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Research Article

Perceived Poor Quality of Care for Cardiac Patients in Nigeria: The Need to Optimize the Structure and Process of Care

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ABSTRACT

Heart disease is a public health concern. Data on the quality of care given to patients with heart diseases in Nigeria are not readily available. This study explored cardiac patients' perception of the quality of care given to them in Nigeria. A mixed method design was used in this study. One hundred and twenty-six patients with heart diseases were recruited into this study through purposive sampling technique. A questionnaire adapted from previous studies was used to collect quantitative data from the patients. The data were analyzed using descriptive statistics of percentages and graphs. Focus group discussion was used for qualitative data and was analyzed using content thematic analysis. The mean age of the patients was 55.31±15.64 years. Patients with heart diseases perceived different aspects of the structure and process of care as poor. Areas that were perceived as poor were poor teamwork among health care providers, prolonged waiting time, poor health record keeping, and inadequate information on treatment. Quality of care for cardiac patients in Nigeria was perceived as poor by patients. Process of care particularly teamwork in Nigeria is the major problem affecting quality of care for cardiac patients apart from structure of care

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INTRODUCTION

Cardiovascular disease poses major and growing threat to the public health and is a major contributor to the burden of disease in low and middle-income countries (World Health Organization, 2020). The growing demands to provide care appropriate to the needs of people with heart disease are significant. Private and public policymakers are continually examining and introducing multidisciplinary efforts to improve the quality and cost effectiveness of care for patients with heart diseases, therefore assessing quality of care forms an aspect of a comprehensive approach to formulating evidence-based goals for patient care and it is a significant component of the continuous quality improvement program (Saila et al, 2008; Obi et al, 2018: Došen et al, 2020). Effective collaboration of health care professionals in the care of patients with heart disease is sacrosanct and will usually result in quality care for the patients which implies the delivery of services in a way that is safe, timely, patient centered, efficient, and equitable (Ashton, 1995; Donabedian, 2005; World Health Organization, 2006)

Research on quality of care for patients with heart diseases is routinely conducted in developed countries with the aim of improving the quality of care (Mconnell et al, 2013; Chou et al, 2018). Studies on quality of care have been conducted in many developed and developing countries (Fonarow et al, 2007; Chou et al, 2018; Došen et al, 2020). Studies on quality of care in Nigeria are sparse with no study focused on the quality of care of patients with cardiac diseases, nor did any study explored the patients' perception qualitatively. Since heart disease is an important condition of public health concern and tertiary hospitals are the best centers for heart disease management in Nigeria, it is important to investigate the quality of care at a tertiary hospital in Nigeria. We hypothesize that the quality of care in our study center will give us insight into what is happening in Nigeria generally as far as cardiac patients care is concerned. This study was therefore designed the explore the perception of cardiac patients on the quality of cardiac care given in Nigeria with a focus on structure and process of care

MATERIALS AND METHODS

This study was a part of a larger study exploring both health professionals and patients' perception of quality of care for cardiac patients in Nigeria

Ethical consideration: Prior to the commencement of the study, Ethical approval was obtained from the Research Ethics Committee of the University of Ibadan/University College Hospital Ibadan, with approval no: UI/EC/14/0112. The purpose of the study was explained to the cardiac patients, and informed consent to participate in this study was obtained from all the participants.

Research design: Mixed method study using focus groups discussion and questionnaires to assess cardiac patients' perception of the quality of care given to them at the tertiary hospital being studied.

Participants: Patients diagnosed with cardiac disease who were receiving cardiac care at the medical wards and outpatient cardiac clinic at the UCH Ibadan for at least three months.

Sampling and sample size calculation: Purposive sampling technique was used to select the participants of the study. A sample size of 109 was estimated, however to allow for 10% non or incomplete response, 126 patients completed the questionnaire.

Measurement tools

Modified Service Quality questionnaire (SERVQUAL): An adapted and validated service quality questionnaire was used to measure the patients' perception of quality of care. Demographic data was obtained using a bio-data form. The adapted Servqual questionnaire is a 25 item profile scale with three subscales which are structure of quality of care subscale, process of quality of care subscale and outcome of quality of care subscale. The scale of measurement is ordinal scale. The structure of quality of care subscale assessed the patients' perception on medical equipment, facility, information system, and staff. The process of quality of care subscale assessed the patients' perception on the care providers' competence, waiting time to see the doctor, relationship between the health professional and the patient, prevention and treatment of heart disease. The outcome of quality of care subscale assessed the patients' satisfaction with care. The internal consistency of the items of the questionnaires was tested using Cronbach's alpha coefficient. Cronbach's alpha coefficient for the developed questionnaire for patients is 0.84. For easy description, response options such as disagree, strongly disagree, and neither agree nor disagree were grouped as poor quality of care while responses such as agree and strongly agree were categorized as good quality of care.

Focus group discussion: The focus group discussion was facilitated by a moderator who was knowledgeable in the techniques of focus group discussion. Three focus group discussions were conducted, each session consisted of four to six participants and lasted 60-90 minutes. Consent to audio tape discussions was obtained. Notes were taken by an independent observer who took down important information during the discussion. Questions on staff relationship, treatment process, and outcome of care were asked during the discussion. The moderator asked other questions and used probes as necessary to stimulate the discussion. The recorded information from the discussion was transcribed verbatim by a transcriptionist.

RESULTS

Response rate: All the questionnaires given to participants were returned giving 100% response rate.

Profile and characteristics of the participants: One hundred and twenty-six patients with heart disease participated in the survey. The mean age of the patients was 55.31±15.64 years. Other demographic characteristics is as presented in table 1

Perception on Quality of Care: Six of the eight items of the structure were perceived as good. The two items of the structure of care that were perceived as poor were availability of informative brochures and clinic having a system for error free and fast retrieval of documents. Patients' outcome of care was assessed based on their satisfaction with the quality of care. The overall perception of the participants is presented in table 2.

Table 1:
Sociodemographic characteristics of Participants

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	74	58.7
	Female	52	41.3
Educational qualification	No formal Education	5	4
	Primary	12	9.5
	Secondary	26	20.6
	Tertiary	83	65.9

Table 2:
Participants' perception on quality of care

Variables	Frequency (n)	Percentage (%)
Perception of structure of care		
Good	69	55
Poor	57	45
Perception of outcome of care		
Satisfied	105	83
Dissatisfied	21	17

Findings from the result of the qualitative component of the study

Structure of Care: Three sub-themes emerged in relation to structure of care namely poor staff strength and administrative issues such as poor health records keeping, and appointment time. Patients observed that the healthcare providers were few in number compared to the influx of patients. Some of the discussants had this to say *"They should employ more doctors to reduce the stress and the number of people who will be on seat waiting. If there are more doctors, the work will be faster".*

Some administrative issues such as fixing of clinic appointments and poor keeping of records were perceived by the patients as negatively affecting the quality of care. As regards the fixing of treatment appointments, a participant had this to say;*"If you want to see the doctor now, doctor will say, we give six to seven months to come back, that time is too long. It should be flexible, so that it will be easy for us."*

As regards the keeping of health records they all expressed a desire for better service that is easier to access. Some participants had this to say;*"I will take it from the records people. No human relations at all. They are nasty, they ask us questions, they shout at you, theirs is zero." "The only thing I want to say is that our file, they don't keep it for us so if we were here like three months, or 4 months ago, when we come again, they say they cannot see the file again. Just go and open another file.*

That is what happened to me the last time. They didn't treat me with my file. The last time they gave me only one sheet of paper. The sheet is here with me now".*"The day I had my crisis, I went to do a test, it is not my clinic day yet. But where I did the test, they said I should go and see my doctor in UCH. I got to the records, they look at the report card, they said NO, this is not your clinic day. I said yes, I'm bringing this report from the doctor that I saw. Do you know they deny me seeing the doctor that day? Before the next clinic day I suffered heart failure and I was rushed here and admitted. So if I did not face that ordeal with record, probably that wouldn't have occurred. But I'm not taking that up. So, anybody can cause set back in an organization or in an environment. What the record can do to smash the image of the hospital can be enormous. So we have to really just watch out for every single person that works here. I think the time they are giving us as appointment, they should give us room. Before that day, if you have the cause to come and see them, it should not be cumbersome to be able to do that"*

Process of Care: Patients reported that the care providers lacked good communication skills. They pointed out that they were not given adequate information concerning their treatment. The discussants explained that the care providers do not always carry them along during treatment and they are not given enough explanation on the reason why diagnostic tests are being conducted.

"We have done ECG over and over again. I don't know what we are waiting for?" "I always go for tests. They asked me to go for blood and urine tests to find out if I have diabetes; they told me that there is too much protein in my urine. I did the test. They said I should go for kidney test. Does it mean that I should be going for test every time?"

The discussants observed that the practice of team work among care givers in the cardiac clinic was dwindling. A discussant had this to say;

"I think maybe there is a breakdown in communication between certain departments. "physio" and "cardio" should work together. There are a lot of people coming to MOP that I see that they just need more of physiotherapy, and should not just be told to go and do exercise. What exercise? How? We don't know, Go and do exercise? How do I know what exercise if I have never exercised in my life?"

It was observed that the poor communication skill of the care providers could be due to lack of team work and pressure of work. Some discussants had this to say;

"The treatment the doctor and the nurses are given us, out of 100, they can score 70%. Most of the nurses they don't have manner of approach. I think if they learn how to talk to their patient, the patient will rate them very well"

"And the way the nurses reacted yesterday, I was moved in my bed. I told my wife that I will just put on my clothes and walk out of the ward."

"Then there is another thing that I notice. The nurses and the doctors are always at logger heads. The nurses and doctors can be so rude to themselves that you wonder. The nurses are "fire for fire" so the doctors and nurses are always at logger heads so we patients are afraid to talk. If you want to complain to the doctor, you don't want to complain because this nurse will be nasty to you. When the doctors are insulted, they take it out on the patients; when the patient reports to the doctor, the nurse takes it out on you when he is gone."

The discussants reported that they had little opportunity to build effective relationship with their care providers because they were changed from one doctor to the other. This was clearly expressed by a patient:

''I noticed that you are just changed from one doctor to another. No definite doctor to attend to you at a particular time. So it is as if you are starting anew. If there could be a way somehow, that at least you see a definite doctor, You know that relationship you have with the doctor…, it makes you more confident; So they don't have to start asking you the same questions over and over again; and I think we need to have some doctors where we are booked under."

In addition, the patients complained about the amount of time they need to wait before they see the doctor. Patients were expected to report in the hospital at least two hours before clinics start for preliminary routine nursing procedures. To add to this, an average out-patient clinic runs for four to five hours. This means that some of the patients may have to wait for six to seven hours before they are attended to by doctors.

"One can just say that the crowd, looks much and probably that might be affecting the time limit they will be able to spare to each and every patient".

"Some people will come by 8 O'clock and they will leave by 4. It shouldn't be the case. They will keep me waiting like they are keeping an energetic person." "I just felt it is too long for me because I know my health.

Consequently, they expressed their concern that this can lead to suboptimal care due to lack of time for comprehensive assessment.

"That day one doctor came here and said… do things fast, fast. The people are many outside."

These are what the discussants had to say about the cost of treatment

"You know before, the cost was very low. At least there was a time we were paying 250 naira for consultant fee. But they have tripled the money, and there are many tests to do. I mean it is not favorable to the poor masses. So if the people in authority can do something about it to reduce the money.

"We shouldn't pay more, it shouldn't be much, we should pay less.

"I will like to just suggest that, probably they will have to categorize thisfees, like it's done overseas, the U.S. particularly, when I get there, I'm in the class of senior citizen, what I will pay there, for consultation, it's not the same thing with the teenager or people in the working age will pay. So, I don't pay as much as people who are still in active service are paying over there. So, if it is the same thing here, we that are 60 years and above, should be in the category of people who will not pay much, but people in active service who can still afford to pay more, and they can categorize, children can pay less and that will solve the problem."

Outcome of Care: The discussants felt the treatment they were receiving was effective. They reported seeing improvement in their health status.

"oh well, I mean, I am satisfied because I know how the situation in year 2012 was when this thing started and I know it is not getting worse, rather it is improving…."

DISCUSSION

The importance of assessing patients perceived quality of care cannot be overemphasized. Research have shown that getting views of the patients on care services is a much realistic tool to evaluate and improve health care services since it is based on direct users of care (Patel et al, 2008; Prakash, 2010). The evaluation process encourages patients to play active roles in their treatment and helps the health professional identify areas of service improvement including the optimization of cost of health expenditure. Generally, findings of the quantitative and qualitative components of quality of care were conflicting in some areas such as process and some structure of care therefore the quantitative component showed good quality of care in many areas while the qualitative component showed poor quality of care in many areas. These disagreements in some of the findings could be because of the important observation that was made during the discussion which was; most of the patients felt they were at the mercy of the health care professional and don't have any other option in terms of where to get specialist care, so they didn't want to sound ungrateful concerning the treatment they were receiving until they were further probed. This can be traced to the fact that patients' perceptions are influenced by sociocultural background of patients, their beliefs, attitudes and level of understanding (Agency for Healthcare Research and Quality, 2009).

Many patients reported good quality of care for the medical equipment, facility, and staff in the quantitative. These findings are supported by some studies where patients perceived the facilities as having good quality of care (Ahmed et al, 2011; Adindu, 2010). However, items such as "clinic having a system for error free and fast retrieval of documents" and "availability of informative brochures" were reported to portray poor quality of care. Findings from the qualitative data revealed further that patients were dissatisfied with structure of care. Areas such as poor staff strength and administrative issues such as poor health records keeping, appointment time, and the cost of care were identified as portraying poor quality of care. In line with this finding, some other studies have shown similar results where patients were dissatisfied with the cost of care, manpower, and timing of treatment (DeSilva et al, 2006; Al-azri et al, 2003). Inconvenient timing or appointment timing was discovered in another study to be responsible for patients having more preferences for private clinics than public hospitals (Baba, 2004).

Many of the items of process of care from the quantitative component were perceived as having good quality of care especially experienced care providers; and items on prevention and treatment of heart diseases. These findings are supported by previous studies (Al-Mahtab et al, 2007; Gadallah et al, 2003). Some of the areas perceived as poor in the quantitative component were also indicated in the qualitative components of the study as having poor quality. Items such as prompt services, waiting time to see doctor and information on cardiac rehabilitation, were perceived as showing poor quality of care in the quantitative aspect while in the qualitative aspect areas such as inadequate provision of information on treatment plan, prolonged waiting time, poor team work among healthcare professionals, poor communication skills, and poor relationship with care providers were highlighted as depicting poor quality of care. The findings on poor communication skill and prolonged waiting time are supported by previous studies on quality of care (Al-Mahtab et al, 2007; Verulava, 2018). On the other hand, this finding does not agree with some other previous studies which show that patients perceived the communication skills of care providers, relationship with care providers and waiting time to see doctor as good (Kumari et al, 2009; Cunningham et al, 2006). In those studies, team work was effective in those locations. Where team work is good, there is usually good communication, relationship and mutual respect among health care providers which result in better care for the patients. Obviously, Nigeria is still struggling with good team work and standard of practice in health care delivery. This is particularly worrisome in the management of cardiac patients whose need for interdisciplinary approach is critical. The need for inter professional education is very pivotal in many developing countries like Nigeria.

Patients' experience of prolonged waiting time can be resolved by giving specific appointment to each patient, rather than giving a single appointment to all patients to be attended to at a clinic. The number of doctors available in a clinic should be considered in giving appointment to patients. Patients reported that their hospital files sometimes get missing and this made them to perceive the system for records keeping at the center as poor. Consequently, some patients expressed the fear that continuity of their care might be hampered. Incidentally this problem was also reported by patients who participated in the quantitative strand of this study. There seems to be urgent need for the center to improve on its health record keeping system. Monitoring of movement of patients' health records and their retrieval can be facilitated by computerizing and networking patients' data across all clinics and wards in the center. The center policy makers can embark on regular training of healthcare providers on information and communication skills in order to improve the provision of information to patients.

The results revealed that most of the patients perceived both the quantitative and qualitative aspect of the outcome of care as having good quality. This result suggests that their

perception of outcome of care was not dependent on good structure and process of care as many aspects of structure and process of care were perceived as having poor quality of care rather their perception may have been influenced by an aspect of process of care which is the presence of experienced care providers seeing they observed positive changes in their health condition. This is consistent with findings from other studies that showed higher levels of patient satisfaction with quality of care (Andaleeb, 2008; Verulava, 2018). On the whole, the fact that patients with heart diseases perceived the quality of care at the center as poor may have a bearing with the prevailing poor economy and inadequate technology of developing countries in relation to health care system. The findings of this study are consistent with findings from other developing countries.

In conclusion, this study shows that the structure and process of quality of care for patients with heart disease at Nigeria's center for cardiac care needs is suboptimal. Aspects of structure and process of care that were perceived by patients as poor were poor teamwork, poor staff strength, poor system for record keeping, inadequate information on treatment, and prolonged waiting time. It is a fact that some of these problems raised by patients are also seen in developed countries, however, poor teamwork and record keeping and lack of information for patients observed in Nigerian cardiac center is not a major problem in developed countries. There may be the need to investigate the health system to deal with these problems.

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