



ORIGINAL ARTICLE

Knowledge, Attitude and Lifestyle Practices Pertaining to Hypertension among the People of Ahoe-Ho

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Abstract

Background: Hypertension has been on high prevalence recently in developing countries of which Ghana is of no exception. Over the period, hypertension education has mostly been geared towards people who already have been diagnosed of the condition leaving most of the general population in the dark. This untargeted portion of the population tend to predispose themselves to the condition as they ignorantly involved themselves in high-risk activities.

Method: A cross-sectional descriptive research design was adopted to conduct the study. Open and close ended, self-administered questionnaires were used to collect information on the social demographics, knowledge, attitudes and lifestyle on hypertension among respondents. Statistical Package for Social Sciences (SPSS) software was used to analyze the data. Results were presented in tables, bar graphs and pie chart.

Results: The study showed that less than half (49.3%) of the respondents correctly explained that hypertension means increased force of blood through the blood vessels and 90.8% agreed that taking of antihypertensive medications can control hypertension. Also, the study showed that the majority of respondents (92.2%) identified exercising as an important factor in controlling hypertension and 32.7% responded yes to using herbal preparations to control their hypertension.

Conclusion: The findings of the study provides information on knowledge, attitudes and lifestyle practices pertaining to hypertension among the people of Ahoe. Minority of the respondents had good knowledge on what hypertension was and very few of them were hypertensive.

Keywords

Hypertension, Knowledge, Attitude and lifestyle, Ghana

Introduction

Hypertension has been on high prevalence recently in developing countries of which Ghana is of no exception. Despite the increase in awareness creation and the influx of information on hypertension globally, the knowledge of the people of Ahoe about hypertension and predisposing factors still remain significantly insufficient as the people indulge in activities and practices that predispose them to the condition. Over the period, hypertension education has mostly been geared towards people who already have been diagnosed of the condition leaving most of the general population in the dark. This untargeted portion of the population tend to predispose themselves to the condition as they ignorantly involved themselves in high risk activities. In effect, they live lifestyles and portray attitudes such as excessive alcohol consumption, sedentary lifestyles, smoking cigarette, poor dieting which include eating too much junk food and salty diets, all of which contribute to the rising levels of hypertension predisposition.

Ahoe is one of the sub-urban communities in Ho, the regional seat of the Volta Region of Ghana. According to the UN (2009), Ahoe is not a typical slum but it is a rundown residential area together with three others in Ho; Bankoe, Hliha and Dome. It is estimated that 36% of the population of Ho live in these rundown residential areas. Ahoe has a population size of 1,234 (UN, 2009) and has limited access routes and community facilities.

The purpose of this study was to examine the knowledge of the people on hypertension with the aim of assessing their attitude and certain lifestyle practices that predispose them to hypertension and/or worsen their condition in known hypertensives, leading them to other complications.

Methods

The research design chosen for this study was a cross-sectional design. To be considered for this study, the potential participant must be an adult who is 18 years or above and have been a resident of Ahoe for not less than three months. A sample size of 302 participants were chosen out of the Population of Ahoe in Ho. Approval was sought from the Institute of Health Research (IHR), University of Health and Allied Sciences, Ho. A formal permission was secured from opinion leaders of the Ho-Ahoe Community prior to the commencement of the study. The purpose and objectives of the study were clearly explained to each respondent. A voluntary consent to participate in the study was acquired from each respondent.

Data was collected using a stratified random sampling. Out of two strata, respondents were sampled out conveniently until the needed sample size was achieved. A research questionnaire was used to receive feedback from the respondents to this study. The data collected was organized in Excel spreadsheets and analyzed using Statistical Package for the Social Sciences (SPSS) version 22.0 for Windows.

Results

Socio-demographic characteristics

More than half (55.4%) of the respondents were females. The mean age with standard deviation of the respondents was 34.09 ± 13.97 and majority (53.7%) of the respondents were aged between 20 to 29 years. The study showed that majority (96.9%) were educated, 47.6% of the respondents had attained secondary school education, 27.6% had attained tertiary education whilst 21.8% had attained basic education. A greater proportion (96.6%) of the respondents formed Christianity religion, 2.7% were of the Islamic religion and 0.7% were also of the traditionalist religion.

Knowledge on hypertension, complications and prevention

49% of the respondents said hypertension means increased force of blood through the blood vessels and most of them; 89.8%, 84.0%, 56.5% and 82.3% said hypertension causes stroke, heart attack, diabetes and heart failure respectively. More than half (54.1%) knew hypertension as a lifelong disease with majority indicating that hypertension can be controlled through the taking of antihypertensive medications (90.8%), exercising (92.2%), having less stress (85.0%) and

Table 1: Hypertension status of the respondents.

Parameter	Frequency	Percentage
Total	294	100.0
Known hypertensive		
No	239	81.3
Yes	55	18.7
When diagnosed		
More than a month	6	10.9
Less than a year	8	14.5
More than a year	41	74.5
On medication		
No	10	18.2
Yes	45	81.8
Taking medication		
No	16	35.6
Yes	29	64.4
Not taking medication		
I cannot afford	6	37.5
They are bitter	3	18.8
I am tired of taking them	7	43.7
Last time of checking blood pressure		
Less than a month	17	30.9
Less than a year	15	27.3
I don't remember	23	41.8

avoiding smoking (92.2%).

Risk factors for hypertension

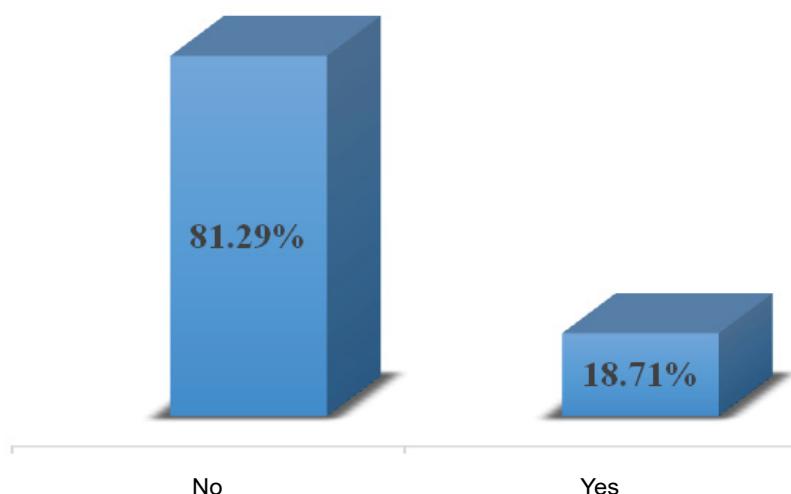
Also, 77.2%, 81.6%, 81.3%, 74.5% and 53.1% reported that excessive weight gain, excessive intake of alcohol, excessive smoking, excessive salt intake and ageing were risk factors of hypertension.

Hypertension status

Highly below half (18.7%) of the respondents were known hypertensives. Out of these, 81.1% of them were on antihypertensive drugs but only 64.4% were taking them. Among the 35.6% who do not take the antihypertensive drugs, 43.7% gave reasons of being tired of taking the drugs. 41.8% of the known hypertensives cannot remember the last time they checked their blood pressure. **Table 1** and **Figure 1** summarize the hypertensive status of the respondents.

Treatment choice

67.3% of the respondents do not take herbal medicine and about 44.4% of the total respondents who took herbal medicines took it since the time they were diagnosed. Also, 55.6% took herbal medication together with prescribed drugs with less than half (38.9%) informing their doctors about their intake of herbal medications during their visits to health care facilities. Moreover, 66.7% of those who took herbal medicines

**Figure 1:** Known hypertensives.**Table 2:** Treatment choice of respondents.

Parameter	Frequency	Percentage
Total	55	100.0
Take herbal preparations		
No	37	67.3
Yes	18	32.7
Duration of taking herbal preparation		
About a month ago	5	27.8
Since I was diagnosed	8	44.4
About a year ago	5	27.8
Take herbal medication together with prescribed drugs		
No	8	44.4
Yes	10	55.6
Informed doctor about herbal preparation usage		
No	11	61.1
Yes	7	38.9
Improvement on hypertension since taking of herbal preparation		
Yes, significant improvement	12	66.7
Yes, fair improvement	5	27.8
None at all	1	5.6
Seek cure for hypertension through prayer camp		
No	290	98.6
Yes	4	1.4
Outcome of seeking cure of hypertension from prayer camp		
I was cured	1	25.0
Nothing changed	3	75.0

reported significant improvement in their conditions and 75.0% sought for cure from prayer camps but did not get improvement ([Table 2](#)).

Attitudes and lifestyle towards hypertension

Majority (92.2%) of the respondents indicated that lifestyle changes can prevent hypertension with 94.9% ready to change their lifestyle to prevent hypertension. Only 3.7% were smokers out of which 54.5% last smoked less than a year. 61.6% do not drink alcohol whilst more than half (69.7%) do exercise ([Table 3](#)).

Discussion

Socio-demographic characteristics

The respondents in this study have similar characteristic with other studies in terms of gender, age, educational level and religion [[1](#)]. The study revealed that 55.4% of the respondents were females, indicating a possibility of higher incidence of hypertension among females. This is in consonance with Hage, Mansur, Xing, & Oparil when they posited that the prevalence and severity of hypertension rises particularly in women due to menopause, contraceptive use and pregnancy [[1](#)]. Also, a greater proportion (96.6%) of the respondents were Christians implying that most of the people may have belief in spiritual healing and are most likely to go to prayer camps to seek cure for hypertension. Segbefia, Oware-Gyekye and Akpalu espoused that some patients went to prayer camps to pray whilst others spent time in church praying as they believed that only God could heal them [[2](#)].

A greater proportion of the respondents to this study were aged between 20-29 (53.7%). This may imply that young adults are more dominant in the population and may contribute to more incidences of hypertension within the population later in life if they do not adhere to hypertension preventive measures. In a similar study, it was agreed that hypertension among young people

Table 3: Lifestyle and hypertension.

Parameter		Frequency	Percent (%)
Lifestyle changes prevent hypertension	No	23	100.0%
	Yes	271	100.0%
Healthy lifestyle is important in preventing illnesses	No	6	100.0%
	Yes	288	100.0%
Change lifestyle if needed to prevent hypertension	No	15	100.0%
	Yes	279	100.0%

is common, and that it affects 1 in 8 young adults aged between 20 and 40 years, with a higher possibility of increase due to lifestyle behaviors and lowering of hypertension diagnostic thresholds [3]. Also, though more prevalent in older people, an increasing incidence of hypertension in younger adults is being observed [4]. This study also revealed that 96.8% of the respondents had obtained some level of education which will translate into good knowledge of hypertension and its preventive activities. Education may be considered the best predictor of global cardiovascular risk in hypertensives and thus, has to be evaluated in the strategies of hypertension and cardiovascular risk management [5].

Knowledge on hypertension

The study showed that less than half (49.3%) of the respondents correctly explained that hypertension means increased force of blood through blood vessels. It implies majority of the people are not knowledgeable about hypertension and they are at risk of developing hypertension without recognition. This finding disagrees with Anowie and Darkwa who stated that more than half of the respondents (63.8%) correctly explained that hypertension occurred when one's blood pressure moved higher than normal [6]. Majority (89.8%) identified stroke as a complication of hypertension which can possibly translate into efforts to lower blood pressure to avoid this possible complication. Dickinson stated that strokes are strongly associated with hypertension because hypertension is also strongly associated with atherosomatous deposits blocking or narrowing brain arteries [7].

In this same study, 56.5% responded that there is a relationship between diabetes and hypertension which agrees to Ferrannini & Cushman stating that high blood pressure is reported in over two-thirds of patients with type 2 diabetes [8]. 54.1% knew hypertension as a lifelong disease and also showed that hypertension can be prevented through taking of antihypertensive medications, exercising, losing of excessive weight, having less stress, avoiding smoking, changing of unhealthy diet to healthy diet and reducing alcohol intake. A similar study reported that 56% of the respondents knew the benefit of stress reduction as Non-Medical Management (NMM) of hypertension [9].

Moreover, 81.6% of the respondents recorded excessive intake of alcohol as a risk factor for developing hypertension. Another study reported a positive relationship between alcohol consumption and the odds of a high blood pressure [10]. Also, 74.5% mentioned excessive salt intake. Other studies revealed that stress, high salt intake, high intake of alcohol and smoking were precipitating factors for hypertension [9].

Attitudes and hypertension

From the study, 90.8% of respondents agreed that taking of antihypertensive medications can control hypertension. This implies that the population is aware of the benefits of antihypertensives in controlling increased blood pressure, hence will be more willing to take their medications. To control Blood Pressure, adherence with antihypertensive medications as prescribed is essential [11]. Adherence is defined as the extent to which a person's behaviors (taking medication, following a diet, and/or executing lifestyle changes) corresponds with agreed recommendations from a health care provider [12].

Findings from the study showed that 85.4% of respondents admit that changing unhealthy diet to healthy diet has a high benefit of controlling hypertension. Dietary Approaches to Stop Hypertension (DASH) eating plan is widely known as an effective diet which was recommended for hypertensive patients to adopt in order to control blood pressure. DASH eating plan is a diet rich in fruits, vegetables, and low-fat dairy products with a reduced content of dietary cholesterol as well as saturated and total fat (modification of whole diet). It is rich in potassium and calcium content [13].

85% of respondents were of the view that less stress is vital in controlling hypertension. Similar finding revealed that 56% of the respondents knew the benefit of stress reduction as a Non-Medical Management (NMM) of hypertension [9]. 86.7% responded that reduction in alcohol intake is a vital decision in controlling hypertension. In another study, it was indicated that the initial direct effect of alcohol in humans is vasodilation, with secondary stimulation of the sympathetic nervous system and vasoconstriction [14]. Furthermore, 53.1% indicated that ageing is a risk factor for hypertension. This suggests that the population knows that their aged are at a high risk of developing hypertension hence are

likely to put in place preventive measures and regular checkups for the aged within the population. This agrees to another finding that espoused that the prevalence of definite hypertension increase with age and that the risk is two to three times higher in the elderly [15].

Hypertensive status

The study showed that only few (18.7%) were known hypertensives. This implies that most people are not hypertensive and that hypertensives form a small proportion of the entire population. With the appropriate preventive measures, its prevalence can be reduced drastically in the community. This agrees with another study that reported that the overall prevalence of hypertension in the Ghanaian population is 13.0% [16].

It was also revealed that 35.6% on antihypertensives were not taking their medications. There could be life - threatening complications in such participants as indicated by Ramli, Ahmad and Paraidathathu stating that poor medication adherence was found to negatively affect blood pressure control [17]. Out of the hypertensive participants who are on medications but are not taking them, 37.5% are not taking them because they cannot afford. This implies that quite a fair number of people would not adhere to the treatment regimen due to financial difficulties or restrictions hence leading to uncontrolled blood pressure as indicated in a similar study stating that people from low-income families had low adherence to hypertension treatment due to unaffordability of hypertension medicines [18]. In addition, this finding corroborates the observed association among poor compliance, ignorance, and lack of funds for the purchase of drugs [19].

Also, 43.7% of hypertensive participants who are on medications and not adhering to them because they are tired of taking the medications concludes that most people are at risk of becoming depressed or fed up due to the chronicity of the condition. Depression has been found to be significantly associated with non-compliance [20].

Treatment of choice for hypertension

32.7% of the participants responded yes to using herbal preparations to control their hypertension. This reveals the deep-rooted belief in plants' potency in hypertension control or management as equally agreed upon in another study which posited that an appreciable number of the population still use herbal medicine, indicating a belief in the healing potential of plants [21]. Thus, there is increased willingness in herbal preparation usage in hypertension management and further studies are required to examine the outcomes and possible side effects.

It came to light from the study that, 44.4% of the people that use herbal preparations to control hypertension, take it together with other medications

prescribed by their doctor. More than half of such people (61.1%) do not inform their doctors about their herbal preparations usage. This implicates the probability of possible drug-herb interactions which can produce fatal effects. Thus, communication between health care givers and their clients should be enhanced to eliminate this barrier. Herbal remedies are often taken in addition to prescribed drugs in hypertension control for which it is worth noting that most people do not tell their health attendants of their herbal remedies' usage [22].

It is seen that about 94.4% users of herbal preparations saw some level of improvements in their condition. This implies that herbal preparations play a key role as an alternative treatment for hypertension management. Complementary and alternative medicine is effective for hypertension in clinical use [23]. Only 1.4% of the respondents to this study responded yes to having gone to a prayer camp or spiritual center to seek for cure for their hypertension of which 25% responded to having been cured whilst the remaining 75% saw nothing changed about their condition. This implies that a larger proportion of the population do not attribute hypertension to evil spirits and spiritual forces but rather seek appropriate care and also put in measures to control the condition. This finding also brings into perspective the spiritual component of the health of the people as it also implies that people still hold on to their beliefs in a higher power or supernatural force for healing and cure from diseases such as hypertension. Some patients went to prayer camps to pray whilst others spent time in the church praying as they believed that only God could heal them [2].

Lifestyle and hypertension

Almost all (98.0%) of the respondents knew about the importance of a healthy lifestyle in the prevention of hypertension with 94.0% of respondents expressing their willingness to change their lifestyle if needed to control or prevent hypertension. It can be implied that much commitment will be shown in employing healthy lifestyle activities to prevent or control hypertension agreeing with a similar finding that says ample evidence supports the beneficial effects of healthy lifestyle modifications in the prevention and management of hypertension [24].

3.7% of the respondents do smoke. With smoking as one major risk factor to hypertension, this finding implies that fewer people in the population are at risk of hypertension as result of smoking. It can also be said that majority of the population are living healthy lifestyles that reduces their risk and vulnerability to hypertension as smoking is a very powerful risk factor for cardiovascular diseases. This is in line with Virdis, Giannarelli, Neves, Taddei, & Ghiadoni's assertion that smoking cessation is the single most effective lifestyle measure for the prevention of a large number of cardiovascular diseases [25].

Conclusion

The findings of this study provide information on knowledge, attitude and lifestyle practices pertaining to hypertension among the people of Ahoe - Ho. The study revealed that minority of the respondents had good knowledge about the symptoms, risk factors, complications and prevention of hypertension. The study also found out that majority of the respondents preferred antihypertensive drugs to herbal medications in the management and treatment of hypertension but most of them do not take the medications because they cannot afford the drugs.

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