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The Status of Primary Healthcare Services Capacity in a State in South-South, Nigeria

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Abstract

BACKGROUND: Supportive supervision involves the practice of regularly visiting health facilities to monitor staff performance, record observations, build relationships and provide constructive feedback with the aim of improving performance and treatment outcomes. This study aims to provide baseline records on the status of primary healthcare delivery in Rivers State before the commencement of the Saving One Million Lives Program for Results (SOMLPforR) Integrated Supportive Supervision in Rivers State.

METHODS: This baseline assessment conducted in 2018 adopted a descriptive design and involved 223 primary and 3 secondary healthcare facilities located within 22 Local Government Areas in Rivers State, Nigeria. A standardised Integrated Supportive Supervision (ISS) checklist comprising 187 indicators under various thematic areas (including immunisation, essential drugs supply, among others) was used to assess the services provided at the healthcare facilities. Data on the specific indicators were analysed using the Statistical Package for Social Sciences (SPSS) version 24 software.

RESULTS: The overall performance of primary healthcare service delivery in the state across all the thematic areas was 40.9%. Performance in the various thematic areas included immunisation service delivery (94.7%), human resources for health/health information management systems (79.4%), availability of basic equipment and supplies (58.6%), tuberculosis services (57.1%), infrastructure (57%), provision of malaria services (35.8%), HIV care (35.7%), essential drugs (35.4%), utilisation of prenatal services (14.1%), outpatient facilities (10.1%), delivery under the care of a skilled birth attendant (3.6%), and prevalence of contraceptive utilisation (2.3%).

CONCLUSION: The delivery of primary healthcare services in Rivers State is below average. While immunisation services were optimally delivered, other services, including the uptake of modern contraceptives/provision of family planning services, need to be improved. There is the need for the Rivers State Government to improve its capacity in meeting up with the requirements of the poorly delivered thematic areas as well as sustaining efforts in thematic areas with high performance.

Keywords:
Primary healthcare, health services, Integrated supportive supervision, Rivers State

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Introduction

Primary healthcare has been described as a population strategy geared towards developing a population-oriented primary care services.[1] This level of care plays a fundamental role in healthcare delivery considering that it provides cost-effective services which are affordable to the populace. The essence of primary healthcare is for individuals and families to utilize the services as their first contact with the national health system when faced with health issues.[2,3] The Primary Healthcare Policy in Nigeria includes practical efforts to ensure equitable distribution of affordable healthcare services in the country, which are needed to meet the respective health needs of the populace and provide comprehensive primary healthcare services.[1] Primary healthcare has been instrumental in promoting healthy behaviours, boosting host resistance, and fostering safe environments that reduce the risk of disease occurrence.[1,4]

Nigeria through the National Primary Healthcare Development Agency has adopted a minimum standard of care which is provided through health posts, health centres and comprehensive health centres. Despite the set standards, the primary healthcare initiative in the country is still faced with problems of dilapidated facilities and infrastructure, insufficient or outdated equipment as well as issues of poor employee performance.[5,6] It also faces problems of poor accessibility to the services provided especially in the rural areas, insufficient immunization coverage, poor contraceptive use of between 14.4% and 15% despite a target of 36%, among other problems.[3,6–8] There is thus the need to improve the functionality of primary healthcare service provision which serves as an arm of healthcare provision for a large proportion of the Nigerian population.[3,9] One way to do this is the provision of effective monitoring and supportive supervision of the provided services.[10] In 2017, Moyimane et al reported that when monitoring and supervision of healthcare service provision was insufficient or lacking, it had the capacity of causing substantial lack of basic medical equipment in a rural healthcare setting. Thus, the need for such monitoring and supportive supervision cannot be downplayed.[10–12]

The World Health Organization defines supportive supervision as "a process of helping staff to improve their work performance continuously".[13] It serves as a polite way of building the capacity of health staff through the facilitation of problem solving without making it look like a fault-finding mission. Supportive supervision involves the practice of regular supervisory visits to health facilities to build relationships, monitor staff performance, record observations, and provide constructive feedback with the aim of improving health program performance and treatment outcomes.[10,12,14] Integrated Supportive Supervision (ISS) is a harmonized supervisory system which uses a common tool (checklist) to assess performance and promote effective coordination of health services at all levels of healthcare delivery. It is targeted at improving the quality of health services and providing the evidence base for effective planning. During the supervisory visits, supervisors are expected to continually supply health workers with the basic equipment to complete their tasks.[9] Evidence has shown that the ISS approach has been useful in improving the outcomes for health-care delivery in primary healthcare facilities in Katsina State, Nigeria, including improving the quality and availability of essential drugs in the health facilities.[10] ISS has also been reported to be instrumental in improving surveillance, delivery of routine immunization services as well as the performance of health workers.[15–18]

In this regard, the Rivers State Ministry of Health, through its Saving One Million Lives Programme for Results (SOMLPforR), commenced the Integrated Supportive Supervision. ISS is a component of the qualitative Disbursement Linked Indicator (DLI) of SOMLPforR. SOMLPforR in Rivers State commenced ISS in 2018 with a training of relevant stakeholders in the health sector (senior state

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personnel/supervisors) to build and strengthen capacity to provide supportive supervision of facility staff. Services provided were categorised under eleven thematic areas, including infrastructure, basic equipment and supplies, human resources/HMIS (merged as a composite thematic area), as well as essential drugs. Other thematic areas included outpatient services, immunisation service provision, pre-natal and post-natal care provision, skilled birth attendance, provision of family planning service, HIV care, and malaria and tuberculosis management and control. This is in line with international ISS best practice.[10,19] This study was undertaken to provide baseline information on the status of primary healthcare service delivery in Rivers State, Nigeria.

Materials and Methods

This study adopted a descriptive cross-sectional design involving an assessment of primary healthcare services and activities in Rivers State, Nigeria. The primary health facilities included health posts, primary health centres, model primary health centres, as well as comprehensive health centres. A sample of 223 primary health facilities was assessed out of 384 functional PHCs in the state, representing about 60 per percent of all the PHCs in the state. However, only three out of the eleven functional secondary health facilities at the time of this study were sampled, as those were the only centres providing comprehensive PHC services within the secondary healthcare set-up in the state. These health facilities are in 22 local government areas of the state. Although Rivers State has 23 LGAs, only 22 LGAs were involved in the study.

Prior to the supervisory visits, training sessions were held to build the capacities of state supervisors, including directors in the Ministry of Health, the Primary Healthcare Management Board (PHCMB) and the Hospital Management Board (HMB). Other supervisors were program managers and desk officers in the various health-related ministries, departments and agencies. The training for supervisors spanned over three days and culminated in the modification of a standard ISS tool for Rivers State.

The Integrated Supportive Supervision checklist comprising 187 indicators across eleven thematic areas was used to assess the services provided at the selected healthcare facilities.[10,19] Responses on the checklist included "yes" for the availability of a checklist item, which was scored as 1, and "no" for non-availability of a checklist item, which was scored as 0. This checklist was pre-tested in four health facilities in the state, and the pre-test findings were used to revise the tool. The checklist was administered at designated health facilities to the health workers in charge of the health facilities and the focal officers in charge of thematic areas. A walk-through survey was also conducted by ISS state supervisors to confirm the functional status of the health facilities. Approval for conducting the study was obtained from the Rivers State Health Research Committee.

Data on the specific indicators was collated and cleaned using Microsoft Excel (2021) software and then analysed using the Statistical Package for Social Sciences (SPSS) version 24 software. A 70.0% cut-off point was used to categorise the availability of the services provided under the 11 thematic areas from the ISS tool as being adequate (≥70.0%) or inadequate (<70.0%). The analysed data was expressed as frequencies and percentages and presented in frequency tables and charts.

Results

Virtually all the facilities assessed during the ISS activities were primary healthcare facilities (223; 98.7%). Emuoha Local Government Area (LGA) had the highest number of participating health facilities (17; 7.5%), while Ogba/Egbema had the least number (4; 1.8%) of participating facilities. These are shown in Table 1.

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Table 1: Profile of healthcare facilities by level of facility and local government area (LGA)

	Freq	(%)
Level of Facility		
Primary	223	98.7
Secondary	3	1.3
Total	226	100.0
LGA		
Degema	6	2.7
Ikwerre	6	2.7
Akukutoru	7	3.1
Opobo/Nkoro	6	2.7
Ogu-Bolo	7	3.1
Oyigbo	5	2.2
Abua/Odual	9	4.0
Asari Toru	13	5.8
Obio/Akpor	10	4.4
Bonny	10	4.4
Etche	9	4.0
Tai	7	3.1
Eleme	10	4.4
Okrika	14	6.2
Omuma	10	4.4
Phalga	11	4.9
Onelga	11	4.9
Andoni	15	6.6
Gokana	13	5.8
Ahoada East	16	7.1
Emuoha	17	7.5
Khana	10	4.4
Ogba/Egbema	4	1.8
Total	226	100.0

Assessment of the performance of the healthcare facilities regarding the provision of the services in the 11 thematic areas revealed that the proportion of adequacy for immunisation services was 64.6%, basic equipment 42.0%, infrastructure availability 41.6%, and HIV control 32.7%. Others included malaria/tuberculosis management control 31.4%, essential drugs 8.4%, human resources/HMIS 4.9%, family planning services 6.2%, prenatal/postnatal 6.2%, outpatient services 1.3%, and availability of skilled birth attendants 0.4%. This is shown in Table II.

Table 2: Frequency of facilities with adequate performance across the 11 thematic areas for all facilities

S/N	Thematic Area (n=226)	Adequate Performance (Freq%)	Inadequate Performance (Freq%)
1.	Infrastructure	94 (41.6)	132 (58.4)
2.	Basic equipment	95 (42.0)	131 (58.0)
3.	Human resources/ HMIS	11 (4.9)	215 (95.1)
4.	Essential drugs	19 (8.4)	207 (91.6)
5.	Outpatient service	3 (1.3)	223 (98.7)
6.	Immunization services	146 (64.6)	80 (35.4)
7.	Pre/postnatal care	14 (6.2)	212 (93.8)
8.	Skilled Birth Attendants	1 (0.4)	225 (99.6)
9.	Family planning	14 (6.2)	212 (93.8)
10.	HIV control	74 (32.7)	152 (67.3)
11.	Malaria/TB management and control	71 (31.4)	155 (68.6)

Obio/Akpor and Port Harcourt LGAs were the best-performing LGAs in up to four thematic areas. Of all LGAs, Obio/Akpor performed best in the areas of infrastructure, basic equipment, and HIV control. Port Harcourt LGA also performed best in these thematic areas, and malaria/tuberculosis control and management, while Degema LGA performed best in adequate availability of basic equipment, immunisation services and HIV control. Additionally, Ikwerre LGA performed best in adequate availability of basic equipment and immunisation services, while Omuma LGA also performed best in adequate availability of immunisation services. The LGA performance details across the 11 thematic areas of focus are shown in Table 3.

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Table 3: Performance across the 11 thematic areas disaggregated by LGAs.

S/N	Thematic Area	3 Best Performing LGA	3 Worst performing LGA
1.	Infrastructure	Obio/Akpor, Ogba/Egbema, Port-Harcourt	All other assessed LGAs performed poorly
2.	Basic equipment	Port-Harcourt, Obio/Akpor, Degema, Ikwerre	All other assessed LGAs performed poorly
3.	Human resources/ HMIS	-	All assessed LGAs performed poorly
4.	Essential drugs	-	All assessed LGAs performed poorly
5.	Outpatient services	-	All assessed LGAs performed poorly
6.	Immunization services	Degema, Ikwerre, Omuma	Opobo/Nkoro, Oyigbo, Asari/Toru
7.	Pre/postnatal care	-	All assessed LGAs performed poorly
8.	Skilled Birth Attendants	-	All assessed LGAs performed poorly
9.	Family planning	-	All assessed LGAs performed poorly
10.	HIV control	Port-Harcourt, Obio/Akpor/ Degema	All other assessed LGAs performed poorly
11.	Malaria/TB management and control	Port-Harcourt	All other assessed LGAs performed poorly

Best performing: LGAs that had the highest number of facilities scoring 70% and above
Worst performing: LGAs that had the highest number of facilities scoring below 70%

Overall performance across all thematic groups

The overall performance of all the health facilities involved in this baseline study was 40.9% across all thematic areas assessed by the ISS tool. Immunisation service and Human Resources for Health (HRH)/Health Information Management Systems (HMIS) had a performance level of 94.6% and 79.4%, respectively. The performance level of infrastructure in the state health facilities stood at 58.3%; tuberculosis control had a performance level of 57.1%, and basic equipment availability had a performance level of 57.0%. The health facilities in the state performed poorly in the aspects of malaria control, HIV control and availability of essential drugs, with performance scores of 35.8%, 35.7% and 35.4%, respectively. Other thematic areas that performed poorly in this study include the provision of pre- and post-natal care (14.1%), outpatient services (10.1%), availability of skilled birth attendants (3.6%) and family planning services [using the contraceptive prevalence rate] (2.3%) as in Figure I.

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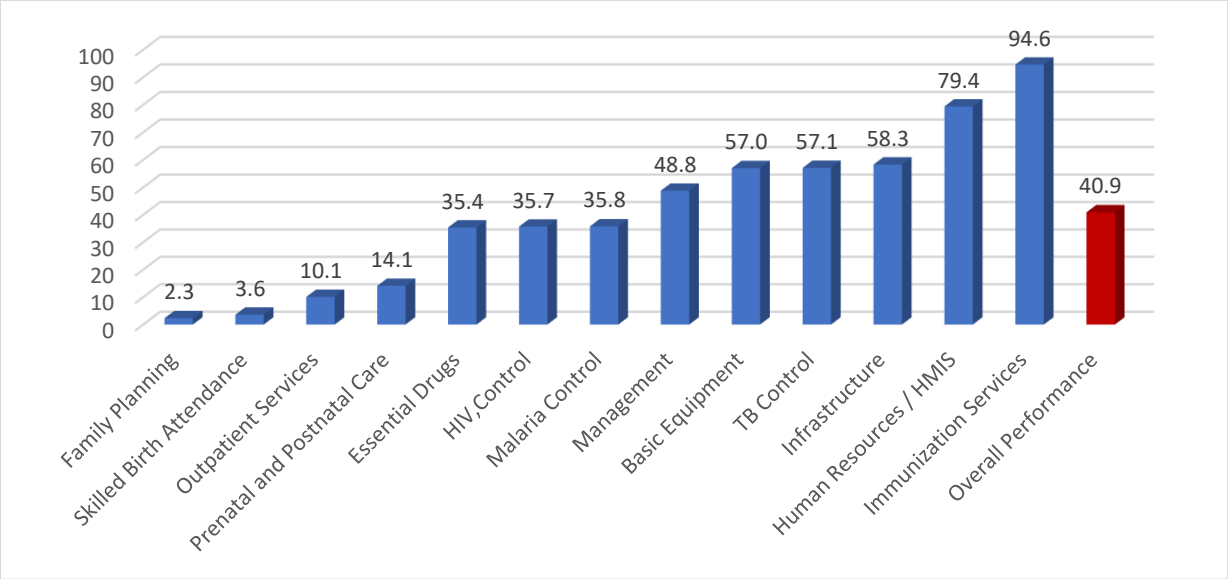

Figure 1: Percentage score for thematic areas in healthcare delivery in the State

Discussion

This study identified that the overall performance for all assessed thematic areas in the ISS checklist was inadequate (40.9%). The state performed best in the provision of immunisation services and worst in the provision of family planning services and availability of skilled birth attendants. The state's overall performance in primary health services provision was mainly influenced by the extreme difference in the best (94.6%) and worst (2.3%) performing thematic areas in healthcare delivery in the state. Assessment of the indicators under the immunisation services thematic area showed that the excellent performance in this thematic area could be linked to adequacy in vaccine coverage rates, immunisation records that agreed with their monthly reports, among other indicators. This is laudable considering the effectiveness of immunisation in controlling and eradicating vaccine-preventable diseases.[6,20] Other studies have also reported satisfactory immunisation service indicators which have contributed to the general health of the populace.[21,22] Sustaining these immunisation efforts is vital to ensuring that Rivers State is not plagued by vaccine-preventable diseases.[19] Similarly, it is essential that the performance of the worst-performing thematic areas be critically analysed to identify specific areas that can be improved to boost performance. Thematic areas that directly impact maternal and child health alongside the overall health and productivity of the Rivers State populace should be strengthened to improve the health indices in the state.[23,24] Evidence has revealed that when maternal and child health as well as family planning services are left to be provided by unskilled health workers, it can result in negative impacts on the overall health, wellbeing and quality of life of affected persons.[25,26]

Human Resource for Health and Health Management Information Systems also had adequate performance. However, for the availability of human resources for health and good information management systems to translate to improved capacity for providing quality healthcare services in Rivers State, further efforts are required. These include the provision of necessary healthcare infrastructure, basic equipment and supplies, among others, across the health facilities in the state.[9,17] The overall assessment of facility infrastructure in this study showed an average and inadequate performance, which has also been reported in other studies as being capable of limiting the effective provision of primary healthcare services.[27–29] In one of

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these studies, alongside the inadequacy of certain requirements for effective primary healthcare service delivery, basic service delivery facilities/equipment were reported to be inadequate.[29] This could be due to the apparent unsatisfactory state of the infrastructure in the health facilities, including potable water, power supply, and hygiene maintenance. Lack of these infrastructures often leads to ineffective sanitation, poor hygiene and infection control, among others.[1,10] Hence, there is an urgent need to address infrastructural gaps in health facilities in the state in order to improve the existing quality of healthcare delivery. Although the availability of basic equipment and supplies in the assessed health facilities had an above-average performance score, it was unsatisfactory, as they were found to be inequitably distributed and also inadequate to meet the healthcare needs of the growing Rivers State populace. These basic equipment and supplies, including blood pressure apparatus, partograms, vaccine carriers, among others, are essential components of healthcare delivery in primary healthcare facilities; thus, the implication of their shortages will be the inability of these facilities to adequately provide quality primary healthcare to clients.[1] The State also performed inadequately in the availability of tuberculosis services. It is pertinent to improve the performance of such services in health facilities in Rivers State, considering the extensive duration of the tuberculosis treatment regimen and the high level of medication adherence required.[14] If services for such infectious disease programmes are not readily available in health facilities in the state, it can thwart national and global efforts to control these diseases. [14]

All other thematic areas assessed in this survey revealed inadequacies in the availability and utilisation of primary healthcare services rendered at healthcare facilities in Rivers State. These include malaria control services, HIV care and control, availability of essential drugs, utilisation of outpatient facilities, utilisation of prenatal services, delivery under the care of a skilled birth attendant, and family planning services. The importance of scaling up the provision of malaria services and HIV care, as well as making essential drugs available, cannot be overemphasised, especially considering the endemicity of malaria and prevalence of HIV/AIDS in Nigeria, as well as the poor availability of essential drugs and drug information in primary health facilities in Nigeria.[30–33] The Contraceptive Prevalence Rate (CPR) used to measure the uptake of family planning services in the state (2.3%) was found to be ranked among the lowest in Nigeria compared to the national target adopted for the country of 36%, as reported in the Nigeria Demographic and Health Survey (2013).[34] It also ranked very low in comparison with the modern CPR of 14.4% in Nigeria [8] and 22.2% in Ethiopia.[35] The low level of CPR in the state adds little to reducing the unmet need for family planning in the country, suggesting the need for Rivers State to intensify efforts against the poor utilisation of family planning services in Nigeria. This can be achieved by addressing socio-cultural and local factors, including the presence of myths and misconceptions regarding contraception, poor awareness of family planning services, and high fertility preferences, among others.[36] Furthermore, there is the need to address the low performance data on the utilisation of prenatal services by pregnant women in order to address maternal and child mortality in Rivers State and Nigeria at large.[25]

This survey also found that Obio/Akpor, Degema and Port Harcourt LGAs had the most adequate availability of healthcare services across most of the assessed themes compared to other LGAs. This may be due to the massive investments in healthcare delivery in two of these LGAs, which make up the Port Harcourt metropolis, which has been pinpointed as a factor that enhances quality healthcare delivery.[37] The inadequate performance of other LGAs and the unavailability of some key primary healthcare services may be due to insecurity and the rural nature of some of these LGAs.[26,38] Other reasons could be the hard-to-reach nature of some of the health facilities.[3,6,7] religious and cultural

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barriers limiting access to some of the services, for instance, family planning and delivery services 39 Similarly, poor healthcare investments, poor monitoring and supervision, as well as inadequacies of quality infrastructure and equipment could also be contributory to poor performance in these LGAs.[10–12]

There is an urgent need to address the inadequacies identified in the services provided at healthcare facilities in Rivers State. This can be achieved by adopting the six building blocks of an effectively functional health system, which include having well-trained and motivated healthcare personnel, providing well-maintained infrastructure, having a reliable supply of medicines and technologies backed by adequate funding, information and research, as well as the use of evidence-based policies.[40,41] Routinely conducting ISS has been shown to be effective in improving the output of healthcare workers, the outcomes of healthcare service delivery, healthcare surveillance and other indicators bordering the building blocks of a functional health system.[15–18] The effective application of integrated supportive supervision in healthcare service delivery in Rivers State will improve the health facility's readiness to deliver these key primary healthcare services. This would, in turn, contribute to successfully promoting accountability, mentorship, trust, teamwork, and improved communication among health workers,[42] alongside an inadvertent provision of quality healthcare services and improvement of clinical outcomes for health consumers in Rivers State.[9,18,36]

Conflict of interest statement

The authors report no conflicts of interest.

Study Limitation

In the conduct of this study using the Integrated Supportive Supervision (ISS) checklist, certain unique needs, and sociocultural contexts in primary healthcare service delivery in Rivers State may have been overlooked. In addition, issues relating to healthcare services delivery, such as patient satisfaction with services and quality of services, among others, were not assessed in this study. These notwithstanding, this was a baseline study which had specific targets to be achieved, thus the use of the ISS checklist. The aforementioned omissions being important service delivery factors can be assessed in follow-up studies that will be conducted in the state.

Conclusion

This study found a generally inadequate performance of healthcare facilities in Rivers State across all the thematic areas assessed during the baseline integrated supervisory visit. The state performed best in the provision of immunisation services and poorest in family planning service provision. There is a need for the Rivers State government to initiate and prioritise some key interventions for successful implementation and achievement of the objectives of the "Saving One Million Lives Program for Results (SOMLPforR) Integrated Supportive Supervision" in the state. The state government should ensure sustenance and further improvement of the achievements of the state in terms of human resources for health, provision of immunisation services as well as vaccination coverage. ISS thematic areas where the state ranked poorly, including facility infrastructure, basic equipment and supplies, essential drugs, outpatient services, prenatal care service utilisation, use of skilled birth attendants, contraceptive prevalence as well as HIV, tuberculosis and malaria care, should be boosted. The Rivers State House of Assembly should formulate and enact policies that will aid the success and preservation of the SOMLPforR in the state and ensure programme continuity when governments transition. All relevant healthcare stakeholders in the state should engage in health promotion and education activities on the utilisation of family planning services, skilled birth services, antenatal care, and other pertinent health-related issues to dispel misconceptions which could impede the efforts of the SOMLPforR in the state. Lastly, the Rivers State government should ensure adequate yearly

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health budgetary allocation that would facilitate the objectives of the SOMLPforR in the state

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