

Knowledge, Attitude and Practices towards Hypertension among Adult Men and Women Attending General Clinic at Kitwe Teaching Hospital, Zambia

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Abstract: Evaluation of knowledge, attitudes and practices (KAP) is a very essential component of hypertension jurisdiction, but little information has been available in Kitwe Zambia where hypertension has been lately recognized as major public health problem. According to our knowledge, no study has been conducted to establish the levels of awareness about hypertension among adult hypertensive patients attending general clinic at Kitwe teaching hospital. A cross-sectional study was conducted in June, 2018 among randomly selected 150 participants aged 35 to 55 years at Kitwe teaching hospital using a pre standardized questionnaire. Collected data was analyzed using a statistical package SPSS version 20. Only 34.7% (52) had good knowledge. Radio, Television and Newspaper were the main source of information and 49.3% of the respondent had negative attitude. Our study has shown that most respondents had poor knowledge about hypertension. We recommend health authorities to devise interventions aimed at social and behavioral changes in order to address the gap highlighted in this study.

Keywords: Attitude, Knowledge, Hypertension, Practice, Kitwe District.

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Introduction

The epidemiology study of demography transition states that a long shift occurs in mortality and disease pattern, in that infectious diseases are gradually being replaced by degenerated and man-made diseases as the main form of morbidity and death (Omran, 2005). According to WHO (2013) global status report on non-communicable diseases kill about 78,000 people annually in Ghana, representing 354 deaths per 100,000 population. Hypertension still remains a condition unattended to like Tanzania since many people are unaware of it and the increasing of its prevalence. Those who know about it do not put in effort to avoid its risk factors and there no national programs at moment which control hypertension probably due to low death rate (Mlunde, 2007). As evidenced by WHO (2013), more than 30% of adults in African region have high blood pressure and proportionality is increasing. Not forgetting Zambia where there has been transition in people adopting western living patterns or culture;

risk factors like sedentary lifestyle, obesity stress, unhealthy diets and smoking. Knowledge of the factors that predispose to hypertension and other cardiovascular disease is important in that modification of lifestyle behavior to optimize cardiovascular health (Cutler, 1993). Health behaviors and sustained behavioral changes are among the proposed models despite differing in content and perspective. Models for behavior change iron out the importance of evaluating the perception, attitude, beliefs and outcome of individuals as a crucial means to understand behavior and changes. Proper assessment understanding of knowledge, attitude and practice towards hypertension is beneficial in areas of chronic hypertension, for which prevention and control impose a long life adoption healthy lifestyle.

The two separate studies conducted both in Lusaka urban areas showed that the prevalence of hypertension was 34.8% and was associated with age, sex, body mass index, alcohol consumption, sedentary lifestyle and fasting blood glucose as risk factors (Goma *et al.*, 2011) and Kitwe the prevalence was at 31.1% and was associated with age and body mass index (Siziya *et al.*, 2012). Kitwe Teaching Hospital is public third level tertiary hospital that services patients in the Copperbelt and other districts of Zambia. Many patients who come at KTH are seen in out-patient department (OPD) one and two. Knowledge, attitude and practice toward hypertension not well known. Hypertension is ranked as one of leading causes of medical admission and mortality among adult patients in the medical department at Kitwe Teaching Hospital similar to results at University Teaching Hospitals in Zambia (Nyirenda *et al.*, 2003).

KTH has a huge patient burden. Patient with different problem have to compete for the limited resources available and yet there is only one hypertension clinic that take care of other medical cases and there is no specialist ward or clinic that offer specialized care. Therefore, there is need to create awareness on this particular disease. Our study aimed at establishing the levels of knowledge, attitude and practice towards hypertension in adults attending general clinic at Kitwe teaching hospital and relate selected social demographics characteristics, knowledge and attitude with practices towards hypertension amongst participants.

Material and Methods

A cross-sectional study using quantitative research method and structured questionnaires was conducted among 150 randomly selected men and women aged between 35 and 55 years who were being attended to at Kitwe teaching hospital out-patient department one. The sample size was determined using statistical program in Epi info version 7.140. The approximated population of adult patients attending general clinic at medical OPD one in a month was 12,754 and sample size was determined at 5% level of significance and P=50% used in a previous study sample size came to 150 participant. Adult men and women in the age group 35 to 55 years that reside in Kitwe and these people should be willing to give consent were included in the study while those aged below 35 or above 55 years, non-Kitwe residents and those who did not give consent. A standardized questionnaire was utilized to collect data on social-demographic factors such as Gender, Marital status, Education status, Age and smoking and three areas of knowledge, attitude and practice towards hypertension. The researcher checked the questionnaires at the end of each day for completeness.

The researcher designed data entry screens using SPSS version 20 that was used by data entrant to translate the paper questionnaire into electronic data for analysis. A supervisor reviewed the accuracy of each questionnaire at least once and corrected any result data errors before analysis. Data was analyzed using SPSS version 20, descriptive statistics were used to

tabulate and describe the data. For analytical statistics, Chi-square was used. The study was reviewed and approved by the Tropical disease research Centre (TDRC) IRB No 00002911). The objectives of the study were explained to the participants and informed consent formally obtained. All respondent records were kept confidential as only research staff had access to their data.

Results

The demographic characteristic of the sample are summarized in Table 1. Most (54.7%) participants were aged 45-55. The majority (52.7%) participants were female and 80% were married.

Table 1. Distribution of Respondent by Demographic Characteristics (n=150)

Variable		No of general population	Percentage %
Age	35-44 years	68	43.3
	45-55 years	82	54.7
	Cumulative	150	100
Sex	Male	71	47.3
	Female	79	52.7
	Cumulative	150	100
Marital Status	Married	120	80
	Single	17	11.3
	Divorced	13	8.7
	Cumulative	150	100
Education Level	Primary	67	44.3
	Secondary	62	44.1
	Tertiary	21	14
	Cumulative	150	100
Smoking	Smoker	30	20
	Non-smoker	120	80
	Cumulative	150	100

Table 2 summarizes the participants' knowledge on hypertension. Nearly 3 out of 4 had good knowledge on hypertension.

Table 2. Respondents Knowledge on Hypertension (n=150)

Indicators	Yes (%)	No (%)
Do you know anything about a disease called hypertension?	105 (70%)	45 (30%)
Do you any disease associated with hypertension?	62 (41.3%)	88 (58.7%)
Does the diet rich in salt cause hypertension?	75 (50%)	75 (50%)
Is smoking the major cause of hypertension?	65 (43.3%)	85 (56.7%)
Is obesity associated with hypertension?	81 (54%)	69 (46%)
Does exercising play a beneficial role in hypertension?	70 (46.3%)	80 (53.3%)
What the symptoms of hypertension?	71 (47.3%)	79 (52.7%)
What are the complications of hypertension?	68 (45.3%)	82 (54.7%)

Overall knowledge

Common principle used to score knowledge about hypertension included questions about hypertension signs, symptoms, causes and complications. This principle generated eight multiple-choice questions, each of which scored one point for correct response and zero for the rest. The figure below shows results.

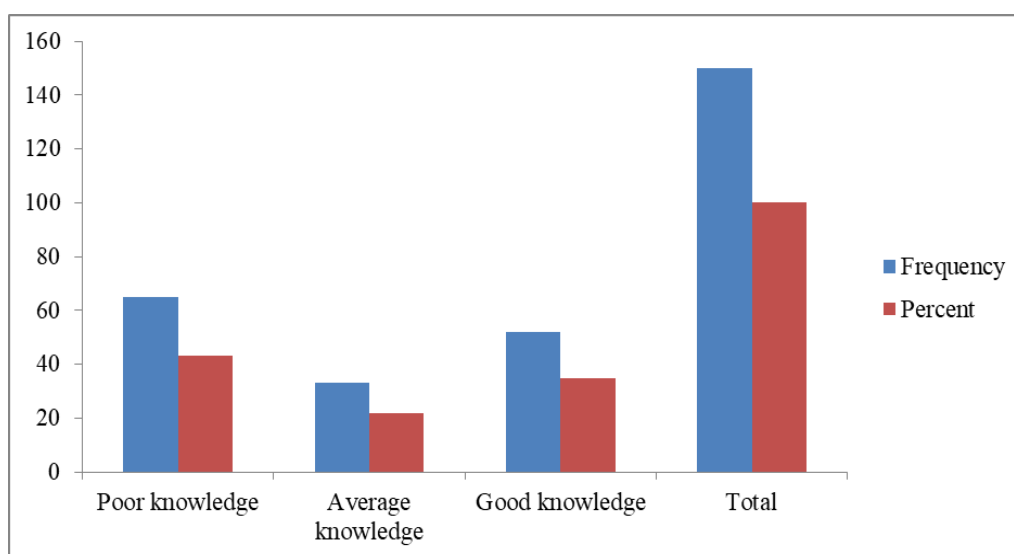


Figure 1. Respondent knowledge on Hypertension

About 47.3% respondent scored “poor” while 34.7% had “good” about hypertension. The mean knowledge score was 4.07 out of 8 possible points (SD± 2.42). Among participants, 35% reported receiving information on radio stations, television and newspaper.

Attitude towards hypertension

Participants’ attitude responses are summarized in table 3. The majority (52.3%) indicated no need to reduce table salt intake in their diets.

Table 3. Participants Attitude Response of Hypertension (n=150)

Indicators	Yes (%)	No (%)
Should we reduce salt intake to prevent hypertension?	73(48.7%)	77(51.3%)
Do you think regular checking of our blood pressure levels is important?	88(58.7%)	62(41.2%)
Should we keep in touch with the physicians regularly?	87(58%)	63(42%)
Do you think regular medication is important in hypertension?	74(49.3%)	76(50.7%)
Should we exercise regularly for health life?	68(45.3%)	82(54.7%)

Practice toward hypertension

Participant answered five questions related to practice and prevention of hypertension in a survey and these are summarized by table 6. Most (74%) participants could not remember their last blood pressure reading.

Table 4. Respondents Response on practice (n=150)

Indicators	Yes (%)	No (%)
When was your blood pressure checked last?	39(26.6%)	111(74%)
When was your last visit to your physician?	47(31.3%)	103(67.7%)
When was your blood sugar level checked last?	39(26%)	111(74%)
When did you have gone for exercise last?	47(31.3%)	103(68.7%)
Are you on any medication for hypertension?	33 (22%)	117 (88%)

Discussion

Based on the findings, most respondent had poor knowledge 49.3% or (Score 0-3). It seemed that low education level contributed to poor knowledge as most respondent had only attained primary education 44.3%. Despite Kitwe having a lot of high schools this was not the case regarding respondent knowledge about hypertension. Similar associations were reported in the study (Kusuma *et al.*, 2009). The lack of knowledge of each respondent should be given attention for good practice and fill the gap of 10% to 100% as studies report that there is a positive correlation between knowledge and good attitude (Ambigapathy *et al.*, 2003). Most respondent had little information about the particular factors of hypertensions (especially signs, symptoms and complications) as identified by overall KAP (Oliveria *et al.*, 2005). In addition average respondent have heard about the hypertension associated diseases such diabetes mellitus 50% and the other 50% have not heard about diseases associated with hypertension. Comparing findings that some elders, African-American ethnicity agreed about hypertension associated disease and the other some did not agree with this idea (Viera *et al.*, 2008).

The results of this study indicate respondent level of education and with hypertension practice have significant association. Those that have attained tertiary education tertiary education have better hypertension practice as compared to those who attained primary and secondary education. Only 4% of those who attained tertiary education were classified "poor". The relationship between level of education and hypertension practice is similar to findings of a study in Iran where results showed that the level of hypertension knowledge is high in those that are educated (Fakhri *et al.*, 2011).

Age also had no association with hypertension practice. One would have suspected that respondent in the age group 45-55 years had better practice since hypertension is common in this age group and also more likely to come across information on good practice at health centre when they go to see their physicians. This age group is more at risk when it comes to having hypertension and other studies have shown prevalent it is (Fakhri *et al.*, 2011).

Regarding hypertension attitude, it was poor. Here it was observed that 45.3% of respondent agreed that habit of exercises is associated with health life. Many studies have proved the beneficial role of physical activities in improving blood pressure control. The attitude of population regarding regular medication was not very poor 49.3% of respondent having positive attitude was compared with other studies that had a similar finding (Demaio *et al.*, 2013). A lot of studies showed that respondent perceived medication and exercise as the only solitary interventions moderately effective at preventing high blood pressure. Attitude toward respondent visiting their physician was good 58% and the attitude of respondent for less salt intake was poor may be due to lack of awareness pertaining this important issue.

Concerning hypertension practice, questioned showed that very few respondents had a positive practice overall. Only 26.6% of the respondents had their own blood pressure checked in the last six months. Poor practice regarding regular blood assessment as well as exercise although some were involved in walking, jogging, running and climbing of stairs. The following were identified as respondent barriers to practice health lifestyle: lack of education, lack of commitment, financial barriers and lack of interest in issues concerning health correspondingly to (Anowie and Darkwa, 2014). Transitions coupled with urbanization and industrialization has been seen as the end outcome in extreme life styles changes globally (Aubert *et al.*, 1998). Comparing other past studies done on hypertension conducted in different areas of the world and before this study the subsequent conclusion provided such as its association with low levels of awareness, drug medication and blood pressure control.

Authors' contributions: MJ conceptualized the study, participated in the protocol preparations, data collection, drafting of manuscript. VM participated in the conceptualization of the study, protocol preparation and revision of manuscript. EK participated in protocol preparations, supervised data analysis, interpretation of findings and preparation of the manuscript.

Conflict of interest: None.

Conclusion

Generally, most of the people had poor knowledge about hypertension practice. We recommend health authorities in Kitwe District to come up with intervention aimed at social and behavior changes primarily target the gap in practice highlighted by the study.

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