Quality Health Service Delivery and Patient Satisfaction in Teaching Hospitals: A Critical Review

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ABSTRACT

Patient satisfaction form part of the guiding principles of teaching hospitals in meeting the needs of their patients. There have been a lot of studies that exist as to the definitions and factors of patient satisfaction in private hospital. Yet, the subject of patient satisfaction in teaching hospitals has been less researched although its importance cannot be questioned. Patient satisfaction in the teaching hospital is particularly important, because for a teaching hospital to achieve greater involvement of the patients in the healthcare process, patient’s complaints and to avoid their dissatisfaction, the patients will decide not to receive their healthcare treatments from other healthcare institutions. Patient satisfaction in teaching hospitals is a complex one due to the highly complex professional service nature which cannot always present a clear outcome. This makes it very difficult for people to judge the abilities and competence of the medical and non-medical staff that provide medical care at teaching hospitals. Also, a consensus in the literature as to what is, and what are the factors of patient satisfaction in teaching hospitals is still far from being reached. It is therefore critical for the administrators that the true state of patient satisfaction is known. To achieve this, most administrators of teaching hospitals embark on research to feel the pulses of the patients who come to the teaching hospitals and discover ways of serving them better. However, deciding the right instrument and methodology to effectively measure the satisfaction level of patients is a major challenge for the administrators and researchers. This review paper tries to discuss what constitutes satisfaction in the perspective of the patients and the types of approaches and type of methods that can be adopted by practitioners or researchers to unveil the factors that are responsible for patient satisfaction.

Keywords: Patient Satisfaction; Quality Health; Service Delivery; Teaching Hospitals

INTRODUCTION

In the past decade, there has been an increase pressure on teaching hospitals to deliver quality services to the patients who come to the hospital and also improve their service delivery to meet the high demands of the modern day patients¹. Many researchers and practitioners in recent years have done a lot of study to discover new ideas and new technological ways of getting to know the changes in the patient’s demands anytime they visit the hospital, and how best the administration of the teaching hospitals will satisfy these demands of the patients any time they visit the hospitals. Teaching hospitals are hospitals that deliver a higher level of healthcare to their patients. Teaching hospitals are responsible for training new generation of physicians who are going to serve as the frontrunners in medical research and technology. Graduate medical education is the final phase of training for physicians who will
successfully complete medical school. Teaching hospitals are the heart of graduate medical education. Therefore, teaching hospital administrators will not just go into making research, actually there are many reasons why healthcare institutions like the teaching hospital may conduct patient satisfaction study. It could be that the teaching hospital would want to find out their strength and weakness in order to mount out a detailed strategy to improve their procedure and process at the teaching hospital; or it could also be that the hospital wants to reduce cost in order to retain old patients whilst on the other hand, attracting new patients. These teaching hospitals will go in these researches because there may be an external force such as; the regulators, healthcare providers, health insurance authorities, government who may be demanding these researches and sometimes, it may be a demand from the patients. From all the reasons given, the teaching hospital’s main aim is to always remain popular among other healthcare institutions and also to become very competitive in the healthcare market. One of the main reasons why healthcare institutions will like to conduct a research study is that, it is the only way the hospital administration will get the feedback from the patients to help them improve on their services and also make the patients know that their views and criticisms to the development of more consumer focused services is important. To improve the quality of service delivery at the teaching hospital, the hospital administration should be able to find out the strength and weakness of the hospital through research results, this will help them to know the factors they have to employ to amend their weakness in order to improve the satisfaction of their patients. For any healthcare institution to bring out the needed desire of patient satisfaction, they should be able to develop the patient centric service delivery, the aim of every patient satisfaction research study is to assess the patient perception on the quality service delivery and the value of the services they receive at the hospital. The outcome of most patient satisfaction research studies are used to improve the quality service delivery by the teaching hospitals, which in most cases will result in changing how medical services are offered at the hospital to the patients, and at other times modify the process and procedure to properly suit the patients’ needs. Furthermore, the hospital administration can use the research study to assess their performance level in comparison with other healthcare institutions they may be in competition with.

This review paper will be organized as follows: the research question will be the focus of the next section. Research question should be set clear to bring out the understanding of the problem and should also seek to include the perspective of the patient. Details of this section will be discussed in section three. The section four will look at the right research method that will suit patient satisfaction research in the healthcare industry. In order to get the right response to the research questions, the question should be properly constructed to obtain the right response from the population you will select. The research questions should have respondents answering questions on both satisfaction and dissatisfaction. According to research questions should not only ask respondents questions on areas of dissatisfaction. Also, sampling limitation and reliability and validity on the measurement tools will be the focus on section five and lastly, conclusion will be in section six.

**Having in-depth Knowledge to the Problem**

This mostly talks about the level of knowledge the researcher has on the problem of the study to be conducted, this may include for instance; what is patient satisfaction? What are teaching hospitals? In what way will the patient measure the level of service quality in relation to teaching hospitals? In what ways will the patient measure the satisfaction they receive from the teaching hospitals? What will be the best method a researcher can use in measuring patient satisfaction in the teaching hospitals? In undertaking a study in patient satisfaction in a teaching hospital, the entire questions above should be answered in a research study before the study will be accepted into the academic field. The biggest test to the researcher is how to answer the above questions which the respondents will also find difficult answering them. After this, the researcher is encouraged to establish a well-crafted research method to answer these difficult questions. The researcher should not think that patient satisfaction is only directly related to effectiveness and efficiency. It is not possible for a patient to be satisfied without effective and efficient service delivery while on the other hand, patients will be satisfy with service delivery which by other measures will be seen as a poor service delivery. Therefore, the means for measuring service delivery effectiveness and efficiency must be in line with the instrument used in measuring patient satisfaction. Nevertheless, research questions should be framed in a way that the respondent will not answer it in the popular way, thus, what is being accepted by the majority but their answer should reflect their original views.

Many researchers have tried to explain what it means healthcare satisfaction is to the patients who come to
the hospital to seek treatment. The following are some to the theories:

1. The evaluation of satisfaction is based on customer's experience of a specific service, and perceived service quality is not necessarily experience based.

2. Patient health care satisfaction is a function of their personal preferences and expectation as far as health care is concerned.

3. Satisfaction is a reflection of only one's specific transaction or service experience.

4. Satisfaction is the antecedent of service quality that is why service quality is a cognitive construct whereas satisfaction is an affective construct.

5. Investigation shows that satisfaction is one of the determinants of service quality. The investigation explains how a high performance work system and customer orientation influence employee and customer perceptions of service quality and patient satisfaction in ambulatory health care centers.

6. The evaluation of patient satisfaction with Primary Health Care (PHC) and quality of health care and they found that accessibility and continuation of health services, waiting time, consultation of patients by health care providers, availability of medicines, performance of doctors and nurses, laboratory investigations and level of privacy in the consultation rooms are dynamics in health care services and should be maintained at all times to enhance patients' dignity.

7. Theory stipulates that interpersonal aspect of care plays very important role in determining the satisfaction patients derive from health care. For a patient to be satisfied with health care delivery he should have a positive judgment towards every aspect of the quality of care delivered especially as it concerns interpersonal side of health care.

8. In a relating to gender and patients satisfaction in their study found that women in terms of visits, were mostly satisfied with the information and the continuity of care, whilst men’ overall satisfaction depended mostly on individual attention they got from staff.

9. Measured patients’ satisfaction as accessibility of health care services provided, ensuring courtesy, considering patients as unique individuals, adequate health information to patients, being able to answer questions asked by patients politely, redressing the wrongs with a positive attitude.

10. Patients’ satisfaction in health care services is influenced by their individual social environment. Patients measure the satisfaction they derive from health care services against the perceived comfort or discomfort they feel with respect to the services.

For any researcher to measure patient satisfaction, it will be more advantageous to use multi-dimensional tools to measure it. In wanting to measure the actual satisfaction of the patient on the services offered at the various teaching hospitals, the services offered should be put into smaller units. The tools for measuring these units should be made in the sense that it will measure all the units involved and not measure only the overall satisfaction. Many researchers have tried to come out with their criteria of measurement. Because of this, there have not been any agreements upon or generally accepted way of measurement among practitioners and researchers. Different authors who have come out with different measurement criteria are. All these researchers have different dimension on patient satisfaction. And to date, practitioners and researchers have not reach unanimity on criteria of dimensions which can be used to measure patient satisfaction in healthcare institutions.

For a researcher to get the actual satisfaction level of the patient, the researcher should first break down the healthcare service into different units and then go ahead to know from the patient’s their satisfaction level by using questionnaires based on the various units. For a researcher to ask a question on the totality of the overall patient satisfaction at the teaching hospital, in order not make the respondent confused, the researcher should not ask questions that bother on the overall patient satisfaction in the teaching hospital as this will be too vague to understand and this will not help the researcher to arrive on the needed answers from the respondents. Therefore it will be more advantageous to the researcher or the practitioner to know more about all units that make up a teaching hospital.

The means of communication between the patient and the doctor should be of importance to the practitioner or the researcher, as means of communication may differ from one teaching hospital to the other. Mostly, communication in the teaching hospitals are done on the face-to-face means but due to modernization and technology, now communication between the doctor and the patient can be done through the internet (email, WhatsApp,
etc.), telephone, post and others. The first call at the

Teaching hospital is the nurse at the front desk of the

Out- patient department (OPD). The satisfaction from

The nurse will be measured based on how welcoming,

effective and polite he or she will be to the patient

Who come to them. There are many questions which

Are asked to know whether patients are comfortable

With the services rendered to them at the hospital,

Which may include; are the nurses at the hospital

Very welcoming and polite? Do patients get the

Chance to see the doctor at the appointment time? Do

Hospitals have excellent treatment diagnostic test and

Other services in an acceptable time period? Are there

Enough seats for patients who come to the hospital?

Are there enough parking spaces for the patient and

Medical staff to park their cars? Does the consulting

Room of the doctor have all the furniture and

Equipment that the doctor will need? Is the waiting

Area comfortable for patients who will be waiting at

The hospital to see the doctor? All the above

Questions deals with the time patients have to get to

The hospital till the time they will see the medical

Staff the patient is looking for. The study has to find

Out the quality of the physical environment of the

Hospital. Is the hospital having up to date well

Maintained equipment? Is the standard of cleanliness

And hygiene at the hospital an excellent one? Are the

Patient’s wards comfortable enough? Does the

Hospital show sincere interest to the problems of the

Patient who visit the hospital? Do doctors explain the

Health condition, diagnosis and treatment in an

Understanding way? Do nurses explain to the patients

Exactly when and what they are going to do? If a

Patient is admitted, does the doctor monitor their

Health status regularly/daily? Do doctors explain to

Them in details how their illness will affect their

Future health? All these question deal with the

Process quality at the hospital. The research will also

Have to find out the quality of interaction between the

Patients and the medical staff at the hospital. Do

Doctors/ nurses listen attentively to the patient? Do

Doctors/nurses have good knowledge to the questions

Asked by the patients? Do doctors/nurses make eye

Contact with patients? Do doctors/nurses choose the

Appropriate words to prevent panic in patients? When

The patient finishes receiving treatment at the hospital,

What is the health status when leaving the hospital?

All these questions above are the few ones most

Researchers and practitioners may want to ask when

Doing research.

In a study conducted by 27, they stated three

Components of assessing patient satisfaction in a

Survey at the private hospital. In the first place, the

Survey looked for the perceived value a patient will

Get from attending a particular private hospital.

Secondly, the survey dealt with the right equipment

And the level of knowledge of the medical staff at the

Private hospital. And service delivery process at the

Private hospital is also part of the survey. Patients

Who visit most hospitals when they are not well are

Much concerned with the cost of treatment at the

Hospital, the duration they will spend at the hospital

And the qualification and conduct of the medical and

Non-medical staff at the hospital. In all, before a

Researcher or practitioner will get a good survey from

Patients, their interest and ideas should be factored

Into the research questions.

Research should be Patient-Centered

Most studies on satisfaction conducted by researchers

And practitioners from the past were mostly done to

The satisfaction of government, ministry of health,

Healthcare services regulators, healthcare directorate,

Shareholders and owners. Most of these research or

Study 28 were aim at looking at the hospital and pay

Little or no attention to the patient at all. For any

Research to achieve its aims and objectives, it

Shouldn’t consider factors of the hospital only,

Because the end results or the conclusion of the study

Will not be satisfactory. For any research study to be

Concluded with the right outcomes, the researcher or

The practitioner should inculcate the satisfaction

Factors of the patient who come to the hospital. Most

Patients will not put in much effort in responding to

The survey when they realize the researcher has not

Factored their interest into the research work, which

Will eventually lead to low response from the patients 29. Research of such nature mostly faces

Validity and reliability tests 30.

The importance of the research to the patients who

Visit the hospital can never be over looked. The

Patients who respond to the study should understand

The profits they are going to get from the research

Work. One of the most important things that the

Researcher need in their research work is the research

Assistant who helps in conducting the research survey.

Most researchers normally choose anybody to work

For them but it will be more advantageous for the

Researchers to take someone who has some

Knowledge on the field of study, for instance, in this

Case, the researcher should take someone with

Healthcare background to be the interviewee, because

Of their in-depth knowledge in the field. In other

Words the individual who has worked with a

Healthcare institution before may have prior

Knowledge on the expectation of the patients and

Because of their experience with the respondents,

They will conduct a better interview with the

Respondents and come out with right responses
needed for the research study. Many a time, researchers depend more on the positive side when they are conducting their study. Therefore, researcher should avoid that and try to balance their research questions by making sure that questions are in both ways. Furthermore, the best way get desirable contribution from the patient satisfaction study is to involve the patient in the all stages of the research study. They can contribute in the formation of the questionnaires and the best tools the researcher can use to collect data. The objective of the research study should be in line with the interest of the patient 30. The views of the patient should be sorted when it comes to the analysis of data collected and their interpretation of the findings.

Adopting Suitable Types of Methods

This section of the satisfaction research is very important because, it explains the type of methods the researcher or the practitioner is going to adopt. The types of methods will be discussed in detail on how the researcher will gather all the information necessary in patient satisfaction study. This will help the researcher to state in detail the sources of the data and survey design. Which sample plan and data analysis method that will be adopted by the researcher? In order to achieve higher level of reliability and validity for the patient satisfaction research, there should be a systematically carried out steps, and each step should be expound in detail. According to 31, the type of method is a system of unambiguous rules and processes in which a satisfaction research is based and against which claims of knowledge are appraised. One of the important things that a researcher of patient satisfaction should know about the use of types of research is that the types of methods form integral part to the reliability of the findings and the validity of the study. Therefore, type of methods research also focus on the research technique that can be adopted and used for the patient satisfaction research study with the aim of achieving the research objectives 32. One of the types of methods in the patient satisfaction research in the healthcare industry is exploratory research. This is characterized by its flexibility 33. The researcher who is conducting research on patient satisfaction can use the exploratory research method as a beginning step when the research problem is broad and not specifically defined 34. For a medical institution like the teaching hospital to understand what is happening in the field of medical studies like seeking insight to a spreading of an epidemic or disease, asking questions about how effective a new drug will be to a patient and the discovery of a new drug for a deadly disease like HIV/AIDS will require the researcher to use the exploratory studies because it assess phenomenon in a new light. Exploratory research method is good for patient satisfaction research because it has a goal of formulating problems more precisely, clarifying the concepts of the two words ‘patient’ and ‘satisfaction’ 35, and gathering all the important explanations to help the researcher and practitioners gain insight to the concept which will lead to the elimination of all unnecessary and impracticable ideas from the study in order to formulate good hypotheses which will be good for the study. Sometimes, exploratory research may develop hypotheses, but it may not test them 36. Researchers use exploratory methods at the teaching hospitals when they want to conduct a Case Study on one of the departments at the hospital such as Medicine, Child Health, Obstetrics and Gynecology, Pathology, Laboratories, Radiology, Anesthesia, Surgery, Polyclinic, Accident Centre and the Surgical/Medical Emergency as well as Pharmacy. Other departments where exploratory research an also be conducted include Finance, Engineering, and General Administration, focus groups such as pregnant women, AIDS patients, Accident patients, and Children unit.

Another method which will be of good help to the study of patient satisfaction is descriptive research method. Because it is the study that project with knowledge, life experiences and a skyline with language and understanding 37, descriptive method provides the researcher opportunity to lay aside presuppositions, assumptions and biases about the concept which the researcher intend to conduct investigation into 38. This will make the study disclose some level of uniquely and subjectively to other researchers and practitioners 39. When a particular phenomenon like patient satisfaction in teaching hospital is under study, the researcher has to describe it, clarify and explain its inner relationships and properties. Researcher or practitioner who wants to portray an accurate profile of the level of satisfaction of the patient who visits the hospital should conduct descriptive research. The difference between descriptive research and the exploratory research is that, in descriptive study, the researcher who will conduct the research on patient satisfaction study will have the knowledge of the patient in mind, will define well-structured questions, choose the right patients for the survey and also know the method of analysis prior to beginning of the collection. In other words, using the descriptive method for research in patient satisfaction defines the research aspect viz, who, what, where, when, why, and sometimes how. This will give the researcher the chance to make all
the necessary preparation that will allow him/her to make any required changes before the process of the data collection will begin. According to descriptive method should be known as a means to an end rather than an end, itself. According to descriptive method is well-developed but unacknowledged method which provides an understanding summary of an event in the everyday terms of events. According to Descriptive method help researchers to stay close to their data and to the surface of the words and events than any other methods. Descriptive method pays much attention to low inference description, which has been accepted by many researchers and practitioners. Researchers and practitioners use description method in patient satisfaction research because it help researchers to choose the right associated interpretive theory or conceptual framework which will guide their studies, and will also makes it easy for them to alter their framework when they feel it is necessary to do so during the course of the study. The theories and frameworks of patient satisfaction research serve as abstract which helps the researcher to follow the study procedures, analysis, and re-presentation. The most important aspect of descriptive research is that, the results of the research are established in straightforward language that clearly describes the factors that will contribute to patient satisfaction in teaching hospitals. In the study of they outlined some important features of descriptive method, which include; (1) a broad range of choices for theoretical or philosophical orientations, (2) the use of virtually any purposive sampling technique (3) the use of observations, literature review, or minimally to moderately structured interview or focus group questions, (4) content analysis and descriptive statistical analysis as data analysis techniques, and (5) the provision of a descriptive summary of the contents of the data organized in a way that best fits the data.

Adopting the Right Approaches

According to there are two approaches that can be used by practitioners and researchers working on the patient satisfaction in teaching hospitals i.e. Qualitative and Quantitative. What makes one approach different from the other is the use of numbers and statistics. The use of either of them will depend on the research problems that the researcher will identify in line with patient satisfaction in teaching hospitals and the data available to solve the problems of that specific study. Some of the challenges that patients encounter at the hospitals can only be determined by using the best research approach.

There are many tools which have been developed in the past decade for the measurement of patient satisfaction in teaching hospitals. For instance, the satisfaction with physician and primary care score by Patient satisfaction questionnaire by and the Patient satisfaction scale by these tools were developed by different researchers and practitioners who have different assumptions with different ideas and perceptive about what made up patient satisfaction in teaching hospitals.

The qualitative approach emphasizes on processes and meanings that are not measured in terms of quantity, amount, intensity or frequency. The qualitative approach provides a deeper understanding of the phenomenon within context. Moreover, qualitative researchers stress on the socially constructed nature of reality that states the relationship between the researcher and the phenomenon under investigation. According to conducting research on patient satisfaction is very subjective because it is based on the researcher’s perception. That is the reason why patient satisfaction research can be effectively conducted using the qualitative means. For instance, according when the researcher decides to use interview (telephone and face-to face) in a study, the researcher will get more respondents than the use of mail survey. However, telephone call can be used indoors to link up with those who did not respond to the mail but it is going to cost the researcher in conducting the study.

The researcher’s use of the qualitative approach in conducting research on patient satisfaction at the teaching hospital will require time and cost so that the researcher will be able to establish an in-depth study that may not have been covered in the study of quantitative approach. Furthermore, the researcher or the practitioner can use qualitative approach to get a great insight into other challenges in the teaching hospitals which a hospital administration may not know. According qualitative approach has the advantage to reveal more in-depth detail in a fixed form questionnaire. One importance of qualitative research is that it gives the researcher the opportunity to fully understand the patients’ standpoint on the services at the hospitals so that the researcher will create the issues which are of importance to the patients. To embark on a qualitative approach, the researcher has to first understand the question the study seeks to answer in order to understand the problem. It is after the purpose for the research is clarified that the researcher can put together the research proposal and eventually the research design.
strategy, data collection and preparation, debriefing of moderators, observers and participants, and all the way to research reporting.

As mentioned earlier, the primary means of getting data in a qualitative research is through interviews. The number of respondents the researcher wants to interview will determine the type of interview session the researcher is going to conduct, the duration for each respondent, and the structure of the interview. Most interviews in teaching hospitals on patient satisfaction are done on individual bases or in group bases. If the researcher is going to use research assistants in conducting the interview then they should be people who are well trained and very skilled in conducting the interview. For instance, they can be retired medical workers, who have worked on patients before. And because of their experience with their patients, they will understand them better.

There are three types of interviews and they include; structured, semi-structured and unstructured. The structured interview is the situation where the researcher or the researcher assistant interviews patients with proper structure fixed questions and laid down procedures in interviewing the patients who come to the hospital because of the satisfaction of services at the hospital. The next, semi-structured is the type of interview by a researcher or researcher assistant where the patient will be asked a few fixed questions and the rest of the interview will go on without following order. The last one is the unstructured interviews. Here, the patient is interviewed by a researcher or researcher assistant without a fixed set of questions and mostly there are no strict procedures that interviewer follows. The researcher or the practitioner who is conducting research on patient satisfaction can use observation technique in gathering data. With this, the researcher will be at the hospital to observe the patient when the patient goes through the procedures at the hospital. The researcher will observe the disposition of the patients before and after he has gone through the services at the hospital.

Quantitative approach can be used to dig deep into the patients’ perceptions, needs, wants, preferences and level of satisfaction. Quantitative approach on the other hand is the situation where practitioners or researchers try to seek information from patients who come to the hospital by giving them questionnaires to answer. This, most of the time confine the respondents to answer only the questions provided, which may be a strong limitation. For a delicate topic such as patient satisfaction in teaching hospitals, it will not be appropriate to confine the respondents to straight answers but the researcher should know the rationale behind the answer the respondent provides. Different patients will have different opinion on the service procedures they go through at the hospital. For instance, the attention given to pregnant women at the OPD will be different from the men who also go to the OPD. Disabled patients are treated different from the way non-physically challenged individual who comes to the hospital by lift or elevator. Also, patients with some special medical conditions may be treated differently and at times, medical and non-medical staffs give such people specialized attention.

The differences between the patients who come to the hospital can unearth through thorough face-to-face interviews and phone call interviews to focus individual and groups. Quantitative approach can also be said to be the situation when the researcher conducts a research on the measurement and analyzing of casual relationship between variables. Quantitative approach is suitable for measuring attitude, value and behaviors which are shown by patient. The researcher or practitioner who conducts a study on the patient satisfaction can use quantitative approach to create models and predict the view of someone or that person will act in a certain way when they are being observed by the researcher.

In a patient satisfaction research, even though it will create a shortcoming in using only qualitative or quantitative approach, this review study recommends that the researchers who want to use these approaches should depart from it absolutely. By putting the two approaches together, it will have a strong impact on the result of the research. According to Yauch & Steudel (2003), qualitative and quantitative approaches should be seen as complementary rather than rivals. The researcher of this study recommends that future research on patient satisfaction in other area of healthcare should adopt both research approaches as far as they complement each other.

**Taking the Right Sample Size**

The researcher can take the sample size from the entire population of patients who come to the hospital. The sample size of the population should be patients who have a lot of knowledge to represent the whole population of patients. Many researchers have different views on the number of population that should determine the sample size of study. For
instance, \(^61\) said that 3 to 5 respondents per estimate parameter, whiles \(^62\) said 5 to 10 per estimate parameter. According to \(^63\) the right sample size is one that allows for the right inference to be derived from the population. When a researcher conduct a research on patient satisfaction at the teaching hospital, it means the researcher has a large number of populations to deal with, so in order to minimize sample error, the researcher has to choose the right sample size from the larger population of patients who come to the hospital\(^{64}\).

The researcher who conduct research on patient satisfaction should know that a large sample size may not come out with the desirable result needed for the study, whiles a smaller sample size may also not offer the researcher enough details to make the desired inference as the data may not be adequate to achieve informational redundancy or theoretical satisfaction \(^65\). Researchers should know that it is very important to select the right sample size in conducting research on patient satisfaction. For instance, a research will show goodness-of-fit indices performance when it has a sample size as small as one hundred participants however a research conducted by a researcher on patient satisfaction may attain an adequate statistical indices performance, yield meaningful and interpretable values if the research has a sample size of two hundred or more participants who will be responding to the questionnaire.

The researcher can use different approaches in sampling which include the purposeful sampling approach - this is when the researcher selects from patients at the hospital who has good knowledge of patient satisfaction \(^66\). Maximum variation sampling is when patient at the hospital with different views and backgrounds are selected for the research on patient satisfaction by using aggregate responses \(^67\). The last one is judgmental sampling, here the researcher may use this sampling approach to selecting patients from various demographic characteristic from the teaching hospital to collect data \(^68\). One importance of sample size is that it helps in the deliberation in SEM analyses \(^69\), that is, it lowers power to detect significant path coefficients and variances and it also helps in the instability of the covariance matrix, leading to attenuation of fit indices.

**Sampling limitations of Study**

One of the limitations that researchers who conduct research on patient satisfaction in teaching hospital may face is that some of the patients who will be in the target group may decide not to answer the questionnaires and in such a situation the response will be inadequate. Some of the patients too will not be able to provide adequate response to the questions when the researcher is going to use interviews. Furthermore, employing people with medical knowledge, especially, retired medical staff will be a little expensive so the researcher may end up employing anybody to conduct the interview or data collection which may not lack the expertly the survey could have had. Another limitation in conducting research on patient satisfaction at the teaching hospital is that some of the patients who come to the hospital are illiterate, elderly people and people who are in severe pains who do not want to talk to anybody apart from the doctor. These people due to their situation may not be able to read, answer and write or may not have interest in what the researcher is looking for.

Again, these patients will not respond and even if they do they will answer the questionnaires wrongly. According to \(^70\) it is very general to have a sample size that does not represent the large patient population of hospital. This may not give the true state of the problems or achievement of the hospital to the administration because the hospital administration will adjust its services to suit the result of the research which may not be the true reflection of the situation at the hospital. For instance, if the patient who responds to the questionnaires are low, it may not reflect the popular view of the patients who comes to the hospital, on the other hand, if the sample size is not well selected it may also give the wrong results. In order to get the true opinion of the respondents from the survey questions, the questionnaires should be negative and positive worded.

**Validity & Reliability of the Study**

These researchers who conduct research study on patient satisfaction can use reliability and validity scale to obtain meaningful results. Validity and reliability will be used as tools to evaluate the characteristics of a good measurement and these tools will be involving the measurement of accuracy and applicability \(^71\). The main concern for performing validity and reliability test by the researchers on patient satisfaction at the teaching hospital is to develop a measurement that reflects a true score of the
variables being measured\textsuperscript{72}. According to\textsuperscript{73} researchers do not give much attention to validity and reliability of measurement tools when conducting research on healthcare delivery. For instance, a study conducted by\textsuperscript{74} on healthcare delivery on patient satisfaction established that sixty-four percent of researchers did not show any evidence on the reliability and validity in their studies. According to\textsuperscript{75} researchers find it difficult to use validity and reliability in testing the originality of their data. Moreover, data collection is a difficult task\textsuperscript{76} and even if they get the data, most often the Cronbach’s alpha of the data will be below the expected range\textsuperscript{77}. According to\textsuperscript{78} validity and reliability are the accuracy of a measure or the extent to which a score truthfully represents a concept. In other words, validity is concerned with testing what it was designed for, which is not as simple as it seems\textsuperscript{79}. When the validity and reliability of data on a research study on patient satisfaction at the teaching hospital does not reach the range of point seven (7)\textsuperscript{3} and above, then the credibility of the data used by the researcher may be in doubt. On the hand, the developing of a model for the measurement of patient satisfaction at the teaching hospital is a very hard task which most researchers do not want to go there\textsuperscript{80}. Not until recently researchers used unverified research data.

**CONCLUSION**

Patient satisfaction in teaching hospitals is one of the effective and well-organized approaches used in qualitative approaches. Qualitative is an approach which helps researchers to undertake multiple occurrences of which little is known. The findings of qualitative are presented in a manner that describes patient satisfaction issues in patients’ view. The patients easily understand the information presented to them in the form in which they normally experience it. Quantitative on the other hand is good for healthcare research methods. It serves as a complement to qualitative research method any time the researcher is measuring patient satisfaction in healthcare delivery in teaching hospitals. Exploratory research helps the researchers to establish facts when the decision is very ambiguous meanwhile, in descriptive research, researchers find answers to phenomena. Therefore exploratory research results in insights or hypothesis, regardless of the method adopted, the most important thing is that it remains flexible so that all the facets of the problem would be studied, as and when they arise. Consequently, descriptive research is a comparative design which is prepared according to the study and resources available. Such study minimizes bias and maximizes reliability.

The research study on patient satisfaction should be a patient-centered study. It is important to note that the patients’ interest should be the main focus in any patient satisfaction research study at the teaching hospital. The researcher should frame the research questions and choose the right approaches and types in such a way that the result will come out with the needed information from the patients who are the respondents for the study. The right sample size method should be used in the patient satisfaction research so that the selected sample size will not be large or small. The selected sample size should be of the right size and right quality. In choosing the right sample size, it will help the researcher to select the right respondent who will represent the entire population at the hospital. Moreover, the researcher must ensure that there are little or no sampling biases. The data used should be valid and reliable to the extent that the research findings are not compromised. To ensure this the research instruments used for the research must possess reasonable validity and reliability.

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