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IMPACT OF HEALTH CARE SERVICE QUALITY ON THE SATISFACTION LEVELS OF USERS OF THE GOHEALTH SCHEME IN GOMBE STATE, NIGERIA

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Abstract

In this empirical study, the researchers investigated what degree of quality (tangibility, assurance, responsiveness and empathy) within the healthcare services available through the GoHealth Scheme in Gombe State, Nigeria impacts the people's level of satisfaction with these services. A sample of 383 formal contributors to the GoHealth Scheme were surveyed at one point in time (cross sectional survey), and included each contributor's information about their 3 or more dependants. Data was analysed using SPSS with statistical methods that included employing descriptive statistics, Pearson correlation coefficients, and multiple regression analysis. The results indicated that the three criteria that were statistically significant predictors of satisfaction of beneficiaries was assurance (β = 190; p < 0001), responsiveness (β = 301; p < 0001), and empathy (β = 327; p < 0001). The one criterion that was not a statistically significant predictor of satisfaction was tangibility (β = 031; p = 495). The researcher found that empathy was the greatest predictor of satisfaction (beta weight = .327), followed by responsiveness (beta weight = .301) and assurance (beta weight = .190). Collectively, these variables accounted for a large proportion of explained variance in satisfaction (R^2 = 482; F = 87.94; df = 4,378; p < 0001). Findings indicate that beneficiaries place more value on staff competence, promptness in responding to the beneficiaries and provision of personalized care over the provision of physical facilities. To enhance satisfaction of beneficiaries with the GoHealth Scheme, the scheme should emphasize training in interpersonal skills, increase responsiveness, routinely evaluate the quality of services provided and enhance communication. The implementation of these recommendations should create the foundation for improving the retention of beneficiaries as well as the overall quality of healthcare services provided through the GoHealth Scheme.

Keywords: GoHealth Scheme, healthcare service quality, formal sector beneficiaries, satisfaction, empathy, responsiveness, assurance.

1.0 INTRODUCTION

The extent to which people who qualify to participate in formal sector health insurance programmes feel satisfied with the health care services they receive from these programmes is mainly dependent upon the quality of care provided by the health care system. Health systems

worldwide have also identified that in order for health systems to achieve better health outcomes and provide long-term, equitable coverage, the health care services they offer must be efficient, easily accessible to patients, and patient-centred (Abbas, Islam & Ejaz, 2026; Azzam & Alkhuzam, 2026). In Nigeria, the GoHealth Scheme, which is part of the Gombe State health system, provides financial protection against illness to formal sector employees and access to high-quality health care services. However, while formal sector health insurance programmes exist in Nigeria, beneficiaries have experienced significant challenges which negatively impact their satisfaction with these programmes, such as a lack of available health care facilities, long wait times for service delivery, and unresponsiveness of health care providers (Opara et al., 2023; Adewole et al., 2022). Understanding the factors that affect satisfaction, therefore, is of paramount importance to improve the overall policy decisions; promote the sustainability of the GoHealth Scheme; and enhance the overall health of Nigeria's people (Effiong et al., 2025; Nwanaji Enwerem et al., 2022).

Tangibility - physical look of the facility, its equipment, and the individuals working in it, typically establishes the first impression of the quality of service provided. Clean facilities and new equipment can enhance a recipient's confidence about the services provided (Aljarallah et al., 2023; Kidola et al., 2022). Assurance is the ability, knowledge and courtesy of employees and their capacity to instill trust and confidence (Shie et al., 2022; Keelson et al., 2024). The willingness of a provider to assist a recipient in an expedient manner is referred to as responsiveness (Shie et al., 2022; Keelson et al., 2024). Empathy is characterised by providing care and individualised service that leads to the recipient feeling as though they were understood (Wahyuningsih, Mariyanti & Hatta , 2023; Zarychta et al., 2026).

The recipients of the GoHealth Scheme in Gombe state are facing many obstacles to receiving service including long wait times, lack of resources, lack of communication with the provider and low levels of responsiveness from the provider (Mir, Shair, Hussain & Aleemuddin , 2023; Effiong et al., 2025). While a plethora of research has been done globally to demonstrate the correlation between these dimensions and overall satisfaction, there is very little empirical evidence to date for satisfaction among recipients under the GoHealth Scheme. This study therefore seeks to investigate the impact of tangibility, assurance, responsiveness and empathy on satisfaction among the recipients of formal sector GoHealth Scheme beneficiaries and develop evidence-based recommendations for administrators and policy makers.

2.0 LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Tangibility

The tangible elements of service delivery are the physical elements of service delivery that customers can experience (e.g., the buildings and equipment that are present at the delivery site; the appearance of the personnel who delivered service). Tangibles provide the first evidence that customers experience regarding the quality of service delivery (Lubis, 2025; Noviyani & Viwattanakulvanid, 2024). And they often provide the first experience of service quality for the majority of customers.

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Tangible elements of service delivery, who demonstrate professionalism and reliability through the appearance of their physical facilities, advance medical technology, and visible cleanliness (Abbas, Islam, & Ejaz , 2026).

Tangibility is a critical component of the recipient's perception of quality in formal health care systems. For example, recipients are more likely to have a higher satisfaction rating when the health care provider's facilities are maintained, the consultation rooms are kept clean, and the staff members are appropriately dressed and behaved than when this is not the case (Opara et al.,2023; Bayked et al, 2024). In addition to having a direct effect on satisfaction, tangible elements of the health care system increase prospective customers' confidence in the entire health care system and promote continued participation in and use of the health care system.

Data collected through empirical research on beneficiaries who receive health services through government and non-government institutions show that tangibility has a strong relationship with recipient satisfaction within both types of health systems across various geographic regions (Getaneh, 2023; Abbas, Islam, & Ejaz, 2026). In Nigeria specifically, many people have low levels of value placed on their level of satisfaction with services due to insufficient, out-dated facilities; therefore, addressing these factors is critical to improving the overall quality of services in the GoHealth program (Opara, 2023). Accordingly, this study provides the following hypothesis:

Ho1: *Tangibility has no significant effect on formal sector beneficiaries' satisfaction in Gombe State.*

Assurance

Assurance is how the people who provide healthcare services (works) are treated by each other, treated by themselves, treated equally, trusted, built from trust, treated fairly or treated positively when providing assistance to meet the needs of other people who receive their care (S. W. O. et al., 2022; J. K. E. et al., 2023). Assurance is also related to a patient's willingness to allow their healthcare needs to be addressed in a professional and trustworthy manner. Additionally, there is a close connection between Assurance and both Trust and Reliability, because the patient is dependent upon professional individuals to provide them with care in a safe and effective manner (D. et al., 2023; O. A. et al., 2025).

As per existing literature, assurance has a strong correlation to patient satisfaction; specifically with regard to insurance programs and the patient's desire for continuity of both professional services (L., 2025; A. & H., 2022). In Nigeria, multiple researchers have shown that increasing professional delivery by healthcare providers has also led to increased patient satisfaction and trust in healthcare systems (A. A. et al., 2022; O. et al., 2023).

Ho2: *Assurance has no significant effect on formal sector beneficiaries' satisfaction in Gombe State*.

Responsiveness

Responsiveness is defined as the ability and willingness of healthcare providers to respond to requests for assistance made by beneficiaries; this includes promptly addressing the individuals'

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concerns and resolving any issues (Wahyuningsih et al., 2023; Keelson et al., 2024). A healthcare professional's response time has a determining effect on how patients perceive the quality of service they receive. This is especially true when it relates to how distributions perceive their experiences with the formal health plans (i.e., starting from scheduling appointments, through timeliness of receiving the treatment to utilizing health service emergency care).

Research has identified that there is a direct correlation between how responsive an organization is to its customers' inquiries/needs (in this case being health insurers in Nigeria) and the beneficiaries' satisfaction with the organization (Gurung & Panza, 2022; Azzam & Alkhuzam, 2026). The slow response times for processing inquiries/requests are one of the leading drivers of dissatisfaction with health insurance customers in Nigeria (Opara et al., 2023; Adewole et al., 2022). Enhancing responsiveness should lead to increased trust and loyalty and improved perceptions of quality. Therefore, the Hypothesis to be tested is as follows:

Ho3: *Responsiveness has no significant effect on formal sector beneficiaries' satisfaction in Gombe State.*

Empathy

Healthcare professionals exhibit empathy by finding out what their beneficiaries want, need, and expect (Wahyuningsih, Mariyanti & Hatta, 2023; Lubis, 2025). Providing patients with individualized attention and an experience-centred on human interactions forms the basis of empathy. By providing patients with individualized attention, empathy creates emotional bonds between patients and their healthcare professionals, enhancing their perception of quality in the care they receive.

Delivering empathetic services by way of interpersonal relationships between health service professionals and beneficiaries improves beneficiary satisfaction generally, with greater improvements among beneficiaries from formal-sector health insurance programs, who expect services to be provided with greater thoughtfulness and a greater degree of patient-centredness.

Extensive studies conducted around the world, including in Nigeria, have demonstrated the importance of providing empathy to beneficiaries as an important predictor of the level of beneficiary satisfaction with the outcome of their enrolment in health insurance programs (both public and private) (AlOmari & Hamid, 2022; Mir et al., 2023; Getaneh et al., 2023). When beneficiaries receive care that they believe is provided with empathy, they are more likely to seek care in the future, be adherent to treatment, and have a positive view of the quality of services rendered to them. However, despite the importance of empathy to beneficiaries, there is a scarcity of empirical literature concerning the level of empathy within the GoHealth Scheme. This study seeks to fill this gap; therefore, the research proposes the following hypotheses:

Ho4: *Empathy has no significant effect on formal sector beneficiaries' satisfaction in Gombe State.*

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2.2 Empirical Review

The research of Adewole, Reid, Oni, and Adebowale (2022) revealed several variables that contribute to dissatisfaction among health insurance users in Nigeria's Southwest region; major causative factors for dissatisfaction included service delivery, inadequate communication, and facilities. They utilized surveys and structured questionnaires from 400 enrollees and determined that perceived quality significantly influences beneficiary satisfaction. The limitation of their research is that it was conducted alone in the Southwest and left out the formal sector in northern Nigeria, particularly in Gombe, as an area for inquiry; hence there is a need to explore perceptions of service quality for GoHealth Scheme enrollees in localized areas.

A study conducted by Danlami, Sunny, Adamu, & Yonla, (2022) the study established that student satisfaction is a function of service quality which include the following dimensions (Tangibility, Empathy, Reliability, assurance and Responsiveness) that explain the relationship between quality service delivery and students' satisfaction.

Research conducted by Opara and colleagues (2023) included an evaluation of enrollees' satisfaction levels with social health insurance using a descriptive survey design. The descriptive survey designed to assess the variables associated with satisfaction used structured interviews with 500 beneficiaries. Findings showed tangibility, responsiveness, and assurance are variables that support beneficiary satisfaction; however, the effects of empathy were not broken down in this study, nor were the previously mentioned variables assessed with a northern Nigerian context, which is a goal of this study.

Kidola's study (2022) evaluated how service quality influences customers' happiness within Kibondo District's National Health Insurance Fund (NHIF). A sample of 350 NHIF beneficiaries provided quantitative survey data which were analyzed using multi-regression analysis. The authors found that the two most influential service quality dimensions (tangibility and assurance) were the most significant predictors of satisfaction, while responsiveness and empathy had moderate significance. One limitation of the study was its geographic and systemic differences; results from Tanzania cannot directly represent formal sector health insurance in Nigeria which provides a strong justification for this research in Gombe State.

Another exemplary work evaluating service quality's effect on satisfaction is the systematic review & meta-analysis conducted by Bayked et al. (2024). They systematically reviewed available literature evaluating community-based health insurance beneficiary satisfaction in Ethiopia. Based on the authors' analyses of data gathered from 25 peer-reviewed academic journal articles representing more than 12,000 participants, 71% expressed dissatisfaction due to insufficient physical infrastructure; unprofessional staff and delayed service delivery. The authors concluded that the dimensions associated with service quality were good predictors of beneficiaries' satisfaction with community-based health insurance schemes. However, because the current systematic review's focus is on community-based health insurance, it has limited applicability to formal sector-based schemes like GoHealth and therefore highlights an additional gap in the literature related to satisfaction with formal sector-based health insurance in Nigeria.

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Perceived service quality and social impact have been examined amongst beneficiaries of Punjab Employees Social Security Institutions (PESSI) in Pakistan by Abbas Islam Ejaz (2026). This quantitative study included 300 survey participants and used structural equation modelling (SEM) to measure the relationship between service quality dimensions and satisfaction. All dimensional items of service quality were found to be statistically significant predictors of satisfaction. Although there are no methodological issues or limitations to the study, the cultural context of Nigeria may not directly apply to this study therefore locally based evidence is needed in Gombe State.

The research conducted by Aljarallah et al. (2023) studied patient satisfaction within tertiary-level medical centers in Riyadh, Saudi Arabia. The cross-sectional survey included 450 patients. The authors found that assurance and empathy were significant predictors of patient satisfaction, whereas tangibility had a moderate relationship with patient satisfaction. As a result, their primary focus on tertiary hospitals in a Middle-Eastern context limits the ability to generalize their findings to formal sector healthcare schemes in Nigeria; therefore, there is a need for research related to the GoHealth Scheme.

Azzam and Alkhuzam (2026) studied the relationship between civil society organizations' (CSOs') service quality and beneficiary satisfaction in Jordan. Using mixed methods with 200 respondents who completed surveys and participated in in-depth interviews, they found that assurance and responsiveness were key to successful outcomes regarding beneficiary satisfaction. While this study establishes the importance of service quality, it does so in the context of CSOs; therefore, additional research is needed regarding the service quality of formal sector health insurance schemes like the GoHealth Scheme.

In a study on beneficiaries' satisfaction with community-based health insurance in Legambo District, Ethiopia, Getaneh et al (2023) used a cross-sectional survey of 380 participants and found that the most significant predictors of satisfaction were empathy and responsiveness. The study was limited to community-based schemes and rural areas, thus not representing the dynamics of the formal sector in Gombe State.

Karmacharya et al (2025) investigated insurance program beneficiaries' satisfaction with healthcare services in Nepal using a cross-sectional survey of 500 beneficiaries and applying regression analysis found that assurance and tangibility represented significant determinants of beneficiaries' satisfaction. The geographical context of this study, as well as its overall focus on general health insurance may contribute to differing frameworks compared to the institutional context of the GoHealth Scheme in Nigeria.

Lubis (2025) examined the influence of service quality on outpatient satisfaction among participants of National Health Insurance in Indonesia. Surveys with 400 participants and correlation analysis indicated positive correlations between satisfaction and tangibility, responsiveness and empathy. However, the study did not focus on formal sector-specific

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providers or geographic differences in service delivery leaving an opportunity to study these same variables for GoHealth Scheme beneficiaries in Gombe State.

The study by Opara et al. (2023) analyzed the satisfaction levels of those enrolled in Southeastern Nigeria's formal sector Social Health Insurance Programme. A descriptive survey design was used to gather data. It was shown that enrollees were satisfied to a greater extent due to being able to trust that they would receive the service provided, as well as timeliness and the ability to see results the same day they went for assistance. Empathy, on the other hand, was less valued in relation to other factors. Although the findings of Opara et al. (2023) are relevant, the study's geographical and cultural context are different from Gombe State. Thus, further empirical evidence is needed to determine how the quality of these services influences the satisfaction of GoHealth beneficiaries in Northern Nigeria.

According to Adewole et al. (2022), service delivery, communication and facilities all affect the satisfaction of respondents enrolled with NHIS in the Southwestern region of Nigeria. However, their research does not include any data on respondents that live within Northern Nigeria. In the Southeastern region of Nigeria, Opara et al. (2023) found that tangibility, responsiveness and assurance contribute to the satisfaction of individuals enrolled with NHIS; however, the element of empathy was not analysed as part of their research. In Tanzania, Kidola (2022) found that both the tangibility and assurance criteria had the most impact on customer satisfaction; similarly, Bayked et al. (2024) report that their entire sample of NHIS respondents in Ethiopia were dissatisfied due to deficient infrastructure, lack of professionalism from staff and overall poor quality of service. All four dimensions of service quality (SERVQUAL) were found to be significant in a study conducted in Pakistan by Abbas, Islam & Ejaz (2026). Aljarallah et al. (2023) found that among respondents enrolled with NHIS, the highest degree of satisfaction was attributed to assurance and empathy, while a moderate degree of satisfaction was attributed to the element of tangibles. Azzam & Alkhuzam (2026) noted that respondents in Jordan were satisfied with assurance and responsiveness, while Getaneh et al. (2023) found that in Ethiopia, community-based insurance schemes are best evaluated by empathy and responsiveness. In Nepal, Karmacharya et al. (2025) noted that both assurance and tangibility were determining process variables, while Lubis (2025) conducted a study exploring relationships between several SERVQUAL dimensions within Indonesia's public health sector and found positive relationships between tangibility, responsiveness and empathy. Opara et al. (2023) also provided evidence that trust and timeliness add to respondent satisfaction, while lower levels of value were found for empathy as it relates to respondent's level of overall satisfaction with their care received through NHIS.

Thus, the current literature reflects a gap of knowledge due to a lack of any empirical studies across the four SERVQUAL dimensions among beneficiaries enrolled in the Go Health Services Scheme (one of Nigeria's current benefit schemes) that reside in the formal workforce in Gombe State in Northern Nigeria. This research intends to bridge the gap.

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2.3 THEORETICAL FRAMEWORK

The model's conceptual basis comes from the work of (Parasuraman, Zeithaml & Berry 1988) representing service quality as a multi-faceted construct based upon five (5) dimensions of performance [Tangibles, Reliability, Responsiveness, Assurance and Empathy]. (Reliability was deleted from this research because operational data regarding GoHealth Scheme's Service Reliability was unavailable; rather than analyzing overall Service Quality, previous research in Nigeria's Health Insurance Industry report that four (4) of the five (5) dimensions are the most261 commonly referenced.) Using this modelling framework, service recipients establish an expectation of the level of Service Quality they should receive prior to receiving that level of quality service; service recipients then evaluate any perceived discrepancy from their expected versus actual experience when they receive the service; this discrepancy results in an overall evaluation of the recipient's satisfaction/dissatisfaction with the Service Provider. High levels of perceived Service Quality results in higher levels of trust among Service Consumers, higher levels of consumer loyalty, and higher levels of desired consumer behaviour. The SERVQUAL model is relevant because:

- It provides a standardised, multidimensional approach applicable to healthcare.
- It captures both tangible and intangible aspects of service.
- It guides evaluation of GoHealth beneficiaries' satisfaction across tangibility, assurance, responsiveness, and empathy, helping to identify gaps for policy intervention.

3.0 METHODOLOGY

A cross-sectional survey design was employed to provide a snapshot of beneficiaries' assessments of service delivery quality and its association with beneficiary satisfaction. The sample for this research study included 72,451 (72,451) registered formal beneficiaries (the principal contributors and their dependents) of the GoHealth Programme (GoHealth Programme, 2023). The Gombe metropolitan area was a natural selection due to the considerable number and accessibility of civil servants. As per Taro Yamane's equation, a sample of 440 was selected and a 10% non-response provision was factored in; purposive and convenience sampling was used so that only those who met both of the following criteria were included: (i) were minimum of three other people living in their households (who actually use health services) and whose experience with respect to health services was more extensive than those with fewer dependents; and (ii) were actively receiving GoHealth services and have already opened a GoHealth file with an accredited GoHealth Provider. To mitigate the risk that probabilistic sampling will lead to generalisability (to the remaining 72,451 beneficiaries), further probability sampling is required to support these conclusions.

A 5-point Likert scale-based structured questionnaire was utilised in accordance with existing research using the SERVQUAL model and the WHO Health System Responsiveness Framework (i.e., tangibility, assurance, responsiveness, empathy and/or satisfaction). Each of the measurements were comprised of 4 measurements to determine the level of quality. Content validity was established by reviewing the questionnaire by three experts in Health Management. Cronbach's alpha coefficients were calculated based on 30 pilot study respondents (not included

in final results): Tangibility α = 0.82; Assurance α = 0.79; Responsiveness α = 0.84; Empathy α = 0.88; and Satisfaction α = 0.86; indicating that all variables had sufficient internal consistency.

Informed consent was obtained from all participants. Participants had the right to choose whether or not to participate and received services that ensured their anonymity and confidentiality, and the right to withdraw from the study at any time without consequence.

Data were analysed using SPSS version 26 (IBM, 2020). Descriptive statistics (means, standard deviations) provided a summary of the data, and a Pearson correlation was used to assess bivariate relationships. Hypotheses were evaluated using a multiple regression analysis where the model was as follows:

$$\mathbf{FSBS = \alpha + \beta_1(TANG) + \beta_2(ASS) + \beta_3(RESP) + \beta_4(EMP) + \varepsilon}$$

Where:

- FSBS = Formal Sector Beneficiaries' Satisfaction (dependent)
- TANG = Tangibility
- ASS = Assurance
- RESP = Responsiveness
- EMP = Empathy
- α = constant
- $\beta_1 \ldots \beta_4$ = regression coefficients
- ε = error term

Diagnostic checks included multicollinearity (VIF and tolerance), normality of residuals (Shapiro-Wilk), homoscedasticity (Breusch-Pagan), and independence of errors (Durbin-Watson). All assumptions were met.

4.1 RESULTS

Descriptive Statistics

Variable	*Mean*	*Std. Deviation*	*N*
FSBS	12.42	3.76	383
TANG	13.34	3.84	383
ASS	12.91	3.76	383
RESP	12.34	3.33	383
EMP	12.66	3.58	383

Beneficiaries reported moderate satisfaction (mean = 12.42, SD = 3.76). Perceptions of service quality were moderate to high across dimensions, with tangibility rated highest (mean = 13.34).

Correlation Analysis

	FSBS	*TANG*	*ASS*	*RESP*	*EMP*
FSBS	1.000				
TANG	0.392*	1.000			
ASS	0.550*	0.515*	1.000		
RESP	0.582*	0.412*	0.585*	1.000	
EMP	0.605*	0.491*	0.602*	0.612*	1.000

Note: N = 383; all correlations significant at p < 0.01 (1-tailed).

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Satisfaction was positively correlated with tangibility (r = 0.392), assurance (r = 0.550), responsiveness (r = 0.582), and empathy (r = 0.605). Empathy showed the strongest correlation.

4.1.1 Regression Analysis

Model Summary

R	*R²*	*Adjusted R²*	*F*	*Sig.*	*Durbin-Watson*
0.694	0.482	0.476	87.94	<0.001	1.92

The model explained 48.2% of the variance in beneficiary satisfaction ($R^2 = 0.482$, adjusted $R^2 = 0.476$). The overall model was significant ($F(4,378) = 87.94$, $p < 0.001$).

Coefficients

Variable	*Unstandardised B*	*Std. Error*	*Standardised β*	*t*	*Sig.*	*VIF*
(Constant)	1.682	0.644		2.613	0.009	
TANG	0.031	0.045	0.031	0.684	0.495	1.46
ASS	0.190	0.053	0.190	3.624	<0.001	1.89
RESP	0.301	0.057	0.267	5.243	<0.001	1.77
EMP	0.327	0.056	0.312	5.886	<0.001	1.93

Dependent variable: FSBS. Tolerance values ranged from 0.52 to 0.68, all above 0.1, confirming no multicollinearity.

Hypothesis Testing

- **H_{10} (Tangibility):** $\beta = 0.031$, $p = 0.495$ → **Not rejected** (no significant effect).
- **H_{20} (Assurance):** $\beta = 0.190$, $p < 0.001$ → **Rejected** (significant effect).
- **H_{30} (Responsiveness):** $\beta = 0.301$, $p < 0.001$ → **Rejected** (significant effect).
- **H_{40} (Empathy):** $\beta = 0.327$, $p < 0.001$ → **Rejected** (significant effect).

Empathy had the strongest influence ($\beta = 0.312$), followed by responsiveness ($\beta = 0.267$) and assurance ($\beta = 0.190$).

4.2 DISCUSSION

This research investigated the relationship between the quality of healthcare services provided by formal providers in Gombe State and how beneficiary satisfaction levels are affected by the quality of those services through the GoHealth scheme. The outcome of the analysis indicated that the quality of the services in terms of assurance, responsiveness, and empathy are all important determinants of consumer satisfaction with healthcare services, while the quality of the services in terms of tangible aspects of the service is not an important determinant of beneficiary satisfaction. The contradictory nature of these findings means that the original hypothesis that all four dimensions would be predictors of consumer satisfaction does not hold true, and serves to correct a previous inconsistency that had previously been observed by some researchers.

Tangibility was found to be a non-significant predictor of beneficiary satisfaction ($\beta=0.031$, $p=0.495$) and is consistent with earlier research (Kidola, 2022; Abbas et al. 2026), indicated that beneficiaries tend to place more weight on functional and relationship-based interactions with staff after the provision of a satisfactory level of basic physical infrastructure. As a result, in

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Gombe State, GoHealth-accredited facilities may be meeting minimum standards of tangibility; therefore, the focus of beneficiaries will be on how members of the staff of those facilities interact with them. The bivariate level of correlation between tangibility and beneficiary satisfaction is moderate (r=0.392); however, the relationship disappears upon regression which suggests that there are a number of other factors that have shared variance with tangibility (e.g. facilities that are well equipped, may also have a high level of empathy from staff) and is supported by VIF values that were acceptable.

The findings that EMPATHY - as measured by β=0.327, RESPONSIVENESS - β=0.301 & ASSURANCE - β=0.190) all provided statistically significant results are consistent with Aljarallah et al., 2023; Opara et al. 2023, Lubis, 2025. EMPATHY having the highest β demonstrates that recipients of healthcare services value being appreciated and cared about as a person by someone they consider their equal. RESPONSIVENESS is extremely important due to the many complaints regarding delays in services in Nigeria (Adewole et al., 2022). ASSURANCE gives the recipient confidence in the skill level & ethical behaviour of the provider which will directly affect their decision to re-enrol. The SERVQUAL model of Parasuraman et al., 1988 has provided support for these findings due to the confirmation that the intangibility of the human aspect of service provides a much greater influence on customer satisfaction than the physical side of service provision. To that end, GoHealth administrators must continue to fund interpersonal relationship training, meet their promised service standards (timeliness), and communicate effectively, rather than spending all their resources on facilities and equipment.

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

In summary, this investigation demonstrates that formal sector beneficiaries' satisfaction with the GoHealth Scheme in Gombe State is influenced significantly by assurance, responsiveness and empathy. The fourth SERVQUAL dimension, tangibility, does not affect satisfaction among beneficiaries. The most significant impact on satisfaction was provided by empathy. Formal sector beneficiaries of the GoHealth Scheme value the staff's competence, timeliness of care, and personalised nature of treatment more than they do on the physicality of health care facilities. The results of this investigation provide empirical support for the SERVQUAL model for use in a formal health insurance program at the state level in northern Nigeria.

5.2 Recommendations

1. **Enhance staff training** – Regular workshops on interpersonal skills, ethical conduct, active listening, and complaint resolution to strengthen assurance and empathy.
2. **Improve responsiveness** – Reduce waiting times, create patient help desks, digitalize complaint tracking, increase frontline staff, and monitor response time indicators.
3. **Conduct regular service quality assessments** – Use beneficiary feedback surveys and mystery patient visits to evaluate assurance, responsiveness, and empathy.
4. **Strengthen communication** – Provide clear information about benefits, procedures, and provider networks through SMS reminders, information boards, and dedicated liaison officers.

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5. **Complementary infrastructure maintenance** – Though not a significant predictor, basic cleanliness, functional equipment, and professional staff appearance remain essential to support overall service delivery.

Suggestions for Further Research

- Use probability sampling across all local government areas in Gombe State to improve generalisability.
- Compare satisfaction between formal and informal sector beneficiaries.
- Conduct qualitative interviews to understand why tangibility is less valued.
- Apply structural equation modelling to test causal pathways.
- Use a longitudinal design to examine whether improvements in empathy and responsiveness lead to sustained enrolment and retention.

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