



Effectiveness of Global Fund C19RM-RSSH Communication Strategies in Strengthening Primary Healthcare Centres in Anambra State, Nigeria

Ifeyinwa Angela Unachukwu^{a*}, Chinwe Elizabeth Uzochukwu^b, Chimezie Patrick Anaso^c

^aDepartment of Mass Communication, Paul University, Awka, Anambra State, Nigeria

^bDepartment of Mass Communication, Nnamdi Azikiwe University, Awka, Anambra State, Nigeria

*Corresponding email: iphieleon@yahoo.com

Abstract

Primary Health Centres (PHCs) are vital to achieving universal health coverage in Nigeria, yet their operations remain constrained by infrastructural deficits, resource shortages and weak community engagement. This study evaluated the effectiveness of communication strategies deployed under the Global Fund COVID-19 Response Mechanism–Resilient and Sustainable Systems for Health (C19RM-RSSH) project in strengthening selected PHCs across Anambra State, Nigeria. Anchored in Rogers’ Diffusion of Innovations Theory, the study adopted a mixed-methods research design. Quantitative data were collected through structured questionnaires administered to 376 randomly sampled adults across five local government areas, yielding a 94.0% response rate, while qualitative data comprised 13 in-depth interviews with key stakeholders and direct facility observations. Quantitative data were analysed using descriptive statistics, while qualitative data were subjected to descriptive content analysis. Findings revealed that approximately 66% of respondents perceived improvements in facility staffing, drug availability and physical infrastructure. Furthermore, the communication strategies fostered strong community ownership and participation, with positive consensus ranging from 79.5% to 84.3%, driven by institutionalised leadership structures such as Ward Development Committees, community-based organisations and traditional leaders acting as trusted change agents. Public satisfaction with healthcare quality was similarly high, ranging from 64.1% to 82.7%, particularly in relation to maternal and child care, waiting times and staff behaviour. The study concludes that multi-channel health communication serves as an important catalyst for community mobilisation and service uptake. However, communication alone cannot fully overcome systemic supply-side deficits. Strategic health communication should therefore be institutionalised alongside sustained investments in clinical infrastructure, staffing and operational logistics.

Keywords: C19RM-RSSH, communication strategies, community ownership, healthcare quality, primary healthcare centres

Introduction

Primary Health Centres (PHCs) remain a critical foundation of healthcare delivery because they provide communities with accessible, affordable and essential preventive, promotive and curative services (Alnaser, 2025). The Alma-Ata Declaration positioned primary healthcare as central to achieving universal health coverage and emphasised community participation, health education and locally responsive healthcare delivery (World Health Organization [WHO], 1978). In Nigeria, PHCs were similarly established as the foundation of the national health system, with responsibility for providing essential healthcare services, particularly to underserved populations (Yisa et al., 2025). However, the capacity of PHCs to fulfil this mandate has continued to be constrained by inadequate funding, poor infrastructure, shortages of skilled personnel, weak governance and limited community participation (Onwujekwe et al., 2020). These persistent weaknesses matter because the effectiveness and sustainability of grassroots healthcare depend not



only on the availability of facilities and personnel but also on the ability of health systems to communicate effectively with the communities they serve.

Communication is particularly important within this context because access to healthcare services is partly dependent on whether communities are adequately informed about available services, understand health messages and participate in decisions concerning their health facilities (Khan, 2022). Inadequate communication can limit community engagement and affect perceptions of PHC ownership and functionality (Abimbola et al., 2016). Thus, in health systems such as PHCs, communication serves not merely as a means of transmitting information but also as a mechanism for strengthening public engagement, transparency and continuity of healthcare delivery (World Health Organization, 2019).

The significance of communication became particularly evident during the COVID-19 pandemic, when misinformation, fear and communication gaps affected health-seeking behaviour and the utilisation of healthcare services (Brown et al., 2022). In response to the wider weaknesses exposed by the pandemic, the Global Fund expanded its Resilient and Sustainable Systems for Health (RSSH) interventions to strengthen health systems and pandemic preparedness, including support for infrastructure, training, service delivery and communication interventions in Nigeria (The Global Fund, 2022). Community-based organisations, Ward Development Committees and other civil-society actors were incorporated into these interventions to ensure that communication and community engagement were connected to local realities (The Global Fund, 2022).

In Anambra State, the COVID-19 Response Mechanism–Resilient and Sustainable Systems for Health (C19RM-RSSH) intervention was implemented through the National Agency for the Control of AIDS (NACA), with funding from the Global Fund and coordination by the Association of Civil Society Organisations in Malaria, Immunisation and Nutrition (ACOMIN) (THISDAYLIVE, 2022). The implementation framework emphasised community ownership, inclusive communication and participatory monitoring as mechanisms for strengthening PHC governance and service delivery. Community-Led Monitoring Teams (CLMTs), comprising Community-Based Organisation (CBO) representatives, Ward Development Committee members and community representatives, were used to promote grassroots participation and monitoring across designated PHCs (WHO, 2023). The project also worked through CBOs to mobilise community leaders, churches, markets and other stakeholders in support of PHC management and community health outcomes (WHO, 2023).

Despite these interventions, the effectiveness of communication within donor-supported health-system-strengthening programmes cannot be assumed from the existence of communication activities alone. Previous studies (Ihekweazu et al., 2022; Akande et al., 2023) have documented the importance of health communication, community mobilisation, culturally appropriate messaging and stakeholder engagement in public-health interventions, but much of this scholarship has examined these issues broadly or in relation to COVID-19 risk communication and behavioural compliance. Similarly, studies by Ezenwaka et al. (2025), Ihekweazu et al. (2022) and Ukonu and Mbamalu (2021) have focused substantially on policy coordination, surveillance and behavioural compliance, with less attention to how communication strategies within externally funded health-system-strengthening programmes are implemented and experienced at the grassroots level. This suggests limited empirical integration of communication strategies, community participation and PHC outcomes within a specific donor-supported health-system-strengthening intervention. This matters because, without such evidence, it remains difficult to



determine which communication practices are useful for strengthening grassroots healthcare and which implementation gaps require attention. Against this background, the present study evaluates the effectiveness of communication strategies deployed under the Global Fund C19RM-RSSH project in strengthening selected PHCs in Anambra State.

Statement of the problem

Primary Health Centres (PHCs) are expected to provide accessible, functional and quality healthcare services, supported by adequate infrastructure, effective governance, active community participation and sustained utilisation. However, many PHCs in Nigeria continue to face infrastructural deficiencies, inadequate staffing, resource constraints and low utilisation, which can undermine service delivery and weaken public confidence in primary healthcare services. In response to these challenges, the Global Fund COVID-19 Response Mechanism–Resilient and Sustainable Systems for Health (C19RM-RSSH) project incorporated communication strategies intended to strengthen awareness, community participation, PHC governance and service delivery. However, the extent to which these communication strategies have contributed to community ownership, service quality, infrastructural development and sustained utilisation remains insufficiently established.

Existing studies have examined health communication, pandemic response and primary healthcare development, largely as distinct areas of inquiry. Consequently, limited empirical evidence exists on how communication strategies embedded within Global Fund-supported health-system-strengthening interventions operate at community and PHC levels, particularly in Anambra State. This gap is important because, without context-specific evidence, policymakers and implementing organisations have limited empirical basis for determining how communication can be effectively integrated into PHC-strengthening interventions and which communication practices may require improvement. Therefore, this study evaluates the communication strategies deployed under the Global Fund C19RM-RSSH project and examines their contribution to infrastructural development, community ownership and the quality of healthcare services in selected PHCs in Anambra State.

Research Objectives

The study is guided by the following objectives:

1. To assess the contribution of the Global Fund C19RM-RSSH communication strategies to infrastructural development of selected PHCs
2. To examine the influence of the communication strategies on community ownership and participation in PHC activities in Anambra State;
3. To assess the perceived influence of the communication strategies on the quality of healthcare services provided by selected PHCs in Anambra State,

Literature Review

Global Fund C19RM-RSSH and Communication Strategies

The Global Fund COVID-19 Response Mechanism–Resilient and Sustainable Systems for Health (C19RM-RSSH) initiative was established to support countries in responding to COVID-19 while strengthening health and community systems against future health emergencies. The mechanism included interventions such as risk communication, community-led response systems, laboratory and supply-chain strengthening, and other measures intended to sustain essential health services and reinforce health-system resilience (The Global Fund, 2020, 2022). In Nigeria, C19RM investments supported health-system capacity through areas including laboratory expansion,



health-worker training, risk communication and community-level interventions. The Global Fund also reported the development of an integrated rumours-management strategy and the training of state risk communication officers as components of Nigeria's COVID-19 response (The Global Fund, 2021). In Nigeria, the C19RM award was made to the National Agency for the Control of AIDS (NACA), which served as a Principal Recipient of the Global Fund grant (The Global Fund, 2021, 2022).

Within the C19RM-RSSH framework, communication strategies in this study therefore refer to the planned and coordinated approaches through which health information was disseminated, communities were mobilised, stakeholders were engaged and feedback was facilitated between health facilities and their surrounding communities. The communication approaches examined include focus group discussions, key informant interviews, client exit interviews, advocacy visits, community-led monitoring, radio and news programmes, text messaging, community meetings, health education, interpersonal communication and digital communication. These approaches were intended to improve awareness of available health services, address misinformation, encourage community participation and facilitate interaction between communities and health-service providers. Thus, communication within the C19RM-RSSH context extends beyond one-way information transmission to encompass dialogue, mobilisation, advocacy, monitoring and feedback through which community members can contribute to identifying health-service needs and engaging with PHC improvement processes.

Review of Empirical Studies

The relationship between health and communication has attracted considerable scholarly attention, particularly in relation to health-service utilisation, community engagement and behavioural response. For instance, Okonofua et al. (2022) found that a multifaceted, community-led intervention comprising community education, advocacy, rapid SMS communication, a community health fund, emergency transport arrangements, health-worker retraining and basic equipment significantly increased the utilisation of primary healthcare services among rural women in Edo State, Nigeria. Similarly, Osanyin et al. (2022) reported that a mobile-phone voice-messaging intervention increased antenatal-care utilisation among pregnant women attending primary healthcare centres in Lagos, Nigeria. These findings suggest that communication may be more effective when integrated with community-based and service-support interventions rather than implemented solely as one-way information dissemination. The relevance of communication is also evident during health emergencies. Ezeah et al. (2020) found that interpersonal communication improved awareness and knowledge of COVID-19 among rural communities in Eastern Nigeria, while source credibility moderated its relationship with reported COVID-19-related health behaviour. These studies indicate that the value of health communication extends beyond message exposure to include the credibility of communicators, accessibility of channels and the social context in which health information is received and acted upon. However, much of this evidence focuses on awareness, behavioural response or service utilisation, with less attention to how communication is embedded within broader health-system-strengthening interventions and how such communication relates to the functionality of PHCs.

A related body of evidence highlights the role of community participation and locally embedded actors in strengthening primary healthcare. Adetunji et al. (2025), for example, documented how Ward Development Committees contributed to community ownership of local health systems by supporting health-related decision-making, establishing health structures and



fostering shared responsibility for their maintenance. Similarly, Mbachu et al. (2022), in a realist evaluation of a maternal and child health programme in Anambra State, found that village health workers served as important links between communities and formal health services. Their performance in mobilising women to utilise PHC services was influenced by community relationships and support, alongside programme factors such as training, supervision and material incentives. These findings underscore the importance of trusted and locally embedded intermediaries in generating demand for health services and connecting communities with PHC facilities.

Evidence from community health committees further demonstrates that participation can operate through communication, mobilisation, advocacy and accountability. Abimbola et al. (2016), based on an analysis of 581 meeting minutes from 129 community health committees across four Nigerian states, found that the committees functioned through meetings, community outreach, lobbying government, augmenting government support and, in some cases, taking responsibility for aspects of local healthcare. However, the study also identified power asymmetries that limited the committees' capacity to influence health-facility performance and government provision of services. This suggests that community participation does not automatically translate into meaningful influence; its effectiveness depends partly on the authority, legitimacy, resources and institutional relationships available to community structures. Within Anambra State, this evidence is particularly relevant because Mbachu et al. (2022) demonstrated that community relationships and support were important contextual factors in the performance of village health workers mobilising pregnant women towards PHC services. More broadly, the evidence indicates that community engagement can strengthen the connection between PHC facilities and their surrounding populations, but the nature and depth of that engagement matter. Where communities are merely mobilised to support predetermined activities, participation may remain limited; where they are able to communicate needs, provide feedback, influence decisions and engage with service providers, communication becomes part of a broader participatory governance process.

Prior studies have also examined stakeholder engagement, accountability and community involvement in PHC governance. Abimbola et al. (2016) showed that community health committees could contribute to both the demand and supply sides of primary healthcare through community mobilisation and engagement with government and health providers. Subsequent evidence has further shown that community health committees may become more oriented towards self-reliance and resource mobilisation than towards demanding accountability from government, thereby creating a tension between community contribution and institutional responsibility (Abimbola et al., 2022). Thus, effective community engagement requires more than the transmission of information; it also requires mechanisms through which communities can articulate needs, provide feedback, monitor services, engage decision-makers and participate meaningfully in health-system improvement.

Although the above studies collectively establish important relationships among communication, community engagement, service utilisation and PHC governance, they largely examine these dimensions separately or within interventions with objectives different from the Global Fund C19RM-RSSH programme. Therefore, there remains limited empirical evidence integrating communication strategies, community participation, participatory monitoring, PHC service outcomes and donor-supported health-system strengthening within a single intervention



context. The present study addresses this gap by examining how communication strategies implemented under the Global Fund C19RM-RSSH project relate to infrastructural development, community ownership, quality of healthcare services, PHC utilisation and the implementation of government PHC programmes in selected PHCs in Anambra State.

Theoretical Framework

This study is anchored on the Diffusion of Innovations Theory, developed by Everett M. Rogers and first published in 1962 (Rogers, 2003). The theory explains how an innovation is communicated through particular channels over time among members of a social system and how individuals or groups move from knowledge and persuasion to adoption, implementation and confirmation (Rogers, 2003). The theory identifies four major elements of diffusion: the innovation, communication channels, time and the social system. It further proposes five attributes that influence adoption: relative advantage, compatibility, complexity, trialability and observability (Rogers, 2003). The theory is relevant to this study because the Global Fund C19RM-RSSH intervention introduced and promoted new or improved approaches to PHC development.

Communication strategies such as community meetings, advocacy visits, radio programmes, interpersonal communication, text messages and community-led monitoring provided channels through which information about the intervention and PHC services was disseminated. The involvement of Community-Based Organisations, Ward Development Committees, community leaders and other stakeholders also reflects the theory's emphasis on the social system and influential actors in facilitating the acceptance and institutionalisation of innovations. Specifically, the theory in this study provides a framework to explain how communication strategies facilitated the awareness, acceptance and participation of communities in C19RM-RSSH activities and how these processes were associated with community ownership, infrastructural development, quality of PHC services, utilisation of PHCs and support for government PHC programmes.

Research Methodology

Research Design

The study adopted a mixed-methods research design, combining quantitative and qualitative approaches. The quantitative component involved a structured questionnaire administered to eligible community members and PHC users, while the qualitative component comprised in-depth interviews (IDIs) with key stakeholders and direct observations of selected PHC facilities.

Population of the Study

The study population comprised adults aged 18 years and above who had used PHC services or had been exposed to C19RM-RSSH communication activities in the selected communities. The projected population of the five study communities was 314,984, comprising Nanka (64,683), Abagana (24,540), Nawfia (15,939), Ebenebe (25,566) and Onitsha (Inland Town and Woliwo) (184,256).

Sample Size and Sampling Technique

Using the Taro Yamane formula at a 5% margin of error, a sample size of 400 respondents was obtained from the population of 314,984. The sample was proportionately allocated to the selected communities according to their population sizes: Nanka (82), Abagana (31), Nawfia (20), Ebenebe (33) and Onitsha (234). A multistage sampling procedure was employed, whereby selection started from LGAs (Awka North, Njikoka, Onitsha North and Orumba North) to



communities (Abagana, Ebenebe, Nawfia, Nanka and Onitsha), to eight RSSH-supported PHCs within the selected communities, and then to the respondents using different approaches. For the qualitative component, 13 key informants comprising PHC personnel, Ward Development Committee members, community leaders and Community-Based Organisation staff were purposively selected based on their direct knowledge or involvement in the intervention.

Method of Data Analysis

Quantitative data were analysed using frequencies, percentages, means and standard deviations, while the qualitative data from the IDIs and observations were analysed using the Descriptive Qualitative Content Analysis technique to complement the quantitative data.

Data Presentation

Table. *Demographic Characteristics of Respondents (N = 376)*

Variable	Response Category	n	%
Gender	Male	162	43.1
	Female	214	56.9
Age	18–27 years	63	16.8
	28–37 years	79	21.0
	38–47 years	161	42.8
	48–57 years	58	15.4
	58 years and above	15	4.0
Marital status	Single	116	30.9
	Married	204	54.3
	Divorced	36	9.6
	Widowed	20	5.3
Educational qualification	No formal education	15	4.0
	First School Leaving Certificate	63	16.8
	SSCE/equivalent	74	19.7
	OND/NCE/Pre-degree Diploma	35	9.3
	First Degree/HND	137	36.4
Occupation	Postgraduate	52	13.8
	Student	38	10.1
	Employed	145	38.6
	Self-employed	162	43.1
	Unemployed	19	5.1
Town of residence	Retired	12	3.2
	Nawfia	18	4.8
	Nanka	77	20.5
	Enugwu-Nanka	99	26.3
	Nkpor	43	11.4
LGA of residence	Fegge	44	11.7
	Woliwo	35	9.3
	Awka North	50	13.3
	Njikoka	34	9.0
	Onitsha North	159	42.3
	Orumba North	133	35.4

Note. Percentages are based on 376 valid responses. The questionnaire response rate was 376 valid questionnaires out of 400 distributed, representing 94.0%.

The demographic distribution shows that the 376 valid respondents comprised more females (56.9%) than males (43.1%), indicating relatively stronger female representation in the study sample. In terms of age, respondents were distributed across the adult age categories, with

the 38–47-year group constituting the largest proportion (42.8%), followed by those aged 28–37 years (21.0%), suggesting substantial representation of respondents within the economically active age range. The marital-status distribution was dominated by married respondents (54.3%), while 30.9% were single, indicating a sample comprising predominantly adults with established family and social responsibilities. Educationally, 60.2% of respondents possessed at least a first degree/HND or postgraduate qualification, while only 4.0% had no formal education, suggesting a generally literate sample capable of engaging with the study instrument. Occupationally, self-employed respondents constituted the largest group (43.1%), followed by employed respondents (38.6%), reflecting considerable representation of economically active participants. Geographically, Onitsha North (42.3%) and Orumba North (35.4%) accounted for the largest proportions of respondents.

Research Objective 1.

Table 2. Respondents' Perceptions of C19RM-RSSH Communication and PHC Infrastructure and Service Strengthening ($N = 376$)

Indicator	Response	n	%
Staffing and maintenance of PHCs	Strongly disagree	25	6.6
	Disagree	38	10.0
	Neutral	72	19.1
	Agree	148	39.4
	Strongly agree	98	26.1
Availability of drugs and medical supplies	Strongly disagree	20	5.3
	Disagree	40	10.6
	Neutral	68	18.1
	Agree	148	39.4
	Strongly agree	100	26.6
Perceived improvement in quality of healthcare	Strongly disagree	18	4.8
	Disagree	42	11.2
	Neutral	65	17.3
	Agree	153	40.7
	Strongly agree	98	26.1

The table presents survey responses from 376 individuals regarding their perceptions of how C19RM-RSSH communication interventions affected Primary Health Centre (PHC) operations. Across three specific areas: staffing and maintenance, availability of drugs and medical supplies, and overall healthcare quality roughly 66% of respondents agreed or strongly agreed that improvements occurred, about 17–19% were neutral, and approximately 16% disagreed or strongly disagreed. The implication is that while communication campaigns succeeded in building strong community awareness and fostering a positive public perception of PHC improvements, public perception alone does not verify actual operational progress. Without cross-referencing these opinions with concrete administrative data (such as drug inventory logs or staff attendance records), the findings show high community satisfaction but cannot confirm whether physical healthcare delivery objectively improved or whether communication campaigns directly caused these gains.

The qualitative evidence reinforces the quantitative findings by detailing the operational mechanisms behind the positive community perceptions. Key qualitative respondents (such as R1–R7, R9, R11–R13, and RQ4) consistently highlighted that Ward Development Committees (WDCs), Community-Based Organizations (CBOs), and traditional leaders played a critical role



as active mobilization channels and collaborative partners with Primary Health Centre (PHC) personnel. This grassroots engagement directly explains *why* around 66% of survey respondents perceived notable gains in staffing, drug availability, and overall service quality: local leadership and community structures effectively bridged the gap between health facilities and residents, driving participation, trust, and a sense of shared ownership. However, while these qualitative insights confirm that structured local communication successfully built strong social support and community alignment, they still reflect relational engagement rather than clinical metrics, meaning objective administrative records remain necessary to verify if actual physical healthcare standards improved alongside these heightened community perceptions.

Table 3. *Respondents' Perceptions of Communication Strategies, Community Ownership and Participation in PHC Activities*

Indicator	Response	n	%
Attendance at community meetings/awareness sessions	Strongly Disagree	15	4.0
	Disagree	23	6.1
	Neutral	39	10.4
	Agree	162	43.1
	Strongly Agree	137	36.4
RSSH project as a driver of community support for health programmes	Strongly Disagree	9	2.4
	Disagree	21	5.6
	Neutral	29	7.7
	Agree	174	46.3
	Strongly Agree	143	38.0
Involvement of community leaders in RSSH activities	Strongly Disagree	13	3.5
	Disagree	19	5.0
	Neutral	34	9.0
	Agree	168	44.7
	Strongly Agree	142	37.8
Community ownership towards PHC development	Strongly Disagree	13	3.5
	Disagree	19	5.0
	Neutral	34	9.0
	Agree	168	44.7
	Strongly Agree	142	37.8
Strengthened partnership between PHCs and communities	Strongly Disagree	12	3.2
	Disagree	21	5.6
	Neutral	32	8.5
	Agree	170	45.2
	Strongly Agree	141	37.5

The table shows public perception across five key indicators of community engagement under the RSSH project: session attendance, project-driven support, leader involvement, community ownership, and PHC-community partnerships. Overwhelmingly, respondents held favorable views, with positive responses (Agree and Strongly Agree combined) ranging from 79.5% for awareness session attendance to 84.3% for community support, while neutral responses remained under 11% and negative responses (Disagree and Strongly Disagree combined) stayed below 10.1% across all metrics. The strong consensus (averaging above 80% positive sentiment) implies that the communication strategies successfully stimulated civic engagement, secured local leadership buy-in, and fostered a strong sense of shared responsibility for primary healthcare facilities. However, because these metrics gauge self-reported attitudes rather than verifiable participation records (such as signed meeting rosters or documented co-funding contributions), the



data demonstrates high public goodwill and perception of strong alignment, but cannot empirically verify the physical level of active, sustained community participation.

The qualitative findings directly corroborate and explain the high positive survey ratings (79.5%–84.3%) observed across all indicators of Objective Two by outlining the exact structural drivers of this engagement. Key qualitative informants (R1, R2, R4–R7, R9, R11–R13, and RQ4) highlighted that established grassroots entities specifically Ward Development Committees (WDCs), Community-Based Organizations (CBOs), and traditional leaders served as essential intermediaries for disseminating health messages and co-planning facility initiatives. This structural collaboration clarifies why overwhelming majorities of surveyed residents reported strong community ownership, leader involvement, and facility partnerships: institutionalizing local leadership creates active communication feedback loops that convert passive awareness into civic buy-in.

Table 4. *Respondents' Perceptions of C19RM-RSSH Communication Strategies and Quality of Healthcare Services*

Indicator	Response	N	%
Perceived improvement in quality of healthcare services	Strongly Disagree	18	4.8
	Disagree	42	11.2
	Neutral	65	17.3
	Agree	153	40.7
	Strongly Agree	98	26.1
Staffing and maintenance of PHCs	Strongly Disagree	25	6.6
	Disagree	38	10.1
	Neutral	72	19.1
	Agree	143	38.0
	Strongly Agree	98	26.1
Availability of drugs and medical supplies	Strongly Disagree	20	5.3
	Disagree	40	10.6
	Neutral	68	18.1
	Agree	146	38.8
	Strongly Agree	102	27.1
Satisfaction with PHC services	Very Dissatisfied	12	3.2
	Dissatisfied	25	6.6
	Neutral	40	10.6
	Satisfied	180	47.9
	Very Satisfied	119	31.6
Satisfaction with waiting time	Very Dissatisfied	15	4.0
	Dissatisfied	28	7.4
	Neutral	41	10.9
	Satisfied	172	45.7
	Very Satisfied	120	31.9
Satisfaction with staff behaviour and attitude	Very Dissatisfied	8	2.1
	Dissatisfied	24	6.4
	Neutral	34	9.0
	Satisfied	184	48.9
	Very Satisfied	126	33.5
Availability of maternal and child healthcare services	Very Dissatisfied	10	2.7
	Dissatisfied	17	4.5
	Neutral	38	10.1
	Satisfied	190	50.5
	Very Satisfied	121	32.2



The table presents distributional survey data measuring public perceptions across seven indicators of healthcare quality and service delivery under the C19RM-RSSH project. Overall approval is high, with positive sentiments (agree/satisfied) ranging from 64.1% for PHC staffing and maintenance to 82.7% for maternal and child healthcare services, while neutral responses average 12–19% and negative perceptions (disagree/dissatisfied) remain below 17% across all dimensions. The data implies strong community satisfaction and a highly favorable public perception of primary healthcare delivery, particularly in specialized services like maternal and child care, waiting times, and staff behavior. However, because these figures reflect subjective patient impressions rather than objective clinical evaluations, the findings demonstrate high public goodwill but cannot confirm whether clinical care standards actually improved or whether communication strategies directly enhanced operational efficiency.

The qualitative findings and observational data substantiate and contextualize the high survey satisfaction rates (64.1%–82.7%) observed in Objective Three by explaining how communication directly influenced patient behavior and service delivery. Key qualitative informants (R1–R3, R7, R9) confirmed that C19RM-RSSH communication increased service awareness (76.9%), built community trust (61.5%), and boosted facility patronage (61.5%), while observational checklists (RQ3) verified that six of the seven assessed PHCs were physically functional, hygienic, and staffed for service delivery. Crucially, this qualitative-observational evidence bridges the gap between public perception and actual healthcare delivery, proving that communication campaigns did not merely generate positive sentiment, but actively improved patient-staff interactions and increased facility utilization. However, feedback from respondents R2, R4, and R8 regarding inconsistent sensitization, material shortages, and facility constraints aligns with the 16–19% of survey respondents who expressed neutral or negative views, highlighting that persistent supply-side limitations continue to restrict optimal service quality across all PHCs.

Discussion of Findings

The first objective was meant to assess the contribution of the Global Fund C19RM-RSSH communication strategies to infrastructural development of selected PHCs. Result from the quantitative survey data revealed that roughly 66% of respondents perceived improvements in staffing, drug availability, and overall healthcare quality under the C19RM-RSSH intervention, a positive sentiment qualitatively attributed to effective community mobilization through local leaders, Ward Development Committees, and community-based organizations. This implies that strategic health communication acts as a vital structural catalyst, converting physical project investments into recognized community gains by keeping residents informed about service upgrades. This finding implies that health communication acts as a vital structural catalyst, converting physical project investments into recognized community gains by keeping residents informed about service upgrades. Empirically, these results align with Okonofua et al. (2022) as well as Osanyin et al. (2022), who demonstrated that multi-channel health campaigns enhance primary healthcare visibility and service uptake. However, these findings contrast studies like Adebayo et al. (2017) and Abah et al. (2023), which argue that health communication campaigns in Nigeria often mask persistent structural failures and chronic supply shortages, suggesting that high perceived approval may reflect public courtesy bias or low baseline expectations rather than objective, physical infrastructure development. Theoretical support for this outcome is anchored in Rogers' Diffusion of Innovations Theory through the concepts of relative advantage and



observability, as active communication by local opinion leaders makes project benefits visible across the social system; however, the persistence of objective supply deficits highlights the theory's boundary condition showing that perceived innovation visibility cannot permanently substitute for underlying material reality.

Secondly, the study examined the influence of the communication strategies on community ownership and participation in PHC activities in Anambra State. The quantitative data demonstrated strong community engagement and facility ownership, which qualitative evidence confirmed was driven by institutionalized leadership structures acting as trusted intermediaries to mobilize residents and foster collaborative partnerships. This finding implies that effective health communication must establish participatory governance structures where community members feel directly invested in facility management rather than remaining passive recipients of information. This pattern is consistent with evidence from Okechukwu et al. (2016), Oyo-Ita et al. (2018), Karuga et al. (2022), and Mbaegbu et al. (2025), which indicates that embedding PHC governance and implementation within established community structures can facilitate local participation, representation, resource mobilisation and community ownership.

. In contrast, a prominent body of public health governance literature (Karuga et al. (2022; Masefield et al. 2021) contradicts this optimistic assessment, contending that community participation in donor-funded African health programs is frequently tokenistic, top-down, and prone to "participation fatigue" or elite capture once active funding cycles conclude. From a theoretical perspective, while the findings align with the social system and interpersonal communication channels dimensions of the Diffusion of Innovations Theory demonstrating how trusted change agents legitimize new practices within local networks. However, literature (Karuga et al. 2022; Abimbola et al. 2022) cautions that without decentralized financial control and true decision-making power, communicated ownership risks remaining symbolic rather than structurally sustained.

Furthermore, the study assessed the perceived influence of the communication strategies on the quality of healthcare services provided by selected PHCs in Anambra State. The survey results showed widespread satisfaction with healthcare quality, supported by qualitative and observational evidence confirming functional facilities, heightened awareness, increased trust, and boosted patronage, though persistent logistical and infrastructural constraints explained the remaining neutral and negative public responses. The core implication is that while targeted communication may enhance access to health information, trust and engagement with health services, information alone cannot fully overcome systemic supply-side constraints such as inadequate medicines, equipment and health-worker capacity. This interpretation is consistent with Ezeah et al. (2020), who found that interpersonal communication improved COVID-19 awareness and knowledge among rural communities in Eastern Nigeria, with source credibility moderating its relationship with reported health behaviour. However, evidence from Nigerian primary healthcare settings demonstrates that communication and demand-side interventions operate within broader structural constraints. Onwujekwe et al. (2020) identified substantial gaps in essential medicines, equipment, infrastructure and staff capacity across public PHC facilities in Enugu State, while Ogu et al. (2023) found in Anambra State that poor facility conditions, inadequate equipment, lack of trained staff, inadequate referral arrangements and other supply-side deficiencies delayed the provision and utilisation of maternal and child health services. Thus,



positive perceptions of communication should not be interpreted as evidence that communication alone has resolved underlying health-system capacity constraints.

On the other hand, these positive satisfaction scores directly contradict some studies (Ntoimo et al., 2019; Ajayi, 2019) which consistently documents deep public dissatisfaction with public PHCs due to prolonged waiting times, abusive staff attitudes, and frequent out-of-pocket expenses. Theoretically, this finding reflects the tension between compatibility and complexity in the Diffusion of Innovations Theory: while effective communication aligns health services with community expectations (compatibility), real operational bottlenecks introduce structural friction (complexity) that restricts total satisfaction across the population.

Conclusion

This study demonstrates that the Global Fund C19RM-RSSH communication strategies played a pivotal role in strengthening primary healthcare delivery across selected communities in Anambra State by fostering positive public perceptions of facility infrastructure, driving robust community participation, and elevating user satisfaction with service quality. By leveraging trusted local intermediaries such as Ward Development Committees, Community-Based Organizations, and traditional leaders; the intervention successfully bridged the gap between health facilities and the public, translating targeted health messaging into heightened service awareness, increased trust, and improved facility patronage. However, while the study establishes that strategic, multi-channel communication serves as an indispensable catalyst for social mobilization and civic ownership, it highlights critical supply-side limitations, proving that information campaigns alone cannot fully compensate for underlying operational bottlenecks such as drug stockouts and infrastructural deficits. Ultimately, for donor-funded health system strengthening initiatives to achieve sustainable impact, communication strategies must be permanently institutionalized alongside direct, long-term investments in physical infrastructure, clinical staffing, and accountability mechanisms.

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AI Use Disclosure:

The following AI tools were used: Perplexity, Google AI and ChatGPT. Perplexity and Google AI and ChatGPT were used to search for literature and ChatGPT was used to design the questionnaire, proofread, edit the language and make the text more coherent and well-structured. The researchers critically reviewed and edited all outputs generated by the AI tools and take full responsibility for the accuracy, originality, integrity and final content of this thesis.
