

# INFLUENCE OF SERVICE QUALITY ON PATIENTS' RETENTION IN THE PRIVATE HEALTHCARE SECTOR IN GOMBE STATE, NIGERIA

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## **Abstract**

*The research investigates the influence of service quality on patients' retention in private healthcare sector in Gombe State Nigeria, by adopting service quality model which include tangibility of service, responsiveness of service and assurance of service. Data were collected through structured questionnaires using a sample size 254 of private healthcare. The hypotheses were tested using Structural Equation Modeling (SEM). The results indicate that two service quality dimensions tangibility of service and responsiveness of service had a positive and significant relationship on private healthcare sector patients' retention. However, assurance of service had a negative and no significant relationship on patients' retention in the private healthcare sector in Gombe State. The research recommends private healthcare service providers should improve on the service quality dimensions by providing adequate service required by patients so as to be able to retain them.*

**Keywords:** *Service Quality, Patients' Retention, Healthcare, Tangibility of Service, Responsiveness, Assurance, Equipment.*

## **INTRODUCTION**

The health industry is one of the Nigeria's essential service industries, and it is as essential as other sectors of the economy as it addresses health-related issues through the services of professionals such as doctors and nurses, as well as the use of healthcare facilities. Retention is the ability to keep or continue having something. Patient retention is about ensuring that patients continue to return to your practice indefinitely, or at least, for as long as they need medical care (Okonofua, et al. 2018). It is also about keeping patients for an extended period by returning to your medical practice when they need a healthcare provider. Patient retention is a practice's ability to turn new patients into loyal patients. Maintaining patients' retention is critical to the private healthcare sector's long-term survival, because no private healthcare provider can remain in business if its patients are not sustained (Banskota, et al. 2020). The private healthcare industry is recognizing the importance of service quality, which is resulting in increased attempts to fulfil patient's expectation (Al-Abri & Al-Balushi, 2014). As such, quality is a vital element of success for any organization (Goniewicz, et al. 2022). Yet, in the competitive environment whereby private healthcare facilities operate, offering quality service could be an essential element for success (Pambreni, et al. 2019).

The healthcare sector in Southeast Asia is rapidly developing, due to the high growth of the private sector, and in addition, medical tourism, or organized travel outside its country of residence to receive medical care (Bao, et al. 2020). It was a clear trend in Southeast Asia, notably in Thailand, Singapore, and Malaysia, and they are the leading regional centres for medical tourism and have considerable government support to promote inflows (Chandran, et al. 2020). Medical tourism is driven by the private sector (Ganguli&Ebrahim, 2017). In Thailand, the number of private hospitals is about 30 percent of the total number of hospitals from the report of a confidential hospital survey by the National Statistical Office of Thailand (Wongkit & Boonyanmethaporn, 2020). The steady growth of private hospitals has catered for medical tourists to access their services (Rahman, 2019). When the personal healthcare sector structure changes, the role patients play in defining what quality means has become crucial (Renedo&

Marston, 2015). As a result, for health-care organizations, service quality has become a critical competitive strategy consideration (Papanikolaou & Zygiaris, 2014).

The government of Saudi Arabia has allocated 71 billion dollars for healthcare expenditure for the next five years, as part of the Saudi Arabia's vision 2030 and the National Transformation Program (Chang, et al. 2019). The healthcare industry is expected to grow by 12.3% by 2020, and according to statistics, having 275 government hospitals account for 57.53 % of all hospitals in the Kingdom, solely managed and administered by the Ministry of Health, and representing approximately 79% of bed capacity (Khan & Iqbal, 2020). As an outcome, the private sector has 158 (33.35%) hospitals, whereas the remaining 24 (9.41%) hospitals are quasi-governmental, indicating that there are no significant disparities in the services offered between government and private hospitals in the Kingdom of Saudi Arabia (Al Asmri, et al. 2020). However, according to internal reports, private hospitals provide quality services with advanced technology and backup analytics, but care costs are comparatively higher than those in government hospitals (Lv, & Qiao, 2020). A business with a high level of service is likely to meet customer needs while also remaining economically competitive in its specific industry (Sturgeon, 2021).

Service quality is an achievement in customer service, from the viewpoint of business administration and it reflects at each service encounter (De Bruin, et al. 2020). Customers, on the other hand, form service expectations based on past experiences, word of mouth, and marketing communications (Hajli, et al. 2014). Consequently, service quality is a critical competitive element in today's corporate landscape (Demir, et al. 2020). Service quality could be a strategic force and it is a crucial issue in today's business environment based on environmental challenges, as such, private healthcare providers are moving toward commercial competition (Ginter, et al. 2018). Becoming a competitive organization means assessing the quality of services offered to all stakeholders (Hastig, & Sodhi, 2020). Consequently, service quality is a critical antecedent to successful customer relationships, especially in the service sector, where quality can be difficult to imitate and so provide the basis for a lengthy competitive edge (Islam, et al. 2019). Offering a superior service that co-competitors cannot match provides customers with a reason to choose and remain with a specific provider, and in contrast, a service offer that is inferior or indistinct may bring more problems in attracting customers and a higher likelihood of defection (Belussi, et al. 2019). Also, service quality can, in principle, provide the basis for retention, and business performance (Murali, et al. 2016). Service quality is an essential market differentiator and a strategy towards sustained competitiveness, and it should be improved by all service organizations, especially those in the private sector (Ali, et al. 2021). In a competitive business environment, offering expected value in the concentration of service, is essential for business success, and experts believe that service quality is the most-strong competitive tool currently influencing marketing and business strategy (Vishnevskiy, et al. 2017). Service quality has long been linked with profitability in any business, whether in manufacturing or service, and has been regarded as a vital competitive advantage for repurchasing or customer retention (Murali, et al. 2016).

Upon this background, this study is established with the aim of examining the influence of service quality on patients' retention in the private healthcare sector in Gombe State, Nigeria.

## **LITERATURE REVIEW**

The conceptual review, theoretical review and the conceptual model are discussed under this section.

### **Service Quality (SERVQUAL)**

Every service organization's primary concern is service quality and it is a requirement for a service company's survival and gaining a competitive advantage over competitors (Zalatar, 2012). The difference between customers' service expectations and what they received in a particular transaction is known to as service quality (Kassim & Abdullah, 2010). As a result, service quality is about meeting and exceeding customers' expectations (Kadlubek & Grabara, 2015). The concept "service quality" relates to comparing of a customer's expectations before using a service versus their experience after (Angelova & Zekiri, 2011). Consequently, it is easy to conclude that service quality is influenced by customer perception, as one customer might perceive a service as being of high quality, in contrast, others might perceive the same service to be of low quality (Mmutle & Shonhe, 2017). The SERVQUAL model or theory of Parasuraman, et al. (1988), which best describes the independent variables that is the three dimensions of service quality, namely, tangibility, responsiveness, and assurance, as it is related to this study;

### **Tangibility**

Tangibility refers to as the physical evidence of service, which involves physical facilities, personnel appearance, necessary equipment to provide the service, physical representations of the service, and communication materials (Yarimoglu, 2014). Hospital rooms, patient beds, laboratories, and equipment required to perform hospital operations are part of the tangibility of service in the health care sector (Hussain, et al. 2019).

### **Responsiveness**

Responsiveness refers to the capability of an instrument to detect change over time in the construct to be measured, according to the Consensus-based Standards for the Selection of Health Measurement Instruments (COSMIN) group (Mokkink, et al. 2010). Responsiveness is a fact that relates to the validity of a change score, and more commonly in the context of services, the concept of responsiveness refers to service providers' willingness and timeliness in assisting customers (Yousapronpaiboon, 2014). Inattentive and prompt in responding to customer requests, queries, and complaints is the emphasis on responsiveness (Thomas & Clifford, 2017). In the healthcare sector, patients expect doctors and nurses to respond to their needs (Al-Neyadi, et al. 2018).

### **Assurance**

The concepts of trust, confidence, and credibility are all parts of the assurance process (Esmaeilpour, et al. 2017). Assurance is defined in the quality of service literature as service personnel's knowledge and courtesy, and also their ability to instill trust and confidence in customers (Tweneboah-Koduah & Farley, 2016). When doctors and nurses are honest in their interactions with patients, trust and confidence exist in the health sector, allowing patients to feel better concerning their interactions with doctors and nurses (Sripad, et al. 2018). The concept of assurance is most commonly associated with the idea of sustainability and quality management within the domain of business and management research. It is stressed in a diverse range of literature such as business ethics, finance and accounting, healthcare, education, information systems, and security (Frizzo-Barker, et al. 2020).

### **Patients' Retention**

To compete favorably and remain in business, every organization, including the private healthcare sector, should have more effective means of sustaining and retaining their customers (Stahl, et al. 2012). Customer retention is a crucial component of business (Hawkins & Hoon, 2019). It refers to as a firm's ability to provide a customer with not only purchasing good, but also a relationship pattern over some time (Degbey, 2015). Regardless of the level of satisfaction, mobility is unavoidable due to increased income. If customers are satisfied, they will

purchase the same brands again (Elrehail, 2020). Much of marketing research and education has tended to focus on the former - attracting new customers by developing products or services to meet specific needs has been one of the main concerns of business practitioners (Wikhamn, 2019).

### **Empirical Review**

The researcher looked at relevant empirical literature on the independent variable (service quality) and its relation to several dependent variables. The review is of various authors on service quality and satisfaction, loyalty and scarcity of studies on retention, which are related and relevant to the researcher's approach. Some have the same approach, but different objectives, findings, and study topics. As a result, the researcher intends to see if service quality influenced patients' retention in the private healthcare sector in Gombe State, Nigeria. This study, on the other hand, reviews the literature in terms of its nature. Patients whether that of the public or private hospitals, are the users of health care services (Garpenhag & Dahlman, 2021). Patients would have more opportunities to support the continued patronage of their service and hold to know how well the services meet patients' expectations for services. Private healthcare should stand out to compete with its counterparts across the globe (Lacity & Willcocks, 2014).

Kulsum & Syah, (2017) studied the effect of service quality on loyalty with mediation of patient satisfaction. The aim of the study is to determine the effect of service quality on loyalty with mediation of patient satisfaction. Findings of the study showed that service quality has an influence on patient satisfaction, patient satisfaction has an influence on loyalty and service quality has an influence on loyalty.

In Nepal private hospitals, Neupane & Devkota, (2017) studied the impacts of service quality dimensions on patient/customer satisfaction. Patients' perceptions of the quality of service provided by private hospitals, as well as their level of satisfaction, are found to be significantly related to satisfaction.

Al-Neyadi, et al. (2018) studied on measuring patient's satisfaction of health services in the United Arab Emirate (UAE) hospitals using SERVQUAL. The study focused on determining patient's satisfaction with the quality of health services. They discovered that patient's satisfaction is influence by the overall service quality.

Akahome & Jackson, (2018) studied on the effect of service quality on patients' satisfaction in Government owned hospitals of Bayelsa State, Nigeria. The main objective of the study is to investigate the effect of service quality on patients' satisfaction in government owned hospitals of Bayelsa state, Nigeria. The regression results show that there is significant positive effect of service quality (tangibility, reliability, and responsiveness) on patients' satisfaction of government owned hospitals in Bayelsa state, Nigeria using regression analysis.

Potluri & Angiating, (2018) investigated the relationship between service quality and customer satisfaction in the Nigerian healthcare sector to see how the quality of services provided by the Nigerian healthcare sector influences patient satisfaction. When compared to tangibility, empathy, and reliability quality variables, the data revealed that most of the respondents were dissatisfied with the service providers' responsiveness. Moreover, there is no connection between the tangibility quality variable and overall satisfaction.

Furthermore, Mahendrayana, et al. (2018) looked at the effect of service quality on patient loyalty as mediated by patient satisfaction in an Indonesian study. They revealed that service quality has a positive and significant impact on patient satisfaction.

Permana, et al. (2019) studied the analysis of service quality and value effect on patient satisfaction and its effect on loyalty of hospital patients in hospital and children of

PucukPermataHati. The study examined how service quality is improved by the hospital so as to create patient satisfaction and loyalty as the ultimate goal. Findings of the study showed that the quality of service had a positive and significant effect on the satisfaction at RSIA PucukPermataHati. Values have a positive and significant influence on patient satisfaction. Service quality has a positive and significant effect on loyalty. Value has a positive and significant effect on loyalty. Consumer power (patients) has a positive and significant effect on loyalty.

Sathish, et al. (2019) carried out a study on service quality and its influence on customer satisfaction in a multi-special hospital in India. To assess the quality of services offered by multi-special hospital suffice patient satisfaction. Also, to bring out the various factors that creates patient satisfaction. The findings of the study revealed that the patients showed positive response on the service quality variables and do have high agreement levels of the dimensions of SERVQUAL (reliability, assurance, tangibles, empathy, and responsiveness). Service quality has emerged as the highest expected aspect by the patients at the hospital.

Tan, et al. (2019) conducted a study in Malaysia on measuring the influence of service quality on patient satisfaction. The findings revealed that assurance, and reliability had a strong relationship with patient satisfaction, while empathy, responsiveness, and tangibility had a weak relationship.

Elrehail, (2020) investigated the impact of service quality and satisfaction on customer loyalty: The moderate role of switching cost. Findings revealed that customer loyalty is affected by customer satisfaction and at the same time affected by service quality.

Ampaw, et al. (2020) investigated the assessment on healthcare service quality and patients' satisfaction in Ghana. The findings revealed that medical service quality has a significant effect on patients' satisfaction.

Aktar, (2021) determinates service quality and its effect on patients' satisfaction of private medical college hospitals, Rangpur, Bangladesh. The findings showed that service quality has a significant effect on patients' satisfaction at the hospital.

Furthermore, Alumran, et al. (2021) evaluated and compared patient satisfaction in government and private hospitals in Saudi Arabia, and discovered that there was no significant difference between the two. However, patient satisfaction with doctors' and auxiliary staff's attitude, behaviour, and communication was significantly higher in private hospitals than in government hospitals.

Sukamuljo, et al. (2021) studied hospital image and service quality are not able to provide patient satisfaction and loyalty effect. This study aims to provide empirical evidence of the influence of hospital image and service quality on patient loyalty mediated by satisfaction. The results showed that simultaneously the image of the hospital and the quality of service had a positive and significant effect on patient loyalty with patient satisfaction as intervening. Partially, service quality has a positive and significant effect on patient satisfaction, hospital image has no effect on patient satisfaction, patient satisfaction and hospital image have positive and significant effect on patient loyalty, service quality has no effect on patient loyalty, hospital image research findings do not affect patient satisfaction and service quality does not affect patient loyalty.

There are comparisons amongst different authors regarding service quality, as revealed by the studied empirical literature. There is also a variation in the authors' methodology. The topics varied, with a diversity of objectives. There are numerous differences in the presentation of service quality dimensions. Some authors (Potluri & Angiating, 2018) emphasized on tangibility and reliability, while (Tan, et al. 2019) emphasized on assurance and reliability. Two authors in the literature used assurance on the dimensions (Tan, et al. 2019), and (Sathish, et al. 2019). That is

why the researcher chose to look into the influence of service quality dimensions, including the tangibility, the responsiveness, and assurance, on patients' retention in the private healthcare sector in Gombe State, Nigeria. Two authors applied five service quality dimensions (Tan, et al. 2019), and (Sathish, et al. 2019), while (Potluri & Angiating, 2018) used four service quality dimensions. Also, an author in his study used three dimensions of the service quality but with the absence of assurance (AkaHOME & Jackson, 2018). As a result, among the literature reviewed, none used retention as a dependent variable, and that there is scarcity on the use of assurance under the dimensions of the service quality, and no study was carried out on similar topic to this current study here in Gombe State, Nigeria.

**Underpinning Theories**

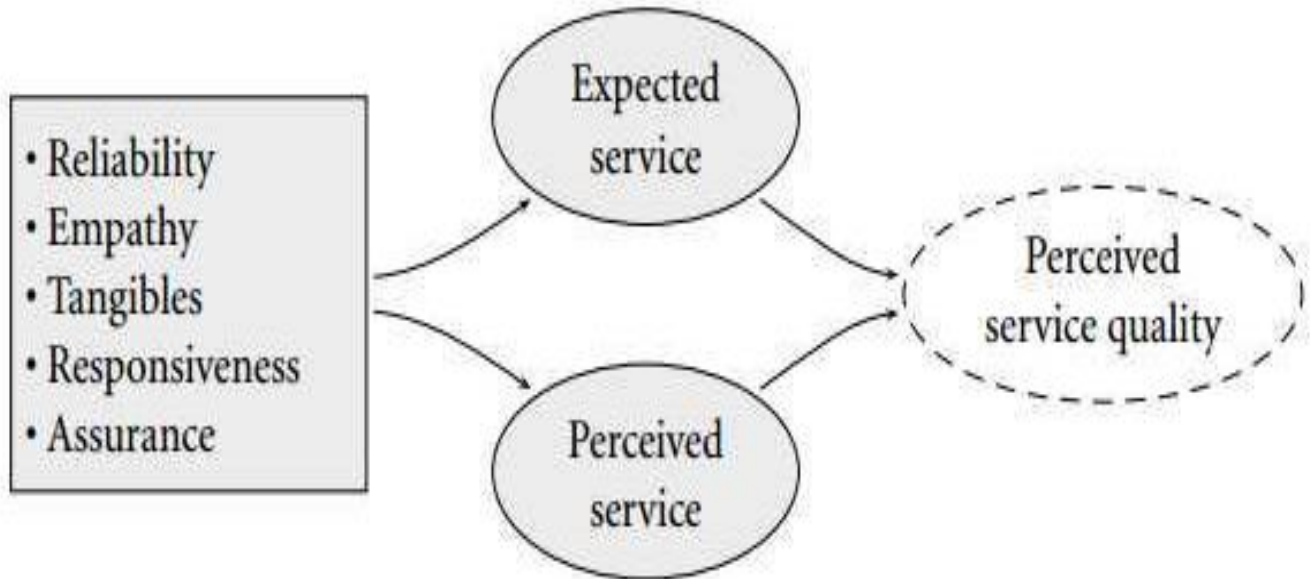
**Expectancy Theory of Motivation**

Victor, (1964) a professor of psychology, developed the expectancy theory, which argued that behavior is the result of conscious choices among alternatives with the goal of increasing pleasure and reducing pain. The Yale School of Management's Victor, (1964) established the expectancy theory, which states that behavior is driven by possible results or consequences, and based on the expected outcome of the chosen behavior, an individual behaves in a certain way.

**Diffusion of Innovations; Perceived Attributes Theory**

The process through which an innovation is absorbed and acknowledged by members of a particular community is known as diffusion (Rogers, 1995). Diffusion of innovations theory is a concept that seeks to explain how, why, and at what rate new ideas and technology spread by focusing on individual perception (Talebian & Mishra, 2018).

**SERVQUAL Model**



**Figure 1: SERVQUAL Model**  
**Source: Parasuraman, et al. (1998)**

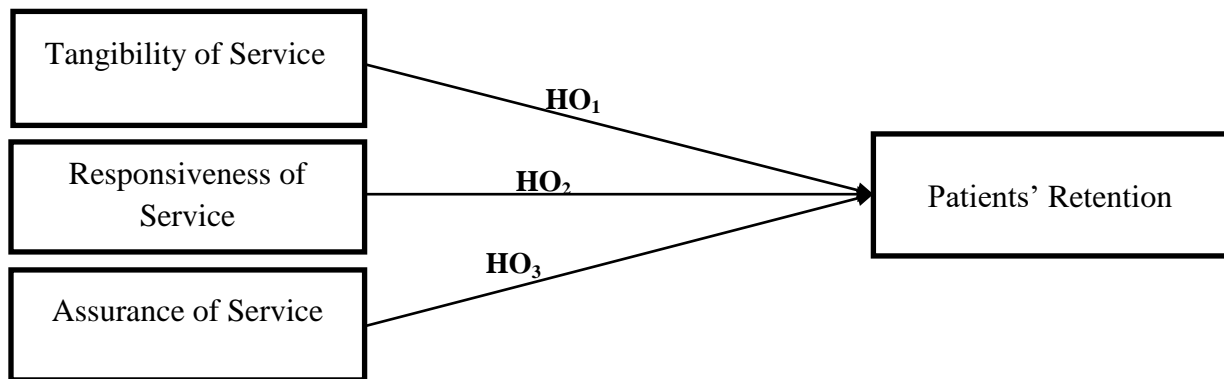
Figure 2 shows the SERVQUAL model's dimensions and are the critical indicators of service quality (Kansra & Jha, 2016). Parasuraman, et al. (1988) identified 97 variables and are reduced to ten dimensions. They are reported to have an impact on service quality and are seen as the

criteria that is essential in attaining customer expectations and perceptions of a given service. The SERVQUAL scale, also known as the gap model by Parasuraman, et al. (1988), has long been regarded as one of the most valuable indicators for evaluating the quality of customer service (Rahim, et al. 2012). The SERVQUAL model seems to best fits the evaluation of service quality from the customer's perspective (Ok, et al. 2018), depending on how this theory (SERVQUAL theory) is identified. When the terms "expected" and "perceived" service are used, it is evident that these refer to the person who will consume or is already consuming the service, that is, the customer (Jebarajakirthy, et al. 2021). Customers' expectations were achieved through the outcome dimension (reliability) and exceeded through the process dimension (tangibility, assurance, responsiveness, and empathy), according to this view (Haming, et al. 2019). AbdulRahim & Iteng (2020) argued that "service quality is a targeted evaluation that reflects the customer's view of reliability, assurance, responsiveness, empathy, and tangibles" to confirm the validity of the SERVQUAL model in the evaluation of service quality.

The SERVQUAL model or theory of Parasuraman, et al. (1988), which best describes the independent variables that is the three dimensions of service quality, namely, tangibility, responsiveness, and assurance, as it is related to this study, is the underpinning theory for this study.

### Conceptual Model

The dimensions used in Parasuraman, et al.'s (1988) Service quality SERVQUAL MODEL are modified and utilized in this study.



**Source: Parasuraman, et al. (1988)**

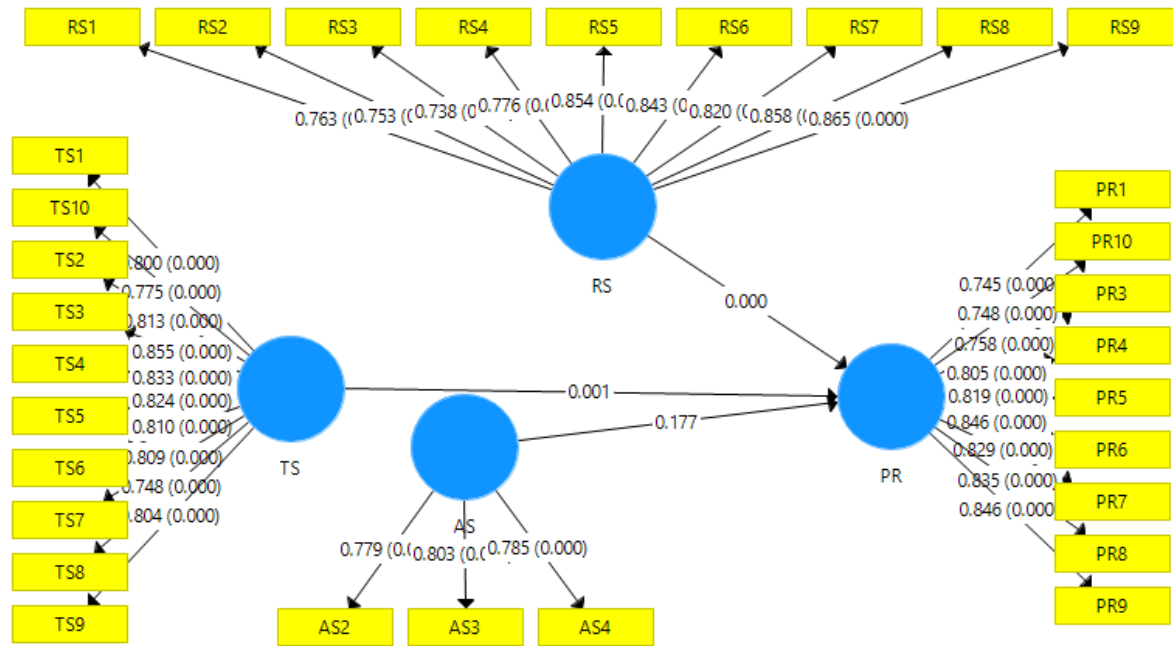
### Methodology

The method that was adopted in this study was survey research design which is a non-experimental research design that sources data from a primary source using a questionnaire and interview (Tolla, et al. 2022). This study used questionnaire which is one of the most commonly used instruments for data collection in field research in the management and social sciences (Kiliñç & Firat, 2017). The data collected from the questionnaire survey is essential to represent the validity of the hypothesis (Lane-Fall, et al. 2014). Moreover, the researcher decided to use a questionnaire survey because the data collected from respondents is much easier to analyze and interpret.

The sampling technique used in this study is the cluster sampling technique and it is a type of probability sampling whereby the researcher needs to randomly select a sample from the target population. Cluster sampling gives every unit or person in the population an equal and known chance of being selected in the sample group. From Gombe North Senatorial District, the

researcher randomly selected two private hospitals/facilities from Gombe Local Government Area, namely; Sabana Hospital, and Yerma Memorial Hospital Gombe. From Gombe Central Senatorial District, the researcher randomly selected two private hospitals/facilities from Akko Local Government Area, namely; Madi Memorial Clinic, and Kumo Health Clinic. And from Gombe South Senatorial Districts, two private hospitals/facilities were also selected from Kaltungo Local Government Area, namely; Amdo Medical Clinic and ECWA Health Clinic Kaltungo.

**Data Presentation and Analysis**



**Figure 2: Structural Model**

Source: PLS-SEM, V3.3.3, (2022)

Figure 2, estimates the path model to view the sampling distribution to determine the standard error and the standard deviation of the distribution of the estimated coefficients in the population.

**Hypotheses Testing**

The study tests the influence of tangibility, responsiveness and assurance of service on patients’ retention in the private healthcare sector in Gombe State, Nigeria. Thus, testing hypotheses 1, 2 and 3. Table 4.13 presents the result of hypotheses.

**Table 1: Path Coefficient**

| Hypotheses Testing       | Beta Value | Standard Error | T Stat | P Values | Decision |
|--------------------------|------------|----------------|--------|----------|----------|
| HO <sub>1</sub> TS -> PR | 0.233      | 0.067          | 3.493  | 0.001    | Accepted |
| HO <sub>2</sub> RS -> PR | 0.637      | 0.065          | 9.695  | 0.000    | Accepted |
| HO <sub>3</sub> AS -> PR | 0.05       | 0.035          | 1.352  | 0.177    | Rejected |

Source: PLS-SEM Path Coefficient, (2022)

\*\*\* p< 0.01; \*\*p< 0.05; \*p <0.1

**Discussion of Findings**

**Ho<sub>1</sub>: “Tangibility has no significant relationship with patients’ retention in the private healthcare sector in Gombe State, Nigeria”.** From Table 4.13, it is seen that the tangibility of service had a positive and significant relationship on private healthcare sector patients’ retention



in Gombe State Nigeria. It means that if benefit is tangible by one unit, private healthcare sector patients' retention would increase by 99%. It is significant at a P value  $<.0001$ , which is accepted because most of the respondents of this study showed their contentment towards the tangible equipment at the hospitals. It has a beta value of 0.233, a standard error of 0.067 and a T stat of 3.493. This means that if there are no concrete service, by private healthcare providers, the lack of patients' retention will increase by 99%.

**“Ho<sub>2</sub>: Responsiveness has no significant relationship with patients' retention in the private healthcare sector in Gombe State, Nigeria”.** Responsiveness of service has a positive and significant relationship on patients' retention in the private healthcare sector in Gombe State, Nigeria. It has a P value of  $<.000$ , which is accepted because a most of the respondents of the study showed their contentment with the response of doctors and nurses in providing services to patients. It has a beta value of 0.637, a standard error of 0.065, and T stat of 9.695, which means a unit of change in responsive service will lead to a 100% loss of patients' retention in the private healthcare sector in the State.

**“Ho<sub>3</sub>: Assurance has no significant relationship with patients' retention in the private healthcare sector in Gombe State, Nigeria”.** It can be deduced that assurance of service has a negative and no significant relationship on patients' retention in the private healthcare sector in Gombe State, Nigeria. It is significant at a P value  $<.0177$ , which is rejected because most of the respondents of this study indicated their discontentment over the assurance of the service providers when compared to tangibility and responsiveness. And it has a beta value of 0.05, standard error of 0.035 and T stat of 1.352, which means that assurance will lead to 82% patient retention. As a result of this, it is rejected.

### **Conclusions**

The service industry, specifically the private healthcare sector, is recognizing the importance of service quality which is leading to heightened efforts to meet the expectations of their patients. On the ground of the findings of this study, conclusions are as follows:

The tangibility of service had a positive and significant relationship on patients' retention in the private healthcare sector in Gombe State, Nigeria, with small effect size. Therefore, it concludes that tangibility played an essential role on patients' retention in the private healthcare sector in Gombe State, Nigeria.

Similarly, the responsiveness of service had a positive and significant relationship on patients' retention in the private healthcare sector in Gombe State, Nigeria, with large effect size, which means that responsiveness played a prominent role in ensuring patients' retention in the private healthcare sector.

Assurance of service had no significant relationship on patients' retention in the private healthcare sector in Gombe State, Nigeria, with small effect size. It is therefore, concluded that assurance played a minimal role in influencing patients' retention in the private healthcare sector.

### **Recommendations**

Based on the studies reviewed, this study has recommended that:

Private healthcare sector service providers should provide adequate tangibility equipment such as patient's wards, bed capacity, operational facilities into their hospitals, this is because tangibility service quality dimension played an essential role on patients' retention in the private healthcare sector in Gombe State, Nigeria.

Private healthcare sector service providers should respond to patients promptly by providing adequate services required because responsiveness played a prominent role on patients' retention in the private healthcare sector in Gombe State, Nigeria.

Private healthcare sector service providers should ensure that patients have confidence in the services they provide. The result of the null hypothesis three  $H_{03}$  showed that assurance had a negative and no significant relationship on patients' retention in the private healthcare sector in Gombe State, Nigeria, which is rejected because it played a minimal role on patients' retention, in the private healthcare sector in Gombe State, Nigeria.

## References

- AbdulRahim, M. F., & Iteng, R. (2020). Study about relationship between service quality orientation and customer satisfaction at UUM Parcel Centre Student UUM. In *Symposium on Technology Management and Logistics (STML Go Green) 2019: Operations Management*, 1(12), 41-44. Universiti Utara Malaysia.
- Adkins, S. (2012). *Cause-related marketing: Who cares wins*, 699-723. Routledge.
- Akahome, J. E., & Jackson, C. (2018). Effect of service quality on patients' satisfaction in Government owned hospitals of Bayelsa State, Nigeria. *LIJOMASS*, 284.
- Aktar, M. S. (2021). Determinates service quality and its effect on patients' satisfaction of private medical college hospitals, Rangpur, Bangladesh. *International Journal of Management Accounting*, 3(4), 91-105.
- Al Asmri, M., Almalki, M. J., Fitzgerald, G., & Clark, M. (2020). The public health care system and primary care services in Saudi Arabia: a system in transition. *Eastern Mediterranean Health Journal*, 26(4).
- Al-Abri, R., & Al-Balushi, A. (2014). Patient satisfaction survey as a tool towards quality improvement. *Oman medical journal*, 29(1), 3.
- Ali, B. J., Gardi, B., Jabbar, O.B., Ali, A.S., Burhan, I.N., Abdalla, H.P. & Anwar, G. (2021). Hotel service quality: The impact of service quality on customer satisfaction in hospitality.
- Ali, I., & Garg, R. K. (2017). Marketing of services: Challenges & opportunities in context of the globalization of business. *International Journal of Engineering and Management Research (IJEMR)*, 7(3), 522-526.
- Al-Neyadi, H. S., Abdallah, S., & Malik, M. (2018). Measuring patient's satisfaction of healthcare services in the UAE hospitals: Using SERVQUAL. *International Journal of Healthcare Management*, 11(2), 96-105.
- Alumran, A., Almutawa, H., Alzain, Z., Althumairi, A., & Khalid, N. (2021). Comparing public and private hospitals' service quality. *Journal of Public Health*, 29, 839-845.
- Ampaw, E. M., Chai, J., Liang, B., Tsai, S. B., & Frempong, J. (2020). Assessment on health care service quality and patients' satisfaction in Ghana. *Kybernetes*.
- Angelova, B., & Zekiri, J. (2011). Measuring customer satisfaction with service quality using American Customer Satisfaction Model (ACSI Model). *International journal of academic research in business and social sciences*, 1(3), 232.
- Bamfo, B. A., & Dogbe, C. S. K. (2017). Factors influencing the choice of private and public hospitals: empirical evidence from Ghana. *International Journal of Pharmaceutical and Healthcare Marketing*.
- Banskota, S., Healy, M., & Goldberg, E. M. (2020). 15 smartphone apps for older adults to use while in isolation during the COVID-19 pandemic. *Western Journal of Emergency Medicine*, 21(3), 514.
- Bao, Y., Sun, Y., Meng, S., Shi, J., & Lu, L. (2020). 2019-nCoV epidemic: address mental health care to empower society. *The Lancet*, 395(10224), e37-e38.
- Belussi, F., Orsi, L., & Savarese, M. (2019). Mapping business model research: A document bibliometric analysis. *Scandinavian Journal of Management*, 35(3), 101048.
- Borrescio-Higa, F., & Valdés, N. (2019). Publicly insured caesarean sections in private hospitals: a repeated cross-sectional analysis in Chile. *BMJ open*, 9(4), e024241.

- Chandran, S. D., Puteh, F., Azmi, N. A., & Suki, N. M. (2020). Exploring the development of medical tourism industry in Southeast Asia region. *International Journal of Business Ecosystem & Strategy*, 2(3), 28-32.
- Chang, A. Y., Cowling, K., Micah, A. E., Chapin, A., Chen, C. S., Ikilezi, G., & Qorbani, M. (2019). Past, present, and future of global health financing: a review of development assistance, government, out-of-pocket, and other private spending on health for 195 countries, 1995-2050. *The Lancet*, 393(10187), 2233-2260.
- De Bruin, L., Roberts-Lombard, M., & De Meyer-Heydenrych, C. (2020). Internal marketing, service quality and perceived customer satisfaction: An Islamic banking perspective. *Journal of Islamic Marketing*.
- Degbey, W. Y. (2015). Customer retention: A source of value for serial acquirers. *Industrial Marketing Management*, 46, 11-23.
- Demir, A., Maroof, L., Khan, N. U. S., & Ali, B. J. (2020). The role of E-service quality in shaping online meeting platforms: a case study from higher education sector. *Journal of Applied Research in Higher Education*.
- Elrehail, H. (2020). The impact of quality of services and satisfaction on customer loyalty: The moderate role of switching costs. *Management Science Letters*, 1843-1856.
- Ennew, C. T., Binks, M. R., & Chiplin, B. (2015). Customer satisfaction and customer retention: An examination of small businesses and their banks in the United Kingdom (UK). In *Proceedings of the 1994 Academy of Marketing Science (AMS) Annual Conference*, 188-192. Springer, Cham.
- Esmailpour, M., Sayadi, A., & Mirzaei, M. (2017). Investigating the impact of service quality dimensions on reputation and brand trust. *International Journal of Business and Economic Sciences Applied Research*, 10(3).
- Frizzo-Barker, J., Chow-White, P. A., Adams, P. R., Mentanko, J., Ha, D., & Green, S. (2020). Blockchain as a disruptive technology for business: A systematic review. *International Journal of Information Management*, 51, 102029.
- Ganguli, S., & Ebrahim, A. H. (2017). A qualitative analysis of Singapore's medical tourism competitiveness. *Tourism Management Perspectives*, 21, 74-84.
- Garpenhag, L., & Dahlman, D. (2021). Perceived healthcare stigma among patients in opioid substitution treatment: a qualitative study. *Substance abuse treatment, prevention, and policy*, 16(1), 1-12.
- Ginter, P. M., Duncan, W. J., & Swayne, L. E. (2018). *The strategic management of health care organizations*. John Wiley & Sons.
- Goniewicz, K., Burkle, F. M., Hall, T. F., Goniewicz, M., & Khorram-Manesh, A. (2022). Global public health leadership: The vital element in managing global health crises. *Journal of global health*, 12.
- Hajli, N., Lin, X., Featherman, M., & Wang, Y. (2014). Social word of mouth: How trust develops in the market. *International Journal of Market Research*, 56(5), 673-689.
- Haming, M., Murdifin, I., Syaiful, A. Z., & Putra, A. H. P. K. (2019). The application of SERVQUAL distribution in measuring customer satisfaction of retails company. *Journal of Distribution Science*, 17(2), 25-34.
- Hastig, G. M., & Sodhi, M. S. (2020). Block chain for supply chain traceability: Business requirements and critical success factors. *Production and Operations Management*, 29(4), 935-954.
- Hawkins, D., & Hoon, S. (2019). The impact of customer retention strategies and the survival of small service-based businesses. *Stephanie, The Impact of Customer Retention Strategies and the Survival of Small Service-Based Businesses*.
- Hussain, A., Sial, M. S., Usman, S. M., Hwang, J., Jiang, Y., & Shafiq, A. (2019). What factors affect patient satisfaction in public sector hospitals: Evidence from an emerging economy. *International journal of environmental research and public health*, 16(6), 994.
- Islam, J. U., Hollebeek, L. D., Rahman, Z., Khan, I., & Rasool, A. (2019). Customer engagement in the service context: an empirical investigation of the construct, its antecedents and consequences. *Journal of Retailing and Consumer Services*, 50, 277-285.

- Javed, S. A., Liu, S., Mahmoudi, A., & Nawaz, M. (2019). Patients' satisfaction and public and private sectors' health care service quality in Pakistan: Application of grey decision analysis approaches. *The International journal of health planning and management*, *34*(1), e168-e182.
- Jebarajakirthy, C., Das, M., Maggioni, I., Sands, S., Dharmesti, M., & Ferraro, C. (2021). Understanding on-the-go consumption: A retail mix perspective. *Journal of Retailing and Consumer Services*, *58*, 102327.
- Kadlubek, M., & Grabara, J. (2015). Customers' expectations and experiences within chosen aspects of logistic customer service quality. *International Journal for Quality Research*, *9*(2).
- Kansra, P., & Jha, A.K. (2016). Measuring service quality in Indian hospitals: an analysis of SERVQUAL model. *International Journal of Services and Operations Management*, *24*(1), 1-17.
- Kassim, N., & Abdullah, N. A. (2010). The effect of perceived service quality dimensions on customer satisfaction, trust, and loyalty in e-commerce settings: A cross cultural analysis. *Asia pacific journal of marketing and logistics*.
- Khan, M. B., & Iqbal, S. (2020). Vision 2030 and the National Transformation Program. In *Research, Innovation and Entrepreneurship in Saudi Arabia*.146-166. Routledge.
- Kilinc, H., & Firat, M. (2017). Opinions of expert academicians on online data collection and voluntary participation in social sciences research. *Educational Sciences: Theory & Practice*, *17*(5).
- Krejcie, R.V., & Morgan, D.W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, *30*,607-610.
- Kulsum, U., & Syah, T. Y. R. (2017). The effect of service quality on loyalty with mediation of patient satisfaction. *International Journal of Business and Management Invention*, *6*(3), 41-50.
- Lacity, M., & Willcocks, L. (2014). Business process outsourcing and dynamic innovation. *Strategic Outsourcing: An International Journal*.
- Lane-Fall, M. B., Beidas, R. S., Pascual, J. L., Collard, M. L., Peifer, H. G., Chavez, T. J., ... & Barg, F. K. (2014). Handoffs and transitions in critical care (HATRICC): protocol for a mixed methods study of operating room to intensive care unit handoffs. *BMC surgery*, *14*(1), 1-11.
- Loyyl, B. W., & Kumar, M. (2018). A critical analysis on service quality and customer retention. Available at SSRN 3201409.
- Lusch, R. F., & Vargo, S. L. (2014). *The service-dominant logic of marketing: Dialog, debate, and directions*. Routledge.
- Lv, Z., & Qiao, L. (2020). Analysis of healthcare big data. *Future Generation Computer Systems*, *109*, 103-110.
- Lysenko-Ryba, K., & Zimon, D. (2021). Customer behavioral reactions to negative experiences during the product return. *Sustainability*, *13*(2), 448.
- Mahendrayana, I.M.A., Yasa, P.N.S., & Indiani, L.P. (2018). Effect of service quality on patient loyalty mediated by patient satisfaction. Indonesia. *Jurnal Ekonomi & Bisnis, JAGADITHA*, *5*(1), 1-7.
- Maran, L., & Lowe, A. (2021). Competing logics in a hybrid organization: Information and Communication Technology (ICT) service provision in the Italian health care sector. *Accounting, Auditing & Accountability Journal*.
- Mmutle, T., & Shonhe, L. (2017). Customers' perception of service quality and its impact on reputation in the hospitality industry.
- Mokkink, L. B., Terwee, C. B., Patrick, D. L., Alonso, J., Stratford, P. W., Knol, D. L., & Devet, H. C. (2010). The COSMIN checklist for assessing the methodological quality of studies on measurement properties of health status measurement instruments: an international Delphi study. *Quality of life research*, *19*(4), 539-549.
- Molina, J. M., Capitant, C., Spire, B., Pialoux, G., Cotte, L., Charreau, I., ...& Delfraissy, J. F. (2015). On-demand pre-exposure prophylaxis in men at high risk for HIV-1 infection. *N Engl J Med*, *373*, 2237-2246.
- Moses, H., Matheson, D. H., Cairns-Smith, S., George, B. P., Palisch, C., & Dorsey, E. R. (2015). The anatomy of medical research: US and international comparisons. *Jama*, *313*(2), 174-189.

- Murali, S., Pugazhendhi, S., & Muralidharan, C. (2016). Modelling and investigating the relationship of after sales service quality with customer satisfaction, retention and loyalty-a case study of home appliances business. *Journal of retailing and consumer services*, 30, 67-83.
- Neupane, R., & Devkota, M. (2017). Evaluation of the impacts of service quality dimensions on customer satisfaction: A study of private hospitals in Nepal. *International Journal of Social Sciences and Management*, 4(3), 165-176.
- Ogiemwonyi, O., Harun, A., Rahman, A., Alam, M. N., & Hamawandy, N. M. (2020). The relationship between service quality dimensions and customer satisfaction towards hypermarket in Malaysia. *International Journal of Psychosocial Rehabilitation*, 24(5), 2062-2071.
- Ok, S., Suy, R., Chhay, L., & Choun, C. (2018). Customer satisfaction and service quality in the marketing practice: Study on literature review. *Asian Themes in Social Sciences Research*, 1(1), 21-27.
- Okonofua, F., Ntoimo, L., Ogungbangbe, J., Anjorin, S., Imongan, W., & Yaya, S. (2018). Predictors of women's utilization of primary health care for skilled pregnancy care in rural Nigeria. *BMC pregnancy and childbirth*, 18(1), 1-15.
- Palmer, A. (2013). *EBOOK: Principles of Services Marketing*. McGraw Hill.
- Pambreni, Y., Khatibi, A., Azam, S., & Tham, J. J. (2019). The influence of total quality management toward organization performance. *Management Science Letters*, 9(9), 1397-1406.
- Papanikolaou, V., & Zygiaris, S. (2014). Service quality perceptions in primary health care centres in Greece. *Health expectations*, 17(2), 197-207.
- Parasuraman, A., Zeithml, V.A., & Berry, L.L. (1988). SERVQUAL: a multiple item. Scale for measuring consumer perception of service quality. *J. Retail.* 64(1):12-40.
- Perera, A. L. D., & Gunaratna, A. G. D. L. K. (2020). Interrelations between mobile banking service quality attributes, customer satisfaction and customer loyalty in domestic commercial banks in Sri Lanka.
- Permana, A. W., Suardika, N., Sujana, W., & Yuesti, A. (2019). Analysis of service quality and value effect on patient satisfaction and its effect on loyalty of hospital patients in hospital and children of PucukPermataHati. *International Journal of Contemporary Research and Review*, 10(02), 21255-21266.
- Potluri, R. M., & Angiating, G. (2018). A study on service quality and customer satisfaction in Nigerian Healthcare sector. *The Journal of Industrial Distribution & Business*, 9(12), 7-14.
- Rahim, A. G., Ignatius, I. U., & Adeoti, O. E. (2012). Is customer satisfaction an indicator of customer loyalty?
- Rahman, M. K. (2019). Medical tourism: tourists' perceived services and satisfaction lessons from Malaysian hospitals. *Tourism Review*.
- Renedo, A., & Marston, C. (2015). Developing patient-centre care: an ethnographic study of patient perceptions and influence on quality improvement. *BMC Health Services Research*, 15(1), 111.
- Rogers, E.M. (1995). Diffusion of innovations. Modifications of a model for telecommunications. 25-38. Springer, Berlin, Heidelberg.
- Sathish, A. S., Indradevi, R., & Gangineni, S. (2019). Service Quality and its influence on Customer Satisfaction in a Multi special Hospital. *Indian Journal of Public Health Research & Development*, 10(5).
- Sripad, P., Ozawa, S., Merritt, M. W., Jennings, L., Kerrigan, D., Ndwiga, C., & Warren, C. E. (2018). Exploring meaning and types of Trust in Maternity Care in Peri-urban Kenya: a qualitative cross-perspective analysis. *Qualitative Health Research*, 28(2), 305-320.
- Stahl, G., Björkman, I., Farndale, E., Morris, S. S., Paauwe, J., Stiles, P., ...& Wright, P. (2012). Six principles of effective global talent management. *Sloan Management Review*, 53(2), 25-42.
- Strandvik, T., Holmlund, M., & Edvardsson, B. (2012). Customer needing: a challenge for the seller offering. *Journal of Business & Industrial Marketing*.
- Sturgeon, T. J. (2021). Upgrading strategies for the digital economy. *Global Strategy Journal*, 11(1), 34-57.

- Sukamuljo, L., Ruswanti, E., & Aida, M. (2021). Hospital Image and Service Quality Are Not Able to Provide Patient Satisfaction and Loyalty Effect. *Journal of Multidisciplinary Academic*, 5(4), 321-327.
- Talebian, A., & Mishra, S. (2018). Predicting the adoption of connected autonomous vehicles: A new approach based on the theory of diffusion of innovations. *Transportation Research Part C: Emerging Technologies*, 95, 363-380.
- Tan, C. N. L., Ojo, A. O., Cheah, J. H., & Ramayah, T. (2019). Measuring the influence of service quality on patient satisfaction in Malaysia. *Quality Management Journal*, 26(3), 129-143.
- Thomas, K. A., & Clifford, S. (2017). Validity and Mechanical Turk: An assessment of exclusion methods and interactive experiments. *Computers in Human Behavior*, 77, 184-197.
- Tolla, H. S., Woyessa, D. B., Balkewu, R. B., Asemere, Y. A., Fekadu, Z. F., Belete, A., ...& Desale, A. Y. (2022). Decentralizing Oxygen Availability and Use at Primary Care Level for Children Under-Five with Severe Pneumonia an Experience from 12 Health Centers in Ethiopia: A Pre-Post Non-Experimental Study Design.
- Tuan, M. N. D., Thanh, N. N., & Le Tuan, L. (2019). Applying a mindfulness-based reliability strategy to the Internet of Things in healthcare – A business model in the Vietnamese market. *Technological Forecasting and Social Change*, 140, 54-68.
- Tweneboah-Koduah, E. Y., & Farley, A. Y. D. (2016). Relationship between customer satisfaction and customer loyalty in the retail banking sector of Ghana. *International Journal of Business and Management*, 11(1), 249.
- Victor, V.H. (1964). *Work and Motivation*.
- Vishnevskiy, K., Karasev, O., Meissner, D., Razheva, A., & Klubova, M. (2017). Technology foresight in asset intensive industries: The case of Russian shipbuilding. *Technological Forecasting and Social Change*, 119, 194-204.
- West, D. C., Ford, J. B., & Ibrahim, E. (2015). *Strategic marketing: creating competitive advantage*. Oxford University Press, USA.
- Wikhamn, W. (2019). Innovation, sustainable Human Resource Management (HRM) and customer satisfaction. *International Journal of Hospitality Management*, 76, 102–110.
- Wongkit, M., & Boonyanmethaporn, W. (2020). Dental Tourism Development in Thailand: A Perspective of Service Providers. *e-Review of Tourism Research*, 18(2), 290-310.
- Yarimoglu, E. K. (2014). A review on dimensions of service quality models. *Journal of marketing management*, 2(2), 79-93.
- Yousapronpaiboon, K. (2014). SERVQUAL: Measuring higher education service quality in Thailand. *Procedia-Social and Behavioral Sciences*, 116, 1088-1095.
- Zalatar, W. F. (2012). Quantifying customers' gender effects on service quality perceptions of Philippine commercial banks. *Procedia-Social and Behavioral Sciences*, 57, 268-274.