


Prevalence of Hypertension and Health-Seeking Behaviours of Market Women in Abia State Nigeria

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ABSTRACT

Background and objectives: Hypertension is a major killer of women worldwide, prioritization of the health needs of market women will sustain the contribution of the informal sector to national economic development. This study aimed at assessing the prevalence of hypertension and health-seeking behaviours of market women in Abia State Nigeria

Methods: A descriptive cross-sectional design study was used to randomly select 1,360 market women (aged 15-70 years) from 8 markets in the State. Omron digital automatic blood pressure monitor was used to obtain the blood pressure values of the respondents. Descriptive and inferential statistics were computed for the variables.

Result: Results showed that 33.5% and 33.4% of the respondents self-rated their health as being excellent and good respectively irrespective of the fact that 26.1% of them had not visited the hospital in recent times, more than half (55.1%) of them visited the hospital because of their ill-health, about half (48.9%) of the respondents monitored their blood pressure upon hospital visit during ill health while 43.5% reported that market activities refrained them from seeking prompt medical treatment early. Results showed that the majority (77.9%) of the respondents had normal blood pressure levels while 20.7% of them were hypertensive. Health-seeking behaviour variables were negatively correlated with blood pressure levels.

Conclusion: The respondents had low health-seeking behaviours, and one-fifth of them were hypertensive. A significant association exists between health-seeking behaviour and blood pressure levels. Improved health-seeking behaviours amongst market women which will facilitate prompt identification/diagnosis and treatment of disease conditions should be encouraged

Keywords: Hypertension, Health seeking behaviours, Prevalence, Market women, Abia State.

INTRODUCTION

Women and girls make up 49% of the Nigerian population and constitute 17.14% of Nigerians in gainful employment, with about 7% of them present in the industrial workforce and about 10% in the service sector (1, 2). Women are highly concentrated in the informal sector of the economy with their lives revolving around the family, farm, and marketplace. Market women are women who gather in an open place or covered building where buyers and sellers convene for the sale of goods and services (2). Women and girls in developing countries are not afforded equal opportunities in education, career, leadership, and finance as their male counterparts (3). It is indeed a credit to her indomitable spirit that despite a literacy rate of 48% (1), the Nigerian woman plays a major role in the economy through her activities in the market sector. Market women function largely as petty traders and salespersons. Their preponderance in retail trade is a result of their social role as producers, who not only produce the food as subsistence farmers but are also responsible for feeding their households (4). With increased urbanization, two categories of women in the retail business have emerged namely; the village women

who sell surplus food from their farms and the urban-based traders who purchase from middlemen and sell to consumers. This small-scale trading represents perhaps the fastest-growing segment of the labour market in developing countries. Market women are contributing greatly to the national economy and in maintaining families. Therefore, they should not be allowed to be ravaged by hypertension. Adequate attention should be paid to their welfare and health-seeking behaviour to enable them to perform to the maximum. Workplace health programmes are among the most cost-effective ways to prevent the effect of hypertension and other NCDs (5), government and the private sector should commit to the provision of safe and enabling environments for the citizen as a means of combating hypertension in Nigeria (6). The big challenge is that most women including those in the market sector and other informal sectors of the economy do not go for periodic medical screening nor are they aware of their health status. Addo *et al.* (7) had advocated that in the formal sectors, workers should have pre-employment screening and periodic medical screening, yet the majority of Nigerian workers are not even aware of their health status and

they are not bothered, how much more those in the informal sector like the market place.

Hypertension is one of the most prevalent chronic diseases in the world and is increasing particularly in developing countries including Nigeria. Research has shown that it is the commonest cause of sudden unexpected natural death and also ranked the first most frequently diagnosed NCDs in elderly Nigerians (8, 9). Several modifiable and non-modifiable risk factors increase blood pressure and they include obesity, high alcohol intake, high salt intake, aging, sedentary lifestyle, family history, stress, low potassium, and calcium intake (9).

Hypertension and other cardiovascular diseases cause about 9.1 million global deaths among women annually. In 2008 it caused about 1.2 million deaths in women between 20 and 59 years of age (the most productive years of life) and caused ill health and suffering to many millions more (10). Developing countries are more affected as 80% of deaths occurred in low and middle-income countries (10). Some symptoms of hypertension include difficulty in breathing, chest pain, edema, syncope (loss of consciousness), palpitation (pounding, racing or skipping heartbeat), and fatigue (11).

A lot of work has not been done on hypertension and health-seeking behaviour among Nigerian women in the informal sector. However, Aribike *et al.* (12) who acknowledged gender role in disease posited that women are key players in improving the health-seeking behaviours of themselves and their family members. Owoseye (13) demanded urgency in actions geared towards the reduction of hypertension and other NCD burden which is responsible for up to 78% of all deaths in Nigeria. He called on all members of the public particularly women to modify their dietary intake, and health-seeking behaviours as well as that of their family members as primary caregivers. He projected that about 38 million people all over the world will die of hypertension or other non-communicable diseases by the next decade. In South Africa for instance, a study reported that the prevalence of hypertension-related deaths in women between 35 to 44 years is 15% higher than that of women in the United States (14). In Nigeria, it reported an overall prevalence of 21% (23% in males and 16.4% in females) (15). Oga *et al.*, (16) observed a 22% prevalence in South-Western Nigeria, 21% in South-Eastern part, and 42% in South-South and the overall prevalence range of between 8% to 46.4% in Nigeria with (7.9% -50.2%) in men and (3.5% - 68.8%) in women with (8.1% - 42.0%) among urban women and (13.5% - 46.4% among rural women. Ulasi *et al.* (17) reported 42.2% prevalence in market workers in Enugu State and also observed that the majority of them were unaware of it.

Another study reported a 29.1% prevalence among market women in Sokoto state (18). This high prevalence indicates that market traders especially market women as the group at risk for hypertension. Few studies have considered the prevalence of hypertension among adult traders in Aba (19, 20), however not much is known about the health-seeking behaviour and prevalence of hypertension among women in Abia State. This study was designed to assess the health-seeking behaviours and prevalence of hypertension among market women in Abia State.

MATERIALS AND METHODS:

Study Design/Area: A descriptive cross-sectional study design was employed. The study was carried out in Abia State, "ABIA" is an acronym formed from the initial letters of the four groups of people who occupied the densely populated regions of the State namely Aba, Bende, Isuikwuato and Afikpo. Afikpo is now in Ebonyi State. For the purpose of this work, Umuahia the State capital was used to replace it. The State is divided into seventeen Local government Areas (LGAs). Eleven of these (LGAs) are rural (Arochukwu, Bende, Ikwuano, Isiala Ngwa North, Isiala Ngwa South, Isuikwuato, Obingwa, Ugwunagbo, Ukwa East, Ukwa West, and Umunneochi while six are urban (Umuahia North, Umuahia South, Osisioma Ngwa, Aba North, Aba South, and Obingwa) and its citizens are predominantly Igbos (21).

Sampling/Ethical considerations: The sampling procedure employed was multi-stage stratified random sampling involving four stages. In the first stage, four towns were purposively selected (Aba, Bende, Isuikwuato and Umuahia). The second stage was stratifying the markets into daily and non-daily markets. The daily markets in each town were listed and sampled according to proportion. A total of eight (8) daily markets were used. 5 markets in Aba, 1 in Bende, 1 in Isuikwuato and 1 in Umuahia. (Aba has more than 20 daily markets, Umuahia 4, Isuikwuato 3 and Bende 4). The third stage was stratifying the trading points in the market into open sheds, lock-up stores, outside sellers, in such a way that sellers of different items (boutique sellers, rice, beans, stockfish, vegetables/ perishables, provision, household items, articles, clothing items, etc) could be captured. The fourth stage was the random selection of 170 market women from the last stratification. The sample size was calculated using the formula for an infinite population where the population is greater than 50,000 (22),

$$\text{Formular } n = \frac{z^2 pq}{d^2}$$

where n = sample size, z = 1.96 (constant), d = tolerance/error, p = pooled prevalence of hypertension in Nigeria = 28.9% (23), q = 1-p. For ease of computation and to accommodate attrition

that may occur in the study, 5% was added to the sample size, and the value obtained was further multiplied by four towns to give a total of one thousand three hundred and sixty (1360).

Data Collection: Data was collected using an interviewer-administered questionnaire. This was used to obtain information on the respondents' socio-demographic characteristics, health-seeking behaviours. Health-seeking behaviour questions were culled and modified from previous literature and guidelines (24, 25).

Blood Pressure Measurement: Omron digital automatic blood pressure monitor (Model BP710N) was used to obtain the blood pressure values of the respondents. The respondent sat up with their back straight in a comfortable and relaxed position (for at least 10 minutes). All tight-fitted clothes or thick clothing such as a sweater from the upper arm were removed. The left upper arm was placed comfortably on a table (at the same level as the heart). The cuff of the Omron monitor was placed at the upper arm midway between shoulder and elbow and the unit was turned on to take the measurement. When the measurement was completed, the arm cuff completely deflated, the monitor displayed the blood pressure and pulse rate were displayed. Three consecutive measurements were taken at intervals of 5 minutes and recorded. The mean values were obtained, recorded, and compared with the standard values (26). Details of the reference standard for hypertension is shown in Table 1

Ethical Approval and Informed Consent: Approval for the study was obtained from the Ethics and Research Committee of Abia State University

Teaching Hospital, Aba Abia State. Written informed consent was obtained from the respondents. The objectives of the study, assurance of no harm, confidentiality and freedom to participate were clearly explained to them.

Statistical Analysis: Descriptive statistics (frequency and percentages) were computed for the categorical variables such as the socio-demographic characteristic, health-seeking behaviours and blood pressure levels etc. Pearson correlation was used to examine the influence of health-seeking behaviour on blood pressure status. All analyses were done using IBM SPSS version 25.

Table 1. Blood pressure classification

Blood Pressure (mm/hg)	Systolic	Diastolic
Normal	<120	<80
Elevated	120-129	<80
Stage 1	130-139	80-89
Stage 2	≥140	≥90

Source: American College of Cardiology/American Heart Association Guidelines (26).

RESULTS

Table 2 presents the socio-demographic characteristics of the respondents. The result showed that 41.3% of the respondents were within the age range of 25 to 35 years, 28.8% were 25 years or younger and 49.6% of them were married. Educational qualification of the respondents showed that about half (49.4%) of the respondents had completed secondary school education and 38.1% completed tertiary education. Less than half (42.5%) of the respondents were retail traders and 37.0% were wholesalers.

Table 2. Socio-demographic/economic characteristics of respondents

Variables	Frequency (N =1360)	Percentage
Age of respondents		
15.0 - 25.0 years	392	28.8
25.1 – 35.0 years	562	41.3
35.1 – 45.0 years	234	17.2
45.1 – 55.0 years	106	7.8
55.1 - 65.0 years	54	4.0
65.1 – 75.0 years	12	0.9
Marital status		
Married	675	49.6
Single	644	47.4
Widow	28	2.1
Divorced	13	1.0
Highest educational level		
No formal education	90	6.6
Primary education only	80	5.9
Secondary education	672	49.4
Tertiary education	518	38.1
Type of trading by respondents		
Retailing	578	42.5
Wholesaling	503	37.0
Others (hawking, petty trading)	279	20.5
Number of days respondents go to the market in a week		
Every day except Sundays	883	64.9
Mondays to Friday	219	16.0
Every day including Sundays	182	13.4
Every day except Saturdays	76	5.6
Respondents' source of income		
Trading only	868	63.8
Trading and proceeds from farm	377	27.7
Trading and gambling	51	3.8
Trading and pension	38	2.8
Trading and awards/ gifts	26	1.9
Average monthly income (₦)		
Less than ₦5000	70	5.1
Between ₦5001 – 10,000	232	17.1
Between ₦10,001 – 20,000	284	20.9
Between ₦20,001 – 30,000	439	32.3
Between ₦30,001 – 40,000	92	6.8
Between ₦40,001 – 50,000	112	8.2
More than ₦50,000	131	9.6

The health status of the respondents is presented in table 3. The result showed that about a third (33.5%) self-rated their health as being excellent and 33.4% good. On the symptoms that the respondents had experienced in the last two months, (33.7%) had experienced headaches and a quarter (25.5%) experienced weakness/ tiredness. Obesity was the highest (29.9%) NCDs that run in the respondents'

families, followed by hypertension (18.2%) and diabetes (14.6%). Medical check-up frequency showed that over half (54.1%) rarely went for medical checkups. The study also reported that the only time when high (83%) regular visit was recorded among women was during the last trimester of pregnancy to ante-natal clinics.

Table 3. Respondents' health status description and medical history

Variables	Frequency	Percentage
Self-health rating by respondents		
	N = 1360	
Excellent	456	33.5
Good	454	33.4
Fair	330	24.3
Poor	120	8.8
Family History of NCDs		
Obesity	407	29.9
Hypertension	247	18.2
Diabetes	199	14.6
Cataract	101	7.4
Stroke	82	6.0
Osteoporosis	76	5.6
Chronic respiratory disease	49	3.6
Breast Cancer	43	3.2
Chronic Kidney disease	32	2.4
Alzheimer	24	1.8
None	100	7.4
Symptoms experienced in the last two months		
Headache	458	33.7
Weakness/tiredness	347	25.5
Chest pain	297	21.8
Palpitation	218	16.0
Weight loss (unintentional)	24	1.8
Blurred vision	16	1.2
Medical check- up frequency		
	N = 1024	
Yearly	138	13.5
Twice yearly	554	54.1
Quarterly	84	8.2
Monthly	138	13.5
Weekly	110	10.7

Table 4 showed the health-seeking behaviours of the respondents, the result revealed that some (26.4%) used mosquito-proofed nets. Some NCDs that took respondents to the hospital were hypertension (36.6%), diabetes (22.1%), respiratory diseases (13.2%) and chest pain (12.4%). On the number of times, they had visited the hospital in the last two months; over half (55.1%) had only been to the

hospital once because they were sick while some 26.1% had not visited the hospital recently. Among those that had visited the hospital, many (48.1%) reported being sick as the reason for hospital visitation. Some (22.4%) were advised to visit the hospital, probably by people who saw them looking sick without their knowing. Only a few (12.4%) went to the hospital for a routine checkup.

Table 4. Health-Seeking Behaviours of the Respondents

Variables	Frequency (N = 1, 360)	Percentage
Respondents health-protective measures		
Use of mosquito-proofed nets	359	26.4
Take anti-malaria drugs weekly	358	26.3
Use of insect-proof room	347	25.5
Immunization/inoculation	304	22.4
Medical check-up	275	20.2
Take birth control measures	217	16.0
Self-reported illnesses that took respondents to hospital in the last two months		
Hypertension	498	36.6
Diabetes	300	22.1
Respiratory disease	179	13.2
Chest pain	169	12.4
Osteoporosis	120	8.8
Cataract	37	2.7
Hypertension and diabetes	31	2.3
Obesity and diabetes	26	1.9
No of times visited the hospital in the last 2 months		
None	N = 1360	
Once only when sick	336	26.1
Twice	779	57.3
Thrice	220	16.2
	25	1.8
Reasons for going to the hospital		
	N = 1024	
I was sick	493	48.1
Advised to do so by family/friends	230	22.4
Went for check up	127	12.4
Other (ante-natal, took family members for check-up and treatment)	110	10.7
To visit a patient	64	6.3
Weight monitoring frequency		
I do not check	500	36.8
Only when I am sick in hospital	680	50.0
Monthly	56	4.1
Weekly	70	5.1
Daily	54	4.0
Blood sugar monitoring frequency		
I do not check	655	48.2
Only when I am sick in hospital	610	44.9
Monthly	40	2.9
Weekly	25	1.8
Daily	30	5.1
Blood pressure monitoring frequency		
I do not check	408	30.0
Only when I am sick in hospital	665	48.9
Monthly	177	13.0
Weekly	69	5.1
Daily	41	3.0
Preferred place of treatment		
Go to a prayer house	130	9.6
Use herbs and traditional alternatives	143	10.5
Buy drugs from a chemist/ Pharmacy	617	45.9
Go to the hospitals	467	34.3
Multiple responses	3	0.2
How marketing activities affected their treatment-seeking pattern		
Does not allow for early treatment	593	43.6
Affects sometimes but not all the time	578	42.5
Does not affect at all	189	13.9

Table 5 showed the prevalence of hypertension among the respondents, 1.4% of the respondents were in a prehypertension state while 8.6% and

12.1% were already in stage one and stage two respectively.

Table 5. Blood Pressure Level of Respondents

Variables	Frequency	Percentage
Normal	1059	77.9
Pre-hypertension	19	1.4
Stage 1	117	8.6
Stage 2	165	12.1
Total	1,360	100.0

Information on the influence of health-seeking behaviours on blood pressure is summarized in table 6. Results revealed that the blood pressure levels were inversely associated with the frequency of medical check-up ($r = -0.23$; $p = 0.02$) and blood pressure monitoring ($r = -0.14$; $p = 0.00$). Place of

treatment was negatively correlated with the blood pressure level of the respondents ($r = -0.07$; $p = 0.01$). The implication of r in this finding is that respondents' choice of a higher-level health institution for treatment/check-ups was associated with reduced blood pressure levels and vice versa.

Table 6. Influence of health seeking behaviours on respondents' blood pressure level

Variables	Blood pressure	Medical check-up Frequency	Blood pressure monitoring frequency	Body weight monitoring frequency	Blood sugar monitoring frequency	Preferred place of treatment	Degree of work interference in HSB
Blood pressure	1	-0.23* (0.02)	-0.14** (0.00)	-0.27 (0.4)	0.35 (0.04)	-0.07** (0.008)	-0.06 (0.33)
Medical check-up Frequency	-0.23* (0.02)	1	0.07 (0.27)	-0.01 (0.89)	0.075 (0.197)	0.54* (0.00)	0.01 (0.84)
Blood pressure monitoring frequency	-0.14** (0.00)	0.07 (0.27)	1	0.08 (0.15)	0.27** (0.00)	0.09 (0.11)	-0.11 (0.06)
Body weight monitoring frequency	-0.27 (0.4)	-0.01 (0.89)	0.08 (0.15)	1	0.28** (0.00)	0.02 (0.79)	-0.06 (0.29)
Blood sugar monitoring frequency	0.35 (0.04)	0.075 (0.197)	0.27** (0.00)	0.278** (0.00)	1	0.10 (0.08)	-0.120* (0.04)
Preferred place of treatment	-0.07** (0.008)	0.54* (0.00)	0.09 (0.11)	0.02 (0.79)	0.10 (0.08)	1	0.003 (0.95)
Degree of work interference in HSB	-0.06 (0.33)	0.01 (0.84)	-0.11 (0.06)	0.06 (0.29)	-0.120* (0.04)	0.003 (0.95)	1

DISCUSSION

Study findings on the age distribution (15-75 years) of respondents compare well with that reported in a study among street traders in Nigeria where 79% of the respondents were still in their reproductive ages (between 25 – 45 years). Similarly, another study reported an age range of between 20 – 50 years among traders in Ondo State Nigeria (28). They described the age range as active labour age that would be involved in vigorous livelihood including marketing activities. The predominance (87.3%) of market women in the age range of 15.1 to 45 years in the present study could be because many of the markets were in Aba and this represents the active age of gainful employment. Aba is almost synonymous with commercial activities so that even

adolescents engaged in full-time or part-time trading as apprentices to established traders. The result also revealed that 49.6% of the market women were married, this is slightly higher than the 29-38% of married cases reported in other studies (19, 29). The difference could be because the other studies were done among traders made up of men and women while the present study was done among women only.

The result of the study showed that the market women in Abia State were educated. About 49.4% and 38.1% of the respondents completed secondary school and tertiary education respectively and this corroborates with the study by Frank-Peterside and Ibanga (29) on textile market women in Southern

Nigeria which reported that 48.4% and 23.8% of the respondents completed secondary education and post-secondary education. The result of the study showed that the market women in Abia State were educated. This high literacy rate of the respondents is not surprising as national data has reported a high literary rate (65%) amongst Nigerian women with South East and southwest regions recording even greater prevalence (30).

The result also showed that less than half (42.5%) of the respondents were retail traders and 37.0% were wholesalers. The result is lower than the findings of (31) who reported that a little over half (51.6%) of the respondents in his study population were involved in retail. It was also lower than the 55% wholesalers reported by Henry Unaeze *et al.* (19). This could be because the present study involved only women while the two former studies involved men and women. Men are more likely to have more money to trade and get bank loans and overdrafts to beef up their businesses than women. Many (64.9%) of the respondents went to the market every day except on Sundays. Few (13.4%) went every day including Sundays. This could be because the daily market's open Mondays to Saturdays (4). Religion may have affected the behaviours of the respondents as a majority of the respondents were Christians who worship on Sundays and markets do not open on Sundays. Those who trade on Sundays hang around the market areas displaying their goods on tables, wheelbarrows, and bare ground. Most traders may harness this reason for Sunday market closure to attend religious activities, socialize with family and friends, attend weddings, and meetings and find time for leisure.

The average monthly income of the subjects ranged from <N5,000 to > N50,000. This was higher than the average monthly income of N19,123.37 reported among traders in Ondo State (28) and also greater than the N5,000 – N20,000 average monthly income reported by Henry Unaeze *et al.* (19). Trading only was the major source of income for over half of the respondents (63.8%) and 27.7% reported that trading and selling farm proceeds were their sources of income. This showed that the market women contributed to household income not only through trading but by engaging in other income-generating activities.

The result of the health status of the respondents showed that about a third (33.5%) of the respondents self-rated their health as being excellent and 33.4% as being good. This is in contrast to a study by Oyeyemi and Adeyemi (32) in Maiduguri Nigeria where 90% of them self-rated themselves as being excellent. This could be a result of the fact that the majority of people in Nigeria do not consider themselves sick unless there are obvious health

challenges that impaired their activities and probably warranted their being rushed to or admitted to the hospital or if there is a fever. The study also revealed that over half (55.1%) had only been to the hospital once because they were sick while some 26.1% had not visited the hospital recently. Studies on routine hospital visitation by Nigerian workers and adults (19, 32, 33) had shown very low routine check-ups. Amit *et al.*, (34) had reported that most women only visit the hospital when they become very ill and that only 7% go for a medical check-up in less than 6 months and opined that the only time when high (83%) regular visit was recorded among women was during the last trimester of pregnancy to ante-natal clinics. This could be why the majority of the respondents in the present study self-rated their health as excellent, good, and fair with only a few (8.8%) rating their health as being poor. Although in the traditional Igbo society health-seeking behaviour is considered feminine behaviour, because of the importance attached to men as heads and sustainers of the family, their health is treated as a priority. When women become sick, older women rally around them, giving diverse suggestions of what should be done. According to Ejim *et al.*, (35) in Igbo communities, until illnesses become severe, people rarely seek for medical attention. The bad implication of this attitude lies in the fact that hypertension and other NCDs are non-contagious but are of slow progression and only frequent medical checkups can dictate them for early management and control.

The result on the health-seeking behaviours revealed that some (26.4%) used mosquito-proofed nets and 26.3% took anti-malaria drugs. Preventive health activities are important for reducing illnesses and detecting diseases in early and treatable stages. Afolabi *et al.* (36) reported that Nigerian women had access to and used mosquito-proofed nets. In their study of 16 LGAs in Nigeria the highest use of health preventive devices (living in insect-proofed rooms (88%) and use of mosquito-proofed nets (81%) was reported in Owo LGA of Ondo State, South-West Nigeria. Living in insect-proofed rooms (81%) and use of mosquito-proofed nets (80%) were reported in Bayelsa State. Moderate use (49%) of insect-proofed rooms and access (31%) to mosquito-proofed nets were reported in Ukwa West LGA of Abia State. Low use (22%) and access (27%) were reported in Lagos Ikorodu. The result of the present study (26.4% and 18.2%) was lower when compared with that reported among women in Ukwa East LGA of Abia State. This could be a result of the difference in the population studied. The first study was done among Nigerian women of childbearing age who were not currently pregnant but who missed the opportunity for malaria control during pregnancy and who came to postnatal clinics during the insect-proofed-net-use campaign against

malaria, whereas the present study was done among market women. The low health and protective behavior reported in the present study among the respondents is a threat to disease prevention. With the good level of literacy observed among the respondents, one expected high compliance and usage of health-protective devices and adaptation of healthy devices, but the reverse was the case. The reason for this may not be far from the report of the Non-Communicable Disease Alliance (10), that women particularly those from low-income families will often prioritize spending on their families' well-being over expenditure on their health.

Some NCDs that took respondents to the hospital were hypertension (36.6%), diabetes (22.1%), respiratory diseases (13.2%), and chest pain (12.4%). Ekpenyong and Ikpeama (37) had earlier reported high blood pressure, diabetes, and cancer as the common NCDs that often took people to the hospital in Nigeria. Few (5.1%, 1.8%, and 5.1%) monitored their weight, blood sugar, and blood pressure respectively weekly, while others (4.1%, 2.9%, and 13.0%) monitored theirs monthly. Some (50.0%, 44.9%, 48.9%) reported they do not monitor the parameters. Funke and Ibrahim reported that even among health workers in Nigeria, weight checks, blood pressure, and blood glucose monitoring were low. It would seem from this and other studies that regular monitoring of weight and blood pressure was rare. This could be because a majority of the women did not have access to monitoring devices like the body weighing scales and blood pressure monitors at home. These devices are available and are sold in the markets places but are rarely purchased by market women probably because they would prefer to spend their money on other household goods than on medical or health equipment. Sometimes young people are seen around the market areas with body scales and bells urging people to check their weight. There is also a recent trend where nurses and other medical personnel occasionally go into the market places with blood pressure monitors, blood sugar monitors, and other devices and urge people to know their health status. Some nutrient supplement dealers also cite their shops at strategic places in the market and use medical devices to encourage people to monitor and know their health status. But since the women had no fever or other signs of illness, they did not see the reason for the check, and some (33.5% and 33.4%) self-rated their health as being excellent and good. Moreover, health monitoring is not part of our culture and the problem of low awareness of the benefits of regular check-ups and self-monitoring of one's health status may have affected the behavior of the respondents.

In Nigeria, most patients present themselves late to the hospitals, oftentimes they would have tried

various forms of alternative treatments before seeking for medical assistance mainly because of reasons related to accessibility and affordability of health care services (39). Many (45.9%) of the respondents went to the chemist or bought drugs from pharmacies when they were sick and 10.5% visited the village medicine man/woman or used traditional alternatives/herbs. Only 34.3% went to the hospital for proper diagnosis and treatment. A study in Calabar reported that 63.49% of their study population resorted to self-medication and visited patent chemist shops or pharmacies for treatment, 27.1% used traditional medication, and 4.3% visited prayer houses first before seeking hospital treatments (37). Apart from cost, the prolonged waiting in the hospital may not be acceptable to the market women whose income depends on what they make daily. This is corroborated by their response that their marketing activities do not allow for early treatment (43.5%) or sometimes interfered with treatment (42.5%). This practice can expose individuals to life-threatening challenges.

The result of the symptoms that the respondents had experienced in the last two months showed that about a third (33.7%) of the respondent had experienced headaches and a quarter (25.5%) experienced weakness/tiredness. Obesity was the highest (29.9%) NCDs that run in the respondents' families, followed by hypertension (18.2%) and diabetes (14.6%). In an earlier study, (19) had also reported diabetes mellitus 20.7%, dental problems (31%), hypertension (15.5%) and obesity (13.8%) as some of the NCDs that run-in families of respondents in Abia State. The impact of heredity cannot be ruled out as a predisposing factor to hypertension and other NCDs.

The result showed that 1.4% of the respondents were in pre-hypertension state while 8.6% and 12.1% were already in stage one and stage two respectively. This means a cumulative hypertension prevalence of 20.7% was observed among the market women in Abia state. This is higher than the 16.4% reported among females in Nigeria (14), and similar to 22% and 21% reported in South-West and South-East Nigeria respectively (15), but lower than 29.1% reported among market women in Sokoto (18). This trend exposes the market women to life-threatening diseases.

The nexus between medical check-ups and blood pressure monitoring on blood pressure level in this study which posited that increased health-seeking behaviour is associated with a drop-in blood pressure level contradicts findings of a Ugandan Study where observed varied health-seeking behaviours did not affect hypertension control of the respondents (40). The disparity in finding may be attributed to the study location/ environmental

exposure of the subjects, the variety of information elicited on health behaviours, and the characteristics of the study population – known hypertensive and normal population

Similarly, findings on the preferred place of treatment and its association with blood pressure level corroborate with previous studies which reported that the blood pressure control rate of hypertensive patients who chose higher-level hospitals as the usual places for medical treatment was higher than those who chose other lower treatment centers (41, 42)

CONCLUSION

Unmonitored and late dictation of hypertension can lead to serious health consequences and sudden death. There is a need for increased awareness and campaign by the government and other stakeholders in markets, emphasizing the importance of adequate health-seeking behaviours and regular check-ups to help combat the spread of hypertension.

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