

Health Seeking and Treatment Compliance among Hypertensive

Adults in Ekiti State, Nigeria

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Abstract

This study investigated the health-seeking and treatment compliance of hypertensive adults in Ekiti State, located in southwest Nigeria. The study adopted a descriptive research design with the pretested questionnaire to collect the data. Sampling involved the use of multi-stage procedures and a sample size of 430 survey respondents across two tertiary hospitals and two secondary hospitals to represent the 23 public hospitals in the State. Respondents were male or female hypertensive patients accessing treatment in the sampled health facilities contacted by exit interviews and the snowball method. The mean age of the respondents is 58 years while over 70% have a minimum of secondary school education and are married with children. The study also revealed that an overwhelming percentage of respondents are aware and knowledgeable about hypertension. Awareness of hypertension in terms of knowledge of causes, symptoms, treatment shows a range of 28% and 86%. The lowest is hypertension associated with Red meat, and the highest; is hypertension as a life-threatening disease. Health seeking practices show 93% were placed on hypertensive drugs immediately after diagnosis, 18% taken non-recommended drugs 68% attended to by medical doctors However, 31%, 24%, 8%, and 35% still used branded herbal drugs, locally produced herbs, traditional healer and spiritual therapy respectively. Generally, the level of treatment compliance was 88%. The low awareness of the relationship between food practices and hypertension and the use of unwholesome non-recommended therapy is a call for increased hospital-based and community sensitization for acceptable knowledge and treatment compliance among patients and care providers of hypertension.

Keywords: Hypertension, Care Seeking, Sick Role, and Treatment Compliance

Introduction

The current prevalence of global hypertension is 26% and is likely to be on the increase. Across the WHO regions, the prevalence of raised blood pressure was highest in less developed nations including Africa, where it was 46% for both sexes combined. Both men and women have high rates of hypertension in the

African region, with prevalence rates over 40% but it is more among men (Mills, Bundy, & He). It is also the leading cause of premature death, this mortality is worse also in developing countries due to poor medical and health infrastructure.

The prevalence rate of hypertension is comparatively few compared to other regions of the world. In this regard, (Ogah, et al., 2012) suggests that the prevalence of hypertension is between 10-15%, with specific settings, for example, urban centres having twice these prevalence rates. Several community-based surveys in Nigeria indicate that the prevalence of hypertension in Nigeria has increased from 11.2% in the 1990s to 27.9% in 2010. This also includes the 22.6% of people in a suburban community in the Niger Delta conducted in 2009 (Wokoma & Alasia, 2011). Despite these increases, the treatment outcomes for this non-communicable disease remained very poor even in the best tertiary hospitals in Nigeria. For instance, good hypertension control could only be achieved for just 24.2% of the patients seen in a clinic in Port Harcourt (Akpa, Alasia, & Emem-Chioma, 2008) More so, 25.3% of all patients admitted into the medical ward of a hospital in Kano city died, while up to 45% of patients admitted for hypertension-related illnesses in Enugu are likely to die (Arodinwe, Ike, & Nwokedinko, 2009). Non-compliance and poor or no persistence in taking anti-hypertensive medications have been attributed to these ugly events which have resulted in uncontrolled high blood, poor clinical outcomes, preventable health care costs in most health institutions in Nigeria, and, high mortality of hypertension. Factors associated with non-compliance are multi-level and relate not only to the patients, but also to the providers, health care system, healthcare organizations, and the community (Osamor & Owumi, 2011).

Although, imported medicine has been successful in developed countries in the treatment of hypertension with a higher level of positive treatment outcomes. It does not have the same positive impact in many of the underdeveloped African countries due to poor appreciation of scientific knowledge of causes, prevention, and treatment of such diseases. Other factors are strong cultural and traditional beliefs that have overriding influence over most of the social lives, including the state of illness and wellness. Though western medicine has made an impact in health care practices in Africa in certain areas, especially in the containment of communicable diseases, governments have not succeeded to make public health respond adequately to medical challenges compared to western nations. Apart from poor health infrastructure, inadequate medical manpower, cultural bias, and stereotype about beliefs and attitudes about certain diseases, including most chronic diseases, and western medicine make patronage of the public health system a challenge and compromised health outcomes, especially for chronic diseases in Africa (Muhammad, Abdulkareem, & Chowdhury, 2017). It is,

therefore, imperative that empirical research must focus on the sick role of hypertension patients given the poor public health system and the unfavourable socio-cultural conditions around them, especially for chronic diseases like hypertension. No doubt, there are social research findings, but they have not reached the tempo to receive the concrete attention of public policy and political leaders to address the menace of treatment noncompliance of hypertension and related health conditions. This study is also a contribution to hard data for a successful drive towards universal health coverage.

The general objective of this study was the description of health-seeking and treatment compliance among hypertensive adults in Ekiti State. Key findings were presented to include knowledge and awareness about hypertension; care-seeking practices and treatment compliance about hypertension. This study, therefore, contributes to the social science analysis of the health-seeking behaviours of hypertension patients especially the challenge of treatment compliance which accounts for the high mortality of hypertension compared to other nations.

Justification for the Study

Hypertension is a non-communicable disease that has important medical, surgical, and public health implications. Hypertension was in the past believed to be a disease of the affluent. But this belief has changed drastically in the last two decades, especially in less advanced nations like Nigeria. Africa presently is believed to have, higher average blood pressures than Europe and the United States of America and this is increasing with the age of the people. About 75 million people are reported to have hypertension in sub-Saharan Africa and the prevalence varies from 12 to 22 percent while in Nigeria the prevalence was estimated to be over 30 percent (Sharma 2021; Adeloye 2021). Hypertension is not only an important public health problem but it also has a big economic impact on the people and the Nation, this is because a large proportion of the productive populations in the society are likely to become chronically ill or even die from the complications of the disease. Consequently, this will make their families poorer and more frustrated. The financial burden comes in the form of direct health care costs related to the treatment. These costs are borne by the individuals, governments, and the private sectors. However, there is a paucity of data on care-seeking and treatment compliance among hypertensive adults in Ekiti State as a case for Nigeria, hence the need for this study as a guide to social intervention. Social Intervention must meet clinical therapy to achieve accelerated desirable preventive and curative approaches to reduce the burden of hypertension.

Methods

This study was conducted in Ekiti State, one of the six states in southwest Nigeria. The State was initially carved out of Ondo State in 1997. It has a 2017 population figure of about 3.3 million people with 16 local government areas. There are about 177 primary health care centres, 19 state general hospitals, three specialist hospitals and a teaching hospital owned by State, and one federal government teaching hospital. There are also scores of privately owned health facilities with different levels of care services. The target of this study is the hypertension patients accessing care at the hospital care level and therefore samples of hospitals were taken from the general, specialist, and teaching hospitals across the State to access the patients.

The study adopted a descriptive survey design, through the use of a pretested questionnaire to collect data from male and female hypertensive adults. Purposive sampling of one general hospital, one specialist hospital, and the two teaching hospitals was done. Also, a sample size of 430 patients was determined as 30% of all registered hypertension patients from each of the samples for hospital facilities. Sampled hospital facilities were to represent federal owed teaching hospitals, state government owed teaching hospitals, state government owed specialist hospitals, and state government owed the general hospital. The samples are as follows: Federal Teaching Hospital, Ido Ekiti, 150; Ekiti State University Teaching Hospital, Ado Ekiti, 150; Specialist Hospital, Ikole Ekiti, 70; and General Hospital, Okemesi Ekiti, 70. The respondents were contacted for the administration of the questionnaire through exit interviews and the snowball method. Two trained field workers (male and female) from each of the sampled areas were engaged to assist in collecting the data. The data collected was analysed using the Statistical Package for Social Sciences (SPSS) software version 22 and presented using descriptive and inferential statistics. Ethical Clearance certificates were obtained from Ekiti State University, Office of Research and Development while the office equally provided ethical guidance in the course of fieldwork and data analysis. Ekiti State University Teaching Hospital also provided ethical clearance before accessing the patients. Gender sensitivity, cultural values, the peculiarity of sick role conditions, and especially assurances of confidentiality, anonymity, and privacy of the respondents were observed in the course of the research.

Results

Socio-Demographic Characteristics of Respondents

The age range of respondents as shown in Table 1, is between 18-89 years while the mean age and standard deviation are 58.1 and ± 15.7 years respectively. This

shows that more of the respondents are above the age of 50 years. The sampled respondents correspond to the age range of hypertensive persons globally and in Nigeria, stating that more than 60 percent of hypertensive persons are above the age of 60 years (Borzecki, Glickman, Kader, & Berlowitz, 2006). Table 1 also shows that more male respondents have better educational status than female respondents though less than 15 percent are without formal education generally. Again, nearly all the respondents (96%) were from Yoruba ethnic groups, native to the southwest geopolitical zone while the Igbo, Hausa, Fulani, and Ebiraland constituted the rest of the population. About 12 percent are Muslims while the majority are Christians. Analysis of respondents on marital status shows that across males and females, the majority were married and living with their spouses, while about one percent are either divorced or widowed. Also, 75% of respondents were in a monogamous marriage, and across gender, 81% of the male population and 69% of the female population were in monogamy. This along with the level of education shows that the respondents represent the less traditional cohort of the population which would have been polygynous. On the family size, half of the sampled respondents had between 5-9 family sizes, followed by 47 percent with 0 and 4 children, while about three percent have more than 10 children, mostly male respondents, and would have been in polygynous unions.

Awareness of Hypertension

This section presents respondents' answers to questions meant to measure their level of awareness about hypertension. All of them are patients already accessing treatment, however, the measures of awareness can lead to the understanding of their self-perception of the severity or seriousness of the disease and the health-seeking behaviour pathway and outcome. Table 2 presents the findings. In all, 69 percent of the sampled respondents have adequate knowledge that hypertension progresses with age though men tend to appreciate this more. The likely reason for this could be a result of the fact that the majority are literate and better educated and consequently, exposed to knowledge and awareness of hypertension and how it progresses. Elevated high blood pressure was also agreed to be an indication of hypertension by 84% of respondents (81% males and 86% females). This is a good indication that respondents must keep on measuring their blood pressure. It was also noted that 71% of respondents for both males and females affirmed that men and women have an equal vulnerability to developing hypertension while 78% (79% males and 77% females) believe that hypertension is treatable with medication alone. This is a misleading affirmation by most of the respondents since there is a recommendation for lifestyle alteration to complement medical treatment.

Measures of awareness of the relationship between lifestyle habits and hypertension were explored also. It shows that 73% of the total population and 78% of females agree that smoking is a risk factor for hypertension. Knowledge of respondents on the intake of excess salt was also explored. Also, about 60% of the sampled respondents were not aware/knowledgeable that excess salt intake can cause hypertension, and women who culturally are in charge of food preparation have more of this negative knowledge. The implication of this is that there is the need for more sensitization and awareness campaigns on excessive salt intake as a risk factor for hypertension and other terminal diseases such as diabetes mellitus. In addition, knowledge of the diet of respondents was explored as a risk factor for developing hypertension. Close to half (48%) of the total respondents were not aware that poor diet could result in hypertension or worsen hypertension experience. Again, more women do not believe in the relationship between diet and hypertension. More than half (53%) of the total respondents (49% males and 56% females) did not know that intake of red meat can cause hypertension. But respondents do not appreciate the role of feeding habits in affecting hypertension. It will be noted also that women who are more culturally responsive to food preparation do not acknowledge the prime place of an adequate diet to lowering or managing hypertension. Regular exercise had been reported by the majority (68%) to lower the risk of having hypertension. A related study confirmed the fact that health care providers do not most of the time include lifestyle modification as part of the treatment package for hypertension (Chiazor & Oparah, 2012). Earlier studies have established the relationship between the pattern of knowledge about hypertension and treatment practices and compliance with it (Azubuike & Kurmi, 2014). A sizeable number (86%) of the respondents (84% males and 88% females) affirmed that hypertension can lead to life-threatening conditions. Generally, the knowledge and awareness of the respondents are appreciably high, especially in the areas of the place of age, gender, treatment, and high risk of sudden death due to the disease. Comparing these findings of awareness with (Ike, Aniebue, & Aniebue, 2010) which was conducted among the less literate population of Nigeria and also with lower perception. Though this study shows a not very high awareness level among patients, it is still higher than comparable studies (Katibi, Olarinoye, & Kuranga, 2010).

Health Seeking Practices

This section presents the findings of respondents' health-seeking, especially at the point of a hospital visit for help as the patients enter the sick role according to Parsons (1951). As shown in Table 3, a significant number, 79% of the respondents were already diagnosed while 21% for both males and females were still waiting for a diagnosis. Out of 338 respondents who had ever been diagnosed

to have hypertension, 93% were placed immediately on anti-hypertensive medication while only 7% were not. The analysis across gender showed that out of a total of 338 respondents, 90% males and 96% females were placed on medication at the point of diagnosis. It was also noted from the distribution that close to half (48%) of the total respondents (42% males and 53% females) presented mild symptoms; 43% (42% males and 44% females) presented moderate symptoms while 9% (16% males and 3% females) presented severe symptoms to a healthcare provider for assistance. Again, among those who have ever been diagnosed with hypertension, more than half (58%) reported sometimes going for follow-up. Across gender, more females sometimes go for follow-up. Also, a quarter (25%) go for follow-up always (28% male and 23% female) while less than one-fifth (17%) never went at all.

Table 3 also noted that about 80% of respondents who have been diagnosed with hypertension had never taken medications outside the ones given at the health facilities while less than one-fifth (18%) did. 18% reported nurses to be their health providers while 71% reported that doctors were their health providers. 33% had medical consultants as their health providers and 12% submitted that Pharmacists were their health providers. Nigeria generally has a challenge of adequate medical manpower due to brain drain, it is therefore unexpected that just a quarter have access to specialised care for hypertension, and about 20 percent looking for unwholesome alternative health care.

In the course of seeking medical help, patients can be faced with the choice of other therapy either as an alternative or complementary care (Oluwadare & Olaniboji, 2009). Respondents were asked to state any alternative care they ever used. Responses show that 8%, more males than females ever used traditional healing; 24%, more males than females, ever used local herbal therapy, about 6%, more males than females, ever used Islamic healing therapy. Also, about 31%, more male than female, used imported or branded herbal drugs. However female respondents (37%) used Christian spiritual help more than male respondents (31%). It could be stressed that spiritual help-seeking may not interfere negatively with the hospital treatment outcome. Male respondents engaged more in alternative treatment or help-seeking than female patients.

Level of Treatment Compliance of Hypertension

Measurement of treatment compliance is based on the already validated scale of Morisky (2008) measuring a wide range of treatment compliance to chronic diseases treatment. The schema is that the higher the score, the higher the treatment compliant with Yes as 1 score and No as 2 scores. Table 3 illustrates the level of treatment compliance of respondents. In a total of 18 respondents

with high compliance to hypertensive drugs, it was found that the majority (89%) never forgot to take their medications while 11% sometimes forgot. It was also noted that 298 respondents complied moderately, 79% did not sometimes forget to take their drugs while 21% did. Furthermore, 22 respondents complied poorly. All the respondents (100%) sometimes forgot to take their hypertensive drugs. It was also observed that respondents missed taking their medicines for other reasons other than forgetting. All respondents (100%) with a high level of compliance did not miss taking their medicine aside from forgetting to take it. Among those with moderate compliance, 71% missed taking their drugs aside from forgetting to take them while 29% had no other reason. All respondents (100%) with poor compliance had other reasons for missing their medicine in addition to forgetting to take it.

Findings in Table 4 equally revealed that all respondents (100%) among those who complied highly ever cut back or stopped taking their medicines without the knowledge of the doctor. Again, 67% of those who complied moderately had ever cut back or stopped taking medicines without informing the doctor while 33% never did. Also, all (100%) respondents with poor compliance had ever cut back or stopped taking medicines without telling their doctors. All respondents (100%) with a high level of compliance to take their drugs never forgot to take their drugs along when they traveled or left home. Also, 71% of the moderately complied respondents sometimes forgot to bring along their medicines when they traveled or left home while 29% never forgot. It is also noted from the table that all the poorly complied respondents (100%) sometimes forgot to bring along their medicines when they traveled or left home. The analysis of respondents who took their drugs a day preceding the survey was also analyzed. Among those who highly complied with their drugs, all (100%) did not take all their drugs a day preceding the survey. Of the moderately complied respondents, 27% did not take all their medicines while 73% took all their medicines preceding the survey. Poorly complied respondents also showed that all (100%) respondents took all their drugs a day preceding the survey.

Fifty-six percent of the highly complied respondents sometimes stopped taking their medicines whenever they noticed that they feel better while 44% never stopped. Among those who complied moderately, 74% sometimes stopped taking medicine whenever they felt better while 26% never did. On the other hand, 77% of the poorly complied respondents sometimes stopped taking their drugs when they felt better while 23% never stopped. All the respondents (100%) who highly complied never felt hassled about sticking to their treatment plan or using other complementary drugs. For those who complied moderately, 71% felt hassled about sticking to their treatment plan while 29% did not while all the

respondents who complied poorly felt hassled about sticking to their treatment plan. The most significant challenge to hypertension treatment compliance is the tendency to stop treatment when there is a feeling of controlled symptoms, and perceived successful treatment.

Discussion

The findings show among other things an educated sampled population. As explained earlier, the level of awareness of hypertension in this study is higher than in studies in less literate and rural settings (Azubuike & Kurmi, 2014) (Ike, Aniebue, & Aniebue, 2010). Revealing from this study is that an overwhelming percentage of respondents are aware and knowledgeable that hypertension progresses with age. Of much interest is that women have more awareness of hypertension than men. This is contrary to the findings of in study among young adults (Everett & Zajacova, 2015). The age disparity can be a significant explanation for the different findings anyway, this study was undertaken among adults mostly above 50 years of age. Another striking finding is the relatively low awareness of lifestyle modification as a controlling factor for hypertension compared to other measures of hypertension awareness. The importance of lifestyle modification cannot be over-emphasised as non-pharmaceutical control measures and where this is not known or presented as part of the treatment protocol, mortality due to hypertension will be imminent and high (Amoah, Okai, Manu, Laar, & Akamah, 2020).

Findings from the study revealed that 90% males and 96% females were placed on medication immediately and 56% males and 60% females sometimes go for follow-up. The study revealed that a substantial number (82%) of respondents who have been diagnosed with hypertension had never taken medications outside the ones given at the health facilities. Also revealing is that a sizeable number reported that doctors were their health providers. The study showed that 31% (38% males and 25% females) of hypertensive respondents have taken any imported herbal drug to treat hypertension. The study revealed that the majority (89%) of the respondents never forgot to take their medications. Furthermore, it revealed that 67% of respondents who complied had ever cut back or stopped taking medicines without informing the doctor. But the study revealed that an overwhelming proportion of respondents sometimes forgot to bring along their medicines when they traveled or left home. It is also noted from the study that fifty-six percent of the respondents sometimes stopped taking their medicines whenever they noticed that they feel better. In addition, findings from the study showed that 71% felt hassled about sticking to their treatment plan. Though there is a higher percentage, mostly over 70 percent compliant level, the rest of non-compliant and equally poorly treated hypertensive patients account for much

mortality and waste of medical and social resources especially in a nation with very poor medical infrastructure compared to developed nations (Lawlor, et al., 2011). This is confirmed also in a study in the same area with about 63 percent compliant rate for hypertensive treatment and the conclusion that non-compliant accounted for the high mortality of the disease (Ezenkwa, Omenai, & Ogunbiyi, 2020). The lack of trust in medical therapy would have accounted for about 11 percent patronage of traditional healers and 25 percent use of local herbs and therapy. Access to quality health care is poor in Nigeria due to inadequate health manpower, unavailability of needed drugs, and the high cost of medical treatment (Oluwadare, Olorunfemi, Atiba, & Ijabadeniyi, 2021).

Conclusion and Recommendations

Based on the findings from the study. The study concluded that though the level of awareness of hypertension is relatively high and health-seeking practices show good public health responses but the household responses to the disease left much to be desired. The respondents could not appreciate the rationale for lifestyle modification to complement medical treatment. Also, the treatment compliance level is medium but the fundamental social challenge is to boost the efficacy of medical treatment with patients' positive response and adjustment of lifestyle to the sick role.

This study, therefore, recommends that mass media communication should provide a culturally understandable explanation of the causes, treatment, social and cultural management of hypertension, and consequences of abiding by the communication both to the patients, households, and the entire community. Secondly, medical doctors should be encouraged to provide preventive and lifestyle modification counselling to patients especially at the first contact and ongoing information to patients as part of the diagnostic protocol. A strategy to monitor compliance not only with medical treatment but non-pharmaceutical prescriptions should be put in place by the medical team, especially by the Nurses.

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List of Tables

Table 1: Percentage Distribution of Respondents by Social Characteristics

Characteristics	Male (n=192)	Female (n=238)	Total(N=430)
Age: 18-59	44.8	51.3	48.4
60-69	19.8	21.0	20.5
70-79	26.0	19.7	22.6
80-89	9.4	8.0	8.6
Mean Age & SD (58.1 years & ±15.7)			
Formal Educational Status: None	7.8	14.3	11.4
Primary	9.9	18.5	14.7
Secondary	21.9	17.2	19.3
Post-secondary	39.1	35.3	37.0
Above secondary	21.4	14.7	17.7
Ethnic identity: Yoruba	97.9	94.5	96.0
Igbo	2.1	2.5	2.3
Others	0	2.9	1.7
Religion: Christianity	84.9	90.3	87.9
Islam	15.1	9.7	12.1
Marital Status: Single	15.1)	4.6	9.3
Married	84.4	94.1	89.9
Divorced/divorced	0.5	1.3	0.9
Family Types: Monogamy	81.3	69.3	74.7
Polygyny	18.8	30.7	25.3
Family size: 0-4	47.9	45.8	46.7
5-9	46.9	51.7	49.5
10 or more	5.2	2.5	3.7

Source: Research Field Survey, 2019

Table 2: Percentage Distribution of Respondents' Awareness of Hypertension

Awareness Checklist	Yes	No	I don't Know
1. Hypertension Progresses with Age			
Male (n=192)	72.9	13.5	13.5
Female (n=238)	65.1	20.2	14.7
Total (N=430)	68.6	17.2	14.2
2. Elevated Blood Pressure is referred to as Hypertension			
Male (n=192)	80.7	6.8	12.5
Female (n=238)	85.9	7.1	7.0
Total (N=430)	84.0	6.7	9.3
3. Women have an Equal Chance of Developing Hypertension			
Male (n=192)	71.9	13.5	14.6
Female (n=238)	71.9	17.6	11.3
Total (N=430)	71.4	15.8	12.8
Hypertension is Treatable			
Male (n=192)	78.6	15.1	6.3
Female (n=238)	76.9	15.5	7.6
Total (N=430)	337	15.3	7.0
4. Obesity is a Risk Factor for Hypertension			
Male (n=192)	74.5	14.6	10.9
Female (n=238)	80.7	10.5	8.8
Total (N=430)	77.9	12.3	9.8
5. Intake of Excess Salt is a Risk Factor for Hypertension			
Male (n=192)	33.3	56.8	9.9
Female (n=238)	34.0	61.3	4.6
Total (n=430)	33.7	59.3	7.0
6. Poor Dietary is a Risk Factor for Hypertension			
Male (n=192)	32.8	47.4	19.8
Female (n=238)	37.4	48.3	14.3
Total (N=430)	35.3	47.9	16.7
7. White Meat is as Good as Red Meat in Hypertension			
Male (n=192)	24.5	49.0	26.6
Female (n=238)	30.3	56.3	13.4
Total (N=430)	27.7	53.0	19.3
8. Regular Exercise Lowers the Risk of having Hypertension			
Male (n=192)	69.8	18.2	12.0
Female (n=238)	66.8	22.7	10.5
Total (N=430)	68.1	20.7	11.2
9. Hypertension can Lead to other Life-Threatening Diseases			
Male (n=192)	84.4	10.4	5.2
Female (n=238)	87.8	8.0	4.2
Total (N=430)	86.3	9.1	4.7

Source: Research Field Survey, 2019

Table 3: Percentage Distribution of Respondents' on Health Seeking Practices towards hypertension

Health Seeking Practices	Gender		Total (N=430)
	Male (n=192)	Female (n=238)	
Have you ever been diagnosed to have Hypertension?			
Yes	78.6	78.6	78.6
No	21.4	21.4	21.4
Were you Placed Immediately on Anti-hypertensive Medication?			
Yes	90.1	95.7	93.2
No	9.9	4.3	6.8
*Stage of Disease before Presenting to Health Care Provider for Assistance			
Mild symptoms	42.4	52.9	48.2
Moderate	41.7	43.9	42.9
Severe stage	15.9	3.2	8.9
*How Often do you go for Follow Up?			
Not at all	16.6	17.1	16.9
Sometimes	55.6	59.9	58.0
Always	27.8	23.0	25.1
*Ever taken Medication Outside the Ones Given to you at the Health Facilities?			
Yes	18.5	18.2	18.3
No	81.5	81.8	81.7
*Have a Nurse as your Health Provider?			
Yes	18.5	18.2	18.3
No	81.5	81.8	81.7
*Have a Doctor as your Health Provider?			
Yes	73.5	64.2	68.3
No	26.5	35.8	31.7
Have Consultant (Specialist) your Health Provider			
Yes	31.8	34.8	33.4
No	68.2	65.2	66.6
Have a Pharmacist as your Health Provider			
Yes	14.6	9.1	11.5
No	85.4	90.9	88.5
*Have you ever consulted Traditional Healer for Hypertensive Care?			
Yes	11.3	5.3	8.0
No	88.7	94.7	92.0
*Have you ever taken any Imported Herbal drugs to Treat Hypertension?			
Yes	37.7	25.1	30.8
No	62.3	74.9	69.2

*Ever Consulted Alfa for Hypertensive Care			
Yes	6.6	6.4	6.5
No	93.4	93.6	93.5
*Ever taken Local Herbs/Concoction to Treat Hypertension			
Yes	25.8	22.5	24.0
No	74.2	77.5	76.0
*Ever Consulted Spiritual Home for Hypertensive Care			
Yes	32.5	36.9	34.9
No	67.5	63.1	65.1

Source: Research Field Survey, 2019

The analysis of (*) was based on the total number of 338 respondents who had ever been diagnosed to have hypertension.

Table 4. Percentage Distribution of Hypertension Treatment Compliance

Variables	Treatment Compliance			Total (N=338)	χ^2	p-value
	High N=18, (5.2%)	Moderate N=298, (88.1%)	Poor N=22, (6.5%)			
Do you Sometimes Forget to take your Medications?						
Yes	2 (11.1%)	235 (78.9%)	22 (100.0%)	240 (71.0%)	50.679	*0.000
No	16 (88.9%)	63 (21.1%)	0 (0.0%)	98 (29.0%)		
Do people Sometimes miss taking their Medicines for Reasons Other than Forgetting?						
Yes	0 (0.0%)	212 (71.1%)	22 (100.0%)	234 (69.2%)	50.788	*0.000
No	18 (100.0%)	86 (28.9%)	0 (0.0%)	104 (30.8%)		
Have you Ever Cut Back or Stopped taking your Medicines without telling your Doctor?						
Yes	0 (0.0%)	199 (66.8%)	22 (100.0%)	221 (65.4%)	45.903	*0.000
No	18 (100.0%)	99 (33.2%)	0 (0.0%)	117 (34.6%)		
Sometimes Forget to Bring along your Medicine when Traveling or Leaving Home?						
Yes	0 (0.0%)	210 (70.5%)	22 (100.0%)	232 (68.6%)	49.912	*0.000

No	18 (100.0%)	88 (29.5%)	0 (0.0%)	106 (31.4%)		
Did you take all your Medicines Yesterday?						
Yes	0 (0.0%)	218 (73.2%)	22 (100.0%)	240 (71.0%)	53.733	*0.000
No	18 (100.0%)	80 (26.8%)	0 (0.0%)	98 (29.0%)		
When you Feel like your Symptoms are Under Control, Do you Sometimes Stop taking your Medicines or Visit your Doctors/Career?						
Yes	10 (55.6%)	188 (73.7%)	50 (76.9%)	3.360	0.186	
No	8 (44.4%)	67 (26.3%)	15 (23.1%)			
Do you Feel Hassled about Sticking to your Treatment Plan or Using other Complimentary Drugs?						
Yes	0 (0.0%)	210 (70.5%)	22 (100.0%)	232 (68.6%)	49.912	*0.000
No	18 (100.0%)	88 (29.5%)	0 (0.0%)	106 (31.4%)		
How Often do you Have Difficulty Remembering to take all your Medicine?						
Never	0 (0.0%)	155 (52.0%)	57 (50.0%)	212 (49.3%)	59.566	*0.000
Once in a while	6 (33.3%)	115 (38.6%)	45 (39.5%)	166 (38.6%)		
Sometimes	7 (38.9%)	14 (4.7%)	4 (3.5%)	25 (5.8%)		
Usually	5 (27.8%)	14 (4.7%)	8 (7.0%)	27 (6.3%)		

Source: Research Field Survey, 2019

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