

Correlates of Responsiveness and Empathy on Antenatal Patients' Satisfaction in
Primary Healthcare Facilities in Obio-Akpor LGA

Abstract

Purpose: This study examines the correlates of empathy and responsiveness on antenatal patient satisfaction in primary healthcare facilities in Obio-Akpor LGA, Rivers State. The objective is to elucidate how these dimensions of service quality impact patient satisfaction during antenatal care.

Design/methodology/approach: Utilizing a quantitative survey design, the study surveyed 264 outgoing antenatal patients from 24 primary healthcare facilities in Obio-Akpor LGA. Stratified random and purposive sampling techniques ensured a representative sample, focusing on women with significant antenatal experience. Data collection involved adapted scales for measuring empathy, responsiveness, and patient satisfaction. Analysis was performed using multivariate analysis of variance (MANOVA), discriminant analysis, and multiple regression.

Findings: The regression analysis revealed a strong positive correlation between empathy, responsiveness, and antenatal patient satisfaction ($R = 0.859$, $R^2 = 0.738$). Responsiveness emerged as a more substantial predictor of patient satisfaction (unstandardized coefficient = 0.727) compared to empathy (unstandardized coefficient = 0.546). The ANOVA results confirmed the significance of both predictors, with empathy and responsiveness significantly affecting patient satisfaction ($p < 0.001$).

Research limitations/implications: While empathy significantly contributes to patient care, its direct impact on satisfaction is less pronounced compared to responsiveness. The study highlights the need for healthcare facilities to enhance both responsiveness and empathy to improve antenatal patient satisfaction. Future research could explore additional dimensions of service quality and their impact on patient outcomes.

Practical implications: To improve responsiveness, healthcare facilities should invest in staff training focused on timely and effective care, and modernize communication tools for real-time patient interactions. Enhancing empathetic behaviors requires training programs that promote active listening and compassionate responses.

Originality/value: This study provides new insights into how empathy and responsiveness influence antenatal patient satisfaction, emphasizing the importance of both dimensions in enhancing the quality of antenatal care. The findings offer practical recommendations for improving patient experiences in primary healthcare settings.

Keywords: Antenatal care, Patient satisfaction, Empathy, Responsiveness, Healthcare Quality.

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1.1 Introduction and Background

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The healthcare sector provides indispensable services aimed at addressing pregnancy-related issues and ensuring a safe delivery process. Patient satisfaction during the antenatal period is vital as it reflects the quality of care provided and influences maternal outcomes and neonatal health. Quality antenatal care is associated with reduced risks of prenatal morbidities and better health outcomes for mothers and newborns (WHO, 2018; UNICEF, 2019). Studies (Fagbamigbe & Idemudia 2015; Affipunguh & Laar 2016) highlight the importance of antenatal education, birth preparedness, and readiness for complications as key factors in improving maternal health outcomes and increasing access to skilled obstetric care. Additionally, Studies by Moedjiono et al. (2017) and Temple et al. (2008) further emphasize the impact of antenatal care, skilled birth attendance, and institutional delivery on reducing maternal mortality rates and enhancing maternal and neonatal health outcomes. Numerous studies have highlighted the importance of regular and comprehensive antenatal visits in lowering maternal and neonatal mortality rates, underscoring ANC's critical role in public health (Carroli et al., 2001; Lincetto et al., 2013).

Despite its recognized importance, the utilization and satisfaction levels of antenatal care services in Nigeria are worryingly low. Only 61% of pregnant women in Nigeria attend antenatal services at least once during their pregnancy, a figure notably lower than the 79% average for other lower-middle-income countries (NPC & ICF, 2019). Moreover, 41% of women who receive antenatal care do not opt for institutional deliveries but prefer to give birth outside of healthcare facilities. This is particularly alarming given Nigeria's high maternal mortality rate of 576 deaths per 100,000 live births, one of the highest globally (WHO, 2018; NPC & ICF, 2019). Andaleeb, (2001) also argued that one of the increased maternal mortality rates in developing countries is because the healthcare service providers

do not pay much attention to service seekers. Traditionally, healthcare service quality has been studied from an organizational standpoint, focusing on institutional metrics such as efficiency, resource allocation, and policy implementation (Donabedian, 1988; Parasuraman et al., 1988). However, this approach often overlooks the perspectives of patients, particularly those who are direct recipients of healthcare services. In the context of antenatal care satisfaction, the dimensions of service quality, which are vital for patient satisfaction, have not been thoroughly examined from the standpoint of the women who experience antenatal services firsthand (Bohren et al., 2015; Babalola & Fatusi, 2009). Also, healthcare sector research into patients' perceptions of the dimensions of service quality (perceived service quality) has been limited (Clemes et al., 2001), yet there is no consensus on the best approach to conceptualizing the relationship between patient satisfaction and their perceptions of the quality of their healthcare.

Therefore, this study seeks to fill this gap by examining healthcare service quality from the perspectives of antenatal women, focusing specifically on their experiences with responsiveness and empathy during antenatal visits. Understanding how these factors influence antenatal satisfaction is crucial, as poor service quality, particularly in these areas, has been shown to deter women from seeking necessary care during pregnancy and childbirth (Berger et al., 2014; Wilkins et al., 2018). Existing research suggests that when healthcare providers are responsive to patient needs and empathetic to their concerns, patient satisfaction increases, leading to better health outcomes and greater trust in the healthcare system (Mercer & Reynolds, 2002; Ahmed et al., 2017). By focusing on antenatal women's perspectives, this study aims to provide a more nuanced understanding of healthcare service quality and its impact on antenatal satisfaction. Drawing on Social Cognitive Theory (Bandura, 1986) and Service Quality Theory (Parasuraman, Zeithaml, & Berry, 1988), this study posits that a patient's perception of the quality of care (responsiveness and empathy) exhibited by

healthcare providers will likely influence their overall satisfaction and their likelihood to continue utilizing healthcare services. Social Cognitive Theory suggests that patients form expectations and evaluations based on their experiences and observations of care, which can directly affect their satisfaction. Also, Service Quality Theory, which identifies responsiveness and empathy as critical dimensions of service quality, further supports the notion that these factors are essential in shaping a patient's perception of care. As such, the demonstration of responsiveness and empathy by healthcare providers can play a key role in enhancing long-term trust, satisfaction, and adherence to healthcare services.

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2.1 Review of Related Literature and Hypothesis Development

2.1.1 Healthcare Service Quality

Service quality has been a focal point of research in marketing and management, particularly in service-driven industries like healthcare. Parasuraman et al. (1985, 1988) and Grönroos (1984) laid the foundational understanding of service quality. It is defined as the consumer's attitude that emerges from their comparison between expectations and actual service performance (Parasuraman et al. 1985, 1988; Grönroos 1984). Parasuraman et al. (1985, 1988) further refined the concept by distilling service quality into five key dimensions through rigorous factor analysis: tangibles (the physical evidence of the service, such as facilities, equipment, and the appearance of staff), reliability (the ability to perform the promised service accurately and dependably), responsiveness (the willingness to help customers and provide prompt service), assurance (the knowledge and courtesy of employees, along with their ability to inspire trust and confidence), and empathy (the provision of caring, individualized attention to customers). These dimensions form the backbone of the SERVQUAL model.

In the healthcare sector, SERVQUAL model has become increasingly important, as patient satisfaction is closely tied to the quality of care provided. Healthcare analysts have utilized SERVQUAL to gauge patient satisfaction and loyalty (Al-Borie & Sheikh Damanhour, 2013; Zarei et al., 2015). By focusing on dimensions such as responsiveness and empathy, healthcare providers can significantly enhance their service delivery, ultimately leading to better patient outcomes. Moreover, Buyukozkan et al. (2011) expanded the measurement of healthcare service quality to include professionalism, alongside the traditional SERVQUAL dimensions. Among these dimensions, responsiveness and empathy have consistently emerged as crucial predictors of patient satisfaction. Bleich et al. (2009) found that these two dimensions significantly influence patient satisfaction in healthcare settings. More recent studies, such as Valles et al. (2022), continue to validate the importance of responsiveness and empathy. Service quality is a complex and elusive concept; hence, the measurement is challenging for both researchers and practitioners, especially when considering diverse cultural contexts. The healthcare systems in different countries vary significantly in their conditions, priorities, and requirements (Laurell, 2018). Consequently, factors that are relevant and effective in one country may not be applicable in another (Murti et al., 2013). Moreover, the number and nature of service quality factors can vary depending on the specific services provided by a facility (Buttle, 1996). Hence, this study defines healthcare service quality as “the patients’ judgment or impression about a healthcare unit’s overall excellence and superiority” (Javed & Ilyas, 2018, p. 491) and focuses on empathy and responsiveness as major dimensions of healthcare service quality. Empathy and responsiveness have been regarded as the most effective and important proxy for the patient’s assessment of service quality (Turris, 2005).

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2.1.1.1 Empathy

Empathy is an important psychological phenomenon in the service marketing literature. Empathy is rooted in Bandura's Social Cognitive Theory (SCT), which posits that learning occurs within a social context and is influenced by the dynamic interaction between individuals, their behavior, and the environment (Bandura, 1986). Empathy is a tool for effective human interactions and can be defined and measured in many ways. It enhances a health worker's ability to interact with patients and adopt behaviors that are appropriate for their respective circumstances. In the marketing literature, there have been considerable differences in the conceptualization of the concept of empathy. According to Davis, (1983) empathy is defined as "the reactions of one individual to the observed experiences of another". Empathy manifests when an observer experiences warmth, compassion, and concern for another individual (Davis, 1983; Eisenberg & Lennon, 1983). Empathy can be either cognitive, affective, or both. The cognitive dimension of empathy is the ability to understand other people's perspectives, to see their point of view, and to anticipate their reactions (Devoldre et al., 2010). This aspect involves understanding the roles or viewpoints of patients. This enables healthcare providers to place themselves in the patient's situation (Preston et al., 2007). On the other hand, the affective component, known as "empathic concern," involves an emotional reaction that facilitates understanding of another's feelings, such as "feeling their pain" (Preston & de Waal, 2002). Affective empathy allows healthcare workers to comprehend and share the feelings of their patients (Silver et al., 2018; Yu et al., 2022). In antenatal care, empathy involves the overall well-being of expectant mothers. In other words, empathic concern occurs when healthcare workers respond to the emotional state of their patients without experiencing the emotion themselves. In this study, empathy is defined as a sympathetic feeling, soft-heartedness, warmth, compassion, and tenderness

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feelings of healthcare workers to their antenatal patients (Cialdini et al., 1997; & Batson et al., 2007).

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2.1.1.2 Responsiveness

Responsiveness in healthcare is characterized by the promptness and appropriateness with which care is delivered. According to Burgess et al. (2022), responsiveness is the healthcare

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provider's ability to deliver services timely and appropriately. It is the ability to promptly meet and even, exceed patients' expectations in providing effective care. According to Parasuraman et al. (1985), responsiveness is the provider's readiness and willingness to offer prompt services. This dimension of service quality emphasizes the importance of minimizing wait times and addressing patients' concerns without delay thereby, enhancing the overall patient experience. Operationally, this study defines responsiveness as the healthcare's ability

to offer timely, efficient, and suitable care that aligns with the immediate needs of patients (Burgess et al., 2022). This definition goes beyond mere speed but emphasizes the importance of appropriateness in addressing patient concerns swiftly while maintaining high standards of care and enhancing overall satisfaction.

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2.1.2 Antenatal Patients Satisfaction

Patient satisfaction is largely considered the most important indicator of quality in the healthcare sector. Research suggests that patient satisfaction is directly linked to the perceived quality of care, as patients compare their expectations with the actual services received in a hospital setting (Kotler, 2007; Pohan, 2014). This satisfaction is not merely an outcome of service provision but also an emotional response to the congruence between what patients anticipate and what they experience (Oliver, 2010; Shabbir & Malik, 2016). Patient satisfaction can therefore be defined as the extent to which the healthcare services provided align with the patient's expectations, resulting in positive evaluations of their care experience

(Baker & Streatfield, 1995; Al-Eisa et al., 2005). When healthcare services meet or exceed patient expectations, satisfaction is achieved, which is crucial in enhancing patient trust and adherence to medical advice (Zarei et al., 2015; Sahoo et al., 2016). In this study, patient satisfaction is defined as the degree of care, compassion, responsiveness, and empathy tailored to meet/exceed the specific needs and expectations of expectant mothers in ensuring safe childbirth, and reduction or elimination of maternal and infant mortality rates.

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2.2.1 Empathy and Antenatal Patients' Satisfaction

Empathy plays a pivotal role in healthcare, significantly influencing patient satisfaction and contributes to improved clinical outcomes. For instance, Kim et al. (2004) established that doctors who exhibit empathy create stronger patient-physician relationships, increasing patient satisfaction and improving adherence to treatment plans. Hojat et al. (2011) further illustrated that empathetic interactions in healthcare settings are essential for enhancing clinical outcomes, patient recovery, and psychological well-being. Moreover, the role of empathy in antenatal care is especially critical. Attanasio and Kozhimannil (2015) found that empathetic antenatal care is directly related to reduced stress levels and greater satisfaction among expectant mothers. Recent studies continue to support these findings. For example, Lin et al. (2021) reported that empathetic antenatal care is linked to lower stress levels and higher satisfaction among expectant mothers. West et al. (2006) emphasized that an empathetic work environment improves employee morale, interactions, and patient satisfaction. Also, Thirioux et al. (2016) found that healthcare facilities with improved empathetic behavior achieved higher patient satisfaction. Wang et al. (2023) argued that empathetic leadership is crucial for sustaining a culture of empathy within healthcare organizations, leading to better patient outcomes. Silver et al. (2018) and Yu et al. (2022) further support empathy as a foundational element of quality care and overall patient satisfaction.

H₁: There is no relationship between empathy and antenatal patient satisfaction.

2.2.2 Responsiveness and Antenatal Patients' Satisfaction

Ensuring timely and efficient care provision is essential for addressing the needs of pregnant women and promoting positive maternal health outcomes. Responsiveness is crucial in enhancing access to maternal health services, (Alam, 2024). The quality of maternal healthcare services is intrinsically tied to responsiveness, with timely and effective care during pregnancy, childbirth, and postpartum, essential for mitigating potential risks (Fazil, 2023). Patients actively assess their experiences throughout their interactions within healthcare facilities, and their perceptions of responsiveness directly impact their overall satisfaction (Adesanya et al., 2012). Faleh et al., (2015) found that the level of responsiveness exhibited by healthcare providers strongly influences patients' overall satisfaction (Bleich et al., 2009; Messina et al., 2009). Furthermore, increased responsiveness from hospitals and care providers often results in higher patient satisfaction, which subsequently encourages greater utilization of healthcare services (Naidu, 2009; Malhotra & Do, 2013). Mustika et al. (2019) discovered a significant relationship between responsiveness dimensions and patient satisfaction. Notwithstanding the importance and avalanche of scholarly submissions supporting the influence of responsiveness on patient satisfaction. Kashkoli et al. (2017) emphasized the necessity for further empirical investigation into the relationship between hospital responsiveness and antenatal patient satisfaction due to the uncertain evidence regarding patients' expectations and satisfaction. In the light of the above, we hypothesize thus;

H₂: There is no relationship between responsiveness and antenatal patient satisfaction.

3.1 Methodology

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This study utilized a quantitative survey design to examine the relationship between empathy, responsiveness, and antenatal patient' satisfaction. The study involved 264 outgoing antenatal patients across the 24 primary health facilities in Obio-Akpor LGA, Rivers State. The sampling process combined stratified random sampling and purposive sampling to ensure a representative and comprehensive sample while specifically targeting women with significant antenatal experience. To capture the diverse range of antenatal care experiences across Obio-Akpor LGA, the 24 primary health facilities were first stratified based on key characteristics, such as location (urban vs. rural) and patient volume (high vs. low). Within each stratum, a proportionate number of facilities were randomly selected to ensure that the sample adequately reflects the varying contexts in which antenatal care is delivered. Also, purposive sampling was employed to target outgoing antenatal patients with significant antenatal experience. Clear and consistent criteria were established to define "significant antenatal experience," focusing on patients who had attended at least three antenatal visits during their pregnancy. This ensured that respondents had sufficient exposure to the healthcare services being evaluated. The total sample of 264 participants was proportionately allocated across the selected health facilities based on their average patient turnout. This approach ensured that the number of respondents from each facility was reflective of its patient load, thus maintaining the representativeness of the sample. Drawing from an extensive literature review, the survey instruments were carefully developed to measure the constructs under investigation. Specifically, the empathy scale was adapted from validated instruments (Douglas et al., 2006; Min et al., 2012; Parasuraman et al., 1988) and included dimensions such as healthcare providers' genuine concern for patients' well-being, personalized attention, and attentiveness to patient's emotional and mental states. Similarly, the responsiveness scale incorporated items modified from established measures (Malhotra & Do, 2013; Bleich et al., 2009; Parasuraman et al., 1988), focusing on the timeliness and availability of care, including

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prompt responses to patient needs and minimal waiting times for appointments. The patient satisfaction scale included items from Shabbir & Malik (2016), Baker & Streatfield (1995), and Qu & Zhang (2011), assessing overall satisfaction with care quality, the extent to which expectations were met, and the likelihood of recommending the healthcare facility to others. A five-point Likert scale was employed to capture the range of responses, offering a balance between discriminatory power and simplicity. This choice was guided by the need to avoid response bias and provide participants with a neutral option, accommodating those with ambivalent views. To ensure content validity, the survey instrument underwent expert validation within the tertiary healthcare sector, leading to refinements that better aligned the questionnaire with the study's objectives. The reliability of the instrument was verified using Cronbach's alpha, with all items exceeding the 0.7 benchmark, as stipulated by Nunnally (1978), confirming the internal consistency of the measures. Measures were taken to minimize bias, including the randomization of survey questions and the inclusion of a neutral response option. The data analysis employed multivariate analysis of variance (MANOVA), discriminant analysis, and multiple regression to investigate the relationships between the variables. SPSS was used to conduct the analyses, ensuring robust statistical examination.

4.1 Result Presentation

4.1.1 Regression analysis showing the effects of Empathy (EP) and Responsiveness (RE), on Antenatal Patient Satisfaction (APS)

Table 1: Model Summary

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.859 ^a	.738	.726	11.43032	1.921
a. Predictors: (Constant), Empathy, Responsiveness					
b. Dependent Variable: Antenatal patient satisfaction					

The analysis in Table 1 demonstrates that the R-value of 0.859 indicates a strong positive correlation between empathy, responsiveness, and antenatal patient satisfaction. The R Square value of 0.738 suggests that the model accounts for 73.8% of the variability in antenatal patient satisfaction, underscoring its strong predictive capability. The adjusted R Square value

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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. The Durbin-Watson statistic of 1.921, is close to 2. This suggests that there are no significant issues with autocorrelation in the residuals.

Table 2: ANOVA

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	44.846	2	8.212	5.735	.000 ^b
	Residual	05.745	245	1.432		
	Total	50.591	264			
a. Dependent Variable: Antenatal patient satisfaction						
b. Predictors: (Constant), Empathy, Responsiveness						

The ANOVA table (Table 2) shows that the regression model significantly explains the variation in antenatal patient satisfaction, with a regression sum of squares of 44.846 and a residual sum of squares of 5.745. The F-statistic of 5.735, with a p-value of 0.000, confirms that empathy and responsiveness significantly predict antenatal patient satisfaction which validates the strength of the model.

Table 3: Coefficients

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.464	.193		17.927	.000
	Empathy	.546	.464	.094	.721	.000
	Responsiveness	.727	.657	.313	.202	.000
a. Dependent Variable: Antenatal patient satisfaction						

Regression Model: APS = 3.464+[(0.546EP) + (0.727RE)]

The intercept of 3.464 represents the predicted level of antenatal patient satisfaction when both empathy and responsiveness are zero which serves as a baseline for the regression model. The unstandardized coefficient for empathy is 0.546, suggesting that a one-unit increase in empathy leads to a 0.546-unit increase in antenatal patient satisfaction. The standardized Beta of 0.094 and the t-value of 0.721 indicate a relatively smaller impact on antenatal patient satisfaction, with a p-value of 0.000. This suggests a statistical significance despite the low effect size. The unstandardized coefficient for responsiveness is 0.727, indicating that a one-unit increase in responsiveness results in a 0.727-unit increase in antenatal patient satisfaction. The standardized Beta of 0.313 and the t-value of 0.202 imply a more substantial effect compared to empathy, with the p-value of 0.000 confirming its significance as a predictor of antenatal patient satisfaction.

4.2 Discussions

4.2.1 Empathy and Antenatal Patient Satisfaction: While empathy is vital for improved patient trust and improving the quality of patient care, its direct impact on patient satisfaction may not be as strong as that of responsiveness. Empathy is crucial for providing emotional support and strengthening patient-provider relationships. Research by Mercer and Reynolds (2002) and Hojat et al. (2011) highlights the importance of empathy in creating a supportive healthcare environment, even though its influence on satisfaction is somewhat less pronounced compared to responsiveness. The finding of this study is also consistent with the position of many **current** studies (Thirioux et al. 2016; Wang et al. 2023; 2018 & Yu et al. 2022) **who** argued that healthcare facilities with improved empathetic behavior achieved higher patient satisfaction.

4.2.2 Responsiveness and Antenatal Patient Satisfaction: Research has consistently demonstrated that responsiveness plays a significant role in enhancing patient satisfaction. Responsiveness, which includes timely and effective communication, is essential in improving patient experiences. Studies by Kim and Kim (2020) and Heskett et al. (1994) affirm that responsiveness positively influences how patients perceive the quality of care they receive, thereby boosting their overall satisfaction. Also, the finding of the current study is consistent with other studies (Adesanya et al., 2012; Faleh et al., 2015; Bleich et al., 2009; Messina et al., 2009) who found that the level of responsiveness exhibited by healthcare providers strongly influences patients' overall satisfaction.

5.1 Conclusion

5.1.1 Empathy is essential in enhancing trust and quality of patient care; however, its direct impact on antenatal patient satisfaction may not be as substantial as that of responsiveness.

Despite this, empathy remains crucial in providing emotional support and strengthening the patient-provider relationship.

5.1.2 Responsiveness has a significant and consistent impact on enhancing antenatal patient satisfaction. Responsiveness is critical in shaping patient experiences, particularly through timely and effective communication.

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5.2 Recommendation

5.2.1 To enhance responsiveness in healthcare facilities within Obio-Akpor LGA, it is essential to implement comprehensive training programs with emphases on the importance of timely and effective patient care. These programs should equip staff with practical skills in active listening, quick decision-making, and empathetic communication. Additionally, facilities should invest in modern communication tools, such as instant messaging systems and digital patient management platforms, to enable real-time responses to patient inquiries and concerns.

5.2.2 To effectively boost empathetic behaviors among staff, primary healthcare facilities in Obio-Akpor should implement thorough training programs that focus on active listening, recognizing patient emotions, and compassionate responses. These initiatives could incorporate role-playing exercises, regular workshops, and patient feedback sessions aimed at helping staff build stronger emotional connections with antenatal patients.

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5.3 Implications

5.3.1 Practical Implications

Cultivating a culture of empathy and responsiveness within healthcare facilities can directly contribute to better health outcomes. Studies (Haidet, & Jones, 2009; McMillan, & Weitzner, (2001) have shown that when patients feel understood and supported by their healthcare

providers, they are more likely to adhere to medical advice, follow treatment plans, and attend follow-up appointments. This adherence is critical in antenatal care, where timely interventions can prevent complications and improve maternal and fetal health. Furthermore, the emotional support provided through empathy can reduce patient stress, which is known to have a positive effect on health outcomes, such as lower blood pressure and reduced risk of pregnancy-related complications. By embedding these practices into everyday care, healthcare facilities can achieve quicker recovery times and better health outcomes for patients.

Investing in systems and resources that enable quick responses to patient needs, such as implementing efficient communication channels, optimizing service delivery processes, and utilizing technology like electronic health records (EHRs) can streamline operations within healthcare facilities. For instance, integrating a real-time patient feedback system can alert staff to issues as they arise, allowing for immediate intervention. These improvements can lead to reduced wait times, fewer patient complaints, and an overall smoother antenatal patient experience. Furthermore, operational enhancements that reduce delays and improve coordination among healthcare teams can also enhance patient safety by minimizing the likelihood of errors and ensuring that medical interventions are timely and effective.

5.3.2 Theoretical Implications

This study extends the Service Quality Theory by emphasizing the dual importance of empathy and responsiveness in patient satisfaction, particularly in the context of antenatal care. Traditionally, Service Quality Theory focuses on dimensions such as tangibility, reliability, and assurance. However, this study suggests that empathy and responsiveness should be considered equally vital components, especially in healthcare settings where patient-provider interactions are central to the care experience. The findings support the idea

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that while responsiveness has a more direct and immediate impact on satisfaction, empathy plays a critical role in creating a supportive and holistic care environment. Future research could further refine this theory by exploring how these two elements interact with other dimensions of service quality to influence patient outcomes.

The research provides empirical evidence that contributes to a more nuanced understanding of patient satisfaction, particularly in antenatal care settings. By quantifying the impact of empathy and responsiveness, the study offers insights that can be used to refine existing patient satisfaction models. These models often emphasize aspects like the quality of medical care, physical environment, and service efficiency but may underplay the importance of emotional and interpersonal factors. This study suggests that future patient satisfaction models should integrate these findings to better predict and enhance patient satisfaction across diverse healthcare contexts. For example, incorporating measures of empathy and responsiveness into patient satisfaction surveys could provide a more comprehensive assessment of care quality

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