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Patient Satisfaction and Perception of Healthcare Quality Among National Youth Service Corps Members Under the National Health Insurance Programme in Rivers State, South-South, Nigeria.

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Abstract

Healthcare provision and access are essential for meeting individuals' basic health needs. The Group, Individual and Family Social Health Insurance Programme–NYSC (GIFSHIP-n) was established to provide healthcare services to corps members. Assessing corps members' satisfaction with services under the programme is important for evaluating quality of care, identifying gaps, and guiding improvements. This study assessed corps members' satisfaction with the quality of care accessed through GIFSHIP-n in Rivers State, Nigeria, using a descriptive cross-sectional design and a self-administered online questionnaire (Google Forms). Descriptive statistics, including frequency tables and cross-tabulations were generated to summarise the data. Associations between socio-demographic characteristics and satisfaction were examined using regression analysis. A confidence limit of 95% was used and a p-value of less than 0.05 considered significant. A total of 697 corps members responded to the questionnaire, with a mean age of 25.7 ± 2.3 years. The overall mean satisfaction score was $76.4\% \pm 18.1$. The highest satisfaction level was recorded for doctors' consultation ($83.6\% \pm 14.0$), while the availability of prescribed drugs and waiting time recorded the lowest satisfaction levels: $71.9\% \pm 20.1$ and $60.3\% \pm 22.6$. Despite the high satisfaction levels in some aspects of care, many respondents expressed dissatisfaction with the unavailability of prescribed drugs and long waiting times. Hence, it is necessary to address these service delivery gaps to ensure sustainability, improve impact, and make GIFSHIP-n a model for expanding health insurance coverage across Nigeria.

Keywords: National Youth Service Corps, Health Insurance, GIFSHIP-n, Satisfaction, Nigeria

1.0 Introduction

Access to quality healthcare is not just a necessity, but a fundamental enabler of human development and societal advancement. Healthcare provision and access play a vital role in addressing a critical basic need of individuals, allowing them to pursue higher-level needs and achieve a more fulfilling and self-actualised life.

Adequate healthcare ensures that individuals can address physical and mental health concerns, attend to health challenges, receive timely interventions, respond effectively to medical emergencies, and protect themselves against disease and health-related risks (Behera *et al.*, 2022; Marmot, 2020). Healthcare access is closely tied to broader efforts to promote equity, human capability, and overall well-being (WHO, 2021; Jindal *et al.*, 2023).

Over the last few decades, the National Youth Service Corps (NYSC) scheme, an obligatory one-year programme in Nigeria, wherein young graduates of tertiary institutions serve their fatherland has faced several criticisms due to issues relating to the safety, health, and well-being of serving corps members (Nwachukwu *et al.*, 2023; Maori *et al.*, 2017; Daramola & Awunor, 2023). In a bid to address healthcare provision and access to serving corps members, the Federal Government commenced the Group, Individual and Family Social Health Insurance Programme - NYSC (GIFSHIP-n) in March 2022 (NYSC, 2022).

However, despite anecdotal reports of the programme's effectiveness, evidence from empirical studies is scarce, creating an evidence gap, which undermines the claims about its effectiveness. Hence, the need for a systematic evaluation.

Understanding corps members' satisfaction and perception of the healthcare services provided under the programme is essential for evaluating service delivery, identifying gaps, and implementing the reforms necessary to improve it. This study fills a critical gap in the literature and offers useful insights into the healthcare experiences of this important youth population.

The findings will chart a course for areas of the programme that need to be reviewed and improved, and contribute to broader efforts to enhance health insurance in Nigeria.

This study, therefore, evaluated corps members' satisfaction and perception of the quality of care accessed under GIFSHIP-n in Rivers State, Nigeria.

2.0 Methodology

The study used a cross-sectional design and was carried out among National Youth Service Corps members in Rivers State, South-South Nigeria. The state is divided into 23 Local Government Areas, with Port Harcourt as the capital.

The sample size was determined using Cochran's formula (Bolarinwa, 2020). Assuming a 95% confidence interval, a 5% margin of error, a 57% prevalence from a previous study (Michael *et al.*, 2020), and accounting for a 10% non-response rate, the minimum required sample size was 414 respondents. However, considering the typically low response rates associated with online surveys, the sample size was doubled to 828 corps members to ensure adequate representation and statistical power. The survey was conducted from September 2024 to May 2025, during which a total of 697 responses were received, yielding a response rate of 84.2%.

Respondents were selected using proportionate sampling based on the utilisation records from the healthcare facilities providing services to corps members across the state, to ensure a balanced representation relative to utilisation patterns.

Selected corps members were contacted via WhatsApp using the phone numbers obtained from the utilisation records and invited to participate in the study, with prior institutional permission to

make contact. The contacts were followed up with reminder messages written in a neutral, non-coercive tone to encourage participation.

Data were collected using a pretested, structured, and anonymous online questionnaire (Google Forms) to facilitate data collection across the state.

The questionnaire was designed by the researchers following a thorough review of previous patient satisfaction studies (Daramola *et al.*, 2017; Olumuyiwa *et al.*, 2021, Agede *et al.*, 2023) and drawing on the researchers' expertise. The Google Form was configured to allow only a single submission per respondent to prevent multiple entries.

The questionnaire was pretested among 20 purposively selected corps members close to the completion of the scheme and preparing for their Passing-Out Parade (POP) in Port Harcourt. The feedback, along with the observed average completion time, informed minor revisions to improve clarity, flow, and overall acceptability of the instrument.

For the knowledge scale, each correctly answered question was scored "1" while every wrongly answered or unanswered question was scored "0". Percentage knowledge scores (Total Correct Score/Total Possible Score \times 100) were categorised into poor (0%– 49.9%), average (50.0%– 69.9%), and good (70.0%–100.0%) (Michael *et al.*, 2020).

The dimensions of care evaluated included: Hospital location and accessibility, availability of relevant hospital staff, doctor's consultation, hospital staff attitude, availability of needed services, availability of prescribed drugs, treatment received, and waiting time. Satisfaction was measured using a 5-point Likert scale, with 1 and 5 signifying the minimum and maximum levels of satisfaction: Very dissatisfied = 1, Dissatisfied = 2, Fairly satisfied = 3, Satisfied = 4, and Very satisfied = 5 (Daramola *et al.*, 2017). The scale was transformed into percentage scores: Very dissatisfied = 20%, Dissatisfied = 40%, Fairly satisfied = 60%, Satisfied = 80%, and Very satisfied = 100%, in line with recommended practices for improving clarity in Likert-based analyses, and for analytical purposes, the scores were further categorised into high ($\geq 75\%$), moderate (60–74%), and poor (<60%), following commonly used cut-offs in patient satisfaction studies (Boone & Boone, 2012; Batbaatar *et al.*, 2017; Akinyinka *et al.*, 2019).

Eligible participants were serving corps members in Rivers State who had accessed healthcare services under GIFSHIP-n and provided a valid contact number during health service registration. Corps members who had not utilised healthcare services, declined to provide informed consent, and those with incomplete responses to the survey questionnaire were excluded from the study.

Data analysis was conducted using IBM SPSS Statistics version 23. Spreadsheets, frequency distributions, and cross-tabulations were generated for descriptive analysis. Associations between socio-demographic variables and satisfaction were evaluated using regression analysis, with a p-value of less than 0.05 considered significant.

The study was approved by the University of Port Harcourt Teaching Hospital (UPTH) Ethical Committee. Institutional approval was also obtained from the NYSC Rivers State Secretariat.

The respondents were informed of the purpose of the study and assured of anonymity, confidentiality, and their right to accept, decline participation, or withdraw from the study, without any negative consequences. Participating in the study required informed consent, which had to be completed before respondents could access the questionnaire. No personally identifying information was collected. All data were coded and stored securely in a password-protected electronic format accessible only to the researcher.

3.0 Results

A total of 697 fully filled questionnaires were submitted. The age range of the respondents was 21 to 33 years, with a mean age of 25.7 ± 2.3 years. Nearly half of the respondents, 343 (49.2%), were within the age of 21 to 25 years, while only a few, 17 (2.4%) were above 30 years. The majority were females 476 (68.3%), and single, totaling 644 (92.4%). A significant portion of corps members were serving in the Rivers East senatorial district 544 (78.0%), with 81 (11.6%) in Rivers West, and 72 (10.3%) in Rivers South East. In relation to the duration of service at the time of the survey, 272 (39.0%) had served for more than 9 months, 207 (29.7%) had served for 3 to 6 months, 174 (25.0%) for 7 to 9 months, and 44 (6.3%) for less than 3 months. [Table 1].

All the respondents were aware of the programme. Most corps members, 467 (67.0%), first heard about GIFSHIP-n at the NYSC orientation camp, during the orientation camp lecture, with the main source of information being the NYSC and Health Insurance (NHIA/HMO) officials, 453 (65.0%). Overall, more than half of participants, 376 (53.9%), demonstrated an average level of knowledge, followed by those with a good level of knowledge 267 (38.3%), while the least proportion, 54 (7.7%) of respondents reported a poor level of knowledge. [Table 2]

The mean total satisfaction score was 76.4 ± 18.1 , with a 95% confidence interval of 75.4% - 77.4%. The mean satisfaction scores ranged from 60.3% to 83.6% across the eight areas assessed. The highest mean score was for satisfaction with the doctor's consultation, ($83.6\% \pm 14.0$). This was followed closely by satisfaction with the availability of relevant hospital staff ($80.4\% \pm 17.1$) and hospital location and accessibility ($80.3\% \pm 18.4$). Satisfaction scores with treatment received was $79.1\% \pm 17.2$, availability of needed services, $78.1\% \pm 17.4$, and hospital staff attitude, $77.6\% \pm 18.3$. On the other hand, the availability of prescribed drugs recorded a relatively lower satisfaction level ($71.9\% \pm 20.1$), while waiting time had the lowest satisfaction score, with a mean of $60.3\% \pm 22.6$. [Table 3].

Among the 697 respondents, 325 (46.6%) perceived the programme as very effective and should be sustained, while 349 (50.1%) considered it somewhat effective but requiring improvement. A small proportion viewed the programme as ineffective, requiring total redesign 18 (2.6%), while 5 (0.7%) stated it is very ineffective and should be discontinued [Table 4]

Ordinal logistic regression (Table 5) showed that age, gender, and knowledge significantly influenced satisfaction with GIFSHIP-n services. Respondents aged 21–25 years had 3.88 times higher odds of greater satisfaction compared to those over 30 ($B = 1.355$, $SE = 0.492$, $p = 0.006$, 95% CI: 1.48–10.17), while those aged 26–30 years had 3.71 times higher odds ($B = 1.310$, $SE = 0.490$, $p = 0.007$, 95% CI: 1.42–9.70). Male respondents were more satisfied than females ($B = 0.504$, $SE = 0.179$, $p = 0.005$, OR = 1.66, 95% CI: 1.16–2.35). Knowledge was also a strong predictor: surprisingly, participants with poor or average knowledge had 2.79 ($B = 1.025$, $SE = 0.333$, $p = 0.002$, 95% CI: 1.45–5.42), and 2.35 ($B = 0.855$, $SE = 0.170$, $p < 0.001$, 95% CI: 1.69–3.28) times higher odds of satisfaction, respectively, compared to those with good knowledge. Other factors, including marital status, location, and service duration, were not statistically significant.

Overall, age, gender, and knowledge were the strongest independent predictors of satisfaction.

4.0 Discussion

The mean age of corps members in this study was 25.7 ± 2.3 years, which is consistent with some studies across other regions of Nigeria, where mean ages of corps members ranged from 25.1 to 26.4 years (Michael *et al.*, 2020; Amoko *et al.*, 2021; Emorinken *et al.*, 2022). This is not

unexpected, considering the NYSC age eligibility criteria, which reinforces the generalisability of the age-related health concerns and needs of this group.

The age distribution showed that most corps members are in the emerging adulthood phase of life, a period characterised by life transitions and experiences that may have long-lasting implications on their health (WHO, 2024). Although the general perception is that individuals at this stage of life are often very healthy, it is associated with many health risks, which include but are not limited to: mental health concerns, weight-related problems, reproductive health issues, and increased vulnerability to accidents and injuries (Halloran, 2024; WHO, 2024). In recent times, the emergence of some noncommunicable diseases (NCDs) such as systemic hypertension (HTN) and diabetes mellitus (DM), have also started to increase during this phase of life (Okpebholo *et al.*, 2025; Adetola *et al.*, 2021). Hence, this is a period to establish healthy lifestyles, and institute early detection and interventions that could significantly prevent future complications and improve long-term health (Agede *et al.*, 2025).

The majority of respondents in this study were female (68.3%). This finding is in contrast with earlier studies among corps members by Balami (2015), Amoko *et al.* (2021), and Michael *et al.* (2020), which reported predominantly male respondents, accounting for 63.6%, 73.9%, and 67.0% respectively. A plausible explanation for this difference is the data collection approach, as this study utilised an online survey, while previous studies used physical questionnaires. Additionally, evidence from existing literature suggests that women are generally more inclined than men to participate in online questionnaires and surveys (Nuzzo *et al.*, 2023; Becker, 2022; Otufowora *et al.*, 2021).

Majority of the respondents (78.0%) were serving in the Rivers East senatorial district. This disproportionate distribution may be attributed to Rivers East being home to Port Harcourt, the state capital, and also having a concentration of urban centres, government ministries, departments and agencies, secondary schools, tertiary institutions, corporate organisations, and healthcare facilities. Consequently, the Rivers East zone usually has a higher number of corps member placements compared to the other two senatorial zones.

Over two-thirds (67.0%) of respondents reported becoming aware of the programme during the orientation camp, while less than two-fifths (38.3%) demonstrated good knowledge. This may suggest though the orientation camp serves as an active point of sensitisation, there is a need to ensure the active participation of corps members in the orientation camp sensitisations and sustained health insurance education beyond camp lectures to post-orientation camp period in order to improve corps members knowledge.

The overall mean satisfaction score was 76.4%. Satisfaction was high for doctor consultations, healthcare facility accessibility, and availability of staff, highlighting that people were most satisfied with interpersonal and structural dimensions of care, which aligned with findings from other studies (Oyebade *et al.*, 2022; Nkiruka *et al.*, 2023).

In this study, satisfaction with doctors' consultations recorded the highest level of patient satisfaction. Similar findings have been reported by other researchers, including Olamuyiwa *et al.* (2021) in Port Harcourt, South-South Nigeria, Agede *et al.* (2024) in Ilorin, North-Central Nigeria, and Daramola *et al.* (2018) in Abuja- FCT, Nigeria. The quality of consultation is essential to patient satisfaction, as it is the central activity in patient care. Satisfaction improves when doctors demonstrate clinical competence and establish effective communication with patients (Lee, 2022; Chen *et al.*, 2025).

Hospital accessibility affects how easily patients can get healthcare services or receive timely, fair, and convenient care, which significantly influences patient satisfaction. Factors like a hospital's

location, flexible operating hours, effective referral systems, and easy navigation through the healthcare setting improve accessibility (Mularczyk-Tomczewska *et al.*, 2025; Sachs, 2024). Satisfaction with hospital location and accessibility in this study was high. This is likely because most of the respondents were from the Rivers East senatorial district, where Port Harcourt, the state capital, and the adjoining urban areas are located, with many public and private healthcare facilities.

According to WHO (2019), huge gaps in accessibility to quality care still exist worldwide, with Nigeria bearing its own share, and more than half of people in rural areas lack access to basic healthcare services (Aranmolate, 2025). One of the major issues facing the scheme is the limited number of accredited healthcare facilities across many towns and LGAs in rural areas, forcing corps members to travel long distances to get care (Daramola & Awunor, 2023). This may impact greatly the general health and welfare of corps members, who are posted to rural areas. Therefore, there is a need for the State and Local Governments to take actions to enhance access to quality health services in rural areas.

In this study, satisfaction was lower for drug availability and waiting time, which is consistent with the persistent challenges in the Nigerian health system, where unavailability of prescribed drugs and out-of-stock syndrome (Daramola *et al.*, 2024; Atinge *et al.*, 2024, Olamuyiwa *et al.*, 2021), prolonged queues and long waiting time were the commonest complaints and the main reasons which frequently undermine patient experience (Olamuyiwa *et al.*, 2021; Isaruk *et al.*, 2024). These findings highlight the need for policies and interventions targeted towards strengthening drug supply and availability, reducing waiting times, and improving service efficiency, in order to enhance both the quality of care and patient satisfaction.

Majority of respondents perceived the programme as very effective (46.6%) and deserving of sustenance, while (50.1%) considered it somewhat effective but requiring improvement. A small proportion (3.3%) viewed the programme as ineffective. These findings suggest that the health insurance programme is valued by corps members, but requires improvements in the service quality, which align with trends reported by many studies in Nigeria's health insurance settings, where most respondents rated the scheme as beneficial but also pointed to gaps in service quality, requiring improvements (Olamuyiwa *et al.*, 2021; Akinyemi *et al.*, 2022; Daramola *et al.*, 2017).

The ordinal logistic regression analysis showed that age and gender significantly influenced corps members' satisfaction with GIFSHIP-n services. Younger respondents were more likely to report higher satisfaction compared to those older than 30 years. Males also reported greater satisfaction than females. These findings align with earlier studies, which indicate that younger adults and males often have higher satisfaction with health services, which could be because they have fewer healthcare needs and lower expectations (Adewole *et al.*, 2022; Batbaatar *et al.*, 2017).

Knowledge of GIFSHIP-n also emerged as a significant predictor. Surprisingly, respondents who had poor or average knowledge reported greater satisfaction than those with good knowledge. This reflects the "knowledge-expectation paradox" described in some studies (Roder-DeWan *et al.*, 2019; Batbaatar *et al.*, 2015; Bowling *et al.*, 2013), in which limited knowledge is associated with lower expectations, and a higher likelihood of expressing satisfaction when the services received meet these low expectations.

It is also consistent with the expectancy-disconfirmation theory (EDT), which suggests that people judge satisfaction by comparing service performance with their expectations (Zhang *et al.*, 2022; Serrano *et al.*, 2018). According to EDT, satisfaction is determined by the gap between what was expected and what was received, i.e. if the services received exceeds expectations, patients are satisfied, and if the services fall short of expectations, there is dissatisfaction.

These findings have important practical and policy implications. High satisfaction among respondents with limited knowledge may overestimate actual service quality, which underscores the need for improved health insurance literacy so that enrollees can understand their benefits, recognize gaps, and advocate for improvements. Policymakers and programme implementers should therefore interpret satisfaction metrics carefully and strengthen monitoring and feedback systems to support more accurate evaluation of healthcare programmes.

5.0 Conclusion

Patients' satisfaction is an essential tool for evaluating the quality of care. This study evaluated corps members' perception of healthcare quality, and satisfaction across various domains of care under GIFSHIP-n. Despite the generally high satisfaction levels with many aspects of care among the corps members, many respondents expressed dissatisfaction due to the unavailability of prescribed drugs, and prolonged queues with the attendant long waiting time, which undermine patient experience. Limited access to healthcare services for those in rural areas was also a notable challenge.

Addressing these identified service delivery gaps is crucial towards ensuring sustainability, maximizing impact, and positioning GIFSHIP-n as a model for expanding health insurance coverage across the nation.

6.0 Limitations

The study was limited to Rivers State; which may make the findings difficult to generalise nationally.

Data were collected via an online questionnaire, which might have posed some challenges for corps members in places with limited internet access, especially those in rural areas, leading to selection bias. However, the mobile lifestyle of corps members helped to mitigate this limitation, as their frequent movement between primary assignments, Community Development Service (CDS), social, and NYSC-related activities in urban centres, increased their chances of accessing reliable internet, even when posted in low-connectivity areas.

Furthermore, the questionnaire was designed to be simple and brief, allowing respondents to complete it within a few minutes, to encourage participation and accuracy of responses.

Although data collection took around eight months, which may have introduced the possibility of temporal variation in service experiences, the extended timeframe also strengthens the study by capturing satisfaction levels across different periods. This enhances representativeness and reduces the likelihood that results reflect short-term fluctuations in service delivery.

Despite the limitations, the study fills a critical literature gap and offers useful insights into the healthcare experiences of this important youth population. The findings will guide on areas of the programme that need to be improved, and also contribute to broader efforts to enhance health insurance in Nigeria.

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Table 1: Socio-demographic Characteristics of Respondents

Socio-demographics	Frequency (N=697)	Percentage (%)
Age Group (years)		
21–25	343	49.2
26–30	337	48.4
> 30	17	2.4
Mean age	25.7 ± 2.3	
Gender		
Male	221	31.7
Female	476	68.3
Marital Status		
Single	644	92.4
Married	51	7.3
Others	2	0.3
Location of Primary Assignment		
Rivers East	544	78.0
Rivers West	87	12.5
Rivers South-East	66	9.5
Service Duration		
< 3 months	44	6.3
3 to 6 months	207	29.7
7 to 9 months	174	25.0
> 9 months	272	39.0

Table 2: Respondents' Knowledge on GIFSHIP-n

Variables	Frequency (N=697)	Percentage (%)
Awareness of GIFSHIP-n		
Yes	697	100
No	0	0.0
Time of Awareness		
Before NYSC registration & mobilisation	51	7.3
During NYSC Registration	57	8.2
At the NYSC Orientation Camp	467	67.0
After the NYSC Orientation Camp	122	17.5
Main Source of Information		
Friends	216	31.0
Internet (social media/ NYSC website etc.)	28	4.0
NYSC/Health Insurance Officials	453	65.0
Level of Knowledge		
Poor	54	7.7
Average	376	53.9
Good	267	38.3

Table 3: Respondents' Satisfaction Level

Domains of Care	Mean Satisfaction (%)
Doctor's Consultation	83.6 ± 14.0
Availability of Relevant Hospital staff	80.4 ± 17.1
Hospital location & accessibility	80.3 ± 18.4
Treatment Received	79.1 ± 17.2
Availability of Needed Services	78.1 ± 17.4
Hospital Staff Attitude	77.6 ± 18.3
Availability of Prescribed Drugs	71.9 ± 20.1
Waiting Time	60.3 ± 22.6
Overall Mean Satisfaction	76.4 ± 18.1

Table 4: Respondents' Perception of GIFSHIP-n

Variable	Frequency (N= 697)	Percentage (%)
Perception		
Very effective (should be sustained)	325	46.6
Somewhat effective (requires improvement)	349	50.1
Ineffective (requires redesign)	18	2.6
Very ineffective (should be discontinued)	5	0.7

Table 5: Ordinal Logistic Regression Analysis of Satisfaction by Sociodemographic Factors and Knowledge

Predictor	B	SE	p-value	OR (95% CI)
Age Group				
21–25	1.355	0.492	0.006	3.88 (1.48–10.17)
26–30	1.310	0.490	0.007	3.71 (1.42–9.70)
> 30 (Ref)	0	–	–	–
Gender				
Male	0.504	0.179	0.005	1.66 (1.16–2.35)
Female (Ref)	0	–	–	–
Marital Status				
Single	1.287	1.347	0.339	3.62 (0.26–50.6)
Married	2.717	1.395	0.052	15.1 (0.98–233.1)
Other (Ref)	0	–	–	–
Location of Primary Assignment				
Rivers East	0.235	0.273	0.389	1.27 (0.74–2.16)
Rivers West	0.501	0.344	0.145	1.65 (0.84–3.28)
Rivers South-East (Ref)	0	–	–	–
Service Duration				
< 3 months	0.296	0.363	0.414	1.34 (0.66–2.74)
3 to 6 months	-0.080	0.194	0.682	0.92 (0.63–1.35)
7 to 9 months	-0.310	0.198	0.118	0.73 (0.50–1.08)
> 9 months (Ref)	0	–	–	–
Knowledge				
Poor	1.025	0.333	0.002	2.79 (1.45–5.42)
Average	0.855	0.170	<0.001	2.35 (1.69–3.28)
Good (Ref)	0	–	–	–

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