

Original Research Article

Factors affecting health seeking behaviour in hypertensive patients of Imenti North sub county, Kenya

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Received: 26 September 2020

Revised: 14 November 2020

Accepted: 19 November 2020

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ABSTRACT

Background: Prevalence of non-communicable diseases like hypertension is raising hence a burden to low resource countries like Kenya. Purpose of the study was to determine factors affecting health seeking behaviour in hypertensive patients in Imenti North sub county, Kenya.

Methods: A cross-sectional study design and cluster random sampling method was used to select five health facilities for study. Purposive sampling was used to select total of 212 patients from selected health facility proportionally. Spearman's Rho correlation and bivariate logistic regression was used to check for strength of associations.

Results: Patients interviewed had an average of 51 years and higher proportions were above 40 years of age. Married and female patients were (66.5%), and 60% respectively. An average of (42%) had a secondary level of education. Knowledge on lifestyle modification strategies was above average (68%).

Conclusions: Health education given during hypertensive clinics had positive influence. Slow service delivery, long queues and the long waiting times for laboratory investigation results influenced patients' health seeking behavior negatively. The study recommends the government of Kenya to develop policies on implementation of support groups among hypertensive patients in all hospitals and intensify campaigns on importance of seeking medical attention early. This will empower the patients on knowledge of hypertension management. The study also recommends health care providers to ensure reduced waiting time for the patients.

Keywords: Factors, Health seeking behaviour, Hypertensive patients, Hypertension

INTRODUCTION

Hypertension is considered a great contributor to non-communicable disease (NCD) load in both developing and also developed countries, especially in developing countries where diagnosis is done at late stages.¹ Hypertension is also known as a "silent killer" and it is mostly detected when it has caused damage to important body organs like the Heart, brain or kidneys. This will eventually result to complications such as kidney failure, stroke and heart diseases.² Motivational interviews have

shown excellent results in improvement of adherence of patients and participation of the intended audience. This measure can be very effective when primary health care approach is applied.³ A study in Pakistan showed that out of 50 participants 20 were females and the remaining were males.⁴ This showed that male respondents were more affected by hypertension than their female counterparts.

In general, it has been shown that the women had a better control status than the men.⁵ Literature indicates that

factors such as economic status, education level, knowledge and distance to health facilities influence health seeking behaviour.⁶ Based on data obtained from health information system indicates that in Imenti North Sub county there were 3,593 cases of hypertension reported in 2013, 4419 cases in 2014, 3774 cases in 2015, 3,728 cases in 2016 and 2570 cases in 2017. This shows that the number of individuals suffering from hypertension has been persistently high.⁷ In Imenti North Sub County, there are about 3616 cases of patients with hypertension. Despite numerous drugs and combination therapies to manage blood pressure, control of high blood pressure remains low as extrapolated from persistently high level of hypertension prevalence rate. The patient knowledge of hypertension in Imenti North Sub County and how they apply other complementary strategies such as lifestyle modification strategies is not well documented.⁷

Statement of the problem

Previous studies have suggested that lack of knowledge and poor patient adherence to recommended therapy such as lifestyle modification are possible reasons for low rates of blood pressure control. Cases of hypertension remains persistently high in Imenti North Sub County despite compliance to a range of drugs administered. This may be as a result of lack or poor complementary management strategies such as health seeking behaviour. The patient's knowledge of lifestyle modification in Imenti North Sub County and how they apply complementary strategies and health seeking behaviour is not well documented hence need for this study.

Objectives of the Study were to determine factors affecting health seeking behaviour in hypertensive patients of Imenti North Sub county.

METHODS

Area of the study

The study was conducted in Imenti North Sub County in Meru County, among hypertensive patients attending outpatient services in selected health facilities. These facilities included; Runogone dispensary, Nthugu dispensary, Gakoromone dispensary, Giaki Sub district hospital and Meru teaching and referral hospital. Study period was between March 2019 to February 2020. Imenti north Sub County is one of the nine sub counties of Meru County. The headquarters of Meru County, which is at Meru town, is located within Imenti North Sub County.

Research design

For the purpose of achieving the objectives of this study, cross sectional design was adopted. This specific design was found to be ideal for use in this study because it gave vital information on health seeking behavior and lifestyle modification of hypertensive patients in Imenti North Sub

County, in managing their hypertensive condition. This design was relevant because also a few people considered to be representative of the population were studied.

Population of the study

The study population comprised of hypertensive patients of ages of 18 and seeking hypertension services in health facilities of Imenti North Sub County. According to health information system (HIS) in Meru County the estimated population of the hypertensive patients is 3616. There may be other hypertensive patients who do not seek their services in the county health facilities therefore may have not been included in this figure.

Sampling

Nassiuma asserts that a coefficient of variation of at most 30% and a standard error of $2\% \leq e \leq 5\%$ is acceptable in most surveys. In this study a coefficient of variation of 30% was used and a standard error of 0.02.⁸

Nassiuma gives the formula as follows;

$$\text{Sample size- } n = \frac{Nc^2}{c^2 + (N-1)e^2}$$

Where, n=sample size, N=population from which sample is obtained, 3616, C=coefficient of variance, 30%, e=standard error, 0.02

Therefore, the sample size is-

$$n = \frac{3616(0.3)^2}{0.3^2 + (3616 - 1)0.02^2}$$

$$n=212$$

Sampling procedure

Cluster sampling and purposive sampling method were used. Cluster random sampling was utilized to choosing the health facilities that were included in this study. Firstly, clusters were formed by dividing health facilities as per the five administrative wards in the sub county; this gave a total of five clusters. Simple random sampling of one health facility in each cluster was carried out. This gave a total of five health facilities. For each selected health facility purposive sampling of the participants in the outpatient who met the inclusion criteria was carried out in order to make a representative size of 212 in total. The sum of participants for each selected facility was allocated proportionately depending on average monthly number of hypertensive patients, as shown in the Table 1.

Inclusion and exclusion criteria

Inclusion criteria included patients who were re-attendances with hypertension and obliged to be involved in the study.

Exclusion criteria excluded new cases of hypertensive patients and those re-attendances unwilling to be involved in the study.

Table 1: Proportionate sampling of participants.

Name of facility	Administrative ward	Number of participants per facility	Percentage of the participants
Runogone dispensary	Nyaki West	37	17
Nthungu dispensary	Ntima West	22	10
Giaki sub district hospital	Nyaki East	31	15
Gakoromone dispensary	Ntima East	22	10
Meru teaching and referral	Municipality	100	47
Total		212	100

Data collection instruments

The data collection tool that was a structured questionnaire attached in appendix I. The items in the questionnaire were organized to reflect the purpose of the study as well as research questions. The questionnaire was divided into four parts namely A, B, C, and D. Section A comprised of demographic data (Age, gender, marital status and level of education). Section B comprised of ten questions on knowledge of hypertension. Section C comprised of five questions practice of lifestyle modification strategies and section D comprised of seven questions on health seeking behaviour of hypertensive patients. The respondents were requested to give the information regarding five recommended strategies for blood pressure control. These were; knowledge on recommended dietary salt intake, the frequency of physical exercise, weight monitoring, alcohol intake and smoking effects on blood pressure. In relation to practices of the recommended strategies, the respondents were expected to give honest information on their daily practice of the recommended strategies. After responding to the questions, an average of the respondents' blood pressure was determined using the last three blood pressure findings for the current and previous clinic. Using the WHO guidelines, the researcher established those respondents with normal ranges of blood pressure and those whose blood pressure was above the normal ranges.

Pretesting

A pretest was done in Githongo Sub County hospital to pretest the questionnaire. According to Mugenda, a sample for pretest study should be (1-10%) of final sample size.⁹ A random sample of 20 research participants with the desired characteristics was selected and the questionnaire administered to them. In this, the questionnaire was standardized to ensure that the questions provided the desired answers. For easy reading and comprehending the content of the questionnaire, Flesch reading easy score was used. The test indicated 82% readability score. Comments made by the

respondents were used to improve the instrument in making it clear and understandable to the respondents.

Validity

The questionnaire was checked by experts from Chuka university for face and content validity. Their main task was to critically examine the questionnaire and determine whether the content was in accordance with the study objectives. During pretesting, content and construct validity was ensured. The questions that were giving distorted information were reconstructed and tested for validity according to the objectives of the research.

Reliability

In order to ascertain that the research instrument was dependable, the instrument was pre tested in Githongo Sub county hospital which was not part of the actual study. Ten participants were selected for the pretest study which represented point zero five of the sample size.

Data analysis

After the data was collected it was coded and analysed using statistical package for social science (SPSS) for windows version 24.0. Statistical methods for description like frequencies, proportions and measures of dispersions were utilized to give a detailed account of the socio-demographic, knowledge, lifestyle and health seeking variables. The relationship linking the study variables was tested by use of a chi-square.

Ethical considerations

The main ethical issues to be addressed in this research proposal include privacy during data collection for the purposes of confidentiality of the subject's information that will not be divulged to any other person unless as authorized by the subject when necessary. An informed written consent was obtained from subjects following a detailed explanation on the nature and reasons for the research. Names of subjects were kept anonymous by writing numbers on the questionnaire instead of their

names. Site approval was obtained from Imenti North Health administration before starting data collection. To avoid plagiarism all materials in this study were referenced appropriately. This study was approved by ethics and research committee of the university of Chuka for review and permit for carrying out the study obtained from national council of science and technology (NACOSTI).

RESULTS

Demographic characteristics of the participants

The study involved patients who already diagnosed to be hypertensive. The study established that (60 %) of the respondents were female. The mean age of the respondents was calculated to be 52.64 ± 2.6 years, with majority of them being above 40 years. A considerable number of respondents, 84 (42%) were secondary education holders, followed by primary education 45 (22.5%) and 44 (22%) had a no formal education; the remaining respondents had tertiary level of education. Majority of patients 133 (66.5%) were married, with 22 (11%) singles, 33 (16.5 %) separated and 12 (6%) who had been divorced. The Table 2 shows a summary of the characteristics of the respondents.

Table 2: Demographic characteristics of the respondents.

Variable	Category	Frequency	Percentage (%)
Age (years)	18-28	10	5
	29-39	38	19
	40-49	92	46
	Above 50	60	30
Gender	Male	80	40
	Female	120	60
Level of education	No formal education	44	22
	Primary	45	22.5
	Secondary	84	42
	Tertiary	27	13.5
Marital status	Single	22	11
	Married	133	66.5
	Separated	33	16.5
	Divorced	12	6

Health seeking behavior among hypertensive patients in Imenti North

Majority of the patients 97 (48.5%) had been diagnosed to be hypertensive during routine medical checkups, 62 (31%) had been diagnosed during medical screening program, 39 (19.5%) were diagnosed during emergency services and 2 (1%) were diagnosed after being admitted with some other illness or during pregnancy.

This shows routine medical checkups and medical screening program can be utilized to diagnose as much as possible people with undiagnosed hypertension. Patients and relatives should be screened for hypertension since the condition does not present with pain.

Table 3: Point of diagnosis for hypertensive patients.

Point of diagnosis	Frequency	Percentage (%)
Routine medical check up	97	48.5
Medical screening program	62	31
During emergency services	39	19.5
When admitted with a different condition	2	1

Availability of medicine and personnel

Almost all of the respondents, 192 (96%) were on medication to regularize their blood pressure. Out of all these only 135 (67.5%) were taking the medication as prescribed. The remaining proportion gave their reasons as follows; 21 (10.5%) took the medication only when the blood pressure was high and never took them when having normal blood pressure, 12 (6%) were unable to afford the medicine after completing the dosage given from hospital, 4 (2%) reported that the prescribed drugs were not available, 7 (3.5%) didn't like the medication taste, 6 (3%) didn't take the medication due to related side effects, and 14 (7%) forgot to take the medicine.

Table 4: Reasons for not taking antihypertensive drugs as prescribed.

Reason	Frequency	Percentage (%)
Didn't like the medication taste	7	3.5
Related side effects	6	3
Take it only when blood pressure is high	21	10.5
Cost (unable to afford)	12	6
Availability of drugs in the chemists	4	2
Forgot to take medication	14	7
Took medication as prescribed	135	67.5

Those patients who didn't get their medication in the hospital, 185 (92.5%) reported to have bought their medicine from chemists/ pharmacies while 15 (7.5%) got helped by family/ friends who are hypertensive and using the same medicine. Interestingly, none of the respondents reported to have sort use of herbal medicine as an alternative for the prescribed medicines, instead they sort alternative point of sale of the same drugs and most of them got them from their preferred chemists or pharmacies. Majority of the respondents bought their prescribed medicine from their preferred chemists; this was associated with their perceived effectiveness from

those chemists. Some members reported that whenever they got medication from the government health facility, these drugs never helped them. The same was contradicted by others who were buying the drugs from government health facility because they were relatively cheap.

Patient waiting time at the facility

Majority of the respondents 131 (65.5%) reported to attend regular blood pressure checkup as advised by the health care provider. Most of those who had irregular blood pressure checkups, 20 (10%) cited long waiting time at the hospital for the checkup, 29 (14.5%) never found it necessary and 10 (5%) reported cost implication in terms of affordability of drugs and distance to health facility to be the deterrent. Other patients reported that whenever they were ok and not feeling sick, they never opted to seek health care services.

The social status of the respondents relatively affected their health seeking behavior, the patients whose income was from permanent employment, sought health care services from private hospitals while majority of the farmers sought health care assistance from the government health facilities whose cost was relatively affordable. The respondents reported to have less waiting time when seen in private and long queues in public facility. Majority of the respondents 67% obtained their medication from government health facilities. This was associated with subsidized cost of the medication. Slightly less than average, 48% of the respondents reported to seek health care assistance from the hospital depending on the severity of the disease. In this, the respondents had been asked to indicate what makes them seek health care services from a health facility. Unlike communicable diseases which present with pain, hypertension is a silent killer. The respondents reported to seek health care services when they had severe headache and inability to see well. These are true manifestations of high hypertension or hypertensive crisis.

DISCUSSION

Health seeking behaviour

In this study, most of the patients were taking their medication or sought health care services in case the blood pressure was high. The patients sought health care services in case of severe headache or difficult in seeing well. In the normal parameters, the patient never took the medication. Some reported cost of the drugs as a hindrance especially if the medication they were given from the hospital was over and they needed to buy from the chemists. The social status of the respondents influenced on where they sought their health care services; either from government facility or private hospital. Source of income and type of employment didn't significantly affect the choice to seek health care services. Cost as hindrance to health care seeking was

reported in a study on health seeking behavior among elderly hypertensive patients in India, the results in the study had shown the cost of services and medicine as a hindrance.¹⁰ In another study, the elderly were found to seek health care in case of other health problems and not necessarily hypertension, these included conditions like diabetes and chest problems. These results are congruent with the results in this study as the participants reported to seek health care services when sick regardless of the specific condition.¹¹

The patients who had normal blood pressure reported to have good health seeking behavior. In this study gender was not a determinant of seeking for health care services. These results differ with those of carried out in Nigeria which revealed that among the women with normal blood pressure, 84.6% had good health seeking behaviour whereas among women with elevated blood pressure, only 14.1% had good health seeking behaviour; 21.8% had average health seeking behaviour and 50 patients (64.1%) had poor health seeking behaviour these results are evident that there is an association between health seeking behaviour and blood pressure control as it was assessed and the results showed that women's blood pressure control is significantly associated with the presence of knowledge seeking behaviour, adherence with carbohydrate restriction, fat and salt restriction, stress reduction measures, regular exercise, intake of antihypertensive drugs and regular follow up.¹² For the satisfactory management of rural patients, providers of health care services will need to have understanding and display a kind heart in order to enhance interpersonal relationship and adequate communication with the patients. In addition, the health care providers need to display certain qualities such as being sensitive, creative, and integrity and be watchful to patient's preconception of their illness and the required health seeking behavior. Openly questioning health beliefs of a patient can likely result to default and also failure of treatment particularly if patients have chronic illness such as hypertension and have a misconception that is acute and does not require long term treatment.¹³ Involvement of advanced practice personnel in patient management has shown to improve outcomes by accurate diagnosis and early detection of health problems.¹⁴ Attitude of healthcare providers has been a factor in influencing health seeking behaviours and uptake of healthcare services.^{15,16} Telehealth services can be provided to improve health seeking behavior in areas far from health facilities.¹⁷

Limitations

The researcher's presence during data collection was unavoidable and this may have affected the subjects' responses.

CONCLUSION

Availability of the drugs prescribed during the hypertension clinics and the cost of both the service and

drugs was a predictor of health seeking behavior. Long waiting time and staff's attitude was also reported to be a determinant for seeking health care services. It was evident that most of the clients sought health care services only when they were sick or needed help for their health problems.

Recommendations

The study recommends health care providers to ensure availability of the drugs used in management of hypertension and reduce the waiting time for the patients. Health care providers to practice home visiting, educate patients and the community at large on the importance of seeking medical attention early enough to avoid complications.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee and permit given by NACOSTI

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Cite this article as: Mwenda AK, Kirigia C, Kamweru PK, Gitonga LK. Factors affecting health seeking behaviour in hypertensive patients of Imenti North sub county, Kenya. Int J Community Med Public Health 2021;8:37-42.