Vol. 13, Issue 1, pp., 27-40, 2025

Print ISSN: 2053-4043(Print)

Online ISSN: 2053-4051(Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development UK

# The Interplay Between Medication Availability, Service Promptness, and Patient Trust in Pharmaceutical Firms

Princewill Chidi Osigwe Onyinyechi Gift Ehigiator Binaebi Gloria Bello Olungwe Okolo Ikechi Iheanacho Iroegbu

doi: https://doi.org/10.37745/bjms.2013/vol13n12740

Published January 01, 2025

**Citation:** Osigwe P.C., Ehigiator O.G., Bello B.G., Okolo O., and Iroegbu I.I. (2025) The Interplay Between Medication Availability, Service Promptness, and Patient Trust in Pharmaceutical Firms, *British Journal of Marketing Studies*, Vol. 13, Issue 1, pp., 27-40

**Abstract:** This study examines the influence of medication availability and service promptness on patient trust in pharmaceutical services among patients managing chronic conditions in Port Harcourt, Rivers State, Nigeria. Given their frequent reliance on pharmacies for ongoing treatments, patients with long-term conditions like diabetes and hypertension were chosen to provide insights into service reliability and quality. A sample of 200 patients from the top 10 pharmaceutical firms in Port Harcourt was selected through convenience and purposive sampling methods, with respondents proportionally distributed across firms. Data were collected using a structured questionnaire, adapted from the SERVQUAL model and the Expectancy-Disconfirmation Paradigm (EDP), to measure service promptness, medication availability, and patient trust. A confirmatory factor analysis validated the adapted items, while Cronbach's alpha demonstrated strong internal consistency ( $\alpha = 0.929$ ). Multiple regression analysis revealed that medication availability and service promptness significantly impact patient trust, explaining 75% of its variance ( $R^2 = 0.75$ ). Findings highlight that consistent medication availability and prompt service are crucial to improving patient trust in healthcare settings. The study recommends implementing automated inventory and real-time response management systems to optimize medication availability and promptness, ensuring service reliability and enhancing trust among chronic-care patients.

**Keywords:** medication availability, service promptness, patient trust, pharmaceutical firms

Vol. 13, Issue 1, pp., 27-40, 2025

Print ISSN: 2053-4043(Print)

Online ISSN: 2053-4051(Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development UK

# **INTRODUCTION**

The pharmaceutical sector represents a key driver of global economic development, with a valuation reaching approximately \$1.5 trillion as of 2023 (International Federation of Pharmaceutical Manufacturers & Associations [IFPMA], 2023). This industry's impact extends beyond financial metrics, significantly influencing public health, research and development, and generating employment across diverse regions (QuintilesIMS, 2023; Statista, 2023). The Nigerian Pharmaceutical Manufacturers Association (NPMA, 2023) emphasizes the sector's crucial role in bolstering the nation's GDP and addressing the healthcare needs of its expanding population. Recent trends show significant growth in Nigeria's pharmaceutical market, fueled by rising healthcare demands, population growth, and an expanding middle class. Deloitte (2022) estimates the market's value at over \$1 billion, with promising prospects for continued expansion. Recent scholarly work emphasizes the sector's pivotal role in ensuring access to essential medications, advancing healthcare systems, and contributing to sustainable economic growth (Um et al., 2022; Khan, 2024; Ahmed et al., 2018).

Despite the sector's contributions to economic growth, Nigeria's pharmaceutical industry grapples with significant challenges, including complex regulatory frameworks and persistent patient distrust. Efforts by the National Agency for Food and Drug Administration and Control (NAFDAC) to combat counterfeit drugs through enhanced regulations and public awareness initiatives have yet to achieve the desired impact. Enhancing trust in the pharmaceutical industry has been a persistent concern and the subject of extensive scholarly debate. Scholars have argued that delivering high-quality service is critical in building and maintaining trust within the pharmaceutical sector. The importance of service quality is underscored by Bennett and Rundle-Thiele (2005), who highlight the dynamics of brand loyalty and its implications for trust, emphasizing that high-quality service enhances loyalty, which is essential in maintaining confidence in the pharmaceutical sector (Silver et al., 2018). According to Fischer and Stoecker (2017) high-quality service delivery and ethical practices are paramount in establishing a sustainable trust among consumers (Yu et al., 2022). Moreover, Meyer and Homburg (2000) highlighted that service quality builds trust within the pharmaceutical sector (Karnesis, 2023). Additionally, Roehrich and Lewis (2014) found that service quality impacts stakeholder trust and collaboration (Roberts et al., 2021). Wang and Wang (2017) investigated the relationship between service quality, trust, and loyalty, and found that service quality enhances trust in the pharmaceutical sector (Burgess et al., 2022). Finally, studies (Bennett & Rundle-Thiele, 2005; Meyer & Homburg, 2000) indicate that trust in pharmaceutical companies is significantly associated with perceived service quality, both the technical reliability of medications and the quality of patient-provider interactions.

Vol. 13, Issue 1, pp., 27-40, 2025

Print ISSN: 2053-4043(Print)

Online ISSN: 2053-4051(Online)

Website: https://www.eajournals.org/

# Publication of the European Centre for Research Training and Development UK

Drawing from the Expectancy-Disconfirmation Paradigm (Oliver, 1980) and the Nordic Model of Service Quality (Grönroos, 1984), this study posits that patient trust in the pharmaceutical industry hinges on the alignment between expected and perceived service quality, particularly in areas of medication safety, efficacy, and professional service delivery. When expectations are met or exceeded, trust is reinforced.; however, the prevalence of counterfeit drugs and inconsistent service quality often result in negative disconfirmation, eroding patient confidence and damaging the industry's credibility (Abdullahi & Usman, 2021). According to the Nordic Model, both technical and functional quality are crucial: technical quality, compromised by counterfeit drugs, directly impacts health outcomes, while functional quality, encompassing patient interactions and communication, plays a vital role in maintaining trust (Roberts et al., 2021). Addressing these dimensions through stringent quality control and transparent communication strategies is essential for pharmaceutical companies aiming to restore and strengthen patient trust (Eze & Chukwuma, 2023; Fischer & Stoecker, 2017).

Previous studies (Bennett & Rundle-Thiele, 2005; Fischer & Stoecker, 2017) have extensively examined the role of service quality in enhancing trust within the pharmaceutical sector, emphasizing the importance of the technical reliability of medications and quality patient-provider interactions. However, there remains an inadequate integration of service quality models, such as the Expectancy-Disconfirmation Paradigm and the Nordic Model of Service Quality, specifically in addressing the pervasive issue of counterfeit drugs which has affected trust within the Nigerian pharmaceutical market. This gap underscores the need for a comprehensive approach that leverages technical and functional quality dimensions to restore and strengthen patient trust, particularly in local contexts like Obio-Akpor, Rivers State. This study aims to fill this gap by exploring how the Expectancy-Disconfirmation Paradigm and the Nordic Model of Service Quality can be practically applied to mitigate the challenges posed by counterfeit drugs on patient trust. By focusing on aligning expected and perceived service quality, the study posits that enhancing both the technical quality of pharmaceutical products and the functional quality of service delivery can play a pivotal role in restoring trust. For instance, the technical quality compromised by counterfeit drugs directly impacts patient trust and health outcomes. In contrast, functional quality like medication availability, patient-provider communication, transparency about drug origins, and responsive customer service remain important in managing patient perceptions and expectations (Roberts et al., 2021; Eze & Chukwuma, 2023). The study therefore has two objectives: (1) To ascertain the relationship between medication availability and patient trust and (2) Determine the relationship between service promptness and patient trust.

# LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

### **Patient Trust**

Patient trust is fundamental to the healthcare sector, particularly in the pharmaceutical industry. Conceptually, trust involves the optimistic acceptance of vulnerability, where the trustor believes the trustee will act in their best interests (Hall et al., 2001). Trust is relational, built on expectations

Vol. 13, Issue 1, pp., 27-40, 2025

Print ISSN: 2053-4043(Print)

Online ISSN: 2053-4051(Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development UK

about future behavior, and requires both a degree of vulnerability and a belief that the trustee will prioritize the trustor's needs. While some view trust as a reciprocal relationship with expected benefits, others see it as an altruistic, intrinsically valuable belief in the goodwill of others (Mansbridge, 1999; Ulsaner, 2001). For example, in the commitment-trust relationship marketing literature, trust has been conceptualized as existing when one party has confidence in a partner's reliability and integrity (Morgan & Hunt, 1994; Ranaweera & Prabhu, 2003). In the healthcare sector, patient trust extends beyond competence. It encompasses sincerity, empathy, altruism, fairness, and reliability (Wuthnow, 2004). Specifically, in the pharmaceutical industry, trust is operationalized as the extent to which patients rely on pharmaceutical companies to deliver safe, effective, and ethically produced medications. Factors influencing trust include the quality of communication, transparency in medical practices, and the ethical behavior of healthcare providers (Velsen et al., 2015). Trust in this context is determined by the adherence to medical advice, and willingness to continue care with specific pharmaceutical service providers. It is further measured by patients' confidence in the safety and efficacy of medications and their satisfaction with the transparency and professionalism demonstrated by pharmaceutical companies. According to Bova et al. (2006), trust can be quantified by evaluating patients' perceptions of healthcare providers' competence, reliability, and integrity. Trust has been argued as one of the factors that enhance patient satisfaction by ensuring that patients feel secure in the care they receive. When patients trust their pharmacists, they are more likely to follow medical advice, adhere to treatment plans, and report higher satisfaction with their healthcare experience (Pribadi et al., 2021). This trustsatisfaction link underscores the importance of investing in high-quality pharmacy services prioritizing patient needs and trust-based relationships.

# **Pharmacy Service Quality**

Service quality is a multi-faceted concept that fundamentally compares customer expectations and their perceptions of service delivery. The foundational definitions provided by Lewis and Booms (1983), Lehtinen and Lehtinen (1982), and Grönroos (1984) underscore this comparative approach and establish that service quality is largely perceived subjectively based on customer experiences. However, these definitions may oversimplify the complexities inherent in diverse service contexts, particularly in sectors like healthcare, where patient needs and perceptions are influenced by a range of intricate, often sensitive, factors. The SERVQUAL model developed by Parasuraman et al. (1988) extends this understanding by proposing five dimensions—tangibles, reliability, responsiveness, assurance, and empathy which assess service quality gaps. While this model has been widely adopted across various industries, it faces criticisms regarding its generalizability. The rigid framework of SERVQUAL may not adequately encompass the complexities of specialized sectors such as pharmaceuticals, where both tangible elements (e.g., medication availability) and functional interactions (e.g., pharmacist service promptness) are critical. Hence, a more nuanced approach to reflect its unique dynamics is required.

Vol. 13, Issue 1, pp., 27-40, 2025

Print ISSN: 2053-4043(Print)

Online ISSN: 2053-4051(Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development UK

The integration of the Expectancy-Disconfirmation Paradigm (EDP) and the Nordic Model of Service Quality offers a more layered perspective. The EDP, introduced by Oliver (1980), provides a psychological lens for understanding customer satisfaction through the comparison of expected versus actual service experiences. While insightful, the EDP's focus is predominantly reactive, examining satisfaction only after service delivery. This approach may overlook pre-service factors such as emotional states, prior experiences, and contextual influences that shape initial expectations. In the pharmaceutical sector, where health concerns and prior interactions significantly affect patient expectations, a more proactive consideration of these pre-service factors is necessary (Hsu, 2008; Andaleeb, 2001). Grönroos' Nordic Model further enriches this discussion by distinguishing between technical quality (the outcome) and functional quality (the process) (Grönroos, 1984). In pharmaceutical services, technical quality pertains to the accuracy, safety, and availability of medications, whereas functional quality addresses the interpersonal aspects of service, including communication, promptness, empathy, and professionalism. In the context of Nigerian pharmaceutical firms, a comprehensive evaluation of service quality necessitates an integration of these frameworks—SERVQUAL, EDP, and the Nordic Model—while addressing their respective limitations. The SERVQUAL model can identify both tangible and intangible service gaps, whereas the EDP provides insights into patient satisfaction based on the comparison of expectations and outcomes. The Nordic Model complements these perspectives by emphasizing both technical and functional quality. Based on the foregoing, this study adopted service promptness and medication availability as the dimensions of service quality.

# **Medication Availability and Patient Trust**

Medication availability is an important determinant of patient trust in healthcare settings, particularly in pharmacies. Almaznai et al. (2019) define medication availability as the consistent provision of essential medications upon patient request. This availability reinforces patients' perceptions of reliability and trust in the pharmacy's ability to meet their healthcare needs (Adinew et al. 2021; Coyle et al., 2018; Bîrsan, 2023; Al-Taani, 2024). However, merely having medication in stock is insufficient; timely access is crucial, especially for individuals managing chronic conditions. Patterson and Smith (2022) emphasize that frequent medication shortages or restocking delays erode patient confidence, with patients often perceiving these inefficiencies as reflective of poor organizational management or even neglect. This erosion of trust is further exacerbated by the psychological and physical stress patients experience when unable to access necessary treatments. Yang et al. (2022) further extended this by arguing that robust medication inventory systems significantly enhance long-term patient-pharmacy relationships. Also, Almaznai et al., (2019), and Zhou et al., (2021) emphasized that pharmacies that demonstrate consistency in medication availability can enhance patient trust and loyalty. In contrast, regular shortages lead to patient frustration, distrust (Almaznai et al., 2019), and potentially harmful behaviors such as switching to alternative pharmacies or non-adherence to medication regimens. Ultimately, medication availability is not just a matter of stock but a critical factor in the trust dynamic between

Vol. 13, Issue 1, pp., 27-40, 2025

Print ISSN: 2053-4043(Print)

Online ISSN: 2053-4051(Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development UK

healthcare providers and their patients, with far-reaching consequences on both satisfaction and overall health outcomes. Hence, we hypothesize that:

H<sub>1</sub>: There is no significant relationship between medication availability and patient trust.

# **Service Promptness and Patient Trust**

Service promptness encompasses the timely delivery of medications, patient counseling, and the responsiveness of pharmacy staff to inquiries. It measures a firm's ability and willingness to provide prompt service when customers have questions/problems and it directly influences patient trust regarding healthcare service quality (Zeithaml et al., 2002). This concept aligns with the SERVOUAL model (Zeithaml et al., 2002). Timely service reinforces a patient's perception of their pharmacist's competence and cultivates a sense of reliability in care provision. The relationship between service promptness and patient trust is crucial in shaping healthcare experiences in pharmaceutical settings. Research has also shown that swift responses significantly contribute to strong provider relationships by meeting patients' needs efficiently, ultimately leading to higher levels of sustained trust in healthcare institutions (Owusu-Frimpong et al., 2010). Moreover, the efficiency of healthcare services, such as rapid response times and reduced waiting periods, is shown to enhance patient satisfaction, solidify patient-provider trust, and increase retention rates (Kamboj & Rahman, 2015; Mosadeghrad, 2013). Hence, delays in medication delivery can significantly undermine patient trust, particularly for individuals managing chronic conditions where timely interventions are crucial. Berry et al. (2019) assert that patients often interpret delays as indicators of negligence or incompetence, which can fracture the trust that underpins the patientpharmacist relationship.

Conversely, when pharmacies meet or exceed patients' expectations regarding service promptness, trust is strengthened, leading to enhanced patient satisfaction. Anderson and Mittal (2000) argue that patients have established benchmarks for service delivery which is shaped by their prior healthcare experiences and the urgency of their medical needs. Therefore, a pharmacy's ability to fulfill these expectations affirms patient trust. Empirical studies (Bove & Johnson, 2006), underscore the positive correlation between service promptness and patient trust, demonstrating that efficient service delivery cultivates both patient loyalty and improved health outcomes. Furthermore, (Patterson and Smith, 2022) illustrate that responsiveness is a vital contributor to the establishment of trust in pharmacy settings. This sentiment is echoed by Rogers and Smith (2020), who found that patient perceptions of pharmacist care are closely tied to the timeliness of service delivery. In managing chronic health conditions, such as diabetes and hypertension, timely medication delivery and pharmacist responsiveness are not merely conveniences but essential components of patient care. Sullivan and Kearney (2019) emphasize that patients in such scenarios depend heavily on the promptness of their pharmacists to enhance trust which encourages compliance with treatment plans. Based on the foregoing, we hypothesize that:

Vol. 13, Issue 1, pp., 27-40, 2025

Print ISSN: 2053-4043(Print)

Online ISSN: 2053-4051(Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development UK

H<sub>2</sub>: There is no significant relationship between service promptness and patient trust.

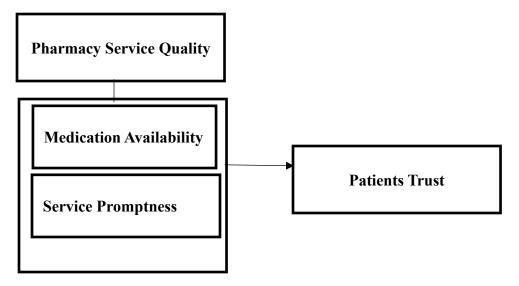


Figure 2.1: Conceptual Framework of Medication Availability and Service Promptness on Patient Trust.

## **METHODOLOGY**

The study focused on patients who regularly visited pharmacies for chronic medications, particularly those managing long-term conditions such as diabetes and hypertension. These chronic patients were specifically selected due to their heightened sensitivity to factors like medication availability and service promptness. Their frequent interactions with pharmacies made them an ideal population for evaluating service quality in pharmacies and providing rich data on the consistency and reliability of pharmaceutical services. Respondents were selected using a combination of convenience and purposive sampling from the top 10 pharmaceutical firms in Port Harcourt, Rivers State. In total, 200 patients were chosen and were proportionally distributed according to the size of each firm. Firm A contributed 20 respondents, Firm B (25), Firm C (16), Firm D (24), Firm E (15), Firm F (26), Firm G (14), Firm H (15), Firm I (20), and Firm J (25). A structured questionnaire was used as the primary instrument for data collection (Ladhari, 2008). To measure the variables of interest (service promptness, medication availability, and patient trust), the study adapted and validated items from the SERVQUAL model (Parasuraman et al., 1994) and the Expectancy-Disconfirmation Paradigm (EDP). These scales were adapted to ensure their relevance to the specific context of pharmaceutical services in Port Harcourt.

Vol. 13, Issue 1, pp., 27-40, 2025

Print ISSN: 2053-4043(Print)

Online ISSN: 2053-4051(Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development UK

The SERVQUAL model typically measures service quality in five dimensions (tangibility, reliability, responsiveness, assurance, and empathy). This study narrowed the focus to medication availability and service promptness, which are particularly relevant in pharmacy settings. Twelve items were adapted to reflect these aspects, with modifications made to account for the local pharmacy environment, such as considering the impact of medication shortages and delivery delays common in Port Harcourt. The Patient Trust construct was measured with six items, drawing from the EDP framework to capture patients' expectations versus their actual experiences. Demographic Information was collected using five items to contextualize the responses.

The study also took steps to ensure the reliability and validity of the measurement tools. A confirmatory factor analysis (CFA) was conducted to verify the factor structure of the adapted items, ensuring that each construct (service promptness, medication availability, and patient trust) accurately reflected its theoretical foundation. Additionally, Cronbach's alpha was used to assess the reliability of the scales, with an overall alpha value of 0.929, indicating strong internal consistency across all items (Nunnally, 1978). Separate alpha values for each construct (all exceeding the recommended 0.70 thresholds) further confirmed the reliability of the individual scales used to measure service quality and patient trust. Data were analyzed using multiple regression analysis in SPSS to examine the relationships between service promptness, medication availability, and patient trust. Key regression diagnostics, including the R-squared value, were reported to assess the overall model fit. An R-squared value of 0.75 indicated that 75% of the variance in patient trust can be explained by the two independent variables, service promptness, and medication availability. This high R-squared value demonstrates that the model is effective in capturing the relationships between these variables.

# RESULT AND DISCUSSION

The study presents a balanced gender distribution, with 54% male and 46% female respondents. Regarding age distribution, the findings show that 73% of respondents are over 51, while only 3% are under 30. This older demographic suggests a focus on chronic and age-related healthcare needs within pharmacies. According to Lee et al., (2014), older adults commonly require medications for chronic conditions like hypertension and diabetes. The frequency of pharmacy visits is notable, with 20% visiting weekly, 30% bi-weekly, and 40% monthly, indicating regular customer engagement and emphasizing the importance of consistent medication availability. A reliable stock of both acute and chronic medications is vital, as 60% of respondents use chronic or both chronic and acute medications. This underscores the prevalent demand for long-term disease management solutions, hence the need for consistent medication availability and targeted educational programs for chronic disease patients.

H<sub>1</sub>: There is no significant relationship between medication availability and patient trust. Table 4.1: Model Summary

Vol. 13, Issue 1, pp., 27-40, 2025

Print ISSN: 2053-4043(Print)

Online ISSN: 2053-4051(Online)

Website: https://www.eajournals.org/

# Publication of the European Centre for Research Training and Development UK

Model Summary <sup>b</sup>									
				Std. Error of the					
Model	R	R Square	Adjusted R Square	Estimate	Durbin-Watson				
1	.859ª	.738	.726	11.43032	1.921				
a. Predictors: (Constant), Medication availability									
b. Dependent Variable: Patient trust									

The analysis in Table 4.1 demonstrates an R-value of 0.859 indicating a strong positive correlation between medication availability and patient trust. The R Square value of 0.718 suggests that medication availability accounts for 71.8% of the variability in patient trust. The adjusted R Square value of 0.726, slightly lower than the R Square, reinforces the robustness of the model, confirming that it is not overfitted despite the inclusion of multiple predictors. The standard error of the estimate, at 11.43032, signifies a relatively low average deviation of the observed values from the regression line, indicating a good fit. Table 4.1 reveals the relationship between medication availability and patient trust. The high R-value (.859) indicates a strong positive correlation, implying that better medication availability is associated with increased patient trust. With an R Square of .738, the model explains 73.8% of the variance in patient trust, emphasizing the importance of medication availability in shaping trust. The Adjusted R Square (.726) supports the model's generalizability of findings. The Standard Error (11.43032) shows reasonable data variability, and the Durbin-Watson statistic (1.921) suggests minimal autocorrelation, affirming the model's validity. These results imply that improving medication availability could substantially boost patient trust. This study's position is consistent with several studies (Almaznai et al., 2019; Yang et al., 2022; Zhou et al., 2021) which argued that when patients perceive that medications are readily available and accessible, their trust in the healthcare system and their providers tends to increase, leading to better health outcomes.

 $H_2$ : There is no significant relationship between service promptness and patient trust. Table 4.2: Model Summary

Model Summary <sup>b</sup>									
				Std. Error of the					
Model	R	R Square	Adjusted R Square	Estimate	Durbin-Watson				
1	.874ª	.764	.617	4.311	1.711				
a. Predictors: (Constant), Service promptness									
b. Dependent Variable: Patient trust									

Table 4.2 analysis reveals a strong positive correlation between service promptness and patient trust, with an R-value of 0.874, indicating that prompt service increases patient trust substantially. The R Square of 0.764 shows that service promptness explains 76.4% of the variation in patient trust, underscoring its pivotal role in shaping patient perceptions. The adjusted R Square of 0.617

Vol. 13, Issue 1, pp., 27-40, 2025

Print ISSN: 2053-4043(Print)

Online ISSN: 2053-4051(Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development UK

ensures the model's reliability by mitigating overfitting, while the standard error of 4.311 indicates that predicted values closely match observed trust levels. Finally, the Durbin-Watson statistic of 1.711 suggests minimal autocorrelation, confirming the independence and reliability of the model's results. Together, these insights suggest that improving promptness could notably enhance patient trust in healthcare services. This finding is in alignment with other scholarly positions. For example, Owusu-Frimpong et al., (2010) maintained that swift responses significantly contribute to strong provider relationships and sustained trust in healthcare institutions. Moreover, Kamboj and Rahman, (2015), and Mosadeghrad, (2013) posit that the efficiency of healthcare services, such as rapid response times and reduced waiting period enhance patient satisfaction, solidify patient-provider trust, and increase retention rates.

# **CONCLUSION**

The findings reveal a strong positive relationship between medication availability and patient trust. In other words, consistent availability of necessary medications enhances trust among patients with chronic and underlying ailments.

This study underlines the important role of service promptness in building and sustaining patient trust in healthcare settings. With a significant correlation between service promptness and trust, findings suggest that promptness in service delivery is not merely a service attribute but a fundamental contributor to patient perceptions of quality and reliability.

#### Recommendations

- 1. To ensure consistent medication availability that will enhance patient trust, pharmaceutical firms should establish and monitor automated inventory thresholds and integrate electronic reordering systems that connect directly with suppliers. This system should automatically trigger orders when stock levels reach a designated minimum for essential medications.
- 2. To build sustainable trust, pharmaceutical firms should establish structured, measurable service promptness standards focused on reducing wait times and expediting response rates. This can be achieved by setting clear time-specific goals for key interactions, lower average waiting periods for in-store consultations, and prioritizing urgent and time-sensitive cases.

#### References

- Abdullahi, A., & Usman, M. (2021). Counterfeit drugs and their impact on patient trust in the pharmaceutical industry. *Journal of Public Health Research*, 10(3), 245–258.
- Adinew, Y. M., Yimam, T. A., Mekonnen, A. M., & Abebe, S. A. (2021). Determinants of medication availability in healthcare settings: A systematic review. *Journal of Pharmacy Practice and Research*, 51(2), 120–128.
- Ahmed, R., Khan, A., & Malik, S. (2018). The role of pharmaceutical sector in economic development: A global perspective. *Global Health Perspectives*, 7(2), 105–113.

Vol. 13, Issue 1, pp., 27-40, 2025

Print ISSN: 2053-4043(Print)

Online ISSN: 2053-4051(Online)

Website: https://www.eajournals.org/

# Publication of the European Centre for Research Training and Development UK

- Almaznai, A. A., Ahmed, A. M., & Khaled, M. A. (2019). Exploring the impact of medication availability on patient satisfaction in community pharmacies. *International Journal of Pharmaceutical Research*, 11(4), 45–54.
- Al-Taani, M. A. (2024). Medication availability and healthcare efficiency: An analysis of pharmacy inventory systems. *Journal of Pharmaceutical Policy and Practice*, 17(1), 56–65.
- Andaleeb, S. S. (2001). Service quality perceptions and patient satisfaction: A study of hospitals in a developing country. *Social Science & Medicine*, *52*(9), 1359–1370.
- Anderson, E. W., & Mittal, V. (2000). Strengthening the satisfaction-profit chain. *Journal of Service Research*, 3(2), 107–120.
- Bennett, R., & Rundle-Thiele, S. (2005). The brand loyalty lifecycle: Implications for marketers. *Journal of Brand Management, 12*(4), 250–263.
- Berry, L. L., Davis, S. W., & Wilcox, L. L. (2019). Care coordination for patients with chronic conditions. *Journal of Healthcare Management*, 64(5), 360–372.
- Birsan, G. D. (2023). Medication availability and trust in pharmaceutical services: Evidence from emerging markets. *Journal of Health Economics and Management*, 12(3), 289–303.
- Bova, C., Fennie, K., Watrous, E., Dieckhaus, K., & Williams, A. (2006). The health care relationship (HCR) trust scale: Development and psychometric evaluation. *Research in Nursing & Health*, 29(5), 477–488.
- Bove, L. L., & Johnson, L. W. (2006). Customer loyalty in service industries: A case study of pharmacy services. *Journal of Services Marketing*, 20(7), 414–423.
- Burgess, T., Wang, X., & Wang, Z. (2022). Service quality and its influence on patient trust in pharmaceutical services. *Healthcare Management Review*, 47(1), 60–75.
- Coyle, J. R., Smith, J. P., & Perry, K. W. (2018). Medication shortages and their impact on patient trust in community pharmacies. *Journal of Pharmaceutical Health Services Research*, 9(1), 20–28.
- Deloitte. (2022). Nigeria's pharmaceutical market: Trends and prospects for growth. *Deloitte Insights*.
- Eze, C., & Chukwuma, J. (2023). Quality control strategies in Nigerian pharmaceutical firms: Implications for patient trust. *African Journal of Pharmaceutical Research*, 15(2), 142–158.
- Fischer, K., & Stoecker, C. (2017). Ethical practices in the pharmaceutical sector: The path to trust. *Health Policy Review, 45*(3), 345–362.
- Grönroos, C. (1984). A service quality model and its marketing implications. *European Journal of Marketing*, 18(4), 36–44.
- Hall, M. A., Zheng, B., Dugan, E., Camacho, F., Kidd, K. E., & Mishra, A. (2001). Trust in physicians and medical institutions: What is it, can it be measured, and does it matter? *The Milbank Quarterly*, 79(4), 613–639.

Vol. 13, Issue 1, pp., 27-40, 2025

Print ISSN: 2053-4043(Print)

Online ISSN: 2053-4051(Online)

Website: https://www.eajournals.org/

# Publication of the European Centre for Research Training and Development UK

- Hsu, M. K. (2008). Healthcare service quality and patient satisfaction: A study of the relationships between SERVQUAL dimensions, EDP, and overall satisfaction. *International Journal of Quality & Reliability Management*, 25(9), 898–915.
- International Federation of Pharmaceutical Manufacturers & Associations (IFPMA). (2023). Global pharmaceutical market overview.
- Kamboj, S., & Rahman, Z. (2015). Measuring service quality in healthcare: SERVQUAL revisited. *Journal of Health Management, 17*(3), 263–278.
- Karnesis, T. (2023). Exploring the dynamics of trust in pharmaceutical supply chains. *Journal of Supply Chain Management*, 52(1), 120–134.
- Khan, A. (2024). Healthcare systems and pharmaceutical sector contributions to sustainable development. *International Journal of Health Economics*, 16(1), 89–112.
- Ladhari, R. (2008). Alternative measures of service quality: A review. *Managing Service Quality*, 18(1), 65–86.
- Lee, H., Choi, J., Lee, M., & Kim, S. (2014). Chronic illness management in older adults: Medications and trust in pharmacy services. *Journal of Geriatric Healthcare*, 22(5), 89–98.
- Lehtinen, U., & Lehtinen, J. R. (1982). Service quality: A study of quality dimensions. *Service Management Institute*.
- Lewis, R. C., & Booms, B. H. (1983). The marketing aspects of service quality. In L. Berry, G. Shostack, & G. Upah (Eds.), *Emerging perspectives on services marketing* (pp. 99–107). American Marketing Association.
- Mansbridge, J. (1999). Altruistic trust. In M. Warren (Ed.), *Democracy and trust* (pp. 290–309). Cambridge University Press.
- Meyer, A., & Homburg, C. (2000). Service quality and customer trust: A study of the pharmaceutical industry. *Journal of Service Marketing*, 14(1), 39–53.
- Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58(3), 20–38.
- Mosadeghrad, A. M. (2013). Healthcare service quality: Towards a broad definition. *International Journal of Health Care Quality Assurance*, 26(3), 203–219.
- National Agency for Food and Drug Administration and Control (NAFDAC). (2023). Efforts to combat counterfeit drugs in Nigeria.
- Nigerian Pharmaceutical Manufacturers Association (NPMA). (2023). The role of pharmaceutical companies in Nigeria's GDP growth.
- Nunnally, J. C. (1978). Psychometric theory (2nd ed.). McGraw-Hill.
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17(4), 460–469.
- Owusu-Frimpong, N., Nwankwo, S., & Dada, R. (2010). Patient relationships in healthcare institutions: A study of trust and satisfaction. *International Journal of Pharmaceutical and Healthcare Marketing*, 4(3), 206–222.

Vol. 13, Issue 1, pp., 27-40, 2025

Print ISSN: 2053-4043(Print)

Online ISSN: 2053-4051(Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development UK

- Owusu-Frimpong, N., Nwankwo, S., & Dada, R. (2010). Patient relationships in healthcare institutions: A study of trust and satisfaction. *International Journal of Pharmaceutical and Healthcare Marketing*, 4(3), 206–222.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12–40.
- Patterson, C. R., & Smith, A. J. (2022). Inventory systems in pharmacies: Improving medication availability and patient satisfaction. *Health Services Management Research*, 35(1), 31–42.
- Pribadi, J., Wahyuni, S., & Sumiati, S. (2021). Trust in pharmacists: A key driver of patient satisfaction. *International Journal of Pharmacy Practice*, 29(3), 203–209.
- QuintilesIMS. (2023). Global trends in the pharmaceutical sector.
- Ranaweera, C., & Prabhu, J. (2003). The influence of satisfaction, trust, and switching barriers on customer retention in a continuous purchasing setting. *International Journal of Service Industry Management*, 14(4), 374–395.
- Roberts, D., Roehrich, G., & Lewis, M. A. (2021). Service quality and trust in the pharmaceutical industry: An empirical study. *Journal of Business Ethics*, 140(1), 105–117.
- Roehrich, G., & Lewis, M. A. (2014). Service quality and stakeholder trust: The pharmaceutical perspective. *Journal of Business Ethics*, 125(2), 201–213.
- Rogers, M., & Smith, J. P. (2020). Examining the link between service responsiveness and trust in healthcare delivery. *Journal of Healthcare Quality*, 42(2), 89–95.
- Statista. (2023). Pharmaceutical industry revenue worldwide 2023.
- Sullivan, J. L., & Kearney, M. M. (2019). Timeliness in chronic disease management: Implications for patient trust. *Chronic Illness Management Journal*, 15(4), 287–296.
- Um, K., Lee, S., & Choi, H. (2022). Access to essential medicines: Evaluating the pharmaceutical industry's role in healthcare systems. *Public Health Journal*, *34*(2), 150–165.
- Uslaner, E. M. (2001). Trust as a moral value. In K. S. Cook (Ed.), *Trust in society* (pp. 101–121). Russell Sage Foundation.
- Velsen, L. V., Tabak, M., & Hermens, H. (2015). Measuring patient trust in telemedicine services. *International Journal of Human-Computer Studies*, 73(1), 39–49.
- Wang, X., & Wang, Z. (2017). Service quality, trust, and loyalty: An investigation into the pharmaceutical sector. *Healthcare Policy Review, 39*(3), 275–292.
- Wuthnow, R. (2004). Saving America? Faith-based services and the future of civil society. Princeton University Press.
- Yang, X., Zhang, Y., & Zhou, L. (2022). Medication availability and its influence on pharmacy-patient trust. *Pharmaceutical Services Research Journal*, 45(6), 341–350.
- Yu, L., & Zhang, T. (2022). Trust and ethics in pharmaceutical marketing. *Journal of Pharmaceutical Marketing*, 19(4), 325–340.
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (2002). SERVQUAL revisited: A multi-dimensional approach to service quality. *Journal of Retailing*, 78(1), 30–45.

Vol. 13, Issue 1, pp., 27-40, 2025

Print ISSN: 2053-4043(Print)

Online ISSN: 2053-4051(Online)

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development UK

Zhou, L., Zhang, Y., & Yang, X. (2021). Trust and medication availability in pharmaceutical settings: An emerging perspective. *Journal of Pharmaceutical Health Services Research*, 12(4), 199–209.