Chapter One

Introduction

1.1 Background to the Study

Healthcare service providers across the world are usually concerned about providing services that satisfy their patients. This is so because the tenets of healthcare services delivery emphasize quality services and also, the healthcare industry has become competitive with several healthcare facilities competing for patients. The main strategy for healthcare facilities to attract more patients and gain the trust of the public is therefore to provide satisfactory services to the patients. In the modern approach to healthcare service delivery, the patient is seen as a customer or client whose opinions regarding the services delivered matter. As a result, the attention of researchers and practitioners in the healthcare sector, whether they operate in the developed or developing world, has shifted to understanding the perception of patients' satisfaction with healthcare services.

Patient satisfaction is described as the point where the healthcare services' expectations of the patient are equal to the level of services delivered by the hospital. It is also described as the subjective judgment and attitude of patients towards the healthcare services provided by hospitals and health professionals[1]. However, the concept of patients' satisfaction is regarded as an evolving phenomenon that requires better clarification[2]. While there is general agreement among researchers that patient satisfaction is a multidimensional concept, experts have failed to agree on the exact dimensions of patient satisfaction.

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This has led to divergence in the metrics used to measure patients' satisfaction with healthcare. Scholars have rightly observed that it is important to have accurate and generally accepted metrics to measure patients' satisfaction with the care they receive in hospitals and other healthcare facilities using a valid and reliable instrument[3]. This is important because measuring patient satisfaction with the use of different metrics would yield different results which would make it difficult to accurately predict factors driving patients' satisfaction[4].

Understanding patients' level of satisfaction is very important, this will help to understand how healthcare services can be improved and what factors can lead to satisfaction in the healthcare facility. This is the best way to help hospital managements respond to specific patient needs and devise strategies to improve overall efficiency. In line with this, various attempts have been made by scholars in the field of healthcare to come up with universally accepted metrics to measure patient satisfaction. The most recent theoretical framework designed for this purpose is the consonance theory of patients' satisfaction.[2] The theory posits that patient satisfaction with health care can only be achieved through consonance between patient care expectations and individualized healthcare.

Patient care expectation is the level of services a particular patient hopes to enjoy during the care period. The magnitude of this expectation is a function of the personal standard of each patient borne out of their individual demographics and their environment. It encompasses three sub-metrics such as technical care, interactive/support care, and information care. Technical care refers to the professional medical information services rendered by health information management professionals in the hospital. Patients expect

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health information management professionals to be knowledgeable about all aspect of information management; retrieving needed information as quickly as possible and making sure information is provided in a reassuring, professional manner. Researchers opined that perception of the quality of technical care depends on the personal factors of the patients, such as education and income level, temperament, and nature of ailment among others.[5] This means two different patients may express varying levels of satisfaction with health information services based on their personal backgrounds. The other aspect of patient care expectation is interaction and support care.

Interaction and support care means the rapport between the patient and the health information managers. Patients are expected to be treated with respect, dignity, and empathy. They expect health information managers and other hospital staff to treat them courteously and not dismiss their complaints as insignificant. Interaction and support care can be linked to the customer service of health information managers. It relates to how comforting, understanding, and reassuring they h are perceived to be by the patients and their families.

This is important because patients are often in a vulnerable emotional state which means that they may not act in their usual rational manner but they would still expect to be understood and accommodated due to their health condition. The rating of the patients about the quality of interaction and support from health information management is a factor in satisfaction. Professionals have opined the ability of health information managers to create a harmonious relationship with patients goes a long way in ensuring patients' cooperation and increase the likelihood of achieving the mutual goal of patients' satisfaction[6]. This is also true of information care.

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Information care is the measures of how forthcoming are health information managers about information relating to the patient's treatment. Patients are often anxious to understand what is going on in their body, the treatment they are receiving and the prognosis for their condition. If there is a test conducted, they want to have the result as soon as possible. While they may not be able to translate the results, they expect the professional to translate and inform them of the implications of the results. In a nutshell, patient expect the health information managers to be open about everything relating to their medical and other records. Information care also relates to the ability of health information managers to pay attention to every detail of the patients' complaint. It involves asking follow-up questions to understand what the patient actually needs. The patient care expectation which comprises of technical care, interaction and support care as well as information care is then juxtaposed against the quality of care provided by the hospital.

Individualized healthcare refers to the health information services provision that arises from proper understanding of the patient's requirement. It speaks to tailor-made services designed to meet the expectation of the patients as much as possible. It is comprised of three main considerations namely; patients' clinical situation; patient's personal live situation and patient's degree of control over care. Individualized care by health information managers is borne out of the understanding that each patient is different and thus there is a need to provide information services in a manner that take cognizance of the patient's beliefs, values, expectations, need and desire. It is also borne out of the recognition that each patient has different health condition and come from different background.

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As a result, individualized care takes into account the unique nature of each patient. For instance, the communication approach for a teenage cancer patient should be different from that of an aged cancer patient. In addition, some patients, probably due to their education or cultural background may need additional information regarding their treatment and overall health condition than others. In this type of situation, health information managers have to personalize their interaction with patients and their families. In a situation where this is done, patient satisfaction is expected to be guaranteed. However, there are still many cases of patients expressing dissatisfaction with the quality of services they receive from all type of health facilities. This thus requires the examination of other factors that may affect patient's satisfaction. These factors include waiting time and continuity of care.

Waiting time in healthcare basically means the length of time that a hospital patient has to wait before they are attended to by health information managers and other healthcare professionals in hospital. It is also referred to as the length of time between the moment a patient arrives at the hospital and the time such patient is seen by a health professional. Waiting time appears to be relative as its calculation is different based on the extent or type of medical service required[7]. The descriptions provided so far cover those outpatients who came into the hospital to complain about various ailment or those with medical emergencies who need urgent lifesaving medical attention such as accident or attack victims.

Depending on the type of services being sought, different definitions are given to waiting time: such as time from arriving in a healthcare facility to the time the patient can see a doctor, time from seeing a doctor to the time treatment is received, time from being

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enrolled on hospital waiting list to treatment, among others. Thus there are different measurements of waiting times according to whether treatment is offered immediately or a patient is put on waiting list. There are other categories of patients who needs major surgeries and organ transplant. These categories of patients have to follow certain procedures and often have to wait for longer periods whether in the hospital or at home. For these categories of patients, waiting time is described as the moment when the patient is enrolled for the procedure and the moment the service is received[8]. Waiting time have also been related to the time it takes to get to the health facilities. This is an issue in developing countries or in remote areas where people have to travel long distances in order to access healthcare services. Researchers have therefore argued for the inclusion of distance traveled as part of the waiting time. Waiting time is taken in this study to mean the time lapse between the moment a patient arrives at the hospital and the time they are attended to.

Waiting time affects patient satisfaction in the sense that a long waiting period leads to patient frustration and dissatisfaction. On the other hand, a short waiting time means that patients are attended to promptly, their pains and worries are taken care of. Experts have realized that patients may get tired of waiting after a certain period. A maximum of thirty (30) minutes was set as the globally accepted waiting time for a patient once they reach the hospital[9]. Health professionals in around the world there use this to determine whether they have a long waiting time or a short one. For instance, the waiting time in Saudi Arabia was reported to be about 37 minutes. On the other hand, patients in Nigerian hospitals often have to wait for an average of 137 minutes before they can access healthcare services[10]. This shows that Nigeria has one of the longest waiting time

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in the world. Like other countries, the waiting time is a byproduct of various issues affecting the health sector. Waiting time has been recognized as a major factor in patient satisfaction, so healthcare managers have often make efforts to find a way to reduce it through proper scheduling. One of the strategies that have been applied to manage waiting time is the queuing theory.

The Queuing theory is a model used to manage waiting time in outpatient clinical situations. The model recognizes that waiting is the most difficult thing to do under any circumstance, particularly when it is to access healthcare services. The theory is made up of four sub constructs namely; arrival patterns, service pattern, capacity of the hospital and queue discipline.[11] Patient arrival pattern focus on the manner in which they arrive in the hospital. This arrival pattern has three features; the number of patients arriving at the same time, the interval between each arrival, and behavior of patients on arrival in the hospital.

Patients could arrive individually or in group. In some hospitals, one patient arrives and they are already attended to before another one arrives while in others, many patients arrive at the same time. The second aspect is also concerned with the time gap between the arrival of each patient or group of patients. Scholars observed that patients' arrival pattern is often random. So while it can be forecasted, it is difficult to accurately predict the number that will arrive at a given period or when exactly another batch will arrive. The arrival pattern also covers the behavior on arrival. Some patients may decide not to queue; some may get tired of the queue and leave while some may try to find a shorter queue or one that is moving faster than the current one. All of these affect the waiting

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time and the attitude of patients towards it. The arrival pattern directly affects the service pattern.

Service pattern in the queuing theory is the manner in which the patients are attended to in the hospital and the process they have to go through to obtain the services they need. Service pattern basically has to do with the number of health information managers attending to patients and the number of service points each patients has to go through. For instance, the service point in a typical hospital may include, registration, vital sign check, nurses bay, doctor consultation etc. Both the number of 'server' and the service points are interwoven. For instance, when there is enough staff at the records office attending to the patients, enough nurses taking vital signs and enough doctors to which several patients can be routed at once, the queue may move faster and the waiting time reduces. How this affects the individual patient however depends on the queue discipline.

Queue discipline is the rule followed by health information managers in attending to people on the queue. The most popular queue discipline is the first come, first serve model. There is also the priority model in which patients are attended to from the queue independent of their arrival times. Health information managers can decide to attend to patients based on the severity or nature of their ailment. This operates in two forms; the preemptive and non-preemptive approach. In the preemptive case, patients, such as women in labour, accidents victims or those at the critical condition can be given priority and allowed to go to the head of the queue and attended to immediately. In the non-preemptive case, elderly patients can be allowed to move to the head of the queue but they cannot be attended to until the first patient they met on the queue is done even if such patient is not high priority.

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There are different queuing systems to satisfy whichever approach is adopted by the hospital. There is the single server, single queue; single queue, multiple server and multiple queue, multiple server models of queue discipline. Whichever queuing approach is adopted have impact the waiting time, consequently on patients' satisfaction with healthcare. However, apart from waiting time, continuity of care is another factor that can affect patients' satisfaction.

Health services experts use the term "continuity of care" to characterize patient-provider relationships that are linked and coordinated across time and venues. From the viewpoint of patients and their families, continuity of care is when a new healthcare professional demonstrate knowledge of the patients' health history, previous treatment and shows willingness to continue with the established treatment routine. The concept of continuity of care has three dimensions namely; information continuity, management continuity, and relational continuity. Each dimension shows the minor variations in what continuity of care entails under each type of healthcare situations. For instance, in pediatric healthcare, continuity of care means that a child is seen by a particular doctor over a long period of time. This is relational continuity. In this sense, continuity of care is frequently stated in terms of an implicit contract of loyalty on the part of the patient and therapeutic responsibility on the part of the healthcare provider[12]. It denotes a longitudinal relationship between patients and healthcare providers[13].

However, because healthcare service delivery is often a team effort and patients' treatment often requires the inputs of different units in an hospital or even different hospital in different geographical location, continuity of care has been expanded beyond a patient sticking to one doctor or nurses. This is why the three dimensions of continuity of

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care have become more significant. The first dimension of continuity of care is information continuity. It involves the use of previous health records of the patients to ensure that they continue to receive appropriate treatment even when the doctors or nurses change or when they move from one department in the hospital to another. Information continuity is essential for healthcare professionals in order for them to have sufficient knowledge and information about a patient to best apply their professional competence and the confidence that their care inputs will be recognized and pursued by other providers.

Information continuity is made possible by effective health information management system. Proper record management practice and effective information sharing process enhance information continuity in hospitals and contribute to patients' satisfaction. Patients information such as lab results, prescription, treatment history, existing conditions etc. should be accessible to relevant units in the hospital so that patients will not be asked the same set of questions after each change of shift or when accessing services from various units of the hospital. information continuity also applies to discharged patients who need continuous treatment at home or need some period for recuperation. Information continuity allow their families or home care nurses to know how to deal with the patient to ensure that they are properly healed. Information continuity is very essential to another dimension of continuity which is management continuity.

Management continuity refers to consistent and coherent approach to the management of a health condition that is responsive to the changing needs of patients. It means that the course of treatment is not necessarily altered when a new set of healthcare professionals

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take over a patient. Indeed, the concept of continuity of care arose because of the fact that patients may have to be attended to by different health professionals. Continuity of care therefore focus on providing the patient with a coherent, connected, and consistent medical care that leads to the most desired outcome. Management continuity is often essential in the treatment of patients with chronic ailments such as HIV, diabetes or cancer.

Such patients need long- term care and may have to receive care from various expert over a long period of time. Management continuity therefore ensures that healthcare providers share among themselves, the treatment plans or care protocols for each patients in order to provide a sense of predictability and assurance in the course of treatment for both the patient and the healthcare professional. Management continuity can also expand from information sharing among doctors and health professional to include other service providers. For instance, in mental health care, doctors often facilitate access to a broad range of services aiming at improving the mental health of their patients. These services providers are guided to deal with the patients in a way consistent with their existing treatment plans to ensure that all the varied approaches work together to the benefit of the patient. However, management continuity also encompasses flexibility and adaptation of care.

Management continuity provides a bird-eye view of the treatment regime as well as the patient's characteristics. This enable the healthcare provider to identify when changes need to be made or the treatment needs to be adapted to match emerging changes in the patient. Flexibility in adapting care to changes in an individual's needs and circumstances is an important aspect of management continuity. Some scholar has however pointed out

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that management continuity is more of care coordination than continuity of care[14]. No matter the perspective, management coordination is focused on consistent and timely coordination of health care service delivery. When care is long term, both consistency and flexibility are critical for management continuity. Aspect where consistency rather than flexibility is essential is relational continuity.

Relational continuity is the dimension of continuity of care that covers the continuous treatment relationship between a patient and a set of health professionals or a single hospital. Relational continuity enables healthcare providers to connect the past to the present in order to chart a course for future treatment. Example of patients who need relational continuity are pregnant women and infants. It is important that these categories of patient have stability in their treatment. That is why it is essential for pregnant women to register for ante-natal treatment in a particular hospital so that the same set of health professionals who have come to develop great understanding of the unborn fetus and the mother. Relational continuity is also applicable to people under home care and people who have appointed a family physician.

In line with this, relational continuity of care is also described as longitudinal continuity as it encompasses a long-term relationship between patients and healthcare professional. It means that patients stick to one healthcare professional or one health facility. Thus relational continuity builds on the relationship between patients and health professionals to create a sense of predictability and coherence. Relational continuity interventions usually refer to the strength of interpersonal relationships including the level of communication, comfort, trust and belief between patients and healthcare providers[12].

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Both waiting time and continuity of care have been examined in studies across the world for their impact on patients' satisfaction in various healthcare setting with different results[15,16,17]. However, researchers have usually examined each variable separately which means that there is no antecedent to determine the combined influence of waiting time and continuity of care on the level of satisfaction of patients, especially in Nigeria. This study therefore seek to examine the influence of waiting time and continuity of care on patients' satisfaction in general hospitals in Plateau state

1.2 Statement of the Problem

Patients' satisfaction is paramount in healthcare delivery and it can be influenced by the amount of waiting time and the level of continuity of care experienced by the patients. Hospital patients are like the customers who patronize the hospital to access healthcare for various health conditions. The perception of any hospital is determined by how satisfied the patients are with its services. However, patients in Nigerian hospitals often express their lack of satisfaction with various healthcare services they receive from the hospitals. When patients are not satisfied, they may lose trust in the hospital and health professionals working there and seek to meet their healthcare needs in other hospitals or resort to self-medication. This is dangerous for public health and may result in unnecessary health emergencies or even untimely death. On the other hand, satisfied patients are more likely to respond positively to treatment, adhere to the instruction of their doctors, remain loyal to the hospital, and even refer others to obtain treatment at the hospital. As a result, scholars have shown interest in understanding factors that affect patient satisfaction in various healthcare settings.

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Some of the factors that have been examined as affecting patients' satisfaction include, quality of service[18], gender, and waiting time[19]. However, researchers have not examined the combination of waiting time and continuity of care as predictors of patients' satisfaction in general hospitals. In as much as patient satisfaction stem from patients' expectation of service, the expectation of service across geographical areas may be different. As there is a dearth of studies focusing on patients' satisfaction among hospital patients in Plateau state, this study aims to fill the information gap by investigating the influence of waiting time and continuity of care on patient satisfaction in general hospitals in Plateau state

1.3 Aim and Objective of the Study:

The aim of the study is investigate the influence of Waiting-Time and Continuity of Care on Patient Satisfaction in General Hospitals in Plateau State. The objectives of the study are:

i. Identifying the level of Patients' Satisfaction with services in General Hospitals in Plateau State.

ii. Assessing the average Waiting Time in General Hospitals in Plateau State.

iii. Examining the extent of Continuity of Care in General Hospitals in Plateau State.

iv. Determining the influence of Waiting Time on Patient Satisfaction in General Hospitals in Plateau State.

v. Ascertaining the influence of Continuity of Care on Patient Satisfaction in General Hospitals in Plateau State.

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vi. Determining the combined influence of Waiting Time and Continuity of Care on Patient Satisfaction in General Hospitals in Plateau State.

1.4 Research Questions

This research question guided the study:

1. What is the level of patient's Satisfaction with services in General Hospitals in Plateau State?

2. What is the average Waiting Time in General Hospitals in Plateau State?

3. What is the extent of Continuity of Care in General Hospitals in Plateau State?

1.5 Hypotheses

The following hypotheses were tested at 0.5 level of significance:-

$H_0$1 There will be no significant influence of Waiting Time on Patient Satisfaction in General Hospitals in Plateau State.

$H_0$2 There will be no significant influence of Continuity of Care on Patient Satisfaction in General Hospitals in Plateau State.

$H_0$3 There will be no significant combined influence of Waiting Time and Continuity of Care on Patient Satisfaction in General Hospitals in Plateau State.

1.6 Significance of the Study

The findings of the current study are expected to make significant contributions to the practice and theory of health information management in Nigeria and also benefits members of the society.

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The study would contribute to practice by providing hospital management in Plateau state with empirical evidence on factors affecting patient's satisfaction and also proffer useful strategies to eliminate long waiting times and improve continuity of care in hospitals in Plateau state. The study would provide policy makers with the latest information capable of guiding their strategic decisions on how to improve healthcare services delivery in Plateau state.

The study finding would also be of benefit to members of the society as it would properly identify factors that affect patients' satisfaction in Plateau state and make recommendations which when implemented will lead to the delivery of improved healthcare services to the general public. The society would definitely benefit when all those who need healthcare can access it promptly and when people are able to maintain healthy living due to improved healthcare delivery.

Ultimately, the study would contribute to research in the field of health care management. It would fill an information gap created by the dearth of information on patients' satisfaction among Plateau state hospital users, in addition, the integration of various theories and models into the study will add to the validity of these model and further support their relevance to the Nigerian context. The adapted models would be available for subsequent researchers who are interested in similar subjects.

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1.7 Scope of the Study

The study examined the influence of Waiting Time and Continuity of Care on Patient's Satisfaction in General Hospitals in Plateau State. There is one dependent variable and two independent variables. The dependent variable is patients' satisfaction which is

measured by constructs such as; patient care expectations and individualize patient care. The first independent variable is waiting time and it was measured with constructs from the queuing theory such as arrival patterns, service pattern, capacity of the hospital, and queue discipline. The second independent variable is continuity of care which was measured by three constructs namely; informational continuity, management continuity, and relational continuity. The participants were patients from General Hospital in Plateau state. The hospitals are Mangu; BarkinLadi; Langtang; Shendam, and Pankshin. These Hospitals cater for large population of patient ranging from infants to adults.

1.8 **Limitation of the study**

(i) The scope of the study might be a limitation as it is restricted to only out patients in public hospitals.

(ii) Also, the researcher employed the primary source of data approach in this study. Hence, the outcome of the study would suffer from the usual drawbacks of primary data.

(iii) Finally, the study focused on waiting time and continuity of care as influence on patient's satisfaction in General Hospitals in Plateau State, Jos. This is insufficient in explaining the phenomenon as there are other variables that affect them.

1.9 Operational Definition of Terms

Patient Satisfaction: This is the point where the healthcare services expectations of patients in Plateau state is equal to the level of services delivered by General hospitals in Plateau State .

Patient Care Expectations: This is the quality of healthcare service deliver expected by patients from General Hospital in Plateau state

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Individualize Patient Care: This is the services designed by healthcare professionals in Plateau state based on the understanding of patients' needs targeted at achieving the best health outcome for the patients.

Waiting Time: This is the amount of tine (in minutes, hours etc) that a patient has to be on the queue before being able to access healthcare services from General Hospital in Plateau state

Arrival Patterns*:* This refers to how many patients arrive at *General* Hospital in Plateau state at a particular moment, the interval between each arrival and the behavior of each patient on arrival

Service Pattern*:* This refers to the number of staff attending to patients on their arrivalat General Hospital in Plateau state who are waiting on the line.

Capacity of the Hospital*:* This refers to the number of staff, waiting area at each service unit, bed spaces and the size of General Hospitals in Plateau State

Queue Discipline*:* This refers to the method used by General Hospital in Plateau State to attend to patients who are waiting on the line.

Continuity of Care: Refers to how health information managers in General Hospital in Plateau State ensure seamless healthcare services through effective collection, management and dissemination of health information allowing for consistent, coherent and continuous treatment of patients across time and venues.

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Informational Continuity: This is the use of information such as patients' health records by General Hospitals in Plateau State to render relevant and effective healthcare services for the patients

Management Continuity: This refers to consistent and coherent approach to the management of a health records by health information managers in General Hospitals in Plateau State so that the treatment received from different healthcare professionals and different units of the hospital complement one another and works toward achieving patients' satisfaction.

Relational Continuity: This is a situation where patients are able to stay with a particular General Hospital in Plateau State for their healthcare needs over a period of time due to effectiveness management of health records by health information managers in General Hospital in Plateau State.

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Chapter Two

Literature Review

This chapter reviews the existing literature related to all the variables in this study such as patients' satisfaction, continuity of care, and waiting time as well the relationships between these variables. The chapter is discussed under the following subheadings;

2.1 Conceptual Review

2.1.1 Concept of Patients' Satisfaction with Healthcare Services

2.1.2 Concept of Waiting Time in Hospitals

2.1.3 Concept of Continuity of Care in Hospitals

2.2 Theoretical Framework

2.2.1 Consonance Theory

2.2.2 Queuing Theory

2.2.3 The Continuity Model

2.3 Review of Empirical Studies

2.3.1 Waiting Time and Patient Satisfaction in Hospitals

2.3.2 Continuity of Care and Patient Satisfaction in Hospitals

2.3.3 Waiting Time, Continuity of Care, and Patient Satisfaction in Hospitals

2.4 Conceptual Model

2.5 Summary of Reviewed Literature

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2.1 Conceptual Review

2.1.1 Concept of Patients' Satisfaction with Healthcare Services

Satisfaction is multifaceted concept that can represent different things depending on the context in which it is used. The concept of satisfaction is not limited to the field of healthcare as it is also being discussed and researched in other fields such as economics, law, psychology, administration, management, and politics among others. What can be deduced from the available literature is that the concept of satisfaction is very subjective and value-laden because it is dependent on predetermined standards. These standards can include anything from expectations to deeply held values and views. The term is very subjective, which helps explain why there are so many different ways to measure satisfaction in different contexts.

Scholars have conceded that the word "satisfaction" can be semantically ambiguous in English, since it can mean both "excellent" and "good enough" depending on the context. A scholar observed that "although everyone knows what satisfaction entails, it definitely does not mean the same thing to everyone"[1]. This has however, not deterred experts from making attempts to define the concept of satisfaction. The question, "What is satisfaction?" has been answered in a variety of ways. The Longman Dictionary of Contemporary English defined satisfaction as a state of being content, something that pleases; the fulfillment of a need or desire; the condition of being fully persuaded. According Oxford Advanced Learner's Dictionary, "satisfaction" is defined as "the positive emotion one experiences after accomplishing a goal or seeing a desired outcome

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materialize. Satisfaction is also defined as an emotional response or affection" for a thing or situation.

Both the need satisfaction and the desire satisfaction theories make use of the concept of satisfaction. Satisfaction with one's needs and wants is distinct from general happiness with one's life (i.e., needs and desires). One's level of life satisfaction can only be judged on an individual basis. But there are ways to speak more objectively about the existence of things like the satisfaction of wants (such as the purchase of a car) and, more importantly, needs (such as the availability of food and shelter). Nonetheless, there is a relationship between these two senses of the word "satisfaction." The extent to which one's needs are met has been linked to life satisfaction. Needs are one kind of desire, but desires more generally encompass a wide variety of preferences, wants, or conscious goals that are, on some accounts, either necessary for or conducive to happiness. Aside from its significance in consumer science and public service analysis, the concept of expectation fulfillment also has deep roots in the theory of wants[2].

The best way to understand satisfaction from the definitions that have been provided so far is to proceed on the basis that it is an emotion triggered by a particular expectation being met. While satisfaction is internal, it is contingent on certain expectations being met. Satisfaction is naturally tied to a particular concept or process. For instance, there is customer satisfaction, employee satisfaction, client satisfaction and others which derived from people being satisfied with other people has contributed to meeting their various needs. Which shows that satisfaction is derivable from the interaction between producers and consumers, providers and receivers, those who make offers and those who are

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expected to accept the offers etc. The basic needs that theorist has identified include, shelter, food, clothing and health among others.

In line with this, a scholar defined consumer satisfaction, as a judgement of pleasurable level of consumption related fulfillment including levels of under-fulfillment or over-fulfillment[3].This means that consumers are satisfied when the products they have purchased meet the description provided by the vendors, perform as advertised and solve the problem or need for which it is purchased. Indeed, solving the problem for which the purchase is made is the topmost determinant of satisfaction as it has been found that consumers make purchase based on the expectation that the product or services will meet certain needs or solve certain problems they may be having. As a result, no matter the quality of the product or service, if it does not solve the problem for which a particular consumer purchases it, that consumer will not be satisfied even if others are satisfied.

This definition emphasises the subjective nature of the satisfaction judgement made in regards to one's level of fulfilment. Having one's needs met is an example of satisfaction[4]. Satisfaction results from certain needs or requirements being met. Despite the fact that various fields of study have different perspectives on what constitutes happiness, there is a consensus that satisfaction can be defined as the point at which one's expectations or desires diverge from their actual experience. An individual can judge how satisfied they are with what they have received in comparison to their expectations, which can be either an emotional or a cognitive experience[5].

Indeed, scholar identified three features of satisfaction as emotional or cognitive response which is directed towards the quality and quantity of products, services experience and

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the precise moment that the reaction takes place such as; after consumption, after choice, based on accumulated experience, etc[6]. The import of this is that satisfaction can only be expressed after the interaction with or knowledge of a product or service. It is also important that the client/consumer have a long-term experience with the product, service, or provided. This is even more appropriate for healthcare where patients can better determine their level of satisfaction after their overall experience with the health facility.

The study of satisfaction is relatively new to the healthcare sector as there was already a well-established body of knowledge in the social sciences devoted to the topic of satisfaction research. Social scientists, especially management scholars, conducted more than 500 studies on the topic of satisfaction for various groups in the 70s. The concept of customer satisfaction has been central to marketing for more than three decades. Customer satisfaction has been used in a wide variety of contexts, including office evaluation by employee satisfaction, hospital evaluation by patient satisfaction, and site evaluation by visitor satisfaction[7]. The interest in satisfaction can also be seen in the two-factor theory by Herzberg and Maslow's Hierarchy of Needs model which seeks to evaluate how an individual can attain satisfaction.

The concept of satisfaction has also taken root in the health sector. The focus on patient satisfaction was borne out of the need to achieve an accurate measurement of the quality of healthcare delivery. One method of gauging the efficacy of a hospital's care is surveying patients on their experience with the healthcare personnel who cared for them. Patient satisfaction with healthcare services is a major concept in the healthcare industry. However, despite the widespread use of the term 'patient satisfaction' research and the ample availability of study instruments on patient satisfaction, very few studies published

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had addressed the definition of the concept of patient satisfaction. Ambiguity in concept meaning makes it difficult to make judgment on the empirical value of study instruments. Clarification of the concept of patient satisfaction, therefore, serves as the pre-requisite for the effective measurement patient satisfaction and the development of relevant strategies to maintain patient satisfaction[8]. This has prompted several attempts by scholars to come up with a conceptualization patients' satisfaction that will be acceptable to all.

A scholar adopted both classical and evolutionary approaches to examine patient satisfaction. This approach yielded eight characteristics as defining factors of patient satisfaction. Some of the features of patient satisfaction examined include art of care, technical quality of care, access, cost of care, physical environment, availability of providers, continuity of treatment, and health outcome for the patient[9]. Although the original study did not go into detail about any of the dimensions, it is easy to deduce that patients' satisfaction is not limited to whether the hospital can cure them of their ailment but it also covers how the cure was achieved, in what manner, and what cost, and with what kind of method. In line with this, other scholars have worked with these dimensions and expanded them in their studies.

A scholar worked on client health behavior theory to investigate the factors that contribute to patient satisfaction with nursing treatment. The scholar outlined factors contributing to patients' satisfaction to include affective support, health information, choice control, and professional abilities. This study emphasized the attitudes of healthcare workers toward the patient in their care, the level of information provided by the healthcare provider regarding the ailment, the treatment and the likely outcome, and

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well as the involvement of the patient in the treatment. It also includes the level of professionalism and competency demonstrated by all the personnel in any given health facility. The fact that patient satisfaction is contingent upon a combination of factors is also supported by another scholar who offered a feminist interpretation of patient satisfaction by calling for an in-depth investigation of the concept in the social context to address the uniqueness of individual patients and allow a deeper comprehension of the notion. Rather than investigating a checklist of criteria and constructing satisfaction as a binary concept[10]. No prior research, however, had investigated patient satisfaction in the broader context of healthcare delivery with many of the studies focusing on satisfaction with nursing services.

While the importance of nursing to healthcare cannot be denied, scholars have argued that patients' satisfaction should be approached from a holistic point of view because the health sector as a whole relies heavily on input from a wide range of other fields, such as medicine and the health sciences. In addition, a typical patient usually interacts with several hospital personnel which includes doctors, nurses, pharmacists, laboratory scientists, janitors, cleaners, and others. In line with this, patient satisfaction should be seen as the extent to which the health facility and its personnel meet the expectation of the patient. It is not only the hospital factors that contribute to patients' satisfaction, scholars also advocate patient-related issues.

As studies on patient satisfaction progresses, the focus of researchers started to shift away from a narrow focus on physical components of health by including not only structural and functional aspects of health, but also mental (emotional and intellectual), social, role, and general perspectives of the patient on health status. Different perspectives, such as

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those of the population, the individual, the organizational structure, the treatment process, and the final outcome, have been used to define and evaluate healthcare quality. Healthcare quality, according to the United States Institute of Medicine, is defined largely in technical terms as the extent to which the public and, more specifically, patients benefit from the health services delivered in light of current knowledge[11]. The framework developed by another group of scholars has been used to strengthen and improve the quality of treatment given to patients[12].

The central theme of the new approach is that healthier communities and populations are possible when high-quality healthcare is affordable for all members of the community. In addition to the cost of care and other consideration, it was added that the perception of the quality of services provided by a healthcare provider is determined by the standards that their patients and clients have for them. The level of care patients receives either validates or disproves their initial views of a doctor[12]. The aggregate of the factors that can be the cause of patient satisfaction (or dissatisfaction) patient expectations can be grouped into appropriateness, desirability, acceptability, and, most importantly, the received versus the expected services. It has been speculated by experts that measuring a patient's satisfaction may be tricky. If patient satisfaction surveys are to reliably measure the patient's reaction to the care they received, a valid and trustworthy instrument is required. Different methods of measuring patient satisfaction may produce varying results (level of satisfaction). The current concept analysis concluded that the definition of patient satisfaction is stable across research. Provider attitude, technical competence, accessibility, and efficacy were found to be the determinants of patient satisfaction in healthcare settings.

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The attitude of healthcare workers is seen as the foremost determinant of patient satisfaction. The influence of how healthcare workers relate with patients was determined to be a uniformly discussed dimension within the body of literature considered for this concept analysis. When patients found their doctors to be polite, friendly, kind, and approachable, they were more likely to be satisfied[6]. Patient satisfaction was also found to be influenced by respect, responsiveness, and personalized attention[5]. In a few recent studies, researchers found that clinicians' attention to patients' friends and family members was a significant factor in patients' overall happiness. In essence, the friendly attitude of healthcare workers can influence the perception of quality of service and boost patient satisfaction while an uncaring or seemingly hostile attitude can lead to dissatisfaction even when patients are cured of the illness that brought them to the hospital. The attitude of health practitioners also determines the level of say that the patient has in his/her care. It also affects the amount of information available to patients and their families in the course of treatment.

Healthcare professionals with the right attitude to patients will allow participatory decision-making in the care of a patient. this means that the patients are allowed to make input into the course of treatment and make suggestions that might help in the course of treatment. Participatory decision-making relies heavily on accurate health information; research shows that patient satisfaction is impacted by physicians' ability to communicate with and involve patients in their care across specialties[13]. When healthcare providers are open to discussing treatment alternatives with their patients and value their input, patients report higher levels of satisfaction. Patient engagement in therapy is also affected by the provider's demeanour. In addition to being open and inclusive, expertise also healthcare

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professionals demonstrate competency and professionalism, or what is called technical proficiency.

The technical competency of medical staff meant that they were up to par in terms of both their technical abilities and their commitment to ethical practice. Patient satisfaction in the hospital environment was again illustrated by technical expertise and professional knowledge in the present analysis, as it had been in earlier studies. Patient satisfaction is based on many factors, but researchers highlighted the importance of doctors and nurses who are up to the task, as well as timely and accurate diagnosis and treatment[14]. A study found that the expertise of physical therapists was a significant factor in the high levels of patient satisfaction that were commonly observed in this field. Professionalism may however not lead to satisfaction without the accessibility of care.

In the context of healthcare, accessibility typically refers to factors such as the proximity of facilities, the availability of necessary equipment, the ease of scheduling appointments, and the consistency of access. Patient satisfaction was found to be directly correlated with the cleanliness, accessibility, and safety of the facility[15]. The availability of medical care is influenced by more than just physical barriers; systemic issues also play a role. It has been established that patient satisfaction decreases in direct proportion to the amount of time spent waiting for an appointment or a procedure during that appointment. Further, recent studies have demonstrated that offering patients extended consultation times with their healthcare practitioners may improve their overall satisfaction[16].

Satisfaction is also measured by the efficacy of the methods employed by the hospital or medical personnel. It measures the perception of patients regarding the actual treatment

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they receive for their specific health conditions. When treatments were thought to be effective, patients were more likely to be pleased with their care. Researchers view efficacy as how the patient has to stay in the hospital compared to the severity of the ailment. Hospital stay length is a factor that may influence a patient's overall satisfaction with healthcare. The condition in which the patients had to stay in the hospital, the maintenance of the pain, or any inconvenience arising from hospital stay and the ailment are also significant factors in patient satisfaction. Furthermore, patients also consider the antecedents of the present health facility and the ones they have patronized previously in determining whether they are satisfied with the current services.

Since patient satisfaction is still a relatively new notion in the healthcare setting, it is important to recognize the myriad of individual and contextual factors that can affect its occurrence. According to the examination of current concepts, the factors of perception in connection to expectation, patient demographics and personality, and market rivalry are all seen as necessary conditions for patients' satisfaction. The first product of antecedent is expectations. So satisfaction is also driven by how the patient's impressions stack up against their expectations. Patient satisfaction, as stated emerges from the convergence of three factors: past experiences; future expectations; and perceived requirements[17]. Patient satisfaction is, in this context, the extent to which an individual's subjective judgment of their cognitive and emotional reactions matches their expectations of optimal health care[18].

Many studies agreed with this interpretation of the relationship between cognitive evaluation and emotional reaction[19]. According to another scholar, the degree to which a patient is satisfied with their care depends greatly on his or her expectations regarding the

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final clinical result[20]. Experience with healthcare in the past was the most important factor in setting expectations. It was proposed that there is a negative correlation between expectations and outcomes. This can be explained by the way that the higher the expectation, the lower the chance of being satisfied with the outcomes. The reverse is also true as patients with low expectations may be easily satisfied with health care delivery.

What makes some patients have low expectations while others have high expectations can be attributed to factors such as socioeconomic backgrounds and personal traits. It has been widely established that patients' demographic variables and personality traits are antecedents of patient satisfaction in the healthcare context[21]. Each individual embodies a dynamic combination of their genetic make-up, upbringing, experiences, and influences from others, as well as their emotional makeup, personality traits, and innate drives. Together and separately, these elements affect the patient's beliefs, perceptions, and assessments of their health. Examples include a trend toward higher patient satisfaction among older patients compared to younger ones[20]. Female patients were found to be more satisfied than males with the physiotherapy they got, according to two studies that looked at patient satisfaction in outpatient physiotherapy settings[22]. In the modern era, a new factor has also come into consideration as a driver of patient satisfaction and that is the competitiveness of the healthcare sector.

As patients increasingly take on the role of client and consumer, the healthcare industry is often viewed as a highly competitive marketplace where service providers offer various incentives to attract 'customers'[23]. The healthcare market has been more open in recent years in response to rising demand from institutions and the general public and the

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widespread adoption of online methods of disseminating information. Patients are now in a better position to make educated decisions about healthcare providers if hospitals routinely used patient satisfaction surveys as a benchmarking tool. They went on to say that increased competition between healthcare insurers would force insurers to insist on high standards for the care they paid for. In this kind of competitive economy, prioritizing customer service and delivering exceptional care to patients has become increasingly important[24]. Hospitals, are facing rising competition and shifting customer attitudes, all of which make for a challenging and unpredictable operating environment. Patients' wants and needs fulfillment has become a crucial business tactic for making it in the healthcare industry[19].

Many studies had already discussed several outcomes related to patient satisfaction. There was a correlation between patient satisfaction and better utilization of the healthcare system and health outcomes. Patients who reported feeling satisfied with their care were more likely to visit the clinic again if they experienced any health complications[25]. Patients who report feeling content with their care are more likely to continue with the prescribed course of treatment and return for subsequent appointments[26]. Patient satisfaction has been shown to increase adherence to treatment plans. Satisfied patients have been reported to take more responsibility for their health, leading to shorter hospital stays because they quickly respond to treatment. In addition, patients who are satisfied with the care they receive frequently refer that doctor or hospital to their friends and acquaintance. This referral activity is a sign of satisfied patients. Patient satisfaction also has unintended repercussions outside of health, such as a lower propensity to switch providers and a reduction in malpractice litigation. Patient

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contentment has also been linked to increased retention rates within the healthcare system and, more crucially, better user health[27, 28].

Evidence has shown that all areas of healthcare, from medicine and nursing to physical and occupational therapy, contain some common elements that contribute to patient satisfaction. Two dimensions can be extracted from the four identified factors contributing to patient satisfaction. Accessibility and effectiveness fall under the purview of the systemic dimension, whereas provider attitude and technical competence fall under the purview of the human dimension.

Examining the human side of healthcare may lead one to investigate the connection between job satisfaction and actions. No doubt, that goes far beyond the goals of the present investigation. However, given that relationships are not always one-way, it stands to reason to wonder whether or not healthcare practitioners' actions are influenced by patients' levels of pleasure. By combining this concept analysis with Maslow's talk about needs being met, it is assumed that his claim that needs are met at different points along a continuum cannot be disputed[29].

With all the myriads of metrics that have been introduced to measure the concept of satisfaction in healthcare, it is often difficult to find two studies that have adopted the same metric to measure patient satisfaction which often makes it difficult to compare results and form a coherent opinion about patient satisfaction. As a consequence, scholars have called for a theoretical framework to provide a solid foundation for the study of patient satisfaction as a measure of the quality of service in the health sector. The most popular theory was based on the most popular definition of patient satisfaction which

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described satisfaction as the extent to which healthcare service received aligns with the patient's expectation of what healthcare services should involve or how it should be delivered. Its components were also taken from all the metrics that have been introduced by scholars as discussed already in this study.

A previous study has already identified two key aspects of patient satisfaction as consisting of human and systemic aspects. The human aspects involve the personality of the patient, their background, socio-economic status, health status, and other factors that distinguish each patient. The systemic factor includes the hospital setup, the facility, its operational standards, and others related exclusively to the hospital beyond the control of the patient. The healthcare personnel, though human, can be grouped with the system because their actions and decisions are theoretically within the bounds allowed and approved by the hospital[30]. before the development of the theory, scholars often face difficulty in making these distinctions.

Due to their complexity, each metric for measuring satisfaction often falls into varying positions in the hierarchy of importance. Health information and responsiveness, for example, may be argued to be core safety requirements of patients, while friendliness could be referred to as a need for love; respect and patient participation in decision-making could be envisioned as needs for esteem. This could explain why some scholars have attempted to use Maslow's theory to measure patients' satisfaction. However, scholars argued that the hierarchy of needs described human needs as an end in itself. As a result, it has been suggested that patient satisfaction with the healthcare system, should be seen as a process rather than an outcome. This will rectify the inherent limitation in the majority of patient satisfaction instruments that appeared to measure patients' perception

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of certain pre-designed parameters at certain points in time. The correct way, as recommended by scholars is to move from measuring patients' experiences as allowed by most of the current research instruments to a measurement of satisfaction.

There is a general warning among scholars in recent times that most of the studies conducted on patient satisfaction as a window into the habits of healthcare providers and their clients should be interpreted cautiously by practitioners. The predictive value of the results is believed to be methodologically weak because most patient satisfaction instruments can only give cross-sectional data on criteria, and participants in most retrospective studies were self-[31]. Future research should pay more attention to addressing issues of validity, reliability, and bias. According to a recent study, there is a high degree of congruence between different areas of medicine about the characteristics that contribute to patient happiness. Although healthcare is thought of as a wide environment, the factors that predict patient satisfaction vary considerably from field to field[32].

This is why the consonance theory of patient satisfaction is considered most appropriate as it is based on two main constructs; patients' care expectations and individualized care. The care expectation is measured by technical care, interaction or support care, and information care. Individualized care examined the factors that are peculiar to each patient such as patients' clinical situation, personal life situation, and decision control over care. As can be seen, patients' care expectations rest on the service pattern in hospitals while individualized care focuses on how that service was adapted to each patient.

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2.1.2 The Concept of Waiting Time in Hospitals

The concept of waiting time was derived from the service industry, particularly by marketers selling various consumer goods. Scholars in the field of marketing studies have focused on how to eliminate or reduce the lag between the time a customer demand a product or service and the actual time they receive the service[33]. The attention paid to waiting time in the business world was in other to optimize sales and ensure customer retention through customer satisfaction. Indeed a scholar in the field of management was the first to outline a conceptual framework to identify waiting time as one of the key factors affecting customer satisfaction[34]. This model was widely accepted because of its strong face validity. The model on waiting time is composed of eight constructs and it was referred to as "the psychology of waiting lines". This model has been tested to good effect by several scholars in the field of management and beyond[35, 36, 37].

The eight assumptions of waiting time as outlined by scholars include the following; when people have to wait without doing anything, the waiting time feels longer than when they are occupied; the waiting before the process starts often feels longer than in-process waiting. In addition, it is theorized that anxious people usually perceive the waiting time to be longer, uncertain waits seem longer than certain waits; unexplained waits seem longer than explained waits. Also, when the queue management seems unfair, the waiting seems longer than when it is seen to be fair; the more valuable the service, the longer people are willing to wait, and waiting alone usually feels longer than waiting in group[38].

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To account for changes in the service sector and the fact that other factors may influence customers' impressions of wait times, researchers have broadened the assumptions guiding waiting time in service organizations, including hospitals. Some researchers have proposed that sick people have an exaggerated sense of how long they have to wait in line compared to healthy people. Also, it seems that first-time or infrequent patients have to wait longer than regular patients do. The length of the line and the number of people waiting behind a given individual may also affect how long they feel they have to wait. How quickly people in a queue move, and how interested they are in the distraction activity[48].

There are four dimensions to waiting time, according to the literature on the service industry. These dimensions are objective, subjective, mental, and affective dimensions. The actual amount of time a customer must wait before being served is a good indicator of the wait time's objective nature. The objective dimension is the most accurate aspect of the waiting time. When a patient has to wait for hours instead of the suggested 15 or 30-minute wait period, in the hospitals before being admitted to, it is easily judged as a long waiting time. The objective dimension can therefore be quantified and independently evaluated. This is not so for the subjective dimension.

The customer's impression of their own wait time, which is affected by both cognitive biases and external cues, is the subjective part of waiting time. Some patients are aware of what is obtainable in other hospitals or other countries and thus able to determine when the wait is becoming longer than usual. These patients are more likely to complain of long waiting. On the other hand, there may be some patients who are used to long waiting times and have come to accept it as the norm. these two categories of patients would

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judge waiting time differently. It will also have different effects on their level of satisfaction with healthcare. Multiple wait-time perception studies support this. The mental component of waiting is the customer's perception of the waiting time in terms of how short or long they find it to be. Emotional reactions to waiting, such as boredom, stress, aggravation, and happiness, make up the affective dimension.

The concept of waiting time has also been found relevant in the healthcare sector since it has been regarded as a service that is often run to achieve both financial and other non-monetary gains such as a healthy public and a productive workforce. In the modern era, mapping the process of care is a significant step in the direction of the present emphasis on increasing quality outpatient service delivery, especially in public health facilities[39]. Efficiency and effectiveness are now seen as key ingredients in the health sector which means that patients, who are now regarded as customers or clients, should be attended to as quickly and effectively as possible. This is why healthcare facilities are now concerned about waiting time.

As it is in other sectors, there is hardly any ambiguity in the conceptualization of waiting time. Waiting time is focused on the patients although it should probably have been directed at 'visitors' to encompass relatives and others who accompany patients to receive treatment in hospitals. According to the WHO, "The time it takes for a patient to go from entering an outpatient clinic to leaving the OutPatient Department" is the accepted definition of the waiting time in the health sector[40]. At the most granular level, waiting time for a patient has been described as the entire amount of time it takes from the time they check in until they leave the hospital after having been examined and having their medical history and symptoms investigated by various medical personnel.

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Waiting time is also defined as the time taken from a patient's arrival at the clinic until the moment they leave having met their purpose of coming to the health facility[41]. In other words, waiting time is the period that the patient must wait before receiving the service expected from the health facility. While waiting time is usually measured in minutes, researchers also introduced another dimension to the conceptualization.

Scholars claimed that waiting time is best understood as an objective assessment of the health facility's adequacy relative to the customer's expectations[42]. This suggests that what constitutes a long waiting time differs in each context. Like any establishment attending to a large number of people, there is often the cause for patients to wait for a while before they are attended to. Waiting is an inevitable part of receiving medical care, and it occurs at every stage: patient registration, regular doctor's visit, emergency room treatment, laboratory/diagnostic tests, procedures, and receiving the results of numerous tests. One of the most annoying but unavoidable things about the healthcare system globally is waiting times. In many healthcare systems, patient waiting times for elective care are seen as a major issue since they slow down the flow of patients[43]. A study found that even for non-emergency services, excessive waiting times reduced the likelihood of receiving care promptly across Australia's public health systems[44].

The total amount of time a patient waited in this trial was calculated by adding the waiting times of each section together. In hospitals, patients often have to wait for long periods before they receive care from medical staff. Health outcomes are thought to be severely impacted by delays in diagnosis and treatment and there may also be unanticipated financial consequences for individuals and the public health system [45, 46]. Waiting time is an important health service aspect for establishing a positive patient

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experience following an encounter with outpatient services since it is a major factor impacting the experience and happiness of patients in various healthcare delivery settings. 10 Patients' future healthcare utilization, compliance with current management, continuity of care, and the overall efficacy of health interventions are all influenced by their post-contact experience, so making sure they have a good one is crucial[11,12].

However, the "optimal" waiting and consultation time is not yet clearly established. As a result, it is critical to establish limits on both durations beyond which no more meaningful changes in patients' happiness may be made. Decisions in healthcare entail questions of life and death and should be afforded a special position compared to other social issues, thus it's important to clear up any confusion about who should make the call on when waiting times have become unacceptable. As a result, there needs to be a unified front from frontline healthcare workers and management to policymakers and the judicial system when it comes to determining how long patients must wait to receive treatment.

Two main issues are controversial about waiting time; what is the ideal or benchmark waiting time and, where/ when to start calculating waiting time? A scholar submitted that the maximum waiting time should not exceed 15 minutes despite admitting that many individuals must wait excessively long to obtain the attention they need at emergency departments. In another study, it was suggested that a patient must not endure more than 30 minutes of waiting as patients are more likely to get frustrated beyond this point. The thirty-minute rule was also endorsed by the French Institute of Medicine which recommended that at least 90% of patients should be seen within 30 minutes of their planned appointment time. The fifteen-minute waiting time limit had no backers and even

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the thirty-minute window has been criticized as impossible for even hospitals in advanced countries[47].

Scholars have described the 30-minute waiting time target as difficult to achieve, especially for overcrowded public hospitals and there's evidence to support this claim because the ability of patients to move freely around a healthcare facility is known as "patient flow," and it is one indicator of the quality of care offered to patients. Patient flow is the extent to which a healthcare system meets the needs of patients in a timely and effective manner as they progress through different treatment phases[48]. Research shows that in most poor nations, hospital patients wait anywhere from two to four hours in the outpatient section before even seeing a doctor[49]. It was reported that the waiting time in Saudi Arabia is 37 minutes, in Malaysia, it was a total of 104.1 minutes of waiting time, w hile in Nigeria, it is an average of 173 minutes.

Wait times for outpatient care in Nigerian hospitals have been examined in several studies. Long wait times were found in studies conducted in different parts of Nigeria, including Abuja, Ibadan, Sokoto, and Benin, highlighting the need for measures to improve patient flow management and the quality of outpatient care. Patient wait times are significantly correlated with access, utilization, and retention of health services. Despite this, waiting is often the norm in healthcare facilities. The concept of a "waiting list" has indeed become standard practice in hospitals and other medical facilities. Nonetheless, all of these are still regarded as having a problem of patient overcrowding, particularly public hospitals[50].

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The issue of growing waiting times is not unique to developing or poor countries as revealed in a study that surveyed hospitals in five countries. It was found that patients in Canada, the United Kingdom, and the United States waited an average of two hours or more for treatment[51]. The majority of patient's time at a Hong Kong public hospital reportedly spent 82% of their time in health facilities in the waiting room[52]. Meanwhile, hospital patients in Britain are supposed to wait no more than 30 minutes, as stated in the Patient's Charter, but the reality on the ground is that they wait far longer than that. This is especially true for patients accessing governments' subsidized healthcare facilities[53]. Long waiting time has led to the institutionalization of the waiting list.

A waiting list is a list of people who need to be admitted to the hospital, but who had to wait, mostly in their own homes because there are no beds available right now. These people will be invited to the hospital when beds become available because other patients have been discharged or because there is a known demand for their services. Another type of waiting list also exists for outpatients. In hospitals, outpatients who need to be seen for evaluation or treatment but who are not experiencing an emergency are placed on a waiting list. The data is utilized to move patients through the correct evaluation, selection, and admission processes, preventing any from being overlooked or sent to the wrong unit of the hospital. Insight about the utilization and necessity of healthcare facilities can be gleaned from such an analysis[54].

Patients on waiting lists come from a wide variety of categories and represent a wide range of treatment progress. The waiting lists could be subdivided into a small number of smaller lists to make clinical and administrative management easier. In addition, they facilitate the routine review and evaluation of admitted patients, and they make it easier

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for hospital and clinical administrators to obtain management information and statistical data[55]. The genuine picture of bed requests is known, and the medical staff committee is notified of the need for admissions in each department.

Multiple metrics have been used to examine patients' happiness with various facets of the waiting room experience. Subjective estimates of waiting time have been analysed by researchers[56]. Furthermore, the researcher contrasted the effect of waiting time to the effect of disconfirmation as a measure of satisfaction. The researchers were interested in quantifying mental processes on a personal, emotional, and intellectual level. In addition to cognitive and affective assessments, another researcher looked at 25 subjective and objective factors affecting patients' perception of waiting time.

The correlation between waiting time and patient satisfaction is significant, according to all research. A lot of studies had looked at how customers felt about their wait times to determine how much waiting time actually affected their satisfaction. On the other hand, research that compared reported wait times to real ones found that estimates were dependent on objective measures of time[57]. A group of scholars discovered that the greatest disparity between patient expectation and perception was the clinic waiting time, demonstrating the significance of understanding this discrepancy.

The length of time a patient has to wait before receiving care can be a proxy for how happy they are with the service they receive, how efficient their managers are, and how fairly they are treated. It's also used as a yardstick of sorts to evaluate how well a given hospital division and its staff are doing in terms of providing quality care. Triaging patients into urgent, non-urgent, and routine categories by healthcare providers based on

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the severity of illness and other factors that determine the priority of access to specialist care and, consequently, the length of time the patient must wait to see that specialist has become increasingly necessary as healthcare spending and service provision have increased.[58]

While many hospitals seem unable to find a quick and permanent solution to the issues of waiting time, it is an issue that has been linked to negative health outcomes and low patient satisfaction. Patient satisfaction drops as a result of long wait times for medical care, and patients may even leave the hospital without being examined by a doctor. Patients' discontent, discomfort, and suffering can be exacerbated by this, and it can even endanger their lives. Healthcare outcomes may be negatively impacted if patients have to wait longer to obtain treatment due to bottlenecks in the system. According to a recent study conducted at a Ugandan public hospital's outpatient departments, patient satisfaction with waiting time is significantly correlated with patient satisfaction with outpatient services as a whole[59]. What this implies is that, once patients are made to wait for a long period of time, they would have already formed a negative perception that even a high-quality services by health practitioners may not be able to dispel. Indeed, when patients had to wait three hours for a consultation that lasts for five or ten minutes, it is likely to increase their level of satisfaction.

Numerous studies have focused on decreasing outpatient waiting times because both wait and treatment durations are typically seen as measures of service quality[60],[61]. However, despite the importance placed on measuring how long patients wait and examining any empirical correlations with patient waiting time for outpatient care, little research has been conducted in these areas.

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Overcrowding in the waiting area is both a nuisance to patients and a nuisance to hospital staff when waiting times are excessively long. Scholars report that patient satisfaction drops significantly when waiting times are long. Patients often reported feeling overwhelmed by the number of people at the outpatient clinics of Malaysian public hospitals, demonstrating that this is not an exceptional occurrence. Waiting time is common in various hospitals around the world. What is also common is that the hospital with the longest waiting time are public hospitals where the services are essentially free. The majority of low-income citizens who cannot afford other hospitals flock to public hospitals.

Wait times in clinics can be further extended by lengthy and intricate work processes and excessive duplication of testing. For instance, some of the common practices in hospitals that have been identified as contributing to patients' waiting time include; late arrival of doctors, a large number of patients arriving at the same time, ineffective record-management practice that makes it difficult to quickly retrieve patients' files, and doctors who spend longer time than necessary in consultation with patients[62]. Also, shortage of doctors and nurses, a lack of efficient diagnostic facilities, a large number of patients shortage of hospital beds and administrative services Consultant practices of patient "recycling" have been linked to inefficiencies in outpatient clinics by reducing the capacity to see new patients. Numerous countries, including the United Kingdom, Belgium, Malaysia, the United States, China, and others, have conducted research on the prevalence of long wait times in public healthcare facilities. It is possible to draw the following conclusions from a review of the literature on the topic of healthcare waiting times: Poor work attitude of employees; erratic patient sequencing; understaffing;

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insufficient management and support; Inadequate facilities, along with improper facility design.

There's a tremendous gap between public and private healthcare, with private hospitals charging ten times as much as public ones. The elements influencing patient attendance at public hospitals are due to waiting times. Overcrowding in many public hospitals is worsened by the fact that they mostly serve people with lower incomes and government employees. Many governments and health authorities across the world emphasizes the importance of ensuring that everyone has an equal opportunity to reach their optimal health status. In order to ensure access to healthcare, many governments around the world often offer significantly subsidized public healthcare systems as part of a program that prioritizes those with lower incomes. That's why the majority of people who use public hospitals as their primary care providers are from lower socioeconomic groups[63].

In some cases, patients' frustration with excessive wait times has manifested itself in outbursts of verbal anger directed at nurses or clinic receptionists. Research conducted in Malaysian public hospitals found a strong association between patient satisfaction with their wait time and their overall experience as an outpatient. While studies have shown a correlation between wait times and patient satisfaction, another scholar argued that waiting times have an effect similar to that of a price on external customers. This means that consumers are made aware of the monetary and time costs associated with various actions, and respond accordingly. Therefore, even in situations where there is monopoly control over customers, such as in a hospital emergency room, there may be alterations in behaviour, such as long delays forcing patients to seek an outpatient facility or private practitioner. Long wait times have been linked to a variety of causes. The healthcare

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industry is hampered by a system that is overburdened with patients, understaffed, and equipped with antiquated technology[64].

Given the impact of waiting time on healthcare delivery, especially its contribution to patients' satisfaction or dissatisfaction, scholars in the medical profession have been exploring several strategies that can be used in reducing waiting time or, at least, mitigating its effect on patients' satisfaction. As the concern for waiting time was developed from the business sector, it is also logical that health practitioners would look at various initiatives and strategies that have been proposed by researchers from various other fields in other to find a solution to the issue of long waiting periods. Some scholars have suggested that hospitals should start with the basics.

The development of standardized systems for monitoring and reporting wait times is recommended. These scholars have recommended that hospitals should keep accurate records of how long each patient had to wait, how many patients are waiting at a particular period, and how many of the patients considered their waiting time to be too long. This is expected to inform the hospital whether there is a 'waiting time crisis' and severe or mild it is. Mathematical modelling, survey research, patient flow analysis, and computer simulation modelling are some of the suggestions that have been made as a way to determine the length of waiting time in hospitals and other service entities. While the use of technology and scientific methods are desirable, each hospital has to conceptualise and measure its patients' waiting time according to its peculiarities.

Hospitals are enjoined to develop a consistent technique for defining "time on"; that is when a patient should be regarded as waiting. Or, in a clearer terms, when should the

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hospital accept that a patient has joined the queue? Some scholars have suggested that waiting time for some patients starts from the moment they leave their homes to go to the hospital. for example, if this is considered, patients who visited the hospital from remote places such as villages and satellite towns may be given priority in service considering that they had already spent hours in transit before getting to the hospitals. While this seems logical, it is not always practical and such not widely used. Another consideration or clarification that must be made is that does the waiting time start when the patient arrivesat the hospital or from when they get in contact with the first hospital personnel such as record managers who put them on the list of patients to be treated for the day. The creation of the waiting list is seen as an effective tool for managing waiting time[65].

The waiting list should consist of pertinent information such as time of arrival, health condition, age, and other relevant information useful to the hospital management. This list should then be continuously monitored to ensure that patients are adequately prioritized and that those who no longer need to be on lists are removed. Time spent waiting for the treatment of any kind, from referral to specialist to treatment, should be monitored closely. It should also be feasible to identify and quantify the following the total amount of time spent waiting between when the patient arrived or is referred to the hospital and when the examination begins. The evaluation should also look at the duration of the consultation, beginning at the time the consultation begins and ending when the consultation is over (the consultation may take several appointments and investigations). The evaluation should also include the sum of time spent waiting from the conclusion of the examination to the beginning of treatment. Having all these

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information is expected to be of immense help to hospitals in determining the level of waiting time, its causes and how to tackle it[66].

No patients would relish having to wait too long for treatment, but this issue can be greatly mitigated with effective management. However, scholars have observed that waiting time may not be eliminated with a stroke of the pen. As a result, hospitals should also develop strategies to ensure that they manage all four dimensions of waiting time so that patients' satisfaction is not adversely affected. This approach was adopted by a Cleveland Clinic when it discovered that long wait times were the primary cause of patients' dissatisfaction. The hospital found that patients care far more about open lines of communication between doctors and their patients. In response, the hospital mandated all hospital personnel, irrespective of rank or occupation to engage with patients in casual conversation while they waited for treatment. This was expected to create the illusion that patients are been attended to. The management of the hospital was working on the assumption that patients would see the interaction with the hospital personnel as part of service delivery.

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Patient wait times at hospitals are commonly cited as a reason for the growing demand for more efficient healthcare delivery in Nigeria. Long wait times to see a doctor are common in Nigeria, as they are in many impoverished nations. This is a common occurrence in healthcare systems that do not require patients to schedule appointments in advance and where medical professionals are scarce.

Sometimes a patient's expectation before or during contact with care providers is linked to that patient's experience with healthcare services. This way, patients may be more

content after receiving their outpatient treatments quickly[5]. Patient happiness is often examined via the lens of the "value expectancy,""fulfillment," or "discrepancy" models, all of which point to the role of expectation in addition to the possibility that it is a reflection of the patients' experiences 8 Understandably, issues at either the patient or the health care level might have an impact on both patient happiness and experience.

A majority of Nigeria's general outpatient clinics do not offer time-specific appointments. Therefore, people seeking outpatient care get to the hospital or clinic bright and early, with the vast majority arriving around the same time. These early arrivals often have to wait for the doctor's office to open before requesting an appointment. Because doctors are often being swamped with patients, lengthier wait times for patients are an unintended side effect of delayed consultation start times. [5]

Several studies have attempted to confirm or refute Master's hypothesis regarding customer satisfaction with waiting times in the service industry. These studies have taken a variety of approaches, including examining the relationship between shifts in customers' perceptions of waiting time and overall satisfaction, examining the various components of Master's hypothesis, and analyzing the discrepancy between expected and experienced wait times. In healthcare, where quick response is essential for happy patients and their families, researchers found that time was the most important factor. The length of time a patient has to waited before being seen is widely acknowledged as a significant contributor to their overall experience.

One of the strategies that have been applied to manage waiting time is the queuing theory. However, in term of concrete efforts to reduce waiting times, scholars have

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recommended the queue theory. Some academics, have proposed utilizing computer simulation as an operational research method to optimize clinic waiting times. A quantitative approach to waiting time has been echoed by researchers who proposed a queuing model to decrease ER wait times by dividing patients into four groups based on their level of urgency[67]. The use of computer simulation for queue management in outpatient departments of public hospitals was proposed by researchers in Hong Kong [68].

The Queuing theory is a model used to manage waiting time in outpatient clinical situations. The model recognizes that waiting is the most difficult thing to do under any circumstance, particularly when it is to access healthcare services. The theory is made up of four sub-constructs namely; arrival patterns, service patterns, the cap ity of the hospital, and queue discipline.[69] Patient arrival pattern focus on the manner in which they arrive in the hospital. This arrival pattern has three features; the number of patients arriving at the same time, the interval between each arrival, and behavior of patients on arrival in the hospital.

Patients could arrive individually or in a group. In some hospitals, one patient arrives and they are already attended to before another one arrives while in others, many patients arrive at the same time. The second aspect is also concerned with the time gap between the arrival of each patient or group of patients. Scholars observed that patients' arrival pattern is often random. So while it can be forecasted, it is difficult to accurately predict the number that will arrive at a given period or when exactly another batch will arrive. The arrival pattern also covers the behavior on arrival. Some patients may decide no tot be willing to queue; some may get tired of the queue and leave while some may try to find a short queue or one that is moving faster than their current one. All of these affect

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the waiting time and the attitude of patients towards it. The arrival pattern directly affects the service pattern.

Service pattern in the queuing theory is the manner in which the patients are attended to in the hospital and the process they have to go through to obtain the services they need. Service pattern has to do with the number of health personnel attending to patients and the number of service points each patient has to go through. For instance, the service point in a typical hospital may include, registration, vital sign check, nurses bay, doctor consultation, etc. Both the number of 'servers' and the service points are interwoven. For instance, when there is enough staff at the registry attending to the patients, enough nurses taking vital signs, and enough doctors to whom several patients can be routed at once, the queue may move faster and the waiting time reduces. How this affects the individual patient however depends on the queue discipline.

Queue discipline is the rule followed by the hospital in attending to people in the queue. The most popular queue discipline is the first come, first serve model. There is also the priority model in which patients are attended to from the queue independent of their arrival times. Hospitals can decide to attend to patients based on the severity or nature of their ailment. This operates in two forms; the preemptive and non-preemptive approach. In the preemptive case, patients, such as women in labour, accident victims or those at critical conditions can be given priority and allowed to go to the head of the queue and be attended to immediately. In the non- preemptive case, elderly patients can be allowed to move to the head of the queue but they cannot be attended to until the first patient they met in the queue is done even if such patient is not high priority.

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There are different queuing systems to satisfy whichever approach is by the hospital. There is the single server, single queue; single queue, multiple server and multiple queues, and multiple server models of queue discipline. Whichever queueing approach is adopted has impacted the waiting time consequently on patients' satisfaction with healthcare. However, apart from waiting time, continuity of care is another factor that can affect patients' satisfaction.

2.1.3 Concept of Continuity of Care in Hospitals

Health services researchers often use the term "continuity of care" to refer to the relationships between patients and doctors that are consistent and coordinated over the course of time and in different care environments. The term "continuity of care" refers to the degree to which a single patient maintains consistent contact with the same healthcare provider over time. In this sense, the care provider may be a hospital or a single general practitioner. A renowned medical scholar also defined continuity of care as the number of times a patient visits a given doctor within a given time frame. It is commonly regarded as a central value of patient care in primary care medicine, and it is typically defined as an ongoing relationship between a patient and a single physician outside of a specific incident of illness.

This means that continuity of care is the practice of patients staying with one doctor or the same set of healthcare providers over a long period of time. They go to this for any type of ailment and listen to them for medical advice. This is seen as the best way to promote "more effective dialogue, steadfast trust, and unwavering accountability"[70]. A patient's ongoing relationship with a provider, medical clinic, primary care physician, or

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other healthcare organization is the foundation of continuity of care. Having a single point of contact for all of a person's healthcare needs may improve health outcomes for those who stick with the same primary care physician over time. This metric takes into account both the average and median ambulatory visits made to each family doctor by employing a weighted index.

The number of providers treating a patient and the proportion of care provided by each provider must be documented, so-called Continuity of Care Indexes (COCI) is constructed for this purpose. Scores can be anywhere from slightly greater than 0 (indicating multiple providers were consulted) to a maximum of 1. (all visits made to the same provider). This indicator is particularly important in studies because it tracks patient contact with healthcare professionals outside of a hospital or clinic setting. Depending on the goals and scale of the study, Continuity of Care can be assessed for a single doctor, a group of doctors, a primary care physician, or a clinic[71].

To scholars who view continuity of care as the fidelity of patients to a set of healthcare providers, two conditions must be satisfied for the concept of "continuity" to be viable a provider(s) must have exclusive access to a patient, and this attention is maintained over time. This is understandable because “when a patient keeps going back to the same doctor, that doctor can gradually refine and implement a treatment strategy tailored to the patient's needs. This possibility is lost when a patient sees multiple doctors, increasing the difficulty of implementing a holistic treatment strategy that addresses multiple problems ". In order to estimate the reliability of home health care services, researchers use a formula originally designed to model the dispersion of patient-provider contact across multiple settings. In comparison to other quantitative indicators of continuity of care, this measure

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is superior because it considers the total number of interactions, the number of interactions with each provider, and the total number of providers[71].

For each patient, the Continuity of Care Index (COCI) details how many different doctors have treated them and what percentage of their overall care has come from each doctor. The index is customized for each patient by dividing the sum of all doctor visits by the number of visits to any given doctor. This index takes into account the average number of ambulatory visits per doctor as well as the variation in those visits. Values for the index are between +1 (many visits to different doctors) and -1 (no visits to a doctor) (all visits made to the same physician)[88]. Available studies have also suggested that continuity of care should not be limited to the use of a single healthcare provider by the patient but the level of coordination that exists in ensure that the patient receives the diverse care needed to achieve the desired outcome. In patient care, there is a concept which described this process. It is referred to as transition of care.

When a patient changes from one care setting or provider to another, this is known as a transition of care (TOC) and is defined as such by the Centers for Medicare & Medicaid Services (CMS)[72]. There are many reasons why this may happen. The transition of care may occur even within the same hospital such as when a patient is moved out intensive care to the general ward with its own set of medical personnel. The patients may also be discharged to continue their convalescence at home under the care of nurses and other medical practitioners. It may also happen that the patient moves to another hospital to secure better treatment or moved out of a particular location. These reasons are numerous but the most important concern of continuity of care is that the most effective course of treatment is maintained across various practitioners who have to deal with the patient.

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The reality of care is that a patient is likely to be seen by different practitioners in the course of diagnoses and treatment. The patient therefore, moves from one practitioner to another until his/her problem is solved. Because healthcare service delivery is often a team effort and patients' treatment often require the inputs of different units in a hospital or even different hospitals in different geographical location, continuity of care has been expanded beyond a patient sticking to one doctor or nurses. This is why the three dimensions of continuity of care have become more significant. The first dimension of continuity of care is information continuity. It involves the use of previous health records of the patients to ensure that they continue to receive appropriate treatment even when the doctors or nurses change or when they move from one department in the hospital to another. Information continuity is essential for healthcare professionals in order for them to have sufficient knowledge and information about a patient to best apply their professional competence and the confidence that their care inputs will be recognized and pursued by other providers.

Information continuity is made possible by effective health information management system. Scholars have reported that, for effective transition of care, medical professionals, patients, and family members all need to work together to make a smooth transition. Oftentimes, patients' records do not follow them from one care facility to another. Many doctors and nurses don't know what happens to their patients when they move from one care facility to another unless they work in a closed health system. Since many facilities and institutions are not linked to one another, information is shared slowly and inaccurately. Unfortunately, around 60% of all medication errors occur during transition of care[73,74]. This is because poor communication occurs during TOC which is often the

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cause of about half of all hospital-related medication errors and one in five adverse drug events[75].

Proper record management practice and effective information sharing process enhance information continuity in hospitals and contribute to patients' satisfaction. Patients information such as lab results, prescription, treatment history, existing conditions etc. should be accessible to relevant units in the hospital so that patients will not be asked the same set of questions after each change of shift or when accessing services from various units of the hospital. information continuity also applies to discharged patients who need continuous treatment at home or need some period for recuperation. Information continuity allow their families or home care nurses to know how to deal with the patient to ensure that they are properly healed. Information continuity is very essential to another dimension of continuity which is management continuity.

Management continuity refers to consistent and coherent approach to the management of a health condition that is responsive to the changing needs of patients. It means that the course of treatment is not necessarily altered when a new set of healthcare professionals take over a patient. Indeed, the concept of continuity of care arose because of the fact that patients may have to be attended to by different health professionals. Continuity of care therefore focus on providing the patient with a coherent, connected, and consistent medical care that leads to the most desired outcome. Management continuity is often essential in the treatment of patients with chronic ailments such as HIV, diabetes or cancer.

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Such patients need prolonged care and may have to receive care from various expert over a long period of time. Management continuity therefore ensures that healthcare providers share among themselves, the treatment plans or care protocols for each patients in order to provide a sense of predictability and assurance for in the course of treatment for both the patient and the healthcare professional. Management continuity can also expand from information sharing among doctors and health professional to include other service providers. For instance, in mental health care, doctors often facilitate access to a broad range of services aiming at improving the mental health of their patients. These services providers are guided to deal with the patients in a way consistent with their existing treatment plans to ensure that all the varied approaches work together to the benefit of the patient. However, management continuity also encompasses flexibility and adaptation of care.

Management continuity provides a bird-eye view of the treatment regime as well as the patient's characteristics. This enable the healthcare provider to identify when changes need to be made or the treatment needs to be adapted to match emerging changes in the patient. Flexibility in adapting care to changes in an individual's needs and circumstances is an important aspect of management continuity. Some scholar has however pointed out that management continuity is more of care coordination than continuity of care[76]. No matter the perspective, management coordination is focused on consistent and timely coordination of health care service delivery. When care is long term, both consistency and flexibility are critical for management continuity. Aspect where consistency rather than flexibility is essential is relational continuity.

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Relational continuity is the dimension of continuity of care that covers the continuous treatment relationship between a patient and a set of health professionals or a single hospital. Relational continuity enables healthcare providers to connect the past to the present in order to chart a course for future treatment. Example of patients who need relational continuity are pregnant women and infants. It is important that these categories of patient have stability in their treatment. That is why it is essential for pregnant women to register for ante-natal treatment in a particular hospital so that the same set of health professionals who have come to develop great understanding of the unborn fetus and the mother. Relational continuity is also applicable to people under home care and people who have appointed a family physician.

In line with this, relational continuity of care is also described as longitudinal continuity as it encompasses a long-term relationship between patients and healthcare professional. It means that patients stick to one healthcare professional or one health facility. Thusrelational continuity builds on the relationship between patients and health professionals to create a sense of predictability and coherence. Relational continuity interventions usually refer to the strength of interpersonal relationships including the level of communication, comfort, trust and belief between patients and healthcare providers[89].

Scholars also distinguishes relational continuity, which is the continuity of relationships between providers, from information continuity which represents the continuity of shared information between providers and "management continuity", that is continuity of oversight and direction aimed at achieving a consistent approach across providers. Though interpersonal continuity which means developing a reciprocal trusting connection

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with a single doctor or healthcare team, is essential for true relational continuity, longitudinal continuity, that is, continuously visiting the same doctor, is commonly employed as an alternative. In the modern setting, it is more feasible to provide small practice teams that try to assure continuity by employing more than one clinician at a time[77].

Although not all patients seek relational continuity, studies demonstrate that it is highly appreciated by some subsets of patients and may improve results. Despite this, the rate of relational continuity has been reducing even in the western world due to a shortage of primary care physicians, a greater volume of work, greater complexity, and policies that value convenience above reliability[78,79]. Primary care networks, e-consultations, and task-shifting to free up health professionals' time are only some of the new forms of primary care that have been pushed by the NHS Long Term Plan in order to address the workload challenge[92].

The consistency of relationships will be impacted by all of these factors. Finding solutions to preserve the benefits that patients connect with relational continuity within the context of the current healthcare system requires first identifying the benefits that patients link with relational continuity. An initial step in this direction is to identify the factors that influence primary care patient satisfaction. Provider behaviour (such as technical care, interpersonal care, and patient-centeredness), care organization and delivery (such as access and continuity), and patient outcomes are all ways in which these qualities have been articulated[80].

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Studies have been conducted to determine which features are most preferred by patients. Although results have been inconsistent, some studies have demonstrated that patients value the qualities of GP behaviour more than organizational aspects. Patients' perceptions of their primary care physicians' (PCPs') qualities and actions, as aided by continuity of care, have been the subject of few qualitative studies. An analysis of this kind can do two important things: pinpoint the ways in which relational continuity (or its lack) may impact the patient experience, and investigate how such negative impacts can be ameliorated within a new continuity model.

2.2 Theoretical Framework

Theoretical review is an important aspect of empirical research. It allows researchers to examine related theories that elaborate on the topic at hand, leading to a deeper knowledge of the study at hand and providing an argument for the current investigation. While empirical review helps the researcher clearly identify, describe, and clarify the study variables, the theoretical review helps justify the current study and provide the framework to test hypothesis and approach the study. The theories adopted in the current study are the consonance theory, queuing theory and continuity of care model. Together, they provide the metrics for measuring the study variables.

2.2.1 The Consonance Theory

The Consonance Theory of Patient Satisfaction by Bernardo Oliber in 2017. The theory was produced inductively from a thorough analysis of the existing literature on the topic of patient satisfaction with nursing care. The theory posits that patient satisfaction is

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determined by factors such as; patients' care expectation, individualized care, institutional quality of care, and patients' health outcome (figure 2.1)[81]. According to the central assumption of this theory, the quality of care provided by a certain institution and the health outcomes experienced by its patients are directly correlated with the level to which patients are satisfied with the treatment they have received from their health information managers. In this model, both the patient and the health information managers are seen as partners working together toward a common goal—the patient's happiness. This theory, offers a realistic framework for analyzing and improving health information management in the interest of patient satisfaction.

Patient's Care Expectation is the level of technical, interpersonal/supportive, and informational care he or she anticipates receiving. The expectation of each patient is often based on his or her unique health care requirements, ideal care conception, and prior care experiences. It means that people with higher care expectation are more difficult to satisfy than patients with lower care expectation irrespective of the quality of care. While patients have care expectation, health information managers also have their own standard or procedures relating to patients' information management. This is called individual care in the consonance theory.

Individualized care is based on the health information manager's evaluation of each person's unique requirements and preferences. There are three parts to construct: the clinical situation, or how the patient responds to the clinical aspects of their care; the personal life situation, or the patient's history and any personal issues they may have; and the patient's ability and willingness to exercise decisional control over their care. These facets of individualized treatment will differ from patient to patient; therefore it is

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important to collect data and use it to ensure that each person feels that their unique needs are being met.

Quality of care in institutions is the effectiveness of health information managers and infrastructure in providing the needed health information management services to patients and health professionals. It measures that service provision ability of health information managers. There are many different components, such as information collection, organization, management, dissemination and patient interaction. For instance, the quality of information management in a tertiary health institution is higher than what is obtainable in primary health centers. As a result, a patient who visit a primary health centre for a condition that should be handled by a tertiary health institution may not be satisfied with the care received. A simple way to determine satisfaction is health related outcome may or may not be what the patient expected.

The level of services provided by health information managers has the greatest impact on patients' opinions of the hospital as a whole. Health information managers providers typically define quality of care from a technical standpoint; however, newer literature has stressed the importance of the patient's perspective when evaluating quality of service. In addition, several researchers have indicated that patients' experiences are increasingly valued as a valid measure of the quality of health services. Hospitalization experiences have a significant impact on patients' perceptions of the quality of treatment they get. Patients' perceptions of the quality of the care they receive from health information managers and others in the hospital have been found to be a useful indication of care outcomes.

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Evaluations of health care quality also reflect a multifaceted brew of requirements, anticipated outcomes, and actual experiences. A patient who is happy with the care they have received from a healthcare provider is more likely to remain loyal to that provider, return to that healthcare provider when necessary, and refer that healthcare provider to others. A patient who isnot getting what they need from their treatment stops it early and searches elsewhere. When a patient leaves a healthcare institution because of dissatisfaction, the facility must replace them at their own expense.

Health-related outcomes are the results, both positive and negative, of the nurse-patient contact, with the patient's level of satisfaction with their actual experience of individualized nursing care having a significant impact on the outcome.Hospitals benefit when their patients have a positive experience with health care because those patients are more likely to follow doctors' orders and recommendations. A dissatisfied patient, on the other hand, is less likely to comply with their healthcare providers.

Patient satisfaction is a predictor of both the patient's health-related results and the quality of care provided by the institution, and it is the result of a concordance between the patient's expectation of care and the actual treatment received from the healthcare provider.The healthcare provider's focus is on the patient's health and is achieved through their interaction, which takes place in every culture and every healthcare system around the globe.The nurse-patient interaction is crucial to achieving positive care outcomes because it directly impacts patient satisfaction. When a nurse interacts with a patient, she should work to strengthen the link between them. This will increase the patient's sense of well-being.

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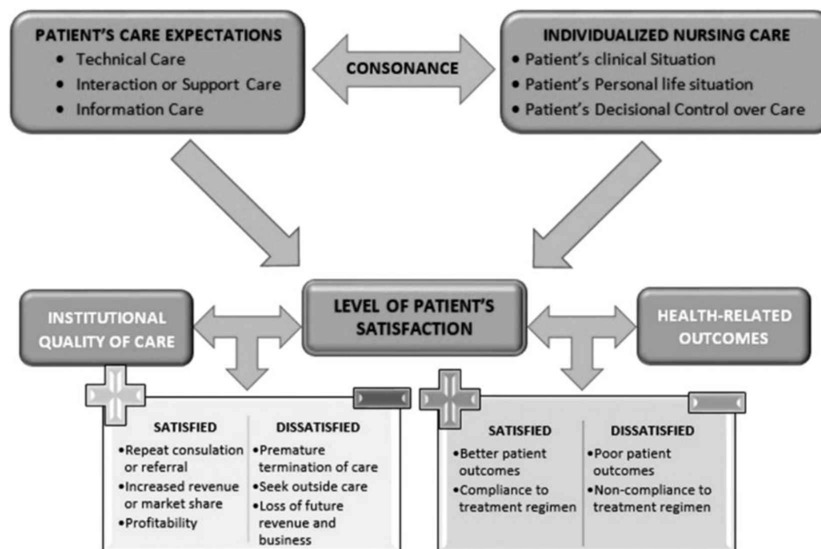

Figure 2.2: Consonance Theory Model[81]

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2.2.2 Queuing Theory

The queuing theory was developed by a Danish scholar named Agner Krarup Erlang around 1920[82]. His extensive studies of wait time in automated telephone services and his proposals for more efficient networks were widely adopted by telephone companies. The queuing theory investigates the dynamics of lines and what causes them to work or not work as intended. It is the goal of queueing theory to analyze every aspect of waiting in line, from the arrival process to the service process to the number of servers to the number of system spaces to the number of consumers, who can be anything from people to data packets to cars. The queueing theory has constructs such as; arrival patterns, service pattern, the capacity of the hospital and queue discipline.

Patients' arrival pattern. The arrival process is mostly random and unpredictable in most queueing scenarios, making it important to understand the probability distribution

characterizing the intervals between patients' arrivals (inter arrival times). The Poisson process is a typical arrival process. Whether or not patients can arrive all at once (batch or bulk arrivals) is equally important information to have, as is the probability distribution characterizing the batch size. The way the pattern shifts over time is also important. An arrival pattern is stationary if it does not evolve over time. That is if a similar number of patients keep arriving at different intervals. A non stationary system is one that does not behave predictably over time. A hospital, for instance, would have a non stationary arrival pattern if its patients tended to come in at a higher rate during the early hour than at other times of the day. Several of the models of arrival pattern rely on an arrival process that remains constant throughout time[83].

Further, understanding a patient's initial impression of the system is essential. Patients have the option of waiting in the queue until they reach the front of the line or leaving the system if the wait time exceeds their tolerance. A customer is said to have baulked if, upon arrival, they opt not to join the queue. It's possible that a patient will join the line, only to abandon it later out of frustration. It is alleged that the patient reneged in this situation. Patients may "juggle" for position by hopping from one waiting line to another if there are more than one. All three of these scenarios involve patient who are impatiently waiting in lines.

Service pattern. This can be either single or batch services. It is common to picture a single patient being attended to by a single server, but in reality, there are many scenarios in which multiple patients may be attended to simultaneously by a single server. The number of patients in line for service may also affect how long each individual must wait. If the server sees the queue growing, they may work quicker, or they may become

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irritated and provide lower-quality work. State-dependent service occurs when the level of service provided is contingent on the current queue length. Both arrivals and services might be time-fixed or dynamic. For instance, as knowledge is learned via experience, services may improve in effectiveness. The time dependence is distinct from state reliance. The first is tied to the system's age (independent of its condition), while the second is proportional to the system's user base (regardless of how long the system has been in operation). It seems to reason that a queueing system may be neither stationary nor independent of its current state.

System capacity. There may be a hard cap on the number of patients that can wait in line at any given time in some setups; when that number is reached, new patients are turned away until more room is made available. That's what we call "finite queueing," when the number of people waiting to enter the system is fixed. Customers in a line where there isn't enough place to wait may feel compelled to leave if they arrive at the queue's maximum capacity. For instance, when the bed space available in the ward is full, or the waiting area has reached its capacity, the hospital may decide to turn some patients away.

Queue Discipline describes how those people are prioritized for service. First-come, first-served is a rule (FCFS)that is often adhered to in hospitals. On the other hand, there are a wide variety of other systems to consider. A random selection for service (RSS) draws patients at random from the queue regardless of their order in the queue; processor sharing (PS) allows the server to process all customers (or jobs) simultaneously but at a slower rate on each job based on the number in the system; and so on.

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Prioritizing the needs of some clients over those of the lowest priority is a central tenet of these methodologies. We can break priority discipline into two broad categories: preemptive and non-preemptive. The non-preemptive scenario is when one customer has a higher priority than another, yet the latter must be served before the former can be served, regardless of the priority difference. In the proactive scenario, a customer with a higher priority is allowed to enter the service immediately upon arrival, even if a customer with a lower priority is already in service. Once the higher priority customer has been attended to, service to the lower priority customer will resume. In this preemptive situation, the server can continue the service from the point where he stopped. He can also start from the beginning.

Queueing theory has many practical uses in many different industries. The results can be utilized to enhance data network and call centre design, as well as speed up customer service and warehouse order shipping. Queuing theory is a subfield of operations research that can provide insight into how to design more effective and economical corporate workflows.

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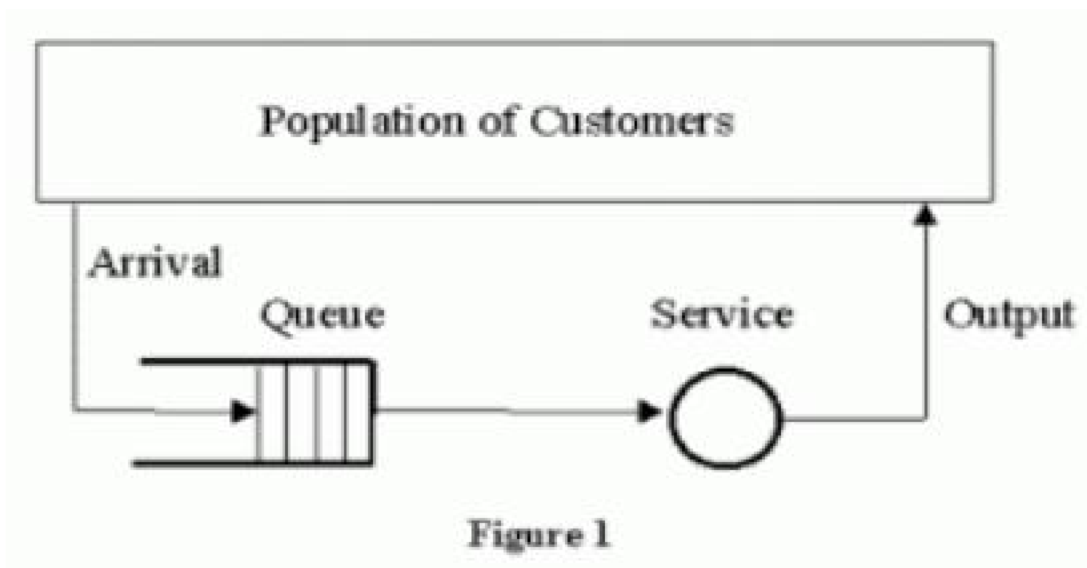

Figure 2.3: Queuing Model[82]

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2.2.3 The Continuity Model

The continuity model was developed by Sarah Bahr and Marianne Weiss in 2017 as part of a Phd dissertation. It holds that continuity of care has three dimensions namely relational continuity, management continuity and informational continuity (figure 2.4) [84]

Care continuity is achieved when patients actively participate in their treatment plans with clinicians over time and across settings. When patients and doctors maintain open lines of communication, they are better able to share relevant data in a timely manner. Maintaining a steady rhythm between patients and healthcare providers is crucial for effective two-way dialogue (informational continuity) and teamwork (management continuity). This two-way communication is mediated by health information managers who keeps the doctor abreast of the latest about the patients and the patient abreast of information regarding what the hospital expect from them.

An integral part of the provider-patient dynamic, patient participation is crucial to effective two-way dialogue and teamwork. By including the patient and family, health information managers can ensure a smooth and successful transfer from the hospital to home. Lack of patient and/or family participation, even in the face of the provider's consistency, might stymie the development of a high-quality patient-provider relationship. Within the context of a relationship with a patient, relational continuity develops. The needs of the patient must serve as the primary focus of this therapeutic partnership. The reciprocal knowing that develops between patients, families, and nurses is a key component of continuity of care. The process of patients and clinicians getting to know one another is not always encouraged or prioritized in the clinical setting since it needs time, availability, sustained contact, and continuity.

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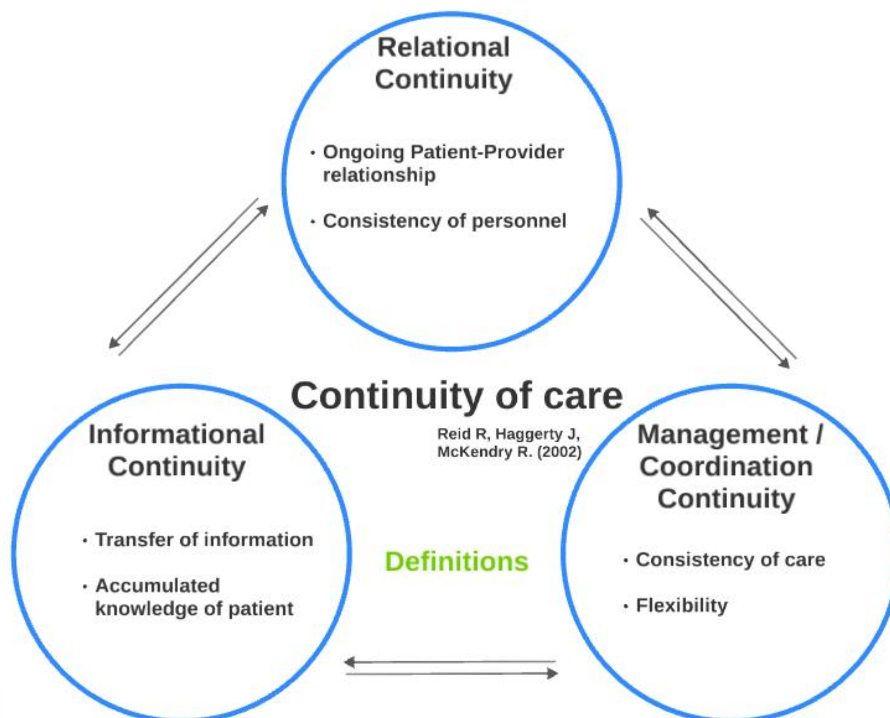

Figure 2.4: The Continuity of Care Model[84]

2.3.1 Waiting Time and Patients Satisfaction in Hospitals

While scholars have argued that waiting is inevitable in any situation where the available patients are beyond the carrying capacity, patients do not always agree. The study on waiting time has always found a correlation between waiting time and patients satisfaction. There is evidence to suggest that waiting time can have a negative impact on patient satisfaction. A number of studies have found that longer waiting times are associated with lower levels of satisfaction, both for patients who are waiting to see a healthcare provider and for those who are waiting for a test or procedure to be completed. For example, a study found that longer waiting times were associated with lower levels of satisfaction among patients in the emergency department. Another study published in the Journal of Advanced Nursing found that patients who experienced longer waiting times in outpatient clinics were less satisfied with the care they received[85].

It is important to note that there are other factors that can also influence patient satisfaction, such as the quality of care, the demeanor of healthcare providers, and the patient's overall health status. However, waiting time can be a significant factor, especially when it is perceived as being excessive or unreasonable. To improve patient satisfaction, it may be helpful for healthcare organizations to focus on reducing waiting times and improving the patient experience. This could involve implementing strategies such as streamlining processes, increasing staffing levels, or investing in technology to help manage patient flow[86].

Another researcher from the United States of America also examined the influence of waiting time on patient satisfactions. The study was a survey research. Data was gathered

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from a sample of 11,352 survey responses given by patients over the course of 1 year in all 44 ambulatory clinics within a large academic medical centre using surveys about patient satisfaction with provider care. Results were tabulated and stratified based on provider ratings and wait time experiences using a conventional statistical methodology, and then statistical modelling approaches were used to evaluate the data.

The study found that, though it is well known that longer wait times have a negative correlation with clinical provider patient satisfaction scores, the results showed that every aspect of the patient experience, particularly trust in the healthcare provider and perceived quality of care, had a negative correlation with longer wait times. This means that waiting time can lead to negative perception of all aspect of care. The study concluded that the amount of time a patient has wait for a provider's attention has a significant impact on their experience. Longer wait times not only have a negative influence on metrics likely to refer and overall satisfaction with the experience, but they also have an impact on how patients perceive the information, directions, and overall care offered by doctors and other caregivers[87].

The most significant indicator of overall patient satisfaction with hospital services and the general quality of healthcare services has been identified as patient satisfaction with nursing care. This led researchers in Ethiopia to examined what percentage of patients are satisfied with nursing treatment on a nationwide basis. The study adopted a systematic review and meta-analysis to determine how satisfied Ethiopian patients were with their nursing care and the factors that contributed to that satisfaction. Meta-analysis was performed using the random-effects technique, and STATA version 14 for Windows was

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used for all statistical analyses. 15 studies with 6091 patients met the inclusion criteria and were included in the meta-analysis out of 1166 records that were reviewed.

The estimated overall percentage of patients in Ethiopia who were satisfied with their nursing treatment was 55.15 percent (95% CI (47.35, 62.95)). There was a higher likelihood that patients would be satisfied with nursing care compared to their counterparts if they had one nurse in charge (OR: 1.08, 95% CI: 0.45-2.62, I2: 77.7%), had no prior hospitalizations (OR: 1.37, 95% CI: 0.82-2.31, I2: 91.3%), lived in an urban area (OR: 1.07, 95% CI: 0.70-1.65, I2: 62.2%. The study found that waiting time was among the various reasons why almost one in two patients in Ethiopia were dissatisfied with the nursing care they received. [88]

Still in the Americas, researchers from Latin America also assessed the correlation between patient waiting and consultation times and satisfaction in Peruvian outpatient clinics. This was done through analysis of secondary data from a cross-section of the 2015 Nationwide Survey on User Satisfaction of Health Services, a representative national survey of Peruvian ambulatory care facilities .All data was gathered using a post-visit survey given to patients at the ambulatory care centers of choice. The study has 13,360 participants. In terms of the most important metrics, the response rate ranged from 99.8 percent to one hundred percent.

The study found that there was a negative correlation between waiting time (per 10 minutes) and patient satisfaction (a OR: 0.98, 95% CI: 0.97-0.99), with the a OR being lowest for those who waited less than 90 minutes (a OR: 0.92, 95% CI: 0.89-0.96).b Patient satisfaction was also shown to be proportional to the length of time spent in

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consultation (per 10 minutes) (a OR: 1.59, 95% CI: 1.26-2.01).Those who reported a consultation lasting less than 15 minutes had a higher a OR (a OR: 2.31, 95% CI: 1.66-3.21).The study concluded that, overall patient satisfaction in Peruvian ambulatory care facilities was strongly correlated with wait time and consultation time, especially during the first 90 minutes of waiting and the first 15 minutes of consultation time[47].

Another group of Emirati researchers also examined the impact of waiting time on patients' satisfaction in the United Arab Emirates. The goal of this study is to examine the relationship between patient wait times and several measures of satisfaction, including overall satisfaction with the provider, as well as patients' impressions of the quality of their care and the physicians' competence. The study was a longitudinal study conducted over the course of one year. Data was collected from 11,352patients at tertiary health institution regarding their experiences with their providers. Results were collated and stratified according to provider ratings and wait times, and then statistical modeling was used to draw conclusions. Although it is known that longer wait times correlate negatively with clinical provider scores of patient satisfaction, the results showed that every aspect of the patient experience, including trust in the care provider and satisfaction with the care received, also correlated negatively with longer wait times[89].

In another instance, researchers conducted a study in Ethiopia with an aim of establishing determinants of patient satisfaction with outpatient health services at public and private hospitals in Addis Ababa, Ethiopia. The study incorporated use of a cross-sectional design to collect data from a stratified random sample of clinics in four regions of Ethiopia. The study examined how patient satisfaction was influenced by type of provider, cost of services, perception of service quality and access to services. The cross-sectional

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study used data that was collected using a time-motion study of patient services paired with 665 patient exit interviews in a stratified random sample of antiretroviral therapy clinics in 21 hospitals and 40 health centers in 2012.

The data collected in the study were analyzed using *f*-tests and multivariate logistic regression to identify determinants of patient satisfaction. The findings of the study indicated that majority of the patients were satisfied or somewhat satisfied with the services received, but patients who received services from nurses and health officers were significantly more likely to report satisfaction than those who received services from doctors. Investments in the health facility were associated with higher satisfaction, while increasing service costs to patients were associated with lower satisfaction. Easy access to services was also associated with improved patient satisfaction. The study showed high levels of patient satisfaction with task shifting. The evidence shows acceptability of studies which support the inclusion of task shifting as a mechanism for scaling-up health services to achieve universal health coverage, particularly for underserved areas facing severe health worker shortages, as a service quality improvement measure[90].

Another group of researchers conducted a study with an aim of investigating the relationship between patient treatment satisfaction and adherence to antidepressants, and the role of patient beliefs toward medication in patient treatment satisfaction. The study employed a facility-based study design in which systematic sampling was used to select a total of 403 patients attending Al Amal Psychiatric Hospital in Riyadh, Saudi Arabia. The study assessed how the outcome variable which was patient satisfaction was associated with unavailability of doctors and nurses, their negative attitudes and behaviors, lack of drugs, long travelling distances and the waiting times for treatment are major hindrances

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to the utilization of services and a cause of decreasing customer satisfaction in public hospitals. Patient outcomes of care are affected by rapport and interpersonal quality of practicing health professionals. Medication adherence was assessed using the eight-item Morisky Medication Adherence Scale, and treatment satisfaction was assessed using the Treatment Satisfaction Questionnaire for Medication.

Correlation and Chi-square analysis was used to show existence of associations between variables and predict the outcome of the relationship respectively. The results indicated that adherence to antidepressants was associated with treatment satisfaction with the antidepressants, with a direct positive correlation. Results of the study showed high treatment satisfaction scores among patients with major depressive disorder, which correlated with adherence and patient beliefs about the necessity of treatment. This finding revealed that understanding of the role of patient beliefs, and preferences can help caregivers and other stakeholders to improve patient satisfaction[91].

In Nigeria, researchers also found that waiting time has some influence on patients' satisfaction healthcare service delivery. Researchers found it necessary to pay special attention to the actual time spent by patients at the various service points during their visit to the hospital in order to improve efficiency in patient flow and the happiness of patients attending outpatient clinics. This led some researchers to survey patients at the General Outpatient Clinic at the University of Port Harcourt Teaching Hospital regarding their experience waiting for care, their degree of satisfaction with that wait, and the correlation between waiting time and satisfaction.

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The study population include patients over the age of 18 who visited the clinic. The study sample was using the random sampling technique. The main instrument used for data collection were a record sheet and a patient satisfaction questionnaire. The results showed that majority of patients were women (58.6%), over half were married (65.3%), and over three quarters visited the clinic on a consistent basis (72.6%). On average, patients spent 83 minutes getting to the hospital and another 274 minutes finishing up their business while there in search of general practice services. The average time spent in a doctor's office was 19 minutes, while patients waited an average of 77 and 50 minutes, respectively, for radiology and laboratory services.

Patients were much more content with their experiences waiting for appointments with doctors (93%) and nurses (83%) than they were with the length of time it took to gain access to imaging and laboratory tests (47%). The study found a statistically significant adverse correlation between patient satisfaction and the length of time they spent at the service stations. The researchers concluded that patients' unpleasant experiences may be exacerbated by the lengthy wait times they encounter while attempting to get routine outpatient care at the university hospital. To better manage patient flow, provide timely access to health services, and enhance the general outpatient encounter, service providers need to implement system redesign, establish patient appointment scheduling, and other interventions[7].

In another study conducted in Nigeria, researchers also explored the link between waiting time and patients' satisfaction. The study adopted a a descriptive cross-sectional research method utilizing a predetermined questionnaire for the purpose of data collection. It was found that some patients left the health facility before being seen by a doctor due to long

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wait times for appointments, difficulty finding patient records, a lack of diagnostic equipment, a lack of hospital beds, and administrative red tape. This resulted in a worsening of the patient's condition and a sense of patient dissatisfaction, which in turn led to a loss of revenue for the hospital as patients did not follow their doctors' orders and did not refer their friends and family. Patients' unhappiness and lack of faith in the healthcare system is on the rise due to the lengthy wait times they must endure before being seen by a doctor or receiving their medication. The general outpatient department desperately needs more medical personnel[92].

Patient satisfaction is a critical indicator of health care quality. Patient satisfaction and the quality of hospital care available remain key challenges despite ongoing attempts to enhance health-care services in Nigeria. This led a group of researchers to set out to learn more about what patients at Nigeria's Ibrahim Badamasi Babangida Specialist Hospital think about the variables that contribute to extended wait times and their overall level of satisfaction with the service they receive there. The study adopted was a mixed-method research approach. Ninety-five outpatients were given a questionnaire, and eight people took part in a focus group discussion (FGD). NVivo 10 was utilized to examine the qualitative data. Patients were reported to be 75.8% satisfied with their hospital experience overall. Patients' satisfaction with their doctors was significantly correlated with both their appointment status and the frequency and nature of their doctor's visits, but negatively correlated with their employment and educational position. Patient satisfaction with the hospital's cleanliness, the doctor's competence, and the doctor-patient interaction was high, according to FGD data. Patient wait times, the hospital's tiny size, the improper processing of patient files by nurse assistants, and the thoroughness of

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the physicians all received negative feedback. Most people were unhappy with how long they had to wait for an appointment, the study found. That is to say, longer consultations resulted in more satisfied patients. Reducing patients' wait times to see a doctor will greatly boost their satisfaction with the service[93].

Waiting time was also mentioned as a major factor in patients' dissatisfaction with ante-natal services in a Nigerian hospital. This was reported in a research conducted to learn how satisfied pregnant women are with the antenatal care services offered at the University of Calabar Teaching Hospital (UCTH) in Calabar, Cross River State, and what factors contribute to that satisfaction. Two hundred pregnant women who were receiving care at the UCTH ANC participated in a descriptive cross-sectional study. Client satisfaction was measured using the CSQ8 questionnaire, and participants were using a systematic random selection technique. Bivariate (Chi-square test) and multivariate (binary logistic regression) analyses were used to examine the data. Overall, this study found a satisfaction rate of 92%. Dissatisfaction was primarily due to the following factors: long wait times (57%) and high prices (40%) for services; unwelcoming clinic environments (31%); poorly matched doctors (19%) and uncaring doctors (13%). Patients' prior positive experiences at the medical centre were the only significant predictor of current satisfaction (p0.05). Pregnant women in UCTH reported a high degree of satisfaction with ANC services, but it is important to address issues like wait times, costs, and a lack of clean restrooms and other infrastructure[94].

Similarly, another set of researchers examined the level of patients satisfaction and residents' impressions of service quality in Lagos State through a community-based survey. The researchers used a mix of quantitative and qualitative techniques to perform a

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descriptive cross-sectional study across four LGAs in Lagos State. Multi-stage sampling was used to choose the respondents. A pre-tested questionnaire was administered by an interviewer, and a focus group discussion guide with 10 topics was used to compile the data. The findings showed that the average age of the 2,000 participants was between 27 to 47 years. Ninety-eight percent of the respondents said they were satisfied with the cleanliness of the medical facilities, and 96% said they were satisfied with the quality of care they received. About two-thirds of those polled found the wait times to be acceptable, and two-thirds also found that most medications were readily available. 87% felt that the care they received was of good quality, and 95% were pleased with the assistance they had received. Quality of care was significantly associated with satisfaction among the patients (r=0.145, p0.001). Confidence in health care professionals was also found to influence h patient satisfaction (p0.001) and the sense of good service quality. Client satisfaction and the impression of high-quality service are directly tied to the level of attention paid to these aspects[95].

2.3.2 Continuity of Care and Patients Satisfaction in Hospitals

Continuity of care is an important aspect of patient care in hospitals that refers to the consistent and coordinated care that patients receive from their healthcare providers over time. This includes ensuring that patients receive appropriate care from a team of healthcare providers who are aware of their medical history, current health status, and treatment goals. Patient satisfaction is another important aspect of care in hospitals, as it reflects the overall quality of care that patients receive. Factors that can affect patient

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satisfaction include the quality of communication with healthcare providers, the availability of necessary resources and services, and the overall hospital environment. Studies have shown that continuity of care is associated with higher patient satisfaction, as it can lead to better communication, more trust in the healthcare team, and a greater sense of control over one's health.

Hospitals that prioritize continuity of care can improve patient satisfaction by establishing clear protocols for coordinating care among different healthcare providers, using electronic medical records to ensure that all providers have access to relevant information, and involving patients in decision-making about their care. For instance, researchers from Canada examined the role of continuity of care on patients satisfactions. The research evaluated adult patients' happiness with mental health services (MHS) they received in healthcare networks with multidisciplinary staff and a variety of MHS, as well as to pinpoint factors linked to patient satisfaction. 325 patients with mental disorders (MDs) from 4 Quebec health service networks were included in this cross-sectional study. Nine standardized tools and participant medical records were used to collect data. An Andersen's Behavioral Model-based three-factor conceptual framework was used to integrate sociodemographic, clinical, needs-related, service use, social support, and quality-of-life (QOL) variables. The model used was an adjusted multiple linear regression one.

The average score across all patients was 4.11 (minimum: 2.0; maximum: 5.0). the study found that patient satisfaction was positively correlated with continuity of care, having a case manager, and receiving assistance from services, whereas being hospitalized was adversely correlated. The number of needs was one of the characteristics that negatively

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impacted satisfaction. Patients who received good continuity of care and well-managed, regular services in relation to their requirements showed higher levels of satisfaction, according to the findings. Patients with significant unmet needs or those who were hospitalized had higher levels of dissatisfaction, which emphasizes the significance of taking these specific factors into account in order to enhance MHS delivery and patient recovery[96].

The importance of continuity of care was also emphasized in a research that focuses on one aspect of continuity of care: consistency in nursing personnel and its connection to three patient outcomes. These outcomes are: a reduction in hospitalization, reduction in the need for emergency treatment, and improvement in patients' ability to perform activities of daily living. Data from a large population of people receiving home health care (N559,854) suggests that patients who have more continuity in their nursing staff between their admission and discharge from home health care are less likely to require hospitalization or emergency care and more likely to show improvement in their ability to perform activities of daily living.

Patients' age, gender, race/ethnicity, living situation, length of stay, diagnosis, comorbidity (measured as the number of diagnoses in addition to the primary diagnosis), the number of activities of daily living for which they require assistance, their estimated life expectancy and their overall prognosis are all taken into account in the regression equations. Patient outcomes were compared across the three levels of home health care continuity with odds ratios estimating the likelihood of these outcomes being achieved after controlling for a variety of demographic and clinical characteristics. In this study,

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we examine the differences between patients who had high, medium, and poor continuity of home health care.

The study found an association between higher levels of continuity of treatment and better health outcomes for patients. For instance, compared to patients with a higher degree of continuity, those with a lower level are 1.4 times more likely to be hospitalised and 1.3 times more likely to attend the emergency room. At discharge from home health care, patients with low continuity of care are (80%) less likely than those with good continuity of care to have increased functioning in activities of daily living[97].

Continuity of care was also found necessary in the health service to old people as it is common for older persons who are dealing with many chronic diseases to be readmitted to the hospital after being released. The was focused in a study which assessed the efficiency of various dimensions of continuity of care (i.e., informational continuity, management continuity, and relational continuity) in decreasing both short- and long-term readmission to the hospital following discharge among older persons with chronic conditions. The study adopted a meta-analysis research method with information gathered from various databases such as CINAHL, EMBASE, PubMed, and Medline,. A Mantel-Haenszel random-effects model was used to pool and integrate data on a subset of outcomes.

The data was divided up according to when patients were readmitted. One month after discharge, fewer patients in the experimental group (12.9%) were readmitted than in the control group (16.0%). Patients in the experimental group had a decreased readmission rate from 1 to 3 months (21.9%) compared to patients in the control group (29.8%). This

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beneficial effect was more pronounced, according to a subgroup study, when interventions targeted all aspects of continuity. This study concluded that older persons with chronic conditions are less likely to be readmitted to the hospital for a short period of time when continuity of care initiatives are put into place[98]. It is safe to conclude that older patients and their families will be satisfied if continuity of care can keep them out of hospital and able to live normal lives.

Continuity of care is not only important to older patients; it was also found relevant in prevent mortality in all patients. Researchers reported that continuity of care ensures that patients are more satisfied, more likely to follow doctors' orders, have shorter hospital stays, and spend less money on healthcare overall. The study is a systematic review of research published in scholarly databases such as MEDLINE, Embase, and the Web of Science.

The analysis of various research findings showed that increases in continuity of care were associated with statistically significant decreases in mortality in 18 (81.8%) high-quality studies. This included 16 cases of death from any cause. All three of the others found no correlation, while the fourth found conflicting results. According to the results, patients who receive greater physician continuity have a reduced risk of death. Patients of different ethnic backgrounds appear to benefit from having regular general practitioners as well as specialists. The study found relational continuity to be the most effective in ensure satisfactory patients outcomes despite the availability of various technology to support informational and managerial continuity[99].

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The study conducted by researchers in the United States of America (USA) found that patients who said they saw the same doctor or nurse every time had a mean adjusted humanistic score of 17.3 (95%), compared to 15.6 for those who saw a variety of doctors. When comparing patients who regularly saw the same physician to those who saw different doctors, the average adjusted organizational score was 16.3 points higher for the former group. Both the raw and adjusted humanistic and organizational ratings of the SOSQ were related to demographic and socioeconomic characteristics, health status, health insurance status, clinic location, and service utilization. Satisfaction levels are significantly greater when patients feel they have had service consistent throughout time. This shows that patients' satisfaction with their physicians and the healthcare system as a whole may increase if continuity of care is enhanced[100].

A similar study evaluated patients' satisfaction with nurse-led clinics, patients' perceptions of received information, and the relationships between continuity of treatment and satisfaction with information. The study was a longitudinal study which focused on patient satisfaction among those who attended a nurse-led clinic at the Department of Oncology at Karolinska Hospital over a six-year period. A structured questionnaire was used to collect data from the patients. The results showed that over time, patients' satisfaction with nurse-led clinics remained stable. Over 90% of patients regarded the nurses' interpersonal skills and care at the clinic as "excellent," the waiting time as "appropriate," and the appointment length as "adequate." Over 90% of respondents believed it was vital to meet with the same nurse, and 62% said they did so, while 51% said they were assigned a nurse navigator. More than 75% of patients assessed the information at their most recent nurse-led clinic visit as "totally adequate."

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Nonetheless, 48% wished for additional knowledge "during the current disease." There were no statistically significant relationships between "information satisfaction" and continuity of care. The researchers concluded that level of patient satisfaction with nurse-led clinics remained rather stable throughout time, with the exception of continuity of care and information, both of which require improvement. The diversity of information requirements may necessitate a person-centered approach[101].

2.3.3 Waiting Time, Continuity of Care, and Patients Satisfaction in Hospitals

Both waiting time and continuity of care have been found to influence the level of satisfaction expressed by patients. This is shown in a study designed to examine trends in patient satisfaction with primary health care and its accessibility and continuity over a 14-year period in Finland and to determine whether some of the fundamental goals had been attained through reforms and improvements. Over the course of fourteen years, nine questionnaire surveys were administered to patients attending the 65 health centers within the Tampere University Hospital's catchment area. Out of a sample size of 333,648 patients, 147,394 answered. The annual response rate ranged from 53% to 37%.

From 1998 to 2011, patient satisfaction in Finnish health centers declined by about 9 percentage points. The decline was particularly pronounced among those older than 64 years. Patients reported a decline of 20 percentage points in the accessibility of services. Additionally, respondents indicated that continuity of care had deteriorated. Despite significant modifications to the Finnish healthcare system, patients appear dissatisfied. Our findings urge both the Finnish government and general practitioners to enhance the accessibility and continuity of primary health care services[102].

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In a related study, researchers in the US examined how continuity of care and other variables that include waiting time contribute to patient satisfaction in the country. The study adopted a cross-sectional research method. The focus was on seven medical centres offering primary care clinics. The population of the study included Twenty-one thousand six hundred and eighty-nine patients who filled out the Seattle Outpatient Satisfaction Questionnaire as part of the Ambulatory Care Quality Improvement Project (SOSQ). It was found that patients who consulted the same doctor or nurse every time they visited the hospital were more satisfied than those who saw a variety of doctors. When comparing patients who regularly saw the same physician to those who saw different doctors, the average adjusted organizational score was 16.3 points higher for the former group.

In the same vein, researchers in Malaysia looked into both the positive and negative elements of waiting time on hospital patients. Patient satisfaction with the length of time they had to wait was found to be the most important factor in determining the final satisfaction with all aspect of the health service. Interestingly, despite the long wait (average 85 minutes), most patients reported being content with the time they spent waiting for their consultation[103],. This was thought to be connected to the type of people who used Malaysia's public hospitals: low-income workers who could not afford to pay for private treatment but were instead getting it for free. The import of this study is time there can be moderating factors that determine how waiting time affect patient's satisfaction.

Aware of the fact that impact of waiting time on patients' satisfaction is connected to their perception of what is acceptable waiting time, researchers have resorted to using

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perceived waiting time or expected waiting duration. Researchers also measured how satisfied people were with waiting time by asking them questions about their thoughts and feelings throughout their wait. Here, the analysis was performed three times, once with the dependent variable being the patients' moods while waiting, once with their level of satisfaction with the waiting period, and once with both.

Based on the collected data, it was found that there is a statistically significant (P=.000) positive correlation (=.172) between the perceived waiting time from arrival to registration and satisfaction with waiting time overall. Furthermore, there was a statistically positive relationship (r=.159, P=.000) between perceived waiting time from registration to consultation and satisfaction with the waiting time, as well as a statistically positive relationship (r=.148, P=.000) between perceived waiting time at the pharmacy and satisfaction with the waiting time overall[104]. This study shows that patients expects different length of waiting time from different unit of the hospital and when they are kept waiting longer than necessary in a section where they expect prompt service, it may affect their overall satisfaction with the hospital.

Studies to determine the influence of waiting time on patients' satisfaction with health services were also conducted in Africa. In Uganda, researchers conducted a study with an aim of identifying factors associated with patients' satisfaction among patients attending outpatient clinics in a tertiary health facility in Uganda. The study adopted a cross-sectional exit survey of the population of the study consisting of patients and health workers in the hospital. the study population was drawn from seven outpatient clinics at Mulago hospital in Uganda. Quota sampling was used to select 347 patients for the administration of the research instrument. Regression analysis was used to determine how

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the independent variables predicted patient satisfaction. Results of the study indicated that overall the clients' general satisfaction was below average. Patient satisfaction was lower among those who face a considerably long waiting time (>2 h). The study also revealed that the perception technical competence of health workers, accessibility, convenience and availability of services especially prescribed drugs were the strongest predictor of general satisfaction[105].

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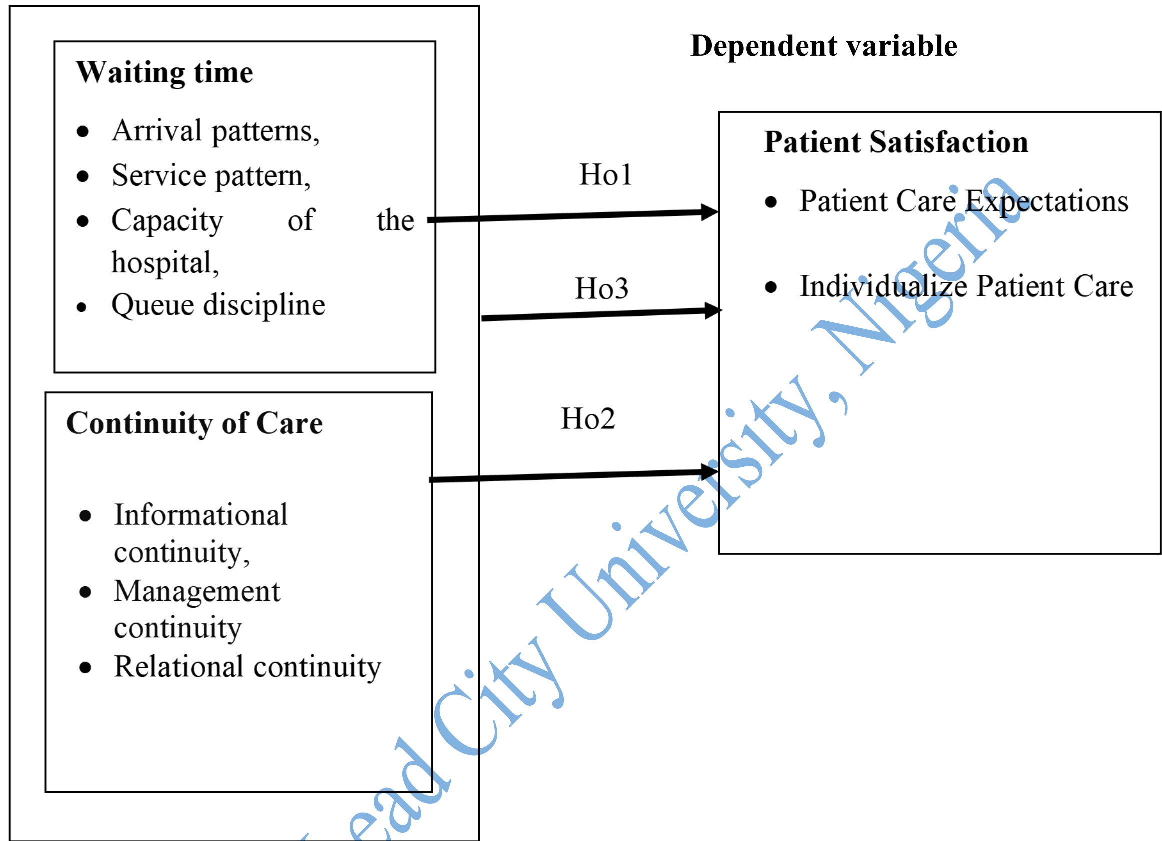
2.4 Conceptual Model



Source: Researcher, 2022

Figure 2.5: Conceptual model on the influence of Waiting Time and Continuity of Care on Patients Satisfaction

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The conceptual model outlined the relationships between all the study variables. The dependent variable is patients satisfaction which was measured by constructs from the consonance theory of patients' satisfaction[84]. The constructs are; patient care expectations and individualize patient care. The patient care expectation is the level or quality of services a patient expected to receive from the hospital while the individualized patient care is the extent to which the hospital and its personnel have been able to adapt their services to meet the specific needs of the patient to achieve the most satisfactory outcome. When the expected services meets the individualized services, there is consonance. However, this consonance may not be achieved due to certain factors such as waiting time and continuity of care.

Waiting time in this study is measured by the constructs from the queuing theory. The constructs are; arrival patterns, service pattern, capacity of the hospital, and queue discipline[85]. The period a patient has to wait can be determined by the arrival patter of the other patients. If all patients arrive at once, then, some have to wait but if they arrive in trickles, the first to arrive may have been attended to before the next one. In this case, the hospital may not meet the expectation of the patients or able to give them the personalized treatment that will make them satisfied. There is also other service patter. The hospital where only one staff in attending to all patients and where there are many staff to process the incoming will experience less chaos. The capacity of the hospital is also a factor. In the period of COVID 19 many hospitals became overwhelmed because more patients than they can handle are now coming to the hospital. the fourth construct that can affect patient satisfaction is queue discipline.

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Queue discipline refers to how patients behave on the queue. Some patients may stay on the queue until their turn while others may decide to leave the queue and the hospital while some may use a proxy or attempt to jump the queue. When many people leave the queue without being served. It helps the others because the queue may move faster. The opposite is the case when people jump the queue or simply appear out of nowhere claiming to be on the queue. The second independent variable is continuity of care.

The continuity of care is measured by constructs found in literature[87]. It has informational continuity, management continuity and relational continuity. All of the dimension of continuity ensure that there is a consistency in the treatment of a patient in term of drug administration, medical procure and personnel among other. It means that even if the patients moves away from a given hospital, he/she should still be able to access the same quality and form of care he has been receiving from the original hospital. all of these combined together to either cause patient satisfaction of lead to patient to become dissatisfied

2.5 Summary of Literature Review

The review of literature has shown that patients satisfaction has become a critical issue in the healthcare sector. Both public and private hospitals are now concerned with satisfaction of their patients as their funding and recognition is based on positive perception of their services among the patients. This has led to a lot of studies on the factions affecting patients satisfaction across the world. These studies have also been conducted in Nigerian with researchers examining various factors associated with patients satisfaction.

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One of the key factors that has been examined by researchers globally is service quality in hospitals. Researchers have examined various dimensions of service quality using different theories and models and the consensus is that service quality affect customer satisfaction. However, it was also found that there are other factors relating to service quality that affects patients satisfaction. These include attitude of staff, quality of the equipment, hospital environment and others. Among these others that have been examined are waiting time and continuity of care.

Waiting time has been explored globally as a factor in patients satisfaction. In Nigeria, it was found that waiting time is above the global average and patients often get frustrated waiting to receive treatment in Nigerian hospitals. However, it was also reported that perception of waiting time is affected by educational level, social status, exposure to other services and personality trait of the patients. This calls for more information on how waiting time actually affect patients satisfaction. Another factor that has been atributed to patients' satisfaction is continuity of care.

Continuity of care has been examined by foreign researchers and it was found to be one of the factors affecting patients satisfaction. However, not much has been done by Nigerian researchers on the role of continuity of care on the satisfaction of patients. Most importantly, no study has combined the independent variables; continuity of care and waiting time to study patient satisfaction. This study is therefore designed to fill that gap.

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Chapter Three

Methodology

This chapter outlined the research method on which the present study was built. It presented the research design and outlined the study population, the sample as well as how the study sample was obtained. It also described the research instrument and the mode of administration as well as the method employed in analyzing the research data.

3.1 Research Design

The descriptive survey research design was adopted for the study. This method was preferred for the flexibility it provides researchers to gather data through appropriate instruments such as questionnaires in order to measure attitudes, opinions, and the dynamics of a particular phenomenon. The descriptive research method is also considered useful when conducting research with the aim of identifying key features, trends, correlations, and categories.

3.2 Population of the Study

The population for this study consists of 402 hospital patients in publicly funded Hospitals under the Plateau State Hospital's Management Board. In total, there are five general hospitals under the board. The hospitals represent all the regions of the state. The hospitals are;

General hospital, Shendam, General hospital, Langtang, General hospital, Pankshin, General hospital, Mangu and General hospital, Barkin Ladi. The population of each hospital according to average clinic attendance of each hospital. Based on the sampling

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technique, the population was divided into stratas being facilities from the three geo-political zones as follows:

Table 3.2.1 Population of Clinic Attendance of General Hospitals in Southern zone, Plateau State

SN	Name of Hospital	Clinic Attendance		Total
		GDPD	ANC	
1	General Hospital, Shendam	112	21	133
2	General Hospital, Langtang	90	14	104
	Total(A)			**237**

Table 3.2.2 Population of Clinic Attendance of General Hospitals in Central zone, Plateau State

SN	Name of Hospital	Clinic Attendance		Total
		GDPD	ANC	
1	General Hospital,Pankshin	48	12	60
2	General Hospital, Mangu	46	10	56
	Total(B)			**116**

Table 3.2.3 Population of Clinic Attendance of General Hospitals in Northern zone, Plateau State

SN	Name of Hospital	Clinic Attendance		Total
		GDPD	ANC	
1	General Hospital, Barkin Ladi	43	6	49
	Total(C)			**49**

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Hence total population = A+B+C

= 237+116+49=402

3.3 Sample Size and Sampling Technique

A sample size of 200 patients was drawn from the five general hospitals included in the study using stratified sampling technique as follows:

The sample was determined using the Taro Yamane formula. :

$$n=\frac{N}{[1+N(e)^2]}$$

Where: n represents the sample size.

N represents the population under study.

e represents margin error

For the current study:

$$n=\frac{402}{[1+402(0.05)^2]}$$

$$=\frac{402}{1+402(0.0025)}$$

$$=\frac{402}{1+1.005}$$

$$=\frac{402}{2.005}=200$$

The sample size of each stratum

$$\frac{sample\ size}{Population}\times stratum\ size$$

Sample size for Southern Zone

$$=\frac{200}{402}\times 237=118$$

Sample size for Central Zone

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$= \frac{\mathbf{200}}{\mathbf{402}} \times \mathbf{116 = 58}$

Sample size for Northern Zone

$= \frac{\mathbf{200}}{\mathbf{402}} \times \mathbf{49 = 24}$

Table 3.4The Sample Size of Each Stratum Which Its Zones Can Be Seen in the Table Below

SN	General Hospitals	Stratum Size	Stratum Sample Size
1	General Hospitals in Southern Zone Plateau State	237	118
2	General Hospitals in Central Zone Plateau State	116	58
3	General Hospitals in Northern Zone	49	24

Source: Field Work, 2023

The table above showed that 118 respondents were drawn from the General Hospitals in the Southern Zone Plateau State. 58 respondents were selected from the Central Zone of Plateau State while 24 respondents were selected from the Northern Zone.

The next stage of the sampling procedure was determining the number of respondents from each facility under each zone as a stratum. To achieve this, the following formula was adopted.

$$\frac{Population\ of\ each\ facility}{Strata\ Population} \times Stratum\ size$$

General Hospital, Shendam. $= \frac{133}{237} \times 118 = 66$

General Hospital ,Langtang .$= \frac{104}{237} \times 118 = 52$

General Hospital ,Pankshin .$= \frac{60}{116} \times 58 = 30$

General Hospital, Mangu . $= \frac{56}{116} \times 58 = 28$

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General Hospital, Barkin Ladi. $=\frac{49}{49} \times 24 = 24$

Therefore, the following table was obtained

Table 3.5 Proportion of Sample Population from Each Facility

SN	Name of Facility	Clinic Attendance	Sample Size
1	General Hospital,Shendam	133	66
2	General Hospital, Langtang	104	52
3	General Hospital,Pankshin	60	30
4	General Hospital, Mangu	56	28
5	General Hospital, B/Ladi	49	24
	Population and Sample Total	402	200

Figure 3.1: Diagrammatic description of sampling procedure

STAGE 1

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3.6 Description of Research Instrument

The instrument used in the study was a standardized scale based on existing literature. Structured questionnaire was used to gather data from the respondents because it analyses the structured questions and responses easily to achieve the study objective. The study adopted the Likert scale design which allowed the researcher in listing options where respondents choose from. The instrument was made up of three sections. It contains the demographic information of respondents which is self-developed. The bio-data of respondents was measured through four (4) factors such as Name of Hospital, gender, age and educational level.

Section B: Patient Satisfaction. The items in this section were adapted from a related study. It is divided into two sections; patient care expectations and individualized care. The items in the sections are scored on a 4-point Likert-type scale with the following response options: 1 4=Very High, 3 = High, 2= Low, and 1=Very Low. Examples of statements includes: "Health professionals were clear and complete in explanations about tests, treatments and what to expect; "Health professionals keep my family informed about my health condition needs"

Section C: Waiting Time. The items in this section were adapted from a related study. The section measures the time it takes patients to get to the hospital as well as the time it takes to access services at each service point in the hospital. The items in the sections are measured in continuous time intervals of 5-10 minutes, 11- 20 minutes, 21-30 minutes, 31 + minutes, etc. Examples of statements include: "Registration with the records department". "Waiting time before nursing service; "

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Section D: this section was adapted from the Patient Continuity of Care Questionnaire (PCCQ) scale was measured through three indicators namely; Informational continuity, (IC), interpersonal continuity (IC), and management continuity (MC). This is used to measure the continuity of care among the patients. The items of the PCCQ are scored on a 4-point Likert-type scale with the following response options: 1 (very high), 2 (high), 3 (low) and 4 (very low). Examples of statements includes: "These care providers transfer information very well to each other".

3.7 Validity of the Research Instrument

The questionnaire for this study was adapted from an established scale. However, it was also be checked for content validity by the supervisor and other experts in the field of Health Information Management. Corrections made were incorporated into the final questionnaire before it is administered on the study respondents.

3.8 Reliability of the Instrument

The reliability of the instrument was tested through a pilot study using thirty (30). Patients from OLAH hospital in Jos, Plateau State which was not a part of the study. Data obtained was subjected to Cronbach's alpha reliability test to establish the internal consistency of the items. The results showed the following cronbach alpha value; Patient satisfaction (0.79); Waiting time scale (0.78) Continuity of Care Scale (0.82).

3.9 Method of Data Collection

A letter of introduction were obtained from the Department of information Management, Lead City University which were used to gain permission to conduct the survey from the hospitals. Questionnaire were administered physically with the aid of two (2) research

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assistants who were trained by the researcher. The whole data collection exercise covers a combined period of five weeks.

3.10 Method of Data Analysis

The data collected from questionnaires was analyzed using the IBM SPSS Statistics Software. The demographic data and the research questions were analyzed using descriptive statistics (simple frequencies and percentages as well as means, and standard deviations) while the research, hypotheses one and two analyzed using linear regression and hypothesis three was analyzed using multiple regression which was tested at 0.05 level of significance.

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Endnotes

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2. E., Säfström., L. Nasstrom., M. Liljeroos., L. Nordgren., K. Arestedt., T. Jaarsma & A. Stromberg.*Patient continuity of care questionnaire in a cardiac sample: A confirmatory factor analysis*. **BMJ open**, 10(7), 2020. e037129.

3. O. Odeyemi, *Assessment of Patient Satisfaction with Nursing Care in Wards of the Lagos University Teaching Hospital (Luth).* **Biomedical Journal of Scientific & Technical Research**, 17(1), 12489-12497.

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Chapter Four

Results and Discussion of Findings

This chapter presented the results of data collected in the course of the research. The researcher administered the study questionnaire to patients from five General Hospitals in Plateau State. Out of the 200 questionnaire administered, 189 was completed and returned, while 11 was not returned. This represents 94.5% and 5.5% return rate respectively which was considered adequate for analysis and subsequent generalization. The decision rule for the descriptive analysis was as follows; 1.00 – 1.49= very low, 1.50 – 2.49= low, 2.50 – 3.49 = high, 3.50-4.00= very high. Also, the hypotheses was tested 0.05 level of significance.

4.1 Demographic Analysis

Table 4.1: Demographic Analysis

		Frequency	Percent
Hospitals	GH Shendam	49	25.9
	GH Langtang	30	15.9
	GH BarkinLadi	38	20.1
	GH Pankshin	45	23.8
	GH Mangu	27	14.3
	Total	**189**	**100.0**
Sex	Male	76	40.2
	Female	113	59.8
	Total	189	100.0
Age	Below 20	35	18.5
	20-25	41	21.7
	26-30	37	19.6
	31-35	28	14.8
	36-40	16	8.5
	41-45	10	5.3
	46 and Above	22	11.6
	Total	**189**	**100.0**
Education	BSC	72	38.1
	Masters	10	5.3
	Mphil	8	4.2
	PhD	3	1.6
	Others	96	50.8

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Total	189	100.0

Source: Researcher's Fieldwork 2023

Table 4.1 outlineed the demographics distribution of the respondents. The first item is the distribution of the respondents according to the location/name of the General Hospital they usually attend. The table showed that 49 (25.9%) of the respondents attended General Hospital, Shendam . This is followed by 45 (23.8%) who attended General Hospital, Pankshin, 38 (20.1%) attended General Hospital, Barkin Ladi; 30 (15.9%) attend ed General Hospital,Langtang while 27 (14.3 %) attended General Hospital in Mangu. In term of gender, 76 (40.2%) of the respondents were Male while 113 (59.8%) of them were Female indicating that majority of the respondents were female. In the same vein, the age distribution of the respondent showed that respondents below 20 years of age (35) constitutes 18.5% of the total respondents. Also, 41 (21.7%) of the respondent are aged between 20-25; those within the age range of 26-30 (37) constitute 19.6%; those in the 31-35 years age bracket (28) constitute 14.8% of the total respondents while those in the 36-40 years age range (16) made up 8.5%;. In the same vein 5.3% of the respondents are in the 41-45 years age bracket while 22 of the respondents are aged 46 and above meaning that they constitute 11.6% of the total respondents. These age categories reflects a good blend of old and young citizens.

The demographic information included the educational attainment of the respondents. The data presented in the Table 4.1 showed that respondents with a BSC degree (72) constituted 38.1% of the total respondents; those with Masters (10) constituted 5.3%; Mphil holders (8) constituted 4.2%; PhD holders (3) were the least as they constituted

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1.6% while those with lower ‘others’ academic qualification (96) are the highest as they constituted 50.8% of the total respondents.

4.2 Research Questions

4.2.1: What is the level of patients’ satisfaction with services in general hospitals in Plateau state?

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Table 4.2 Patients' Satisfaction with Services in General Hospitals in Plateau State

Patient Care Expectations	Very High	High	Low	Very Low	Mean
Health professionals were:	(%)	(%)	(%)	(%)	
clear in explanations about tests I need to do	56 (29.6 %)	113 (59.8%)	18 (9.5%)	2 (1.1%)	3.18
clear in explanations about the type of treatments I am getting	63 (33.3 %)	102 (54.0%)	22 (11.6 %)	2 (1.1%)	3.20
complete in explanations about my health	46 (24.3%)	110 (58.2%)	25 (13.2%)	8 (4.2%)	3.03
Regularly explaining how to prepare for tests and operations	52(27.5%)	112 (59.3%)	21 (11.1%)	4 (2.1%)	3.12
willing to answer all of my questions	56 (29.6%)	107 (56.6%)	22 (11.6%)	4 (2.1%)	3.14
communicating properly with my family	54(28.6%)	108 (57.1%)	24 (12.7%)	3 (1.6%)	3.13
Weighted Mean					**3.13**
Individualized Patient Care	**Very High**	**High**	**Low**	**Very Low**	**Mean**
Health professionals					
Kept my family informed about my health condition needs	69 (36.5%)	102 (54.0%)	15 (7.9%)	3 (1.6%)	3.25
were ready to adjust their schedules to my needs	51 (27.0%)	97 (51.3%)	37 (19.6%)	4 (2.1%)	3.03
were friendly and kind to me during treatment	44 (23.3 %)	107 (56.6%)	29 (15.3%)	9 (4.8%)	2.98
often checking on me to keep track of how I was doing	52 (27.5%)	100 (52.9%)	30 (15.9%)	7 (3.7%)	3.04
willing to be flexible in meeting my health needs	57 (30.2%)	100 (52.9%)	24 (12.7%)	8 (4.2%)	3.09
Weighted Mean					**3.08**
Grand Mean					**3.11**

Source: Researcher's Fieldwork 2023

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Decision rule 1.00 – 1.49= very low, 1.50 – 2.49= low, 2.50 – 3.49 = high, 3.50-4.00= very high.

Table 4.2 presented the responses to the items measuring patients' satisfaction with services in General Hospitals in Plateau State. Patient's satisfaction was measured under two dimensions; patient care expectations and individualized patient care. From the responses to the items under the dimension of patient care expectations, 56 (29.6 %) of the respondents strongly agreed that healthcare professional were clear in explanations about necessary tests. In addition 113 (59.8%) of the respondents agreed to the statement; 18 (9.5%) however disagreed while 2 (1.1%) strongly disagreed with the statement. The item also had a mean score of 3.18. Also, 63 (33.3 %) strongly agreed that healthcare professional were clear in explanations about the type of treatments they were getting; 102 (54.0%) agreed to this while 22 (11.6 %) of the respondents disagreed and 2 (1.1%) strongly disagreed respectfully. The statement that healthcare professional wereclear in explanations about the type of treatments patients were getting had a mean score of 3.2 which means it was highly accepted. Furthermore, 46 (24.3%) strongly agreed that healthcare professional were clear in explanations about their health; 110 (58.2%) agreed to this while 25 (13.2%) of the respondents disagreed and 8 (4.2%) strongly disagreed respectfully. In addition, the statement that healthcare professional were clear in explanations about their health had a mean score of 3.03. Another statement under the dimension of patient care expectation was that healthcare professional regularly explains how patient can prepare for tests and operations. Among the respondent, 52(27.5%) strongly agreed to the statement while 112 (59.3%) agreed. However, 21 (11.1%) of the respondents disagreed and 4 (2.1%) strongly disagreed. In summary, the statement had a

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mean score of 3.12 which also signified a high acceptance. The responses also showed that56 (29.6%) strongly agreed that healthcare professional were willing to answer all of their questions; 107 (56.6%) of the respondents agreed to this while 22 (11.6%) disagreed and 4 (2.1%) strongly disagreed respectively. In summary the item regarding the willingness of healthcare professionals to answer all patients' questions was 3.14. The final item was that healthcare professionals are communicating properly with patients' families to which 54(28.6%) of the respondents strongly agreed and 108 (57.1%) agreed. However, 24 (12.7%) of the respondents disagreed while 3 (1.6%) strongly disagreed. In summary, the mean score for the item on the item that healthcare professionals are communicating properly with patients' families was 3.13 which was consistent with the other items. Overall, the weighted mean of the dimension of the dimensions was 3.18 which mean that the respondents' cares are met to a high degree by the Hospitals.

The second dimension of patient satisfaction is individualized patient care focusing on the perception of the respondents regarding the care they receive. The responses showed that 69 (36.5%) strongly agreed that health professionals kept their family informed about their health conditions and needs while 102 (54.0%) of the respondents agreed. On the other hand, 15 (7.9%) disagreed while 3 (1.6%) strongly disagreed with the item. In summary, the item had a mean score of 3.25 which showed that it was highly accepted. Similarly, 51 (27.0%) strongly agreed that health professionals were always ready to adjust their schedules to suit patient needs. 97 (51.3%) of the respondents agreed with this while 37 (19.6%) disagreed and 4 (2.1%) strongly disagreed. In summary, the item on the willingness of health professionals to adjust their schedules to suit patient needs was 3.03 indicating a high level of acceptance. Furthermore, 44 (23.3 %) of the

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respondents strongly agreed that health professionals were friendly and kind to them during treatment; 107 (56.6%) of the respondents agreed while 29 (15.3%) disagreed and 9 (4.8%) strongly disagreed. In summary, the item on the friendliness of health professionals towards patients was 2.98 which also indicated a high acceptance. In addition, 52 (27.5%) of the respondents strongly agreed that health professionals often check on them and keep track of how they are doing; 100 (52.9%) agreed to this while30 (15.9%) disagreed and 7(3.7%)strongly disagreed with the item. In summary the item on the health professionals keeping track of their patients was 3.04 which also indicated high acceptance. The last item on the willingness of health professionals to be flexible in meeting patients health needs. The results showed that 57 (30.2%) of the respondents strongly agreed to this while 100 (52.9%) of them agreed. On the other hand, 24 (12.7%) disagreed while 8 (4.2%) of the respondents strongly disagreed. In summary, the item had a mean score of 3.09 indicating a high acceptance.

Overall, the aggregate mean of all the items on patients' satisfaction was 3.18 which, according to decision rule, indicated that the level of patient satisfaction among the respondents was high. However, the level of patient care expectation was lower than individualized care; this implies that the speculation and general opinion of low patient satisfaction was true.

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4.2.2: What is the average Waiting Time in General Hospitals in Plateau State?

Table 4.3: Average Waiting Time in General Hospitals in Plateau State?

Items	Minutes				Mean
	5-10	**11- 20**	**21- 30**	**31 +**	
Movement to hospital	47 (24.9%)	70 (37.0%)	28 (14.8%)	44 (23.3%)	2.63
Registration with the records department	88 (46.6%)	64 (33.9%)	22 (11.6%)	15 (7.9%)	3.19
Waiting time before nursing service	59 (31.2%)	74 (39.2%)	30 (15.9%)	26 (13.8%)	2.88
Waiting time before doctor consult	42 (22.2%)	73 (38.6%)	38 (20.1%)	36 (19.0%)	2.64
Consulting time with the doctor	60 (31.7%)	70 (37.0%)	35 (18.5%)	24 (12.7%)	2.88
Waiting time for laboratory service	41 (21.7%)	59 (31.2%)	46 (24.3%)	43 (22.8%)	2.52
Waiting time for radiological service	27 (14.3%)	68 (36.0%)	46 (24.3%)	48 (25.4%)	2.39
Time spent buying drugs from the hospital dispensary	58 (30.7%)	79 (41.8%)	36 (19.0%)	16 (8.5%)	2.95
Effective time spent in the hospital	30 (15.9%)	37 (19.6%)	40 (21.2%)	82 (43.4%)	2.08
Aggregate Mean					**2.68**

Source: Field Survey (2023)

Decision rule 1.00 – 1.49= very low, 1.50 – 2.49= low, 2.50 – 3.49 = high, 3.50-4.00= very high.

Table 4.3 presented data on the Waiting Time that face the respondents on their visits to General Hospitals in Plateau State. The section had nine items with the first being on the duration of patients' movement to hospital. The responses showed that it took 24.9% of the respondents 5-10 minutes from their homes to the hospital. Also for 37.0% of the respondents, it took 11-20 minutes, 14.8% took 21-30 minutes while 23.3% of the respondents spent 31 or more minutes; the mean value for the time it takes patient from home is 2.63. The section also asked question about how long it take for Registration

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with the records department. About 46.6% of the respondents reported that it took 5-10 minutes, for 33.9% of them, the time to complete registration is between 11-20 minutes. In addition, 11.6% of the respondents often spend between 21-30 minutes in the registration department while 7.9% of the respondent often spent about 31+ minutes. In summary. The mean score value for this statement was 3.19 indicating that the time spent in the records department was very long.

The waiting times for various services in the hospital were analyzed to understand the patient experience and service efficiency. Regarding the waiting time before nursing service, the data showed that 31.2% of the occurrences took 5-10 minutes, 39.2% took 11-20 minutes, 15.9% took 21-30 minutes, and 13.8% took 31+ minutes. The mean value for this category was 2.88, indicating the average waiting time. For the waiting time before a doctor consultation, the data revealed that 22.2% of the occurrences took 5-10 minutes, 38.6% took 11-20 minutes, 20.1% took 21-30 minutes, and 19.0% took 31+ minutes. The mean value for this category was 2.64.

When analyzing the consulting time with the doctor, the findings showed that 31.7% of the occurrences took 5-10 minutes, 37.0% took 11-20 minutes, 18.5% took 21-30 minutes, and 12.7% took 31+ minutes. The mean value for this category was 2.88. Concerning the waiting time for laboratory service, the data indicated that 21.7% of the occurrences took 5-10 minutes, 31.2% took 11-20 minutes, 24.3% took 21-30 minutes, and 22.8% took 31+ minutes. The mean value for this category was 2.52.

For the waiting time for radiological service, the analysis revealed that 14.3% of the occurrences took 5-10 minutes, 36.0% took 11-20 minutes, 24.3% took 21-30 minutes,

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and 25.4% took 31+ minutes. The mean value for this category was 2.39. Lastly, the time spent buying drugs from the hospital dispensary showed that 30.7% of the occurrences took 5-10 minutes, and 41.8% took 11-20 minutes. These findings provided valuable insights into the waiting times experienced by patients for different services in the Hospital. The mean score of 2.68 showed a moderately high waiting time in these hospitals.

The findings showed that there was a difference between the average global wait time of thirty minutes and what was obtainable in the study area where the average wait time was above thirty minutes.

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4.2.3: What is the extent of Continuity of Care in General Hospitals in Plateau State?

Table 4.4: Extent of Continuity of Care in General Hospitals in Plateau State

Informational Continuity	**Very High**	**High**	**Low**	**Very Low**	
The hospital always provides information:					
about follow-up appointments	46 (24.3%)	105 (55.6%)	33 (17.5%)	5 (2.6%)	3.02
about treatment after discharge	45 (23.8 %)	109 (57.7%)	30 (15.9%)	5 (2.6%)	3.08
Plan for follow-up treatment or arranged home care when needed	33 (17.5 %)	89 (47.1%)	55 (29.1%)	12 (6.3%)	2.76
There is regular information from all healthcare staff	48 (25.4%)	94 (49.7%)	36 (19.0%)	11 (5.8%)	2.95
Weighted Mean					2.95

Management Continuity					
The care providers:					
transfer information very well to each other	48 (25.4%)	107 (56.6%)	29 (15.3%)	5 (2.6%)	3.07
work together very well to take care of me	60 (31.7%)	103 (54.5%)	23 (12.2%)	3 (1.6%)	3.16
Provide well connected services anytime I visit the hospital	52 (27.5 %)	111 (58.7%)	23 (12.2%)	3 (1.6%)	3.13
always know very well from each other what they do	45 (23.8 %)	103 (54.5%)	36 (19.0%)	5 (2.6%)	2.99
Weighted Mean					3.08
Interpersonal Continuity					
The care providers:					
Understood my expectations	45 (23.8%)	104 (55.0%)	35 (18.5%)	5 (2.6%)	3.01
always knew about the situation and medical condition	49 (25.9%)	114 (60.3%)	20 (10.6%)	6 (3.3%)	3.11
linked me with other healthcare staff before discharge	40 (21.2%)	115 (60.8%)	31 (16.4%)	3 (1.6%)	3.02
always provide satisfactory emotional support	46 (24.3%)	115 (60.8%)	25 (13.2%)	3 (1.6%)	3.08
provide me opportunities to ask questions and talk	48 (25.4 %)	116 (61.4%)	22 (11.6%)	3 (1.6%)	3.11
					3.06
Aggregate Mean					**3.03**

Source: Field Survey, 2023

Decision rule 1.00 – 1.49= very low, 1.50 – 2.49= low, 2.50 – 3.49 = high, 3.50-4.00= very high

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Table 4.4 presented the result of the responses on the extent of continuity of care in General Hospitals in Plateau State. Continuity of care was measured with three dimensions namely, informational, management and relational continuity. The responses showed that 24.3% of respondents strongly agreed that the hospitals always provided information about follow-up appointments, 55.6% agreed, 17.5% disagreed, and 2.6% strongly disagreed. On average, the responses one extent of information about follow-up appointments had a mean of 3.02. Results also indicated that 23.8 % of respondents strongly agreed that hospital always provided information about treatment after discharge, 57.7% agreed, 15.9% disagreed, and 2.6% strongly disagreed. On average, the respondents indicated that hospital always provided information about treatment after discharge had a mean of 3.08. Furthermore, 17.5% of the respondents strongly agreed that there is regular information on plan for follow-up treatment or arranged home care when needed, 47.1% agreed to this while 29.1% disagreed, and 6.3% strongly disagreed. On average, the respondents indicated that there was regular information on plan for follow-up treatment or arranged home care when needed had a mean of 2.76. Still on informational continuity, 25.4% of the respondents strongly agreed that they got regular information from all healthcare staff, 49.0% agreed, 19.0% disagreed, and 5.8% of the respondents strongly disagreed. On average, the respondents indicated that they got regular information from all healthcare staff had a mean of 2.95. Overall, the weighted mean for informational continuity was 2.95. This indicated a high level of informational continuity of care.

The second dimension of continuity examined was management continuity. Results also indicated that 25.4% of respondents strongly agreed that their care providers transfer

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information very well to each other, 56.6% agreed, 15.3% disagreed, and 2.6% strongly disagreed. On average, responses had a mean of 2.93. also, 31.7% of respondents strongly agreed that their care givers work together very well to take care of them, 54.5% agreed, 12.2% disagreed, while 1.6% of the respondents strongly disagreed. On average, the responses had a mean of 3.16. Furthermore, 27.5% of respondents strongly agreed that their cares provide well connected services anytime they visited the hospital, 31.8% agreed, 46.9% disagreed, and 8.6% strongly disagreed. On average, the responses had a mean of 3.13. Results also indicated that 23.8 % of the respondents strongly agreed that their caregivers always knew very well from each other what they do, 54.5% agreed to this while, 19.0% disagreed, and 2.6% strongly disagreed. On average, the responses had a mean of 2.99. Overall, the weighted mean score for management continuity dimension was 3.09.

On the dimension of relational continuity, results also indicated that 23.8% of respondents strongly agreed that their caregivers understood expectations, 55.0% agreed, 18.5% disagreed, and 2.6% strongly disagreed. On average responses had a mean of 3.01. Also 25.9% of respondents strongly agreed that health professionals always knew about their situation and medical condition, 60.3% agreed, 10.6% disagreed, and 3.3% strongly disagreed. The responses had a mean score of 3.11. In the same vein 21.2% of the respondents strongly agreed that health professionals linked me with other healthcare staff before discharge, 60.8% agreed, 16.4% disagree, and 1.6% strongly disagreed. The responses had a mean score of 3.13. The responses also showed that 24.3% of the respondents strongly agreed that health professionals always provide satisfactory emotional support, 60.8% agreed, 13.2% disagreed, and 1.6% strongly disagreed. The

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responses had a mean score of 3.08. The respondents also strongly agreed (25.4 %) that health professionals provided them with opportunities to ask questions and talk, 61.4% agreed, 11.6% disagreed, and 1.6% strongly disagreed. The responses had a mean score of 3.11. On average, the weighted mean for the dimension of relational continuity was 3.06 which indicated a high level of relational continuity according to the decision rule. The overall aggregate mean of all the dimensions was 3.03 which indicated a high level of continuity of care in the hospitals studied. However, information continuity of care rated low among the three dimensions.

4.3 Presentation of Hypotheses

H_01 There will be no significant influence of Waiting Time on Patient Satisfaction in General Hospitals in Plateau State.

Table 4.5 a-c: Influence of Waiting Time on Patient Satisfaction in General Hospitals in Plateau State.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.342a	.117	.112	4.17784

a. Predictors: (Constant), Wait_Time

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	431.185	1	431.185	24.704	.000b
	Residual	3263.958	187	17.454		
	Total	3695.143	188			

a. Dependent Variable: Satisfaction

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b. Predictors: (Constant), Wait_Time

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	27.867	1.308		21.303	.000
Wait_Time	.262	.053	.342	4.970	.000

a. Dependent Variable: Patient Satisfaction

Table 4.5 a-c presented the results of linear regression analysis on the influence of Waiting Time on Patient Satisfaction in General Hospitals in Plateau State. R: The correlation coefficient (R) indicated a positive but weak relationship between the Waiting Time and Patient Satisfaction in General Hospitals in Plateau State. The coefficient of determination (R Square) suggested that approximately 11.7% of the variance in the Patient Satisfaction in General Hospitals in Plateau State can be explained by the waiting time. In the same vein, the adjusted R Square took into account the number of predictor variables and adjusts the R Square accordingly. Here, it suggested that approximately 11.2% of the variance in the outcome variable can be explained by the waiting time after considering the model's complexity.

Furthermore, the analysis of variance (Table 4.5c) showed that the regression model was statistically significant ($p < .001$) in explaining the variance in patient satisfaction. It indicated that waiting time contributed significantly to explaining the variation in patient satisfaction. This can be seen in the F value (24.704) and the p-value was (.000).

Ultimately, the analysis of the coefficient table also revealed that waiting time had a significant influence on Patient Satisfaction in General Hospitals in Plateau State. The coefficient estimate of 27.867 indicated that for each unit increase in waiting time, patient

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satisfaction is expected to increase by 27.867. The coefficient was highly significant, as indicated by the t-value of 21.303 and the p-value of .000. This suggested a positive relationship between waiting time and patient satisfaction in General Hospitals in Plateau State. Overall, the results indicated that waiting time was an important factor in explaining the variability in patient satisfaction in General Hospitals in Plateau State. .Consequently the null hypothesis that there will be no significant influence of Waiting Time on Patient Satisfaction in General Hospitals in Plateau State, was rejected

$H_0$2 There will be no Significant Influence of Continuity of Care on Patient Satisfaction in General Hospital in Plateau State.

Table 4.6: Influence of Continuity of Care on Patient Satisfaction in General Hospitals in Plateau State.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.540a	.292	.288	3.74114

a. Predictors: (Constant), Continuity

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1077.871	1	1077.871	77.012	.000b
	Residual	2617.272	187	13.996		
	Total	3695.143	188			

a. Dependent Variable: Satisfaction

b. Predictors: (Constant), Continuity

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Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	16.823	1.998		8.422	.000
Continuity of Care	.441	.050	.540	8.776	.000

Dependent Variable: Patient Satisfaction

Table 4.6(a-c) presented the results of linear regression analysis on the influence of Continuity of Care on Patient Satisfaction in General Hospitals in Plateau State. The model demonstrated a significant relationship between the variables. The correlation coefficient (R) was 0.540, indicating a moderate positive influence of Continuity of Care on Patient Satisfaction in General Hospitals in Plateau State. The coefficient of determination (R Square) was 0.292, indicated that approximately 29.2% of the variance in the patient satisfaction can be explained by the continuity of care.

In the same vein, Table 4.6b, the analysis of variance (ANOVA) indicated a significant overall model fit. The regression model accounted for a significant amount of variance in the dependent variable. The regression sum of squares was 1077.871, with 1 degree of freedom, resulting in a mean square of 1077.871. The F-statistic was 77.012, indicating a significant relationship between the variables. The p-value was 0.000, confirming the significance of the model.

In addition, the regression coefficients (Table 4.6c) showed that coefficient for the continuity of care was 0.441. this indicated that for each unit increase in continuity of care was, patient satisfaction is expected to increase by 0.441. The coefficient was highly

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significant, as indicated by the t-value of 8.776 and the p-value of .000. This suggested a positive influence of Continuity of Care on Patient Satisfaction in General Hospitals in Plateau State.

Overall, the results suggested that the continuity of care had a significant positive influence on the satisfaction of the participants. The model provided valuable insights into the relationship between continuity and patient satisfaction, explaining approximately 29.2% of the variance in satisfaction scores. Consequently the null hypothesis that there will be no significant influence of Continuity of Care on Patient Satisfaction in General Hospitals in Plateau State, was rejected

$H_0 3$ There will be no significant combined influence of Waiting Time and Continuity of Care on Patient Satisfaction in General Hospitals in Plateau State.

Table 4.7a-c: Combined Influence of Waiting Time and Continuity of Care on Patient Satisfaction in General Hospitals in Plateau State.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.547a	.299	.292	3.73139

a. Predictors: (Constant), Waiting Time, Continuity of Care

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1105.415	2	552.708	39.697	.000b
	Residual	2589.728	186	13.923		
	Total	3695.143	188			

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a. Dependent Variable: Satisfaction

b. Predictors: (Constant), Waiting Time, Continuity of Care

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	16.561	2.001		8.276	.000
Continuity of care	.401	.058	.491	6.959	.000
Waiting Time	.076	.054	.099	1.407	.161

Dependent Variable: Patient Satisfaction

Table 4.7a-c: presents the results of combined influence of Waiting Time and Continuity of Care on Patient Satisfaction in General Hospitals in Plateau State. The model summary demonstrated a significant relationship between the variables. The analysis showed a correlation coefficient (R) of 0.547, indicated a moderate positive influence of Waiting Time and Continuity of Care on Patient Satisfaction in General Hospitals in Plateau State. Also, the R Square values (0.299) indicate that approximately 29.9% of the variance in the patient satisfaction among the respondents can be explained by waiting time and continuity of care.

Table 4.7b presented the analysis of variance (ANOVA) which indicated a significant overall model fit. The regression model accounted for a significant amount of variance in the dependent variable. The F-statistic was 39.697, indicated a significant relationship between the variables. The p-value was 0.000, which also confirms the significance of the model.

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Furthermore, the regression coefficients (table 4.7c) showed that the coefficient for the Continuity of Care was 0.401, indicated a positive relationship. However, the coefficient for Waiting Time was 0.076, suggested a smaller positive effect. The t-statistics for Continuity of care and Waiting Time were 8.276 and 1.407, with corresponding p-values of 0.000 and 0.161. This means that, while continuity of care had a significant joint influence on patient satisfaction, waiting time ($p > 0.05$) does not have a significant joint influence on patient satisfaction

Notwithstanding, the results suggested that both continuity of care and waiting time had significant combined effects on patient satisfaction. The model explained approximately 29.9% of the variance in patient satisfaction scores. Continuity of Care had a larger positive effect on satisfaction, while the effect of Waiting Time was smaller and not statistically significant. Consequently, the null hypothesis which states that there will be no combined influence of Waiting Time and Continuity of Care on Patient Satisfaction in General Hospitals in Plateau State was rejected.

4.4 Discussion of Findings

The study set out to investigate the role of Waiting Time and Continuity of Care on Patient Satisfaction in General Hospitals in Plateau State of Nigeria. To achieve the research aim, research questions were raised and hypotheses were formulated. The first research question was on the level of satisfaction among the respondents. The study found that the level of satisfaction among the patient was high with patients expressing high level of satisfaction with the two precursor. However, the respondents rated patient care expectation lower than individualized care. This findings were in line with other

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studies in Nigeria which have pointed to the fact that majority of patients were not satisfied with health care delivery in Nigeria. However, scholars have observed that contradictory on patient satisfaction often arise due to several factors.

With all the myriads of metrics that have been introduced to measure the concept of satisfaction in healthcare, it is often difficult to find two studies that have adopted the same metric to measure patient satisfaction which often makes it difficult to compare results and form a coherent opinion about patient satisfaction. As a consequence, scholars have called for a theoretical framework to provide a solid foundation for the study of patient satisfaction as a measure of the quality of service in the health sector. The most popular theory was based on the most popular definition of patient satisfaction which described satisfaction as the extent to which healthcare service received aligns with the patient's expectation of what healthcare services should involve or how it should be delivered. Its components were also taken from all the metrics that have been introduced by scholars as discussed already in this study.

A previous study has already identified two key aspects of patient satisfaction as consisting of human and systemic aspects. The human aspects involve the personality of the patient, their background, socio-economic status, health status, and other factors that distinguish each patient. The systemic factor includes the hospital setup, the facility, its operational standards, and others related exclusively to the hospital beyond the control of the patient. The healthcare personnel, though human, can be grouped with the system because their actions and decisions are theoretically within the bounds allowed and approved by the hospital[1]. Before the development of the theory, scholars often faced difficulties in making these distinctions.

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The second research question focused on waiting among the respondents. The study found a longer waiting time than the global average. While wait-time has become a global issue, studies have shown that patient often face varying waiting time especially in public hospitals. Wait times for outpatient care in Nigerian hospitals have been examined in several studies. Long wait times were found in studies conducted in different parts of Nigeria, including Abuja, Ibadan, Sokoto, and Benin, highlighting the need for measures to improve patient flow management and the quality of outpatient care. Patient wait times are significantly correlated with access, utilization, and retention of health services. Despite this, waiting is often the norm in healthcare facilities. The concept of a "waiting list" has indeed become a standard practice in hospitals and other medical facilities. Nonetheless, all of these are still regarded as having a problem of patient overcrowding, particularly public hospitals[2].

The issue of growing waiting times is not unique to developing or poor countries as revealed in a study that surveyed hospitals in five countries. It was found that patients in Canada, the United Kingdom, and the United States waited an average of two hours or more for treatment[3]. The majority of patient's wait time at a Hong Kong public hospital reportedly spent 82% of their time in health facilities in the waiting room[4]. Meanwhile, hospital patients in Britain are supposed to wait not more than 30 minutes, as stated in the Patient's Charter, but the reality on ground is that they wait far longer than that. This is especially true for patients accessing governments' subsidized healthcare facilities[5]. These studies have shown that patient often face longer wait-time in public health institutions.

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The third research question is on the level of continuity of care available to patient throughout the public hospital system in Plateau State. The study found that the level of continuity of care in the studied hospital with patients rating the hospitals high. However, amongs the dimensions, informational continuity of care was rated low by the respondents. This finding was in line with what has been reported in literature. Health professionals have reported that around 60% of all medication errors occur during transition of care[6],[7]. This has been attributed to poor communication which often occurs during transfer of care which is often the cause of about half of all hospital-related medication errors and one in five adverse drug effects[8].

In addition, it is suggested that only of a few patients actually enjoy relational continuity of care. Though relational continuity which means developing a reciprocal trusting connection with a single doctor or healthcare team, is essential for true relational continuity, longitudinal continuity, that is, continuously visiting the same doctor, is commonly employed as an alternative. In the modern setting, it is more feasible to provide small practice teams than try to assure continuity by employing more than one clinician at a time[9]. The rate of relational continuity has been reducing even in the western world due to a shortage of primary care physicians, a greater volume of work, greater complexity, and policies that value convenience above reliability[10],[11]. Primary care networks, e-consultations, and task-shifting to free up health professionals' time are only some of the new forms of primary care that have been pushed by the NHS Long Term Plan in order to address the workload challenge[2].

The findings of this study was however justified in the sense that the hospital are public-owned which means that they are more affordable than other alternatives. From this

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perspective, it can be understood if the patient continues to patronize the hospitals. In the same vein, being government-owned hospitals, the health professional attrition is often kept to the minimum. This could be the reason behind high level of informational, management and relational continuity encountered in the study. The influence of this on patient satisfaction was explored in the hypotheses tested in the study.

The first hypothesis examined on the influence of Waiting Time on Patient Satisfaction in General Hospitals in Plateau State. The study found that waiting time had a weak but significant influence on patient satisfaction. This finding was consistent with available literature on the subject. For example, a study found that longer waiting times were associated with lower levels of satisfaction among patients in the emergency department. Another study also found that patients who experienced longer waiting times in outpatient clinics were less satisfied with the care they received[12]. Experts have pointed out that, while there are other factors that can also influence patient satisfaction, such as the quality of care, the demeanor of healthcare providers, and the patient's overall health status, waiting time can be a significant factor. This is universally true especially when it is perceived as being excessive or unreasonable[13].

Indeed, studies conducted in both developed and developing countries have shown that waiting time can affect patient satisfaction. This was shown by a researcher from the United States of America who examined the influence of waiting time on patient satisfactions. The study found longer wait times not only have a negative influence on metrics likely to refer and overall satisfaction with the experience, but they also have an impact on how patients perceived the information, directions, and overall care offered by doctors and other caregivers[14]. In another study, researchers found that waiting time was

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among the various reasons why almost one in two patients in Ethiopia were dissatisfied with the nursing care they received[15].

Similar findings were reported by a group of Emirati researchers who examined the impact of waiting time on patients' satisfaction in the United Arab Emirates. The study found that longer wait times correlate negatively with clinical provider scores of patient satisfaction[16]. Another group of researchers conducted a study with an aim of investigating the relationship between patient treatment satisfaction and adherence to antidepressants, and the role of patient beliefs toward medication in patient treatment satisfaction. Results of the study showed high treatment satisfaction scores among patients with major depressive disorder, which correlated with adherence and patient beliefs about the necessity of treatment. This finding revealed that understanding of the role of patient beliefs, and preferences can help caregivers and other stakeholders to improve patient satisfaction[17].

In Nigeria, researchers also found that waiting time has some influence on patients' satisfaction with healthcare service delivery. Researchers found it necessary to pay special attention to the actual time spent by patients at the various service points during their visit to the hospital in order to improve efficiency in patient flow and the happiness of patients attending outpatient clinics[18].

In another study conducted in Nigeria, researchers also explored the link between waiting time and patients' satisfaction. It was found that some patients left the health facility before being seen by a doctor due to long wait times for appointments, difficulties in locating patient records, a lack of diagnostic equipment, a lack of hospital beds, and

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administrative red tape. This resulted in worsening of the patient's condition and a sense of patient dissatisfaction, which in turn led to a loss of revenue for the hospital as patients did not follow their doctors' orders and did not refer their friends and families. Patients' dissatisfaction and lack of faith in the healthcare system is on the rise due to the lengthy wait times they must endure before being seen by a doctor or receiving their medication. The general outpatient department desperately needs more medical personnel[19].

The second hypothesis focused on the influence of Continuity of Care on Patient Satisfaction in General Hospitals in Plateau State. The study found that continuity of care has a moderately significant influence on patient satisfaction among the study subjects. This finding is supported by a significant number related studies from around the world. A study conducted in Canada found that patients who received good continuity of care and well-managed, regular services in relation to their requirements showed higher levels of satisfaction, according to the findings. Patients with significant unmet needs or those who were hospitalized had higher levels of dissatisfaction, which emphasises the significance of taking these specific factors into account in order to enhance MHS delivery and patient recovery[20].

Another study conducted in Nigeria emphasized how continuity of care contributed to patient satisfaction and dissatisfaction by reporting an association between higher levels of continuity of treatment and better health outcomes for patients. For instance, compared to patients with a higher degree of continuity, those with a lower level are 1.4 times more likely to be hospitalized and 1.3 times more likely to attend the emergency room. At discharge from home health care, patients with low continuity of care are (80%) less likely than those with good continuity of care to have increased functioning in activities

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of daily living[21]. In the same vein, researchers from the USA reported that increases in continuity of care were associated with statistically significant decreases in mortality in 18 (81.8%) high-quality studies. This included 16 cases of death from any cause. All three of the others found no correlation, while the fourth found conflicting results. According to the results, patients who receive greater physician continuity have a reduced risk of death. Patients of different ethnic backgrounds appear to benefit from having regular general practitioners as well as specialists. The study found relational continuity to be the most effective in ensure satisfactory patients' outcomes despite the availability of various technology to support informational and managerial continuity[22].

The third hypothesis focused on the combined influence of Waiting Time and Continuity of Care on Patient Satisfaction in General Hospitals in Plateau State. The study found that both continuity of care and waiting time combined to influence patient satisfaction among the respondents. However, it was found that continuity of care is the most significant out of the two variables. This means that, having to choose between continuity of care and waiting time, patient would prefer to have continuity of care even if it means they have to wait longer to see health professionals for treatment. This finding is supported by various findings that have been reported by previous researchers.

Studies conducted in Finland have shown that patient satisfaction in Finnish health centers declined by about 9 percentage points. The decline was particularly pronounced among those older than 64 years. Patients reported a decline of 20 percentage points in the accessibility of services which is epitomized by long waiting times. Additionally, respondents indicated that continuity of care had deteriorated. Despite significant modifications to the Finnish healthcare system, patients appear dissatisfied[23]. In the same

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vein, researchers in Malaysia examined the positive and negative elements of waiting time on hospital patients. Patient satisfaction with the length of time they had to wait was found to be the most important factor in determining the final satisfaction with all aspect of the health service. Interestingly, despite the long wait (average 85 minutes), most patients reported being content with the time they spent waiting for their consultation[24].

In Uganda, researchers found that overall, the clients' general satisfaction was below average. Patient satisfaction was lower among those who face a considerably long waiting time (>2 h). The study also revealed that the perception technical competence of health workers, accessibility, convenience and availability of services especially prescribed drugs were the strongest predictor of general satisfaction[25]. The same finding is reported by Nigerian authors who indicated that continuity of care, prompt service and conducive hospital environment are significant factors in patient satisfaction.

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Chapter Five

Conclusion

This chapter consists of the summary, conclusion recommendation and contribution to knowledge of the study.

5.1 Summary of Findings

The findings of the study were summarized as follows;

i. The study found a high level of patients' satisfaction among the respondents. However, the expected level of care is often lower than the individualized care received. This suggests an issue with patient satisfaction in the hospitals.

ii. The waiting time in the participating hospitals was generally high as patients have to wait longer than the global average before they can access care.

iii. There was a high level of continuity of care in the hospitals with all three dimensions of continuity of care rated high. However, the information continuity of care was the lowest among all the dimensions.

iv. The study found a significance influence of waiting time on patient satisfaction among the respondents.

v. The test of hypothesis also indicated a significant influence of continuity of care and patient satisfaction in the studied hospitals.

vi. It was also found that there was a significant combined influence of waiting time and continuity of care on patient satisfaction in the studied hospitals. However, it was also found that waiting time was not significant as a predictor of patient satisfaction when combined with continuity of care

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5.2 Conclusion

Healthcare is now a service and the hallmark of any service is customer satisfaction. In line with this, health professionals and health institutions are paying attention to factors relating to the satisfaction of their patients who are now expected to be treated as clients on whose patronage the continued existence of the hospitals depends on. This therefore calls for a concerted effort to ensure patient satisfaction. This study has shown that, while there are still major issues affecting healthcare service delivery in Nigeria, there is an awareness about the needs to ensure that patients are satisfied with services rendered. It is obvious that issues such as waiting time cannot disappear overnight due to high demand for health care in the face of limited resources and facilities. However, it is obvious that when health professionals focus on factors that can be helped such as continuity of care, it can make up for other deficiencies thereby ameliorating the level dissatisfaction being felt by patients.

5.3 Recommendations

In line with the findings of this study, the following recommendations were considered relevant;

1. There is an urgent need for General Hospitals in Plateau State to work on improving patient satisfaction by prioritizing staff training and development, welfare improvement and technology deployment to meet or manage patients care expectation.
2. General hospitals in Plateau State should employ more personnel in order to open up multiple service points. In the alternative, waiting room and hospital

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environment should be made more comfortable and attractive to ensure that the patients do not get frustrated while waiting to be served.

3. Communication system should be improved to ease information sharing within service units and other facilities in terms of referrals.
4. With the awareness that waiting time interfere with patient satisfaction in all aspect of healthcare, waiting time should be seen as a direct threat to health outcomes and be dealt with accordingly.
5. In view of the role of continuity of care on patient satisfaction in hospitals, management should ensure strict supervision and mentorship to ensure consistency in service delivery and best practices.
6. It is important for general hospitals in Plateau state to strengthen the available organisational structure which has promoted a significant level of continuity of care.

5.4 Contribution to Knowledge

The study has made conceptual, empirical and, theoretical contribution to knowledge. It has also contributed to the theory and practice of Health Information Management. Conceptually, the study has developed a conceptual model that brings together various variables such as waiting time, continuity of care and, patient satisfaction. The model outlined theory-based metrics that can be used to measure these variables, something that has not been properly done by previous researchers. In addition, the study is the first to examine the combination of waiting time and continuity of care as factors in patient satisfaction.

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Theoretically, the study has adapted and validated three different theories and model for the study. These theories and model are the continuity of care model, the consonance theory and the queueing theory. These theories and model have been successfully adapted and validated in this study to make it easier for future researcher to apply them in the study of hospital patients.

Empirically, the study has collected primary data and analyses responses from patients in five general hospitals in Plateau state. This data is unique in that it has not been collected previously. The data analysis which established the relationship between waiting time, continuity of care and patient satisfaction has confirmed that the variables actually affect patient satisfaction among patients in Plateau State.

5.5 Suggested Areas for Further Research

As this study has focused on the influence of waiting time and continuity of care on patient satisfaction in general hospitals in Plateau State, other study can explore other areas such as;

Influence of demographic factors on the perception of waiting time among hospital patients in Plateau state.

Comparative analysis of patient satisfaction with healthcare delivery in private and public hospitals in the North Central region of Nigeria.

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Appendix

Questionnaire

Lead City University Ibadan
Faculty of Communication and Information Science
Department of Information Management

Dear Respondent,

I am a postgraduate student of the above-named institution. I am currently conducting a research work on “influence of waiting time and continuity of care on patients’ satisfaction in Jos, Plateau State”. I therefore solicit your support in completing this instrument. Please note that any information supplied by you in this questionnaire shall be treated with utmost confidentiality and will be used for academic research only.

Thank you for your anticipated cooperation.

Researcher

Section A: Demographic Information

Instruction: Select the appropriate option below.

Name of Hospital ………………………………………………………

Gender: Male ( ), Female ( )

Age: below 20 ( ), 20 – 25yrs ( ), 26 – 30yrs ( ), 31 – 35yrs ( ), 36 – 40yrs ( ),

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41-45yrs (   ), 46 and above (   )

Highest Educational Level: Bachelor's degree (   ) Master's degree (   ) , M.Phil, ( ) PhD. (   ).

Section B: What is the level of patients' satisfaction with services in general hospitals in Plateau state?

Instruction: Using the four-point Likert scale provided below. Please tick the appropriate choice that indicates your opinion in the respective box.

S/N	Patient Care Expectations	Very High	High	Low	Very Low
Health professionals were:					
1.	clear in explanations about tests I need to do				
2.	clear in explanations about the type of treatments I am getting				
3.	complete in explanations about my health				
4.	Regularly explaining how to prepare for tests and operations				
5.	willing to answer all of my questions				
6.	communicating properly with my family and doctors				
	Individualized Patient Care				
Health professionals:					
7.	Kept my family informed about my health conditions and needs				
8.	were ready to adjust their schedules to my needs				
9.	were friendly and kind to me during treatment				
10.	often checking on me and keeping track of				

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	how I was doing				
11.	willing to be flexible in meeting my health needs				

Section C; What is the average waiting time in general hospitals in Plateau state?

Instruction: Using the four-point Likert scale provided below. Please tick the appropriate choice that indicates your opinion in the respective box

S/N	**Items**	**Minutes**			
		5-10	**11- 20**	**21- 30**	**31 +**
1.	Movement to hospital				
2.	Registration with the records department				
3.	Waiting time before nursing service				
4.	Waiting time before doctor consult				
5.	Consulting time with the doctor				
6.	Waiting time for laboratory service				
7.	Waiting time for radiological service				
8.	Time spent buying drugs from the hospital dispensary				
9.	Effective time spent in the hospital				

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Section D; What is the extent of continuity of care in general hospitals in Plateau state?

Instruction: Using the four-point Likert scale provided below. Please tick the appropriate choice that indicates your opinion in the respective box

S/N	**Informational Continuity**	**Very High**	**High**	**Low**	**Very Low**
The hospital always provides information:					
1.	about follow-up appointments				
2.	about treatment after discharge				
3.	Plan for follow-up arranged home care when needed				
4.	from all healthcare staff				
	Management Continuity				
The care providers:					
5.	transfer information very well to each other				
6.	work together very well to take care of me				
7.	Provide well connected services anytime I visit the hospital				
8.	always know very well from each other what they do				
	Interpersonal Continuity				
The care providers:					
9.	Understood expectations				
10.	always knew about the situation and medical condition				
11.	Linked me with other healthcare staff before discharge				
12.	always provide satisfactory emotional support				
13.	Provide me opportunities to ask questions and talk				

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Bio-data

A. Personal Data

1. **Full Name: Chundung Dung JOSHUA**
2. Address: Behind COCIN Rahol-Kanang
3. Email: joshuachundung@gmail.com
4. **Date and Place of Birth: 18/9/1970**
5. **Nationality:** Nigerian
6. **Name and Address of Next of Kin: Kaneng Joshua Dajok**

Add. Same as above

B. Educational Background
Educational Institutions attended with dates and Qualifications:

i. Primary Education: LGED Primary school Du
1976-1982

ii. **Secondary Education: Government Teachers College Foron**
1982- 1987(Grade II)

iii. Higher Educational Institutions: ABUTH Zaria
2003-2005 D)

a.

B. Working Experience with Dates
a. Organisation:
Role:
Date:

A. Working Experience with Dates
a. **Organisation:**
Role:
Date:
b. **Organisation:**
c. **Role:**
Date:

B. Awards and Fellowships:
i. .

Signature **Date**

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The University Compliance Certificate

This is to certify that this thesis by Chundung Dung JOSHUA with Matriculation Number LCU/PG/002408 in the Department of Information Management, Lead City University, Ibadan, is in FULL compliance with the approved university format and style.

____________________	__________________
Signature	**Date**

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