-economic factors and obesity-related chronic diseases in rural southwest China. *Public Health*, 127(3), 247–251. <https://doi.org/10.1016/j.puhe.2012.12.027>
- Dele-Ojo, B. F., Raimi, T. H., Fadare, J. O., Ajayi, E. A., Ajayi, D. D., Ojo, O. D., Dada, S. A., Ajayi, O. A., & Ogunmodede, J. A. (2021). Knowledge and Prevalence of Heart Disease Risk Factors Among Staff of a Tertiary Institution in Nigeria. *International Quarterly of Community Health Education*, 41(4), 387–394. <https://doi.org/10.1177/0272684X20972653>



- Gao, Z., Chen, Z., Sun, A., & Deng, X. (2019). Gender differences in cardiovascular disease. *Medicine in Novel Technology and Devices*, 4, 100025. <https://doi.org/10.1016/j.medntd.2019.100025>
- Gaziano, T. A. (2007). Reducing The Growing Burden Of Cardiovascular Disease In The Developing World. *Health Affairs (Project Hope)*, 26(1), 13–24. <https://doi.org/10.1377/hlthaff.26.1.13>
- Jafar, T. H., Jafary, F. H., Jessani, S., & Chaturvedi, N. (2005). Heart disease epidemic in Pakistan: Women and men at equal risk. *American Heart Journal*, 150(2), 221–226. <https://doi.org/10.1016/j.ahj.2004.09.025>
- Lakka, H.-M., Lakka, T. A., Tuomilehto, J., & Salonen, J. T. (2002). Abdominal obesity is associated with increased risk of acute coronary events in men. *European Heart Journal*, 23(9), 706–713. <https://doi.org/10.1053/euhj.2001.2889>
- Lim, S. S., Vos, T., Flaxman, A. D., Danaei, G., Shibuya, K., Adair-Rohani, H., Amann, M., Anderson, H. R., Andrews, K. G., Aryee, M., Atkinson, C., Bacchus, L. J., Bahalim, A. N., Balakrishnan, K., Balmes, J., Barker-Collo, S., Baxter, A., Bell, M. L., Blore, J. D., ... Ezzati, M. (2012). A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990–2010: A systematic analysis for the Global Burden of Disease Study 2010. *Lancet*, 380(9859), 2224–2260. [https://doi.org/10.1016/S0140-6736\(12\)61766-8](https://doi.org/10.1016/S0140-6736(12)61766-8)
- Mathers, C. D., & Loncar, D. (2006). Projections of Global Mortality and Burden of Disease from 2002 to 2030. *PLoS Medicine*, 3(11), e442. <https://doi.org/10.1371/journal.pmed.0030442>
- Mosca, L., Hammond, G., Mochari-Greenberger, H., Towfighi, A., Albert, M. A., & American Heart Association Cardiovascular Disease and Stroke in Women and Special Populations Committee of the Council on Clinical Cardiology, Council on Epidemiology and Prevention, Council on Cardiovascular Nursing, Council on High Blood. (2013). Fifteen-year trends in awareness of heart disease in women: Results of a 2012 American Heart Association national survey. *Circulation*, 127(11), 1254–1263, e1-29. <https://doi.org/10.1161/CIR.0b013e318287cf2f>
- Mukhtar, I. G., Abdullahi, A. T., Muhammad, S. M., Sabiu, N. H., & Salisu, A. I. (2021). Prevalence of modifiable cardiovascular risk factors among undergraduate students in Kano Nigeria: A need for action. *Journal of Taibah University Medical Sciences*, 17(4), 578–586. <https://doi.org/10.1016/j.jtumed.2021.10.013>
- Nnate, D. A., Eleazu, C. O., & Abaraogu, U. O. (2021). Ischemic Heart Disease in Nigeria: Exploring the Challenges, Current Status, and Impact of Lifestyle Interventions on Its Primary Healthcare System. *International Journal of Environmental Research and Public Health*, 19(1), 211. <https://doi.org/10.3390/ijerph19010211>



- Odunaiya, N. A., Adesanya, T. B., Okoye, E. C., & Oguntibeju, O. O. (2021). Towards cardiovascular disease prevention in Nigeria: A mixed method study of how adolescents and young adults in a university setting perceive cardiovascular disease and risk factors. *African Journal of Primary Health Care & Family Medicine*, 13(1), 2200. <https://doi.org/10.4102/phcfm.v13i1.2200>
- Odunaiya, N. A., Grimmer, K., & Louw, Q. A. (2015). High prevalence and clustering of modifiable CVD risk factors among rural adolescents in southwest Nigeria: Implication for grass root prevention. *BMC Public Health*, 15, 661. <https://doi.org/10.1186/s12889-015-2028-3>
- Okunola, O. O., Akintunde, A. A., & Akinwusi, P. O. (2012). Some emerging issues in medical admission pattern in the tropics. *Nigerian Journal of Clinical Practice*, 15(1), 51–54. <https://doi.org/10.4103/1119-3077.94098>
- Omoronyia, O., Ayuk, A., Nwafor, K., & Legogie, A. (2020). Hypertensive patients' knowledge of cardiovascular disease in Calabar, Nigeria. *Journal of the Egyptian Public Health Association*, 95,

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