Original Article

Stakeholders' Perspectives on Internal Accountability Within a Sub-National Immunization Program: A Qualitative Study in Enugu State, South-East Nigeria

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Abstract

Background: Weak accountability hinders the effectiveness of routine immunization (RI) systems in low- and middle-income countries, yet studies on accountability of immunization programs are scarce. **Aim:** The study explored stakeholders' perspectives on the functioning of internal accountability within the National Program on Immunization in Enugu State, southeast Nigeria. **Subjects and Methods:** We used semi-structured in-depth interviews to collect data from RI officials at state government, local government, and health facility levels (n = 35) in Enugu State between June and July 2021. We adopted maximum variation sampling to purposively select individuals with roles in immunization. The interview guide was developed based on an accountability framework with three dimensions—the axes of power, ability, and justice. Data were analyzed thematically using NVivo software (version 11). The major themes were role clarity, performance standards, supervision, data use, human resources, funding, motivation, sanctions, political influence, and community engagement. **Results:** Performance targets for immunization coverage and reporting timeline were not always met due to multiple accountability failures. Weaknesses in the formal rules that distribute roles among the immunization workforce comprise a lack of deployment letters, unavailability of job descriptions, and inadequate staff orientation. Local officials have a narrow decision space regarding staff posting, transfer, and discipline. Performance accountability was constrained by staff shortages, uneven staff distribution, absenteeism, infrequent supervision, weak data monitoring system, and underfunding. Despite being motivated by job recognition and accomplishments, low motivation from an insecure working environment and lack of financial incentives undermined the constructive agency of service delivery actors. The sanctions framework exists but is weakly enforced due to fear of victimization. Political commitment to the immunization program was low. Yet, political decision-makers interfered with staff recruitment, distribution, and discipline. Community engagement improved resource availability through paid volunteer health workers and maintenance of facilities. However, health facility committees were poorly resourced, non-functional, and lacked the power

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to sanction erring health workers. **Conclusions:** Immunization service delivery actors can be held accountable for program performance when there are sufficient formal instruments that provide roles and responsibilities, needed resources, motivated and supervised staff, an effective sanctions framework, genuine political participation, and strong community engagement.

Keywords: *Accountability, accountability framework, immunization program, Nigeria*

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Introduction

Despite the crucial role of routine immunization (RI) in reaching the health and poverty-related Sustainable Development Goals, global immunization-related targets have not been met in sub-Saharan Africa.[1] Weak accountability has been recognized as a significant barrier to the performance of RI systems and high immunization coverage in low-resource settings.[2] Accountability involves holding decision-makers and providers answerable and responsible for their actions and decisions and health systems outcomes.[3] Accountability within immunization program entails that decision-makers, program managers, and providers need to be accountable for their part in the immunization program, and data are transparently reported to the government, communities, and civil society for joint monitoring.[4,5] Hence, the Global Vaccine Action Plan (GVAP) identifies accountability as a key strategy to achieve an effective and strong immunization program.[6]

In Nigeria, accountability is one of the three implementation strategies for the National Routine Immunization Strategic Plan.[7,8] Similarly, Nigeria's accountability framework for RI defines roles and responsibilities; timelines, monitoring, and reporting structures; and rewards and sanctions to enforce these responsibilities; as well as creates a dashboard for monitoring and feedback on key performance indicators within the RI system.[9] The accountability mechanism links financial and programmatic inputs to vaccination outcomes with key milestones and performance indicators. Each milestone is linked to relevant stakeholders responsible for implementation and tracking at different levels. Despite these policies, weak accountability significantly limits the performance of RI system and high immunization coverage in Nigeria.[8,10] This might be due to the slow operationalization of the accountability framework at the sub-national level.[11] Evidence shows that consistency in the implementation of immunization policies and programs at sub-national levels enhances sustainable health systems performance.[12]

Published research on the accountability of immunization programs is growing. Evidence indicates that the accountability framework for the GVAP failed to promote greater accountability among stakeholders, countries, their immunization partners, and international agencies due to poor data quality and lack of specific and measurable deliverables.[6,13] In Ethiopia, low use of RI data for decision-making at the local level undermined the internal accountability of immunization program.[14] Equally, infrequent supportive supervision, poor technical capacity of health workers, lack of motivating incentives, and weak community engagement constrained the accountability RI program in Ethiopia.[14] In Pakistan, the lack of a written human resource policy, lack of job description, inadequate funding, shortage of vaccinators, delayed wages, lack of supervisory feedback, and poor community engagement constrained accountability of the immunization workforce.[15] On the contrary, the accountability framework for the polio program improved partner coordination, efficient utilization of resources, staff performance, and vaccination coverage in Ethiopia.[16]

Weak accountability in Nigeria's immunization program has been characterized by unclear roles, weak authority, under-funding, unpredictable vaccine availability, infrequent supervision, poor staff performance, and weak data management.[8,10] Conversely, the accountability framework for the polio program has been shown to improve coordination among stakeholders, efficient resource utilization, staff performance, and vaccination coverage in Nigeria.[17,18] Similarly, using data to hold providers accountable in the measles vaccination campaign improved measles vaccination coverage in Nigeria.[19] Nevertheless, more evidence of the functioning of accountability relationships in sub-national immunization programs in Nigeria is needed. The root causes of the underperformance of immunization programs are contextual, requiring place-specific evaluations.[13] Since RI programs vary among Nigerian states, context-specific evidence and interventions are required to strengthen accountability in each state.[10] The purpose of this study was therefore to explore stakeholders' perspectives on the functioning of the internal accountability relationships within the National Program on Immunization in Enugu State. This evidence would be useful to immunization stakeholders in designing interventions to address accountability failures in the sub-national immunization system.

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Study Methods

Conceptual framework

This study adopted George *et al*.[8] (2016) accountability framework which organizes elements of accountability into three axes—axis of ability, axis of power, and axis of justice [Figure 1]. The framework was deemed appropriate because of its dynamism and focus on how and why accountability initiatives drive change in health systems. The axis of ability explores how inputs, formal rules (roles, responsibilities, and performance standards), and authority (decision space, managerial discretion, and supervision) support changes in the performance of service delivery actors. The axis of power sparks changes by using incentives to motivate service providers but also sanctions and penalties to reduce their potential abuse of power. The axis of justice steers the strategic direction of change by balancing the accountability relationship between service delivery actors and political and community actors to ensure sustainable change.

Study area

The study area was Enugu State, southeast Nigeria. The study was conducted in six Local Government Areas (LGAs) randomly selected from the state's 17 LGAs. The immunization program is coordinated by the State Primary Health Development Agency. In each LGA while the immunization program is managed by a Local Immunization Officer (LIO), the Monitoring and Evaluation (M and E) Officer oversees the health information system (HIS) within the LGAs. At least one primary health care (PHC) center exists in each ward. Each PHC facility has an officer-in charge and an immunization focal person. Health facility committees (HFCs) hold providers accountable to citizens who own and/or use the facilities.

Study design and sampling

The study involved semi-structured interviews with a cross-section of sub-national immunization stakeholders at the state, LGA, and facility levels, respectively. This design allowed us to gain deeper insights into accountability relationships within the immunization program. The design was deemed most appropriate for this study because it allows us the flexibility to respond to varied research questions including questions of what, why, and how the phenomenon under study occurs.[20]

The study population comprised four categories of immunization stakeholders including state-level policymakers, LGA policymakers, facility service providers, and HFC members. Purposive sampling was used to select participants based on their position and location in the immunization program. At the state level, we selected policymakers (n = 5) namely the Director of Planning, Research, and Statistics; Executive Secretary of the Primary Health Care Development Agency; State Immunization Officer; State M and E Officer; and Health Management Information System Officer. At the LGA level, we selected five persons from each of the six LGAs. The LGA participants included the PHC Coordinator, LIO, M and E Officer, an HFC leader, and either an officer-in-charge of a health facility or a facility RI focal person. In total, we interviewed 35 stakeholders involved in RI service delivery.

Data collection

The study involved interviews using in-depth interview (IDI) guides [Appendix 1] developed by the researchers. The development of the IDI guide was guided by the research questions and the conceptual framework of the study. Broadly, the IDI guide explored actors' roles, decision space, data quality, data use, health technology, supervision, staffing, staff attitude, staff discipline, motivation, performance standards, funding, political engagement, and community interaction. Data were collected between June and July 2021 by researchers experienced in qualitative techniques. There was a 3-day training, including a qualitative pilot exercise, for the research team on qualitative research approaches, IDI guides, research ethics, and COVID-19 protocols. Interviews were held at a time and place agreed with the participants. All interviews were conducted in the English language, audiotaped, and lasted between 30 and 60 min.

Data analysis

Qualitative data were transcribed verbatim and analyzed thematically using NVivo software version 11. Two independent analysts coded the transcripts using codes deduced from the research questions and conceptual framework of the study. The codes deduced from the accountability framework included role clarity, decision space, data quality, data use, health technology, supervision, staffing, staff attitude, staff discipline, performance standards, funding, motivation, penalties and sanctions, political engagement, and community interaction. Data from different stakeholders were compared for convergence and divergence. Facilitators and constraints to the functioning of accountability relationships in the immunization program were inferred from the analysis.

Ethical considerations

Ethical approval was obtained from the Research Ethics Committee, Enugu State Ministry of Health (protocol code MH/MSD/REC21/182). Written informed consent was obtained from all participants for participation and audio-recording of qualitative interviews.

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The transcripts were anonymized by removing all identifying characteristics of the participants and replacing them with pseudonyms. Furthermore, the transcripts and audio records were safely stored in protected files.

Results

Axis of ability

Six themes and 22 sub-themes that emerged from the findings are presented based on the conceptual framework of the study [Table 1].

Role clarity

Deployment letters were issued at the state level but not usually the case at the LGA level, where deployments are often by word of mouth or telephonic messages. Most participants agreed that written job descriptions were not usually available to staff. Orientation about roles and responsibilities in immunization is through job experience, on-the-job training, and standard operational guidelines. Nonetheless, immunization program staff at the LGA and facility levels have competing non-immunization roles.

"Everything I know about this job was learnt through on-the-job trainings, meetings, and re-training organized by the government or development partners" (EN2LG4LIO4).

"I participate in all the service delivery activities that go on in the health facility including immunisation" (EN2LG2HW2).

Performance standards, decision space, and managerial discretion

Even though participants recognized the importance of meeting program targets, most policymakers and providers acknowledged that coverage targets and reporting timelines are not usually met. Poor performances were

Table 1: Themes and sub-themes from the axis of ability

Themes	Sub-themes
Role clarity	Deployment letter
	Job descriptions
	Multiple responsibilities
	Orientation of roles
Performance standards	Performance targets
	Decision space
	Managerial discretion
Supervision	Supportive supervision
	Low frequency of visits
	Weak supervisory feedback
Data use	Poor data quality
	Non-adherence to reporting timeline
	Irregular review meetings
	Electronic data transmission
Human resources	Shortages
	Maldistribution
	Absenteeism
	Poor attitude to caregivers
	Private practice
	Informal payments
Funding	Low public spending
	No resource mobilisation plan

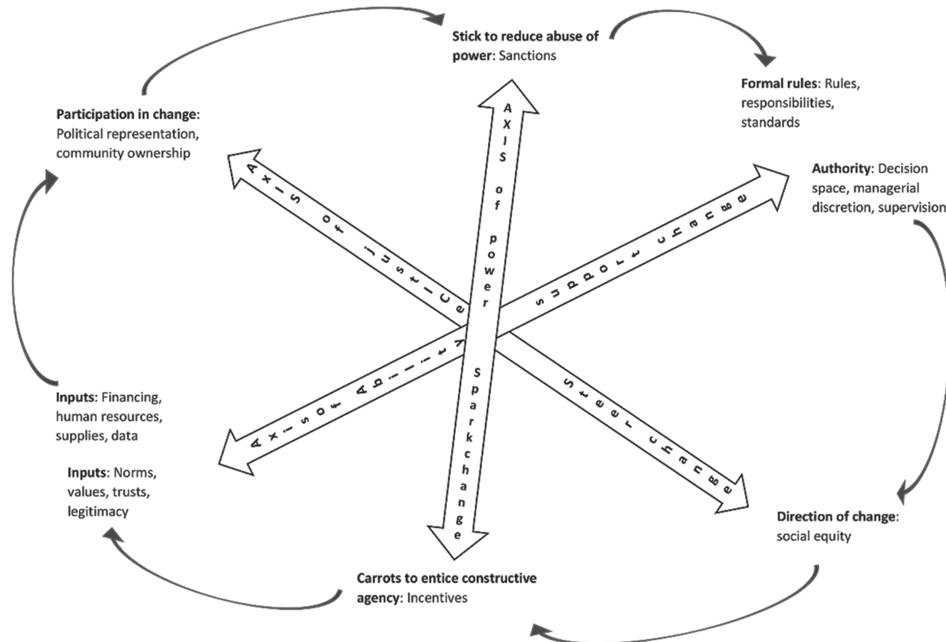

Figure 1: George *et al*. (2016) accountability framework[10]

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blamed on absenteeism and a shortage of staff. "*The focal person is usually not around, excerpt on immunisation days*" (EN2LG1HW1). Yet, the LGA officials lack the "*power of punishment"* (EN2LG1MEO1) but engage with staff, discuss the reasons for poor performance, and agree on an improvement plan. "*We try to reason with the person on how to overcome such challenges*" (EN2LG3PHCC3). Additionally, HFC leaders are not involved in decision-making in the facilities that they oversee, nor at the LGA health planning.

Supervision

All participants agreed that supervision is supportive and provides an opportunity for holding service providers accountable for data quality, resource use, and progress toward the target. A supervisory logbook is an essential tool for providing and monitoring supervisory feedback. However, supervision is less frequent than required because of a lack of funds. The supervisory feedback is also weak.

"*We update our data every time because we do not know when they will come*" (EN2LG4HW4).

"*The only feedback to the facilities is on the data facilities submit monthly. Occasionally, when we attend technical meeting, the partners showcase our performance"* (EN2LG4LIO4*).*

Data use

Most policymakers and providers highlighted that data use has helped in the tracking of progress and decision-making in health facilities and LGAs. The use of smartphones and data review meetings were perceived to be enabling data use. However, data use is hampered by poor data quality and limited capacity to analyze and interpret performance by immunization personnel. Common reasons for inaccurate data included recording errors, skipping reporting timelines, inaccurate demographic information, poor archiving of paper records, lack of data audits, and unstable internet connectivity.

"*We see the charts, but we cannot interpret them…. but after interpreting the chart to us that people no longer attended the facility, we talked to our people"* (EN2LG3HFCC3).

"*A major barrier is internet access. At times, you will upload your data, and it might not go the DHIS2 platform due to network*" (EN2LG5LIO5).

Human resources

Most participants identified inadequate staffing as a major challenge in the immunization program. Service providers are not evenly distributed due to political interference and health worker preferences for urban areas and idle facilities. *"We are short of staff; even in immunisation we have to hire some volunteer workers and pay them stipends"* (EN2LG2HFCC2). Further, immunization workers are overburdened due to absenteeism and multiple responsibilities, predisposing them to aggression and unfriendly attitude toward caregivers. Whereas some health workers hold private jobs, others are involved in informal payments within their facilities. "*They (health workers) buy the cotton wool for vaccination and pay transport to collect vaccines, that's the reason for collecting the hundred naira from mothers*" (EN2LG4 LIO4).

Funding

All the participants noted that public funding for immunization activities is low. The state government provides counterpart funding to external resources. Additional funding from the local government is considerably minimal and unpredictable. No mobilization plan exists at the facility and LGA levels. Sometimes, program staff filled the funding gaps out of pocket. Lack of funds affected immunization activities such as review meetings, outreaches, monitoring, tracking, timely data submission, stakeholder participation, and supervision.

"*The immunization programme is driven by the partners, who provide the huge chunk of resource" (EN2SPM5)*.

"*The chairmen do not really understand that the data we report have implications for the LGA. If they have such understanding, they will support the programme"* (EN2LG4 LIO4).

Axis of power

Two themes and 12 sub-themes emerged from the findings [Table 2].

Incentives and motivation

Most participants stated that financial incentives were received from supplemental immunization activities, availability of materials, supportive supervision, achievement, and recognition motivated immunization service providers. Even so, lack of training on updated tools, irregular power supply, inadequate infrastructure, armed robbery attacks, and insecure health facilities de-motivated them.

"*The performing staff should be selected and recognized while those that perform below average should be sanctioned*" (EN2LG3MEO3).

"*It (supportive supervision) motivates them when you are one-on-one* with them" (EN2LG5LIO5).

Penalties and sanctions

Despite the existence of a sanction framework in the public service, most participants acknowledged that underperforming health workers are not usually reported

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Table 2: Themes and sub-themes from the axes of power and justice

Dimension	Themes	Sub-themes
Axis of power	Motivation	Achievement
		Recognition
		Availability of materials
		Insecurity
		Training
		Pay
	Penalties and sanctions	Weak enforcement of sanctions
		Victimization
		Punitive transfers
		Queries
		Withholding of salaries
		HFC lack power to sanction
Axis of justice	Political engagement	Political influence
		Peer participatory review mechanism
		Strategic advocacy
		Low political interest
		Political interference
	Community engagement	Community outreaches
		Volunteer health workers
		Maintenance of buildings
		Low community ownership
		Non-functioning HFCs

nor sanctioned due to fear of political interference and victimization. Queries, withholding of salaries, and punitive transfers were common disincentives used on erring health workers. However, most LG officials defer enforcement sanctions to state government officials. Also, the HFCs do not have the power to sanction health workers.

"*If you want to sanction them, they might turn out to be candidates of politicians and you end up being the victim* (EN2LG1HW1).

Axis of justice

Two themes and 10 sub-themes emerged from the findings under the axis of justice [Table 2].

Political engagement

Most participants observed that the use of local politicians, peer influence, and strategic advocacy facilitated engagement with political decision-makers. Although local decision-makers show little interest in health programs, they tend to accept issues championed by the State government and the Association of Local Government of Nigeria. It was further noted that politicians manipulate the recruitment process of immunization health workers and shelter truant workers.

"*Some health workers employ other persons to cover their work just because they have political god fathers*" (EN2LG4MO4).

Community interaction

Most participants agreed that HFC members facilitated community involvement in immunization activities such as raising community awareness of immunization activities, participating in outreaches, maintenance of physical infrastructure, and hiring volunteer health workers. However, community ownership was limited by members' demand to be remunerated for HFC activities. The lack of financial incentives made many HFCs non-functional.

"*We have volunteers here, and we pay them from the money contributed by the ward development committee and the community* (EN2LG6HW6)".

"*They want to be paid for looking after the health facilities in their communities contrary to the guidelines*" (EN2SPM3).

Discussion

This study explored the functioning of the accountability mechanism in RI program in Enugu State based on the dynamic dimensions of accountability along the axes of ability, power, and justice. Our findings regarding how the formal rules, authority, and inputs shape accountability; the role of incentives and sanctions in the accountability relationships; and the influence of political and community engagement on internal accountability within the immunization program require further examination.

This study revealed that performance targets for immunization coverage and reporting timeline were not always met due to multiple accountability failures along the axis of ability. Conversely, evidence from previous studies shows that the introduction of an accountability framework improved both the polio program and staff performance in Nigeria and Ethiopia.[16-18] Our findings uncovered considerable weaknesses in the formal rules that distribute roles among the immunization workforce including lack of deployment letters, non-existent job descriptions, poor orientation of staff with new roles, and multiple responsibilities. These findings are consistent with evidence of lack of appointment letters,[10,15] no job description,[10,15,21] poor technical capacity,[14] multiple and conflicting job roles,[10,14] and unclear roles and responsibilities[10,15,22] among immunization service delivery actors in prior studies. There is, therefore, a compelling need for sufficient formal instruments that provides clear roles and responsibilities with which all actors can be held accountable within the immunization system.

Consistent with evidence of narrow decision space from the broader health system,[23,24] this study found that

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immunization program staff at the LGA level have a narrow decision space regarding staff posting, transfer, and discipline. Our findings are also in line with a previous Nigerian study that found a limited decision space and increasing use of managerial discretion at the LGA level.[10] In contrast, in Tanzania, district health officials had a wide decision space on distributing service providers within the district and providing incentives.[25] Our findings imply that local officials lack the power to redistribute staff, enforce sanctions, or fill service delivery gaps within the RI program, which calls for the expansion of their authority to act or respond to circumstances.

Performance accountability was also constrained by a lack of resources. Our finding that supervision of immunization service providers is infrequent with a weak feedback mechanism confirms the findings of previous studies.[10,14,15,21,26] Also, the staffing constraints found in the current study mirror the staff shortages,[10,15,21,27] absenteeism,[22,26,28] dismissive behavior of staff members toward caregivers,[22] existence of informal payments,[27,28] and private practices[29] reported in previous studies. Further, the low use of RI data for decision-making constitutes a barrier to accountability as found in preceding studies.[10,14,21] Moreover, public funding of immunization services constrained accountability as reported in prior studies.[10,15,27] Resource constraints mean that review meetings, monitoring and supervision, timely data submission, and community engagement activities that provide opportunities for holding service delivery actors accountable are often shelved.

This study's finding that low motivation weakened performance accountability is in line with the results of preceding studies.[10,14] Similarly, our findings confirm evidence that accomplishments, recognition, and intrinsic desire to serve motivated primary health workers in Nigeria.[30] In contrast, insecurity in health facilities, as found in the current study, demotivates health workers, reduces the time spent at work, and ultimately results in poor program performance as has been previously reported.[31] Consequently, strategies to bolster human resource accountability in RI should incorporate a secure and conducive work environment, financial incentives, and job recognition to motivate constructive agency of service delivery actors.

This study further found that enforcement of sanctions on erring health workers was low. Our finding is very much like the weak disciplinary mechanism found in previous Nigerian studies.[10,32] Although existing civil service rules prescribe disciplinary actions for various categories of offenses, erring health workers were not usually reported, nor punished by their supervisors or the HFCs. Whereas the HFCs lacked the power to sanction, the supervisors feared victimization by political "godparents" of such staff. Unfortunately, the protection offered by the political "godparents" reinforces the indiscipline and corrupt behaviors of the health workers. To improve performance accountability, it is imperative to strictly enforce the framework of the existing sanctions.

Our finding that mobilized social capital such as political leaders' influence and strategic advocacy improved the visibility of the immunization program aligning with the results of a previous study.[10] In the current study, however, poor ownership and unwillingness of political decision-makers to invest in immunization undermined performance accountability. This is contrary to improved ownership and increased funding reported in a previous study.[17] Furthermore, political interference with staff recruitment, distribution, and discipline was high. To translate political engagement into ownership, the immunization program must capitalize on the existing peer participatory performance review meeting with the association of LGA chairmen and state officials to make an investment case for RI and clarify the expectations of political decision-makers.

Like existing scholarship,[10,14,15] this study also found that weak community engagement limited accountability within the immunization program. HFCs were poorly resourced, non-functional, and lacked the power to sanction erring health workers. Nevertheless, the study revealed how community mobilization, recruitment of paid volunteers, and maintenance of health facilities enhanced performance accountability of immunization program. Generally, citizen-led accountability within the immunization program needs to improve in Enugu State. Hence, there is a need to fully implement the existing operational guidelines for HFCs and upscale community stakeholders' capacity to hold health workers accountable for immunization program performance.

Our study adds to the growing scholarship and policy debates on accountability within immunization programs in low- and middle-income countries by bringing the perspectives of sub-national stakeholders. However, as the study was undertaken in one Nigerian state, the findings are unlikely to represent the entire country. Social desirability bias could also limit our findings where stakeholders were not candid about their experiences, but this was minimized using experienced interviewers, who used probes effectively, and triangulation of findings across various categories of stakeholders.

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Conclusion

This study has explored the stakeholders' perspectives on the functioning of the accountability framework in the Enugu State immunization program. Performance targets for immunization coverage and reporting timeline were not always met due to multiple accountability failures. Considerable weaknesses in the formal rules that distribute roles among immunization workforce exist. Local officials have a narrow decision space regarding staff posting, transfer, and discipline. Performance accountability was constrained by a lack of resources, low motivation, weak enforcement of sanctions, low political commitment of decision-makers, and weak community engagement. Addressing the above-mentioned challenges will bolster accountability within the sub-national immunization programs.

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Authors contributions

All authors (ODC, GN, OU, NN, EU, and OO) contributed to the conceptualization of the study; ODC, GN, OU, and NN collected the data/carried out the study; ODC and GN analyzed the data. ODC drafted the first manuscript. All authors reviewed and approved the final manuscript for publication.

Ethical approval and consent to participate

Ethics approval was received from the Health Research Ethics Committee, Enugu State Ministry of Health, Enugu, Nigeria (protocol code MH/MSD/REC21/182).

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Conflicts of interest

There are no conflicts of interest.

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