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Influence of Patients' Waiting Time on Satisfaction at the University of Port Harcourt Teaching Hospital, Port Harcourt, Nigeria

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ABSTRACT

This study assessed patient waiting time and satisfaction at UPTH, Rivers State, Nigeria. A cross-sectional survey research design was used for the study. The population of the study comprised 560 patients from the six departments of UPTH. A sample size of 227 was determined using the Cochran sample determination formula. A mixed methodology was employed in which combined multi-stage sampling, proportional simple random, and purposive sampling procedures were used to select six departments or units at the UPTH. A structured and validated questionnaire and informant participants' observation through a checklist were used to collect data. A return rate of 87.22% was achieved. Data were analyzed using descriptive and inferential (Pearson correlation coefficient) statistics at the 5% level of significance. The study concluded that despite patients agreeing of having a high level of satisfaction with the healthcare services they received at the six departments or clinics, they still faced significant issues with long waiting times to receive medical attention, with factors that were attributed to negative staff behaviour, inadequate staffing levels, and poor record-keeping systems in the hospital. Therefore, the study recommended that the government, management of UPTH, and NGOs should employ more healthcare and allied health personnel in hospitals and ensure their periodic training and retraining to address workers' negative behaviour and improve their attitudes towards patients and performances.

Keywords: Assessment of patients' waiting time, Healthcare service, Health records management system, Patients' satisfaction, University of Port Harcourt Teaching Hospital

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INTRODUCTION

Teaching hospitals offer tertiary levels of healthcare in both developed and developing countries, including Nigeria. These hospitals are weighed down by multidisciplinary tasks that are both clinical and non-clinical, as well as a variety of professionals and other stakeholders whose level of satisfaction is crucial and

widely regarded as the yardstick in evaluating the quality of healthcare service provision, which in some ways compromises the loyalty and retention of clients and patients. More importantly, over the ages, medical practice and administration have changed, bringing in a number of good advancements, such as the idea of patient

satisfaction recently emerging in health systems as a critical metric for assessing the quality of healthcare service delivery (Efanga et al., 2021; Kulkarni, 2018).

In the 1950s, researchers began to focus on patients' satisfaction with health care services after finding that higher patient satisfaction was linked to better appointment keeping, prescription use, and adherence to treatment recommendations (Guideway Care, 2019). The chance of getting sued for negligence was also discovered to be inversely correlated with patient satisfaction. Greater specifically, due to increased marketing of healthcare services in the United States, patient satisfaction has gained relevance recently and is also receiving more attention as a sign of the quality of services (Melcher, 2011; Smith et al., 2006; Williams, 1994 in Guideway Care, 2019). The American Academy of Emergency Medicine (2011) notes that the patient satisfaction up for does have a positive side, and that achievement in this area has been demonstrated to lower malpractice exposure, improve perceptions of healthcare providers' clinical competence, increase patient compliance, and boost job satisfaction and morale. In order to examine some of the straightforward actions healthcare professionals can utilize during their future modifications to start boosting patient satisfaction, it is useful to look to these positive outcomes rather than the negative ones.

According to Patavegar et al. (2012), one of the primary goals of any health system is to ensure patient satisfaction. Given the breadth, depth, and variety of specializations offered by teaching hospitals, patients should be extremely satisfied with the medical care they frequently receive from this kind of healthcare system. Patients, however, frequently feel unsatisfied with the treatment they receive at these hospitals. Patient satisfaction is currently recognized as a key determinant in establishing the standard of patient care services (Isaruk et al., 2021). Because of this, the effectiveness of health systems and facilities around the world, including Nigeria, depends on the quality of services that are generally ignored at various levels in such facilities.

Patient satisfaction is one of the most crucial goals for any healthcare system, but it can be challenging to assess the effectiveness and responsiveness of these systems because it depends on both medical and non-medical aftermaths of care. A patient's statement of satisfaction or dissatisfaction reflects on the overall quality of hospital service. The hospital's main responsibility is to provide high-quality care for its patients. Patient satisfaction, according to Iqbal et al. (2019), depends on four important factors: healthcare provider-patient relationship, paramedics/nursing care, diagnosis procedures, and waiting time. Therefore, reducing the amount of time it takes to complete services, enhancing facility cleanliness overall, enhancing nursing services, increasing the availability of medications at the pharmacy, reducing the wait for laboratory results, and improving the medical

records collection center are important factors to take into account and, when taken together, these can significantly boost patient loyalty and retention.

A range of persons with a variety of health conditions frequently use tertiary hospitals. According to Pandit and Debmallik (2016) study, most patients were not always satisfied with the care they received from these clinics. Recent years have seen a rise in the popularity and effectiveness of studies on patient satisfaction since they provide administrators and healthcare professionals with a chance to improve the services provided by public health institutions. Many scholars have pointed to patient satisfaction as a crucial indicator of healthcare quality. Patient satisfaction is now regarded as the completion or fulfillment of a person's expectations from a service or product as a result of the growth in reward for performance. Patient satisfaction is a purely arbitrary measurement of the skills and services that healthcare practitioners offer.

According to Dubina et al. (2009), managing or curing disease is another key therapy aim in addition to patient satisfaction. Although patient satisfaction is a goal, it may also affect how well they stick to their treatment and, as a result, may help the condition clear up. Dubina et al. (2009) further argued that the unifying treatment objective across all specialties of medicine is patient satisfaction with care. Numerous variables affect how satisfied patients are with their doctors. It is critical for the doctor-patient connection to be solid, built on clear communication and strong interpersonal abilities. Insufficient communication was identified by patients as a primary factor contributing to their dissatisfaction with care management. Another obstacle to patient satisfaction is inadequate patient education.

Furthermore, inadequate information may cause patients to set unattainable objectives and expectations, which can result in dissatisfaction when the ideal results, such as complete illness clearance, are not achieved. A thorough review of the literature identified three objectives for measuring patient satisfaction: i) to assess healthcare, ii) to pinpoint organizational issues in the healthcare sector, and iii) to describe healthcare services from the patient's point of view. Finding issues that need to be rectified is also important for enhancing health care services. This kind of feedback arouses genuine attention and may lead to a change in the organization's culture and attitude toward patients, even if they still do not use it consistently to improve care delivery and services.

Patient satisfaction is an attitude, according to Poulas et al. (2008), and it is a powerful motivator but does not guarantee that the patient will remain devoted to the healthcare practitioner, healthcare supporting personnel, or the institution (Obi et al., 2018). In contrast, patient satisfaction is just a proximate or indirect measure of how well a hospital or doctor is performing. Healthcare professionals must give care in a specific method that is

always based on the needs of each patient if they are to practice patient-centered care. The Institute of Medicine [IOM] (2001) stated that the timely, effective, and patient-centered dimensions of healthcare quality are three aspects that directly affect patient satisfaction in its report, "Crossing the Quality Chasm," as stated in Prakash (2010).

The IOM continues by stating that in the United States, the hospital sector, third-party players, and healthcare providers have realized that higher patient satisfaction benefits the health industry in a number of ways, including patient loyalty, improved patient retention, being less susceptible to price wars, consistent profitability, increased staff morale with reduced staff turnover, increased productivity, a reduced risk of malpractice suits, and increased profitability. Although some academic studies claim that it is challenging to measure patient satisfaction and assess the responsiveness of the healthcare system since both clinical and nonclinical outcomes of care have an impact on client or patient satisfaction.

The level of care provided in clinical settings, the availability of medications, the behavior of medical professionals and paraprofessional staff, the cost of services, hospital infrastructure, the comfort levels of patients both physically and emotionally, and respect for their preferences are just a few of the factors that have an impact on patient satisfaction. Healthcare professionals in underdeveloped countries, particularly in Nigeria, seem to have mostly ignored patients' satisfaction with health care systems (Obi et al., 2018; Patel & Patel, 2017).

Furthermore, at the beginning of work at primary care and specialized clinics, as well as the health information sections of most public hospitals in Nigeria, it is normal to see crowded patient waiting spaces. This has a detrimental effect on the length of time that patients must wait before receiving care (i.e., from the moment they arrive at the clinic or unit). The length of the patient wait time is found to have a significant impact on the patient's satisfaction. A relatively new idea in service delivery that aims to increase satisfaction is patient-centered care (Akintomide et al., 2019).

Prolong waiting time have been cited as a factor in some patients' expressed unwillingness to seek future medical attention at the unit or clinic. Malik and Patil (2022) averred the term "waiting time" to be the amount of time a patient must wait in a hospital, whether it be a primary, secondary, or tertiary facility, before a doctor or other healthcare professional will see them. A hospital's or healthcare facility's patient wait time is a significant indicator of the quality of the services offered by the hospital or healthcare facility, according to numerous studies and researchers (Kulkarni, 2018). One aspect that impacts the use of healthcare services and determines an individual's satisfaction with the care they receive is the length of time a patient must wait to be seen. Stress and a waste of important labor resources might result from making

patients wait for an extended period of time without a valid reason. Even more than their expertise, skill, and facility efficiency, patients will rate health professionals based on how long they make them wait.

In another development, Anil et al. (2016) define waiting time as the period of time needed to address a patient's medical needs immediately following their presence at the outpatient department. It also refers to the entire amount of time taken to move the patient from one area of the healthcare facility to another. These include the time spent obtaining the treatment ticket, visiting the physician, providing samples for analysis, and gathering medications, including receiving usage instructions. The length of time patients must wait relies on a variety of variables, including the effectiveness, honesty, and punctuality of the healthcare professionals as well as the institution's current facilities. The IOM advises that at least 90% of patients be seen within 30 minutes of their planned appointment, according to numerous research (Al-Harajin et al., 2019). Having to wait a long time at the clinic is a major source of patient discontent with healthcare, and numerous studies have shown a link between longer wait times and worse patient satisfaction with primary care. Algiriyage et al. (2014), and Azraii et al. (2017), claimed that waiting periods in clinics and hospital departments have turned into a concern for healthcare systems all over the world. Therefore, in today's evolving quest for quality healthcare delivery, patient-centered care, and safety, it is imperative to assess patient waiting time in a tertiary hospital like UPTH in order to bring the findings to bear on potential ways that would be adopted to reduce the patient's unnecessary waiting time while receiving care.

However, contrary to popular belief, patients in the majority of developing nations including Nigeria always spend 2-4 hours from time of visit prior to seeing a healthcare provider. Because modern healthcare systems are dynamic, complicated, and emergent, literature demonstrates that patient wait times are still a problem (Hossain et al., 2017). A large number of them turn to pricey, tiny, private hospitals staffed by a single doctor who could lack the specialized knowledge the patients are looking for. A mismatch between patient expectations and the service received is linked to lower satisfaction. Giving patients a voice by evaluating patient wait times and satisfaction at the UPTH in Nigeria may help public health services better meet the needs and expectations of the people who live in Rivers State and beyond.

Equally, health care management organizations in developing nations, particularly in Nigeria, appear to have paid little attention to patients' satisfaction with health care systems. A mismatch between the service provided and the patient's expectations is linked to lower satisfaction. As a result, evaluating patient perspectives provides patients a voice, which can help public health services be more responsive to the needs and expectations of the general population. Recent years have seen a rise in the popularity

and effectiveness of studies on patient satisfaction because they gave managers and healthcare professionals a chance to enhance the services in public health facilities.

In order to systematically develop the information system and enhance care delivery and services, it is essential to get input from patients. This kind of feedback sparks genuine curiosity, which may result in a shift in the organization's culture and attitude toward patients. In general, a well-run, orderly, and clean hospital with the required information boards and clear directions presents a positive image. Reduced workload on patient wards can also result from effective and efficient management of healthcare services (Patel & Patel, 2017). The current study was conducted to assess the extent of patient waiting times and satisfaction with healthcare services provided at the University of Port Harcourt Teaching Hospital in Nigeria and to obtain feedback because patient satisfaction is a crucial component of the healthcare industry in this cutthroat contemporary era.

Objectives of the study

In this study, the University of Port Harcourt Teaching Hospital (UPTH), in Rivers State, Nigeria, was evaluated for its patient waiting times and satisfaction levels. The study's specific objective is to:

- i). find out the correlation between patient wait time and satisfaction of healthcare services provided at the various clinics and departments at the UPTH in Rivers State, Nigeria.

Research Hypothesis

One null hypothesis was developed for the study to direct the researcher in achieving the study's goals.

Ho₁: At the UPTH in Rivers State, Nigeria, patient wait time has no significant correlation with satisfaction of healthcare services provided at the various clinics and departments.

METHODOLOGY

The study employed cross-sectional survey research design, focusing on gathering data through standardized questionnaires and interviews from a specific sample of patients at the University of Port Harcourt Teaching Hospital (UPTH). The study utilized self-reported measures as part of a quantitative methodology to understand patients' preferences, opinions, and behaviors. Participants were selected based on specific inclusion and exclusion criteria to ensure reliable responses, targeting those with repeated healthcare experiences at UPTH.

The population for the study consisted of 560 patients from various outpatient clinics at UPTH, including the Medical Records, General Out-Patient Department (GOPD), Medical Out-Patient Clinic (MOPC), National Health Insurance Scheme Clinic (NHISC), Dental Clinic (DC), and Ophthalmology Clinic (OC). Using Cochran's (1963, 1975) formula, a sample size of 227 patients was calculated, ensuring a representative sample from each clinic. Multi-stage sampling, proportional simple random sampling, and purposive sampling were used to ensure that the selection of respondents was systematic and unbiased. For data collection, the researchers designed a questionnaire validated by experts from the School of Public Health at the University of Port Harcourt. The questionnaire was divided into two sections: demographic information and questions addressing the study's research objectives. Data analysis was conducted using SPSS version 23, where descriptive statistics such as frequency, percentage, mean, and standard deviation were used to analyze the demographic data and answer the research questions.

RESULTS

The investigation of patients' waiting time and satisfaction at the University of Port Harcourt Teaching Hospital (UPTH), Port Harcourt, Nigeria, is the main goal of this chapter, which also addresses the interpretation, analysis, and discussion of the data collected. Two hundred and twenty-seven (227) copies of the questionnaire were given to patients who attended the health records department, general outpatient department, medical outpatient clinic, national health insurance clinic, dental clinic, and ophthalmology clinic, respectively. Out of the 227 copies administered, 198 were retrieved, and all the sections were well documented, giving a return rate of 87.22%.

Test of research hypothesis

In order to provide answers to the stated research hypothesis, hypothesis 1 was analyzed and tested using Pearson's Correlation Coefficients. The decision criteria states that the correlation coefficient can range from -1 to 1.0 based on the degree of strong or weak relationship or association between the variables. Furthermore, one null hypothesis was developed for the study to direct the researcher in achieving the study's goals.

Ho₁: At the UPTH in Rivers State, Nigeria, patient wait time has no significant correlation with satisfaction of healthcare services provided at the various clinics and departments. The correlation coefficient can range from -1 to 1.0. Equally, correlation coefficient rules are: 1.0 to 0.8 = very strong positive correlation, 0.8 to 0.6 = strong positive correlation, 0.6 to 0.4 = moderate positive

Table 1: Analysis of Pearson's Correlation Coefficients Testing between patient waiting time and satisfaction with healthcare services received at the different clinics and departments at UPTH.

Variables Type of Test	Patient waits to receive healthcare services in the different clinics and departments at UPTH	Patient satisfaction of healthcare service received at UPTH
Patient waits time to receive healthcare services in the different clinics and departments at UPTH	Pearson Correlation Sig. (2-tailed) N	0.853** 0.000 150
Patient satisfaction of healthcare service received at UPTH	Pearson Correlation Sig. (2-tailed) N	1 0.000 150

Source: Researcher's fieldwork 2024, **Correlation is significant at the 0.01 level (2-tailed)

correlation, 0.4 to 0.2 = weak positive correlation, 0.2 to 0.0 = very weak correlation, 0.0 = no correlation, 0.0 to -0.2 = very weak negative correlation, -0.2 to -0.4 = weak negative correlation, -0.4 to -0.6 = moderate negative correlation, -0.6 to -0.8 = strong negative correlation, -0.8 to -1.0 = very strong negative correlation.

From (Table 1), the Pearson Correlation Coefficient test carried out showed a correlation value of .85 with the Sig. (2-tailed) test value of .000 at each of the horizontal and vertical intersections between patient wait times to receive healthcare services and patient satisfaction of healthcare services received at the different clinics and departments at the UPTH. Equally, (Table 1) showed that the degree of fitness for Pearson Correlation ($r = N-2$), which means $150 - 2 = 130$, and a strong positive correlation coefficient. Therefore, by decision rule, since the result of the Pearson Correlation Coefficient test carried out was .85 and it falls between the range of 1.0 and 0.8, which connotes a very strong positive correlation between patient wait time to receive healthcare services and patient satisfaction of healthcare service received at the different clinics and departments at the UPTH. Thus, the null hypothesis, which states that at the UPTH in Rivers State, Nigeria, patient wait time has no significant correlation with satisfaction of healthcare services provided at the various clinics and departments, was rejected and the alternative accepted. This implies that a very positive and strong relationship existed between patient wait time and satisfaction with healthcare services they received at the UPTH, Rivers State.

DISCUSSION

From the hypothesis testing, the result of the Pearson Correlation Coefficient test was .85, and it falls between the range of 1.0 and 0.8, which connotes a very strong positive correlation between patient wait time to receive healthcare services and patient satisfaction of healthcare services received at the different clinics and departments at the UPTH. These findings, combined with a previous study by Obamiro (2013), discovered that even after lengthy wait

periods, patients were content with the quality of service. Longer wait times have a negative correlation with clinical provider patient satisfaction scores, according to research by Bleustein et al. (2014). This has an effect on measures like overall satisfaction and the likelihood of recommending. In contrast, a study in a state teaching hospital by Ndibuagu et al. (2020) study on patient satisfaction discovered that the most important factor predicting satisfaction is the interpersonal competency of medical staff. In general outpatient departments, wait periods are a critical factor in determining the quality of care provided. Prolonged wait times, particularly in developing nations such as Nigeria, can cause tension and worry. In addition, Geta and Edessa (2020) found that patient satisfaction with waiting time among outpatients at Nekemte Referral Hospital in Ethiopia was 57.1%, with factors such as registration, visiting physicians, laboratory services, drugs, and payment being significantly associated with satisfaction. The study recommends reducing waiting times to ≤ 30 minutes for health services to increase outpatient satisfaction. Sarwat (2022) found that physician professionalism received the highest scores, while waiting times received the lowest. Ndibuagu et al. (2020) found that patients' satisfaction with hospital services, particularly the General Outpatient Department (GOPD), is crucial for their continued use.

Conclusion

The study revealed significant issues with long waiting times for patients to receive medical attention. The majority of patients waited 56 minutes or more, with an average wait time of 88.66 minutes and an average length of stay of 17.32 minutes. These prolonged wait times were attributed to factors such as negative staff behaviour, inadequate staffing levels, and poor record-keeping systems. The long wait times were found to have a negative impact on patient satisfaction and experience with the healthcare system. This is supported by previous studies that have shown long waiting times to be a

significant issue in outpatient clinics, affecting patient adherence, missed appointments, and treatment initiation.

Recommendations

The UPTH and its staff should enhance the cleanliness and comfort of the waiting areas, as a significant percentage of patients expressed dissatisfaction with this aspect. The UPTH management and government at the level of healthcare systems should implement process improvements to reduce waiting times through the adoption of electronic health record management across departments and clinics at UPTH and beyond. Furthermore, UPTH management should always focus on improving the interpersonal competency of healthcare staff. Patients should be involved in decision-making by healthcare providers in order to build trust and synergy in the overall patient care management and adequate healthcare resources utilization.

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