



Barrier of Hypertensive Drugs among Patients in Tanzania: Case Study of Southern Highlands, Tanzania

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Abstract

Experience with patients shows that prescribed drugs for treating hypertension disease fail to work effectively, causing high mortality rates in African Ethnic types. This situation has resulted in the query as to why the situation exists. The study was conducted to investigate factors affecting the failure of hypertension drugs among patients suffering from the disease. Particularly, the study aimed at examining cultural, individual and financial factors affecting drug failure among Tanzania patients. The sample consisted of 300 respondents from Afya Medicare Specialized Clinic and Mbeya Referral hospital in Tanzania. Questionnaires were distributed and interviews were conducted with patients and their caretakers, doctors and nurses in both health centres. The study revealed that the drugs fail to provide relief to the patients because of the negative attitude towards the consumption of the drugs in the belief that the diseases affected only rich people and developed countries. From the findings, it was concluded that education should be provided to the patients as well as their caretakers on the fact that the disease can affect anyone and emphasize preventive measures.

Subject Areas

Cardiology

Keywords

Barrier, Hypertensive Drugs, Mortality, Cultural Factors, Tanzania

1. Introduction

Hypertension is a form of cardiovascular disorder that results from a wide range of inter-connected ontologies. Untreated and uncontrolled hypertension leads to

structural and functional abnormalities of cardiovascular system, which ultimately harm the vital organs of body, e.g. heart, failure and chronic kidney diseases [1]. The experience with patients shows that prescribed drugs for treating hypertension diseases fail to work effectively, causing high mortality rates in African Ethnic types. Whereas this situation has resulted in the query as to why the situation exists [2]. The study was conducted to investigate factors affecting the failure of hypertension drugs among patients suffering from the disease. Particularly, the study aimed at examining cultural, individual and financial factors affecting drug failure among Tanzania patients.

2. Methods

Cross-sectional descriptive comparative study was utilized, the study was conducted in two different hospitals in Mbeya and Njombe regions, which are Afya Medicare specialized clinic and Mbeya Referral Hospital in Tanzania. And 300 patients were recruited from the all two medical out patients general clinics of Afya Medicare specialized clinic and Mbeya Referral hospital. The eligible respondents were selected by systematic randomized controlled sampling method. The study was conducted for a period of 4 months from August to November 2021.

2.1. Study Area

The study was conducted in two different hospitals in Mbeya and Njombe regions, which are Afya Medicare specialized clinic and Mbeya Regional Referral Hospital in Tanzania.

2.2. Sample Size

Three hundred (300) patients were recruited from the all two medical out patients general clinics of Afya Medicare specialized clinic and Mbeya Regional Referral hospital.

2.3. Sampling Methods

The eligible respondents were selected by systematic randomized controlled sampling method.

2.4. Study Period

The study was conducted for a period of 4 months from July to November 2021.

3. Results

The demographic and clinical characteristics of the 300 individuals, who were identified at the study site, are as described below:-

Table 1 shows the Gender of individuals with hypertension in interviewed in the study, according to the data observed, 51.3% of individuals were female and 48.7% were male. This implies that most of women especially in the southern

highlands of Tanzania are Hypertension case, and this may be due to the lifestyle around the area.

Table 2 shows the frequency at which patients forget the intake of their medications, according to the observed data, 62.3% of individuals forget to take their medications on time and others forget completely to take the medication either purposely or unintended, and 37.7% do not forget their medications. The results imply that most of patients with hypertension fail to improve due to resistance of taking their medications as required and instructed. The graph (**Figure 1**) below illustrates more details.

Table 3 indicates the frequency of medication intake within the past two weeks where by 56.7% shows that most of the patients didn't follow the medications as they were prescribed with their medical personnel, and 43.3% shows that they did not forget taking their medications in the past two weeks, these results imply that most of patients hate following the given procedures.

Table 4 indicates the frequency at which the patient has ever stopped or taken medication without consulting the doctor, whereby 62.0% of the interviewed individuals shows that they stopped medications without telling their medical instructors and 36.0% shows that they follow the instructions very well. These results imply that a high number of individuals with hypertension have resistance to medications due to ignorance and other factors such as social issues and lifestyle.

Table 5 shows that 52.3% of people when they travel or leave home they sometimes forget to take their medications with them, and 47.7% of people

Table 1. Gender.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	154	51.3	51.3	51.3
	Male	146	48.7	48.7	48.7
	Total	300	100.0	100.0	100.0

Table 2. Do you sometimes forget to take your medications?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	187	62.3	62.3	62.3
	NO	113	37.7	37.7	37.7
	Total	300	100.0	100.0	100.0

Table 3. In the past two weeks were there any days when you did not take your medications?

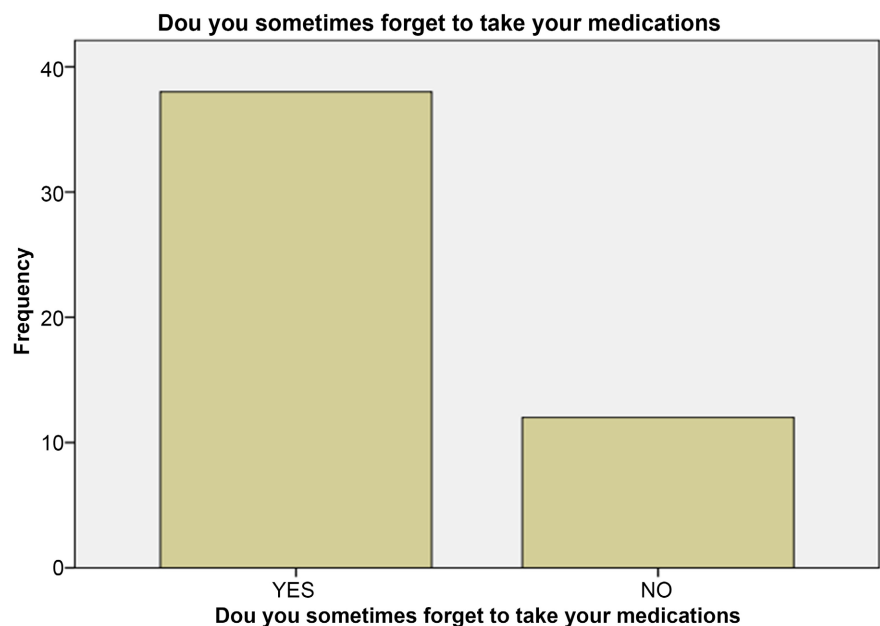
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	170	56.7	56.7	56.7
	NO	130	43.3	43.3	43.3
	Total	300	100.0	100.0	100.0

Table 4. Stopped or taken medication without telling a doctor.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	185	61.7	61.7	61.7
	NO	130	38.3	38.3	38.3
Total		300	100.0	100.0	100.0

Table 5. When you leave/travel, do you sometimes forget to take your medications?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	YES	157	52.3	52.3	52.3
	NO	143	47.7	47.7	47.7
Total		300	100.0	100.0	100.0

**Figure 1.** Represents Frequency of medication intake.

do remember their medications when on leave or travel. These results imply that, a high number of individuals taking the maintenance dose do not comply with their treatment plan which leads to resistance to some of medications to some of the patients.

4. Discussion

Hypertension remains a perplexing medical condition among the non-communicable disease of ever developing population [3] [4]. Efforts to switch Hypertension include increasing public knowledge and attentiveness about the risks associated with high blood pressure [5] [6] [7]. The study was conducted to investigate factors affecting failure of hypertension drugs among patients suffering from the disease.

The National High Blood Pressure Education Program was launched to improve the public's knowledge of hypertension in 1972 [8] [9] [10]. Data from the National Health and Nutrition Examination Survey (NHANES II and NHANES III) reported an increase in BP awareness during the time period 1976-1991 from 51% to 73% [11] [12] [13]. Some other studies have assessed knowledge, Awareness and Medication Adherence in Patients with Hypertension from Tertiary care centre from Northern Sri Lanka and revealed that most of patients of 69.9% had adequate knowledge about hypertension [13] [14].

This study revealed that, the drugs fail to provide relief to the patients because of the negative attitude towards the consumption of the drugs in the belief that the diseases affected only rich people and developed countries. Moreover, it was found out that some of the respondent associate the disease with witchcraft, hence, seek alternative drugs and that early and frequent usage of the drugs and that, early and frequent usage of the drugs only worsens their condition. In addition to that, it was discovered that, in some cases, the drugs do not work effectively due to financial difficulty and failure to follow instructions as directed by their physicians/doctors.

5. Conclusion

Barrier to hypertensive drugs to patients is increasing daily due to laziness of medication intake, economic factors, local beliefs and religious beliefs, patients' not believing that health depends on medicine, adverse drug reaction, poor knowledge of disease and ignorance of long-term treatment, forgetfulness, insufficient communication, lack of reminder on clinic dates, being away/on vacation and too many medications to take. Therefore, education should be provided to the patients as well as their caretakers on the fact that the disease can affect anyone and emphasize preventive measures. Along with this, heavy investment is needed to create awareness of cardiovascular diseases among the population by individuals, organizations and the government of Tanzania so as to seek solutions to the problem. Investment should also aim at supporting patients who cannot afford to buy the drugs in order to reduce high death rates resulting from the inability of the patients to afford the drugs.

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Availability of Data and Materials

The datasets analysed during the current study are available from the corresponding author upon reasonable request.

Ethics Approval

The review was conducted after approval by the joint ethical research committee of the Mbeya Regional Referral Hospital and Afya Medicare Specialized Clinic, particularly the Department of Internal Medicine, and community medicine and research.

Conflicts of Interest

The authors declare no conflicts of interest.

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Abbreviations

BP—Blood Pressure; MRRH—Mbeya Regional Referral Hospital; AMSC—Afya Medicare Specialized Clinic.