

## Expectations of hypertensive patients attending the GOPC of the University of Calabar Teaching Hospital, Calabar

AN Gyuse<sup>\*,\*</sup>, P Adat<sup>b</sup>, NE Udonwa<sup>a</sup> and UJ Ndebbio<sup>b</sup>

<sup>a</sup>Department of Family Medicine, Faculty of Medicine & Dentistry, College of Medical Sciences, University of Calabar, Calabar, Nigeria

<sup>b</sup>Department of Family Medicine, University of Calabar Teaching Hospital, Calabar, Nigeria

\*Corresponding author, email: ngugyuse@yahoo.com

**Background:** Hypertensive patients' expectations are a major determinant of treatment outcomes. This study was undertaken to determine the pattern of expectations of hypertensive patients as a basis for modification of the care given to them.

**Methodology:** This was a descriptive hospital study involving 260 hypertensive patients aged above 20 years, randomly selected. Study participants were engaged in patient-centred consultation during each visit. Their socio-demographic characteristics were collected using a semi-structured questionnaire, while the expectations of the hypertensive patients were also assessed. Their blood pressure was measured on three (3) occasions at two-monthly intervals. Data were analysed using SPSS version 20.0 and data were presented in tables.

**Results:** The majority of the respondents (161, 61.9%) were females while the males numbered 99 (38.1%). Most (219) of the respondents were older than 40 years and had some form of education. The majority of the respondents needed information on hypertension (85.3%), expected that the hypertensive medication they would be given would lower their blood pressure (88.5%), and expected a cure of their hypertension (70.4%). There were some respondents who did not have any expectations.

**Conclusion:** Hypertensive patients have varying illness expectations that can be explored using the patient-centred consultation strategy to improve treatment outcomes.

**Keywords:** Calabar, expectations, hypertensives, patient-centredness, UCTH

### Background

Hypertension is a global health challenge that affects people of all age groups, all sexes and cuts across all socioeconomic classes.<sup>1,2</sup> It constitutes 4.5% of the current global burden of disease and affects approximately one billion people worldwide with 340 million of those affected living in economically developing countries.<sup>3</sup> Annually, it causes 7.1 million (or one-third of) global preventable premature deaths.<sup>4</sup> The global prevalence of hypertension among adults was recently estimated to be 26.6% in men and 26.1% in women.<sup>5</sup> The balance of disease tilts in favour of females after 50 years of age.<sup>6</sup>

Hypertension in black individuals has long been recognised as occurring earlier in life, being more severe and having closer links to blood-pressure-related target-organ injury than in Caucasians.<sup>7</sup> Generally speaking black people have a higher prevalence of hypertension than white people.<sup>8–10</sup> It is also thought that cultural influences such as health behaviour, access to health care and environmental exposures may all affect blood pressure. In sub-Saharan Africa, hypertension has emerged as a major public health concern due to rural–urban migration coupled with modernisation trends, which are characterised by sedentary lifestyles and consumption of food rich in refined carbohydrates and animal fat.<sup>11</sup> It is estimated that over 20 million people in the region are affected by hypertension<sup>9</sup> and the prevalence has been reported to be on the increase in recent years because of the aforementioned factors.

In Nigeria, hypertension ranks first among the non-communicable diseases with over 4.3 million Nigerians above 15 years classified as being hypertensive, with a prevalence rate of about 25%.<sup>9</sup> Prevalence rate of this magnitude creates a significant burden on the already limited health facilities of developing countries like Nigeria

where there has been an ongoing battle with communicable diseases. As a consequence of an increasing adult population of patients with hypertension and its complications, countries like Nigeria will experience economic losses from the disease and the already weak health facilities could be further stretched if the tide is not stemmed.

A major cause of treatment failure with attendant negative consequences is adherence, which in itself is also affected by the illness experience of hypertensive patients. Thus, understanding the illness experience of hypertensive patients will help in employing measures to improve adherence and consequently treatment outcomes and the overall well-being of the patients.

Illness experience is the way in which people define and adjust to perceived interruption to their health because illness has both a biomedical and an experiential dimension.<sup>10</sup> The bio-psychosocial model of care seeks to understand these social, cultural and psychological aspect of the patient through the use of the Fear, Ideas, Function, and Expectation (FIFE) family tool, which was developed specifically for use in primary care.<sup>11</sup> The understanding of the psychosocial perspective is very important in the management of chronic illness like hypertension as patients have to live with the disease for the rest of their lives.

Different approaches have been undertaken in studying the expectations of patients in primary care, such as that taken by Zebiene *et al.* in Lithuania where evaluation of expectations was done prior to consultation and then after consultation to ascertain how much those expectations were met.<sup>11</sup> Another approach was taken by Ogedegbe *et al.* in African-Americans in which open-ended questions were used after which the responses were grouped into patient's role, physician role and medical effects.<sup>12</sup> The method in the US study seem appropriate

as a pilot study showed responses that could be broadly categorised into patient's role, physician role and treatment or long-term outcome.

The term expectation is often used to indicate what patients hope will happen whether or not they explicitly verbalise their expectation as a request or not.<sup>12</sup> It may also refer to what the patients perceive to be necessary in their care.<sup>13</sup> These expectations may be biomedical as well as non-biomedical.<sup>14</sup> In the current millennium, there has been increased access to medical information through the Internet and mass media, alongside the traditional sources such as peers etc. Consequently most patients who come for consultation have expectations based on their understanding of the illness, based on the information they have received rightly or wrongly. The degree to which these expectations are met influences the patients' perception of the quality of the consultation experience and thus patients' satisfaction.<sup>15</sup> These expectations form a yardstick by which patients measure the course of recovery, occurrence of complications and disease outcome.<sup>16</sup> Exploring patients' expectations is important in ensuring health care of the highest quality. Specifically patients' whose expectations have been met have good resource utilisation, adherence to recommended treatment and reduced request for medication and procedures, while those who have unmet expectations are less likely to be satisfied with their care.

It is known that recognising patients' expectations and meeting/modifying them form an important task for primary care physicians. However, not much has been done by primary care physicians in our environment to study and understand the expectations of patients and to address them. This study was undertaken to determine the pattern of expectations of hypertensive patients. This could then form the basis for modification of the care given to these patients in an attempt to improve adherence to care measures and overall outcome of management of their chronic disease.

## Materials and methods

This was a descriptive hospital-based study involving 260 hypertensive patients attending the General Out-Patient Clinic of the University of Calabar Teaching Hospital (UCTH) from September 2011 to February 2012.

UCTH is the largest health facility located within the Calabar Metropolis, the capital city of Cross River state in Nigeria. The hospital offers both specialist and primary care services to inpatients and outpatients. The GOPC of UCTH where this study took place offers a walk-in policy and no referrals are required before patients are seen. The UCTH receives patients from Cross River state, the neighbouring states of Akwa Ibom, Benue, Ebonyi and Abia, and the Cameroon Republic. Patients also come from other parts of Nigeria based on choice and convenience.

The sample size was determined using the formulae  $Z^2pq/d^2$  and the sample population was made up of consenting hypertensive patients who were 20 years of age and above. Systematic random sampling was employed to arrive at the expected sample size calculated. Patients with major communication difficulties and those who were too ill to participate in the study were excluded.

All the study participants were engaged in patient-centred consultation during each visit focusing on the information they require concerning their illness and treatment modalities, cause of their disease and expected duration of treatment.

Socio-demographic characteristics of the study participants were collected using a semi-structured questionnaire. The expecta-

tions of the hypertensive patients were assessed by use of a Likert-like response scale. Then, based on these direct questions using standard qualitative techniques, patients' responses were grouped into a taxonomy of three categories reflecting physician's role, medication effects, and long-term outcome of disease.

Data were analysed using SPSS version 20.0 (IBM Corp., Armonk, NY, USA) and data presented in tables. Ethical approval for the study was received from the UCTH Health Research Ethics Committee.

## Results

A total of 270 adult patients with hypertension were recruited for the study. Ten patients did not present for follow-up and so were dropped from the study giving a respondent rate of 96.3%. The sociodemographic characteristics of 260 patients is presented in Table 1.

The majority of the respondents (161, 61.9%) were females, while the males numbered 99 (38.1%). Most (219) of the respondents were 40 years or older, while only 16.1% were aged below 40 years. Married patients (67.9%) were more numerous than single patients (6.35%) in this study. Civil servants were the predominant group of respondents (96, 36.9%) in the study population. Most of the respondents in the study population (83.5%) had some form of education, while only 12.7% had no education.

Table 2 shows that 184 (70.7%) of the respondents strongly agreed that they needed information on hypertension, 38 (14.6%) agreed to this as well, while 21 (8.1%) did not know if they expected information on hypertension, and the rest did not expect information on hypertension.

**Table 1:** Socio-demographic characteristics of study participants ( $n = 260$ )

Variables	Frequency (N)	Percentage (%)
Age (years)		
20-29	8	3.1
30-39	33	12.6
40-49	68	26.2
50-59	92	35.4
60 and above	59	22.7
Sex		
Male	99	38.1
Female	161	61.9
Occupation		
Civil service	96	36.9
Trading	73	28.1
Farming	26	10.0
Schooling	10	3.8
Unemployed	13	5.0
Artisans	26	10.0
Retired	16	6.2
Education		
None	33	12.7
Primary	61	23.5
Secondary	81	31.2
Tertiary	75	28.8
Others	10	3.8

**Table 2:** The pattern of hypertensive patients'/respondents' expectations

Expectations	Response	Frequency (n)	Percentage (%)
Receive information on hypertension from caregivers	Strongly agree	184	70.7
	Agree	38	14.6
	Don't know	21	8.1
	Disagree	15	5.8
	Strongly disagree	2	0.8
Hypertensive drugs will lower BP	Strongly agree	152	58.5
	Agree	78	30.0
	Don't know	15	5.7
	Disagree	9	3.5
	Strongly disagree	6	2.3
Treatment will cure their hypertension	Strongly agree	173	66.5
	Agree	10	3.9
	Don't know	40	15.3
	Disagree	21	8.1
	Strongly disagree	16	6.2

One hundred and fifty-two (58.5%) respondents strongly agreed that they expected the medication they would be given to lower their blood pressure; 78 (30.0%) patients agreed with this as well. Fifteen (5.7%) respondents did not know if they expected their drugs to lower their blood pressure, while the rest did not expect that the medication given would lower their blood pressure.

A total of 173 (66.5%) patients strongly agreed that they expected a cure of their illness while another 10 (3.9%) agreed but not strongly. A good number were not expecting cure of their hypertension (21, 8.1% disagreed; 16, 6.2% strongly disagreed), while the rest were not sure if they could be cured (40, 15.3%).

## Discussion

The study found that a good number of respondents (85.3%) required information about hypertension and its management. This finding is similar to that found among African-Americans, where hypertensive patients said they expected their physician to educate them on the disease management and outcomes.<sup>12</sup> Another study in a group of primary care patients found that they expected information regarding the disease and disease process.<sup>17</sup> In Pakistan a study among hypertensive patients found that the patients expected their physician to educate them about hypertension.<sup>18</sup> Also in a Spanish study it was found that patients did not adhere to their treatment because their clinical encounter with the doctor was viewed as unsatisfactory because of its length, the doctor did all the talking, and was very impersonal.<sup>19</sup>

These are reasonable expectations because such information may help patients to cope with the illness while also helping them to improve on their self-care. This is more so because, during consultation, the family physician/primary care physician may not release information spontaneously or explore the expectations of their patients due to lack of time, laziness on the part of the physician or lack of knowledge that this should be part of the consultation process. This is despite the fact that giving patients information will help them to make informed choices about their treatment while also increasing their trust in their physician and improving the doctor-patient relationship.<sup>12</sup> Given the number of patients who required information about hypertension and its management in this study it is clear that patients no longer want to be passive partners in their care but, rather, active participants

in their care and management. This was also found among an African-American population in a study which found the patient population expected to take an active role in their treatment, especially as it relates to adoption of healthy behaviours.<sup>12</sup>

More than three-quarters (88.5%) of the respondents expected their antihypertensive drugs to lower their blood pressure. This finding is similar to that of the study carried out in New York, USA where some respondents indicated that they expected a good physiologic response to their antihypertensive drugs.<sup>20</sup> The result of this study showed a high degree of trust in the effect of the antihypertensive medication, which should be encouraged and explored to enhance adherence. It is also thought that such trust among many of these patients presenting in a primary care clinic may be based on their personal experience and understanding of their illnesses. These expectations and perceptions are often influenced by their cultural backgrounds, beliefs, attitudes and level of understanding of the disease in question.

Close to three-quarters of them (70.4%) expected to be cured of hypertension, which differs from the biomedical view that hypertension is generally treatable and not curable. This was elaborated in a study among a population of African-American patients where, despite the fact that they had appropriate expectations, a considerable proportion of them had non-biomedical expectations of their treatment with 38% expecting a cure, and the same number (38%) not expecting to take their medications for life and 23% wanting to take medications only with symptoms.<sup>12</sup> The expectation to be cured may also be because many patients in our country when diagnosed with hypertension are worried about the long-term consequences such as stroke and other complications, most time because of a relative, neighbour or friend suffering these consequences. A similar result was found among an Israeli population where it was found that people with hypertension tend to see hypertension not as a disease but as a risk factor for myocardial infarction or stroke.<sup>21</sup>

Meeting the expectation of patients through the health care provider is a major indication that the health care system is functioning and responsive to the health care needs of the population it serves.<sup>17</sup> This must be tailored and relevant to the expectations of the population in focus. An attempt at understanding the expect-

tations of our patients was made by tailoring the questions to the expressed areas of the patients' expectations.

Physicians should see the consultation as an opportunity to give patients realistic expectations in this era of informatics and glamorisation that leads to unrealistic expectations such as expectation of a cure for hypertension. If this is not addressed properly, it could lead to patient frustration, risk of poor adherence to treatment and avoidable complications.

### Conclusion

This study supports the fact that hypertensive patients have varying illness expectations that can be explored using the patient-centred consultation method. Given the various expectations concerning hypertension and its management by participants in this study, it is important to have patients become active participants in their care by creating the appropriate environment through patient centredness for them to verbalise their expectations in order to aid the physician to tailor their management to meet the patient's needs. This will enhance the healthcare experience of our patients, and consequently the doctor-patient relationship and treatment outcomes.

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