Use of Routine Health Information to Inform Budgetary Allocations for Reproductive Health in Cross River State, Nigeria

Abiodun Hassan, MD, MPH

November 2016

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MEASURE Evaluation

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FOREWORD

We thank the United States Agency for International Development (USAID) for its support of the research and its publication. We also thank the USAID-funded MEASURE Evaluation project for its collaboration in implementing this baseline survey as the first step toward improving routine data demand and use for budget allocation in Cross River State. We are grateful to Dr. Abiodun Hassan, Monitoring and Evaluation Coordinator at ARFH, for his work and expertise on this research project, particularly with writing the research paper. We thank Ms. Bridgit Adamou, Family Planning Technical Advisor at MEASURE Evaluation, for her guidance both in the research and in the preparation of this report.

Also deserving special attention and commendation are the Cross River State team, especially the staff of the Department of Planning, Research, and Statistics (PRS) and the budget office of the state ministry. Many thanks for the support we received from the state ethics committee and especially the role played by Dr. Comfort Ekanem, the former director of PRS and secretary of the Ethics Committee, who helped facilitate the review and approval of the survey protocol and who provided oversight of the conduct of the baseline assessment.

Of note is the support we received from Mr. Oba N. Okina and Mr. Duke Bassey, who took pains to facilitate completion of the report and the dissemination meeting. Many thanks to all of the stakeholders and partners in Cross River and Calabar Municipal Local Government Areas (FHI360, Pathfinder, World Health Organization, Population Council, Budget Transparency and Accountability Initiative Nigeria, and the Health Strategy and Delivery Foundation) for their splendid support.

I hope that the findings of the baseline assessment will be useful in the development of the Cross River State budget process in the next fiscal year.

With best wishes,
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ABBREVIATIONS

ANC	antenatal care
ARFH	Association of Reproductive and Family Health
BTAN	Budget Transparency and Accountability Initiative Nigeria
CIDA	Canadian International Development Association
CMLGA	Calabar Municipal Local Government Area
CPR	contraceptive prevalence rate
CRS	Cross River State
CSOs	civil society organizations
DFID	United Kingdom Department for International Development
FMOH	Federal Ministry of Health
FP	family planning
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
HMIS	health management information system
IUD	intrauterine device
KII	key informant interview
LGA	Local Government Area
M&E	monitoring and evaluation
MDAs	ministries, departments or agencies
MDG	Millennium Development Goal
NDHS	National Demographic and Health Survey
NGOs	nongovernmental organizations
NPC	National Population Commission
OCP	oral contraceptive pills
PHC	primary healthcare center
RH	reproductive health
RHI	routine health information
SMOH	State Ministry of Health
TFR	total fertility rate
UN	United Nations
UNFPA	United Nations Population Fund
USAID	United State Agency for International Development

EXECUTIVE SUMMARY

The relevance of reproductive health (RH) and family planning (FP) for the global and national development agenda as well as socioeconomic development of communities, families, and individuals is a major issue in the sustainable development era. Negative reproductive health outcomes are common in Nigeria. The 2013 Demographic and Health Survey (DHS) showed that the total fertility rate (TFR) of 5.3 was higher than the wanted fertility rate (4.7) in Cross River State. This implies that the average number of children a woman wants is less than the number she currently has. The unmet need for family planning (30.8%) is almost twice the national average. Despite the situation, the use of modern contraceptives in the state has declined from 16.3 percent in 2008 to 14.4 percent in 2013 (NPC & ICF Macro, 2009; NPC & ICF International, 2014). The uptake of FP services has been hampered by many challenges, including contraceptive commodity stockouts and unavailability of consumables.

Government demonstrates its commitment to health by speaking out, making public declarations in favor of health, linking health to development, creating budget lines, and ensuring prompt release of budgeted funds for the purpose for which it was budgeted; and by effective and equitable delivery of quality service (Bujari & McGinn, 2013). To ensure that decisions on budgetary allocations are evidence-based, it is essential to understand the budget process. Donald and Ahmed (2013) examined the budget process in Cross River State. Despite the highly sophisticated budget process in the state, FP was not considered a critical issue by government officials and policymakers. Hence, there is no budget line for FP commodities and distribution in the state except for the support received from the United Nations Population Fund (UNFPA) (Donald & Ahmed, 2013). Also, the budget for reproductive health is placed under the budget for maternal and child health. However, not much is known about the inner workings of the budget process within the State Ministry of Health (SMOH) and the local government councils, such as the process of allocating proportions of the budget to specific items under maternal and child health, and the use of routine health information to inform such budgetary allocations. In addition, there is little documentation of the process to guide advocacy efforts.

Against this backdrop, this study seeks the following:

- Understand the budget process within the SMOH and in the health department of the Calabar municipal local government council
- Examine the use of routine health information (RHI) as evidence for budgetary allocation for RH and FP
- Identify barriers and constraints to routine data use
- Explore possible solutions
- Dialogue with the stakeholders on how routine health data can be used in the budget process

The survey used a cross-sectional design. Both qualitative (key informant interviews [KIIs]) and quantitative (structured questionnaires) research methods were employed for the survey. The research team conducted a desk review of existing FP data in the state and Calabar Municipal LGA (Local Government Area).

The literature review revealed an increasing trend in the uptake of modern contraceptive methods among women of reproductive age in Cross River State. Between 2012 and 2014, uptake rose dramatically, from 10,790 to 66,364. However, this study revealed a decline in the rate at which men of reproductive age used modern contraceptives between 2012 and 2014, from 4,375 to 2,529. This can be attributed to

misconceptions about FP and to religious or cultural barriers, which also play a negative role in the acceptance of modern FP methods both by men and women (Federal Ministry of Health [FMOH], n.d.).

The health budgetary allocation in Cross River State is based on available funds. The confirmed 2014 Cross River State government's budgetary allocation for the health sector was 9.8 billion naira (approximately US$6 million), of which just 10 million naira (about US$61,000) was earmarked for the FP subunit to cover a population of nearly 4 million people. Not all of the funds were spent and were therefore rolled over in 2015. In 2015, 7 billion naira was allocated for the health sector. This represents a 16.7 percent decrease in allocation between 2014 and 2015 for the health sector. The consequence is that fewer RH and FP programs and activities are implemented in the state.

The budget process in Cross River State involves budget drafting by the executive arm, budget review and approval by the legislative arm, budget implementation, and auditing and evaluation. Inquiries revealed that only the officers of the state government, local government, and the Budget Transparency and Accountability Initiative Nigeria (BTAN) have good knowledge of the budget process and allocations. Because civil society organizations (CSOs) and nongovernmental organizations (NGOs) are not included in the budgeting process, they have only a fair knowledge of the budget process and budgetary allocation to RH and FP.

A good understanding and use of the current health management information system (HMIS) contributes to good-quality data; however, a large proportion of respondents (68% of males and 83% of females) have never received any formal training in HMIS and planning.

Based on our findings, our recommendations are as follows:

- Intensify stakeholders' knowledge of and access to RH- and FP-related policies to enhance policy implementation, monitoring, and evaluation of the policies.
- Develop advocacy messages that will motivate the government to take action in support of FP and provide a budget line for FP at the LGA level.
- Ensure that allocated funds for FP are released and used for the right purposes.
- Create advocacy messages targeting policymakers on the importance of investing in capacity building for monitoring and evaluation (M&E) staff at the facility, LGA, and state levels. This cadre of staff need to be trained and retrained on M&E harmonized data capturing tools, data analysis, and data quality assurance. This approach is important for achieving the sensitivity and reliability of the FP system and achieving the health goals and objectives for Cross River State.

INTRODUCTION

1.1. Reproductive Health and Family Planning Context in Nigeria

According to the United Nations (UN), 63 percent of partnered, reproductive-age women (15–49 years) worldwide practice some form of contraception (Population Reference Bureau, 2008). Modern contraceptive use has risen steadily over time in most of the developing world. Globally, 90 percent of reproductive-age women who practice FP use a modern contraceptive method.

The Nigerian government has recognized for a long time that its population is growing at a rapid rate. Nigeria's urban population increased almost threefold between 1960 and 1980, from 7.3 million to 21.3 million, and almost quadrupled between 1980 and 2010, to reach nearly 79 million. If the UN projections materialize, the urban population will reach 218 million in 2050 (Fotso, Ajayi, Idoko, Speizer, Fasiku, Mberu, & Mutua, 2011). Nigeria has a population of about 170 million and a contraceptive prevalence rate (CPR)—defined as the percentage of women who are using or whose sexual partners are using, any form of contraception—of 15 percent for all FP methods (NPC & ICF International, 2014). According to the 2013 Nigeria Demographic Health Survey (NPC & ICF International, 2014), CPR for modern contraceptives was 10 percent and has remained persistently low for the past 10 years (NPC & ICF International, 2014). This represents a small increase from 2003, when CPR was 13 percent. Nigeria's CPR entails wide state variations, ranging from 0.3 percent in Jigawa to 41.6 percent in Lagos State, as well as zonal variations ranging from 2.7 percent in the North West to 28.5 percent in the South West (UNFPA, 2010). The use of injectables, male condoms, and traditional methods all increased from 2003 to 2013 (NPC & ICF International, 2014).

Owing to low CPR and cultural norms encouraging large families, Nigeria's total fertility rate (TFR) as of 2013 was 5.5 births per woman (NPC & ICF International, 2014). This means that the average Nigerian woman will give birth to five to six children by the end of her childbearing years. Consequently, the maternal mortality rate is still high in Nigeria and is not improving, with 576 maternal deaths per 100,000 live births as of 2013, in comparison with 545/100,000 live births as of 2008 (NPC & ICF Macro, 2009). However, infant mortality has improved, with a rate of 100 deaths per 1,000 live births in 2003 as compared to 69 per 1,000 live births in 2013 (NPC & ICF International, 2014).

According to the National Reproductive Health Policy and Strategy to Achieve Quality Reproductive and Sexual Health in Nigeria (FMOH, 2001), RH in Nigeria is still very poor. Sixty-one percent of women received antenatal care (ANC) from a skilled provider, while one-third of women had no ANC at all (NPC & ICF International, 2014). ANC coverage varies by zone; about 40 percent of women in the North West Zone received ANC from a skilled provider compared to 91 percent in the South East Zone. The timing and quality of ANC are also important. Eighteen percent of women had an ANC visit before their fourth month of pregnancy, as recommended, and more than half of women made four or more ANC visits. More than half (55 percent) had problems getting money for treatment, and 25 percent did not find the health centers accessible.

Cross River State (CRS), in the South-South Zone, experiences a high fertility rate of 5.4 births per woman and a high unmet need for FP (31%). Use of modern contraceptives in the state declined from 16.3 percent in 2008 to 14.4 percent in 2013 (NPC & ICF Macro, 2009; NPC & ICF International, 2014). The uptake of FP services has been plagued by myriad challenges, including contraceptive commodity stockouts and unavailability of consumables.

1.2. Government Support in Nigeria

The events of the government public declaration to allocate US$3 million annually from 2011 to 2014 as counterpart funding to support the procurement of contraceptives highlights the government's support and concern for effective and equitable delivery of good-quality quality health services, including those for RH and FP. The government eliminated user fees in public health facilities and pledged US$8.34 million in funding for FP and RH commodities at the 2012 London Summit on Family Planning (Donald & Ahmed, 2013). This is in addition to the US$10–14 million annual support for the procurement of FP commodities provided by the United States Agency for International Development (USAID), UNFPA, the United Kingdom Department for International Development (DFID), the Canadian International Development Agency (CIDA), the Bill & Melinda Gates Foundation, and the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM)—all of which have been providing funding support to the Nigerian government.

Generating political support to prioritize safe motherhood and other RH issues in Nigeria has been difficult, because political leaders are burdened with many other challenges and have limited resources to deal with them. Furthermore, enlisting meaningful political backing in Nigeria for these issues depends on gaining the active support of state- and local-level political, social, and religious leaders, because the federalized nature of the political system circumscribes the power of the national government (Shiffman & Okonofua, 2007).

The Cross River State government implements the maternal and child health policy of the FMOH to increase access to RH services. Nevertheless, the state (including Cross River State) and local government councils have been encouraged to make financial commitments through budgetary allocation in order to increase funding for RH and FP services. However, some of the states have not yet created budget lines specifically for FP, while others have embedded the FP budget within RH or maternal and child health allocations.

Programming increasingly emphasizes the need for advocacy as a catalyst for mainstreaming and sustaining interest in RH programs among stakeholders (Amadi, Effiong, Okoro, Adeeyo, & Obiwole, 2004). It is important in catalyzing public opinion and support (Nathan, Rotem, & Ritchie, 2002), and in turn, this public support becomes central to the effective implementation of policies and programs (IPPF, 1995; Warhurst, 1997). Civil society organizations (CSOs) and government agencies should be at the vanguard, positioning RH as a central issue in population and development issues in Nigeria. Although they should be involved in policy dialogues to discuss development programs, in reality, most of them have insufficient knowledge of or access to policy and planning processes, and the role they can and should play is often underestimated by government.

Against this backdrop, this study seeks to accomplish the following tasks:

- Explain the budget process within the SMOH and in the health council of Calabar Municipal Local Government Council.
- Examine the use of routine health information (RHI) as evidence for budgetary allocation for RH and FP.
- Identify barriers and constraints to routine data use in this regard.
- Explore possible solutions.
- Dialogue with stakeholders on how routine health data can be used.

METHODS

2.1. Research Objectives and Questions

The research objectives are as follows:

1. Document the budgetary process within the SMOH and local health department.
2. Assess data demand, supply, and information use within the SMOH and local health department.
3. Assess policymakers' awareness of the relevance of RHI in budgetary allocation.
4. Determine the possible barriers and constraints to data demand and information use for budgetary allocation, which could be technical, organizational, behavioral, and/or environmental determinants, among others.
5. Disseminate results of the research to decision makers in the SMOH and local health departments to engender dialogue on how the barriers and constraints may be addressed, and to link the information to action.
6. Pilot technical support to the SMOH and local health departments to address barriers and constraints to data demand and use for budgetary allocation in the ministry.
7. Evaluate changes in routine health data demand and use for decision making regarding budgetary allocation for RH.

The research sought to answer the following questions:

1. Are government officials and decision makers aware of the relevance of RHI in budgetary allocation?
2. Are decision makers demanding and using RHI? Are the demands being met in the right format and at the right time? For what purpose(s) is RHI being demanded?
3. What are the barriers and constraints and other factors affecting data demand and use for budgetary allocation at the state and local government area (LGA) levels?
4. How might the barriers and constraints be addressed and linked to action?
5. What is the trend in FP use in Cross River State?
6. What are the factors exacerbating the poor use of RHI to inform budgetary allocation for RH and FP services?
7. Is there any significant change in awareness, data demand, and use for decision making regarding budgetary allocation for RH in Cross River State following the provision of technical support?

Figure 1: Map of Nigeria, showing Cross River State

Cross River State, Nigeria

2.2. Study Setting

The study area, Cross River State, is located in the South-South Geopolitical Zone of Nigeria and has a total land area of 23,000 sq. km. The state shares common boundaries with Cameroon Republic in the east, Benue State in the north, Ebonyi and Abia States in the west, and the Atlantic Ocean and Akwa Ibom State in the south. It has 18 LGAs with an estimated population of 4,026,585 (2015) based on a population growth rate of 2.98 percent. There are 196 political wards in the state, and Calabar is the capital. Many languages are spoken in the state. Efik, Bekwarra, and Ejagham are the three major languages; however, English remains the official language. The vegetation varies from tropical rain forest in the south to savannah in the north. The people of Cross River State are predominantly farmers and fishermen with a few petty traders and civil servants. The main sources of income are from federal subvention, oil producing areas derivation fund (currently in controversy), income taxes from a few companies, and large quantities of limestone in Akamkpa LGA.

Calabar metropolis is made up of two LGAs: Calabar Municipality (population 176,218) and Calabar South (population 196,630) (NPC, 2006). Calabar Municipality has 10 political wards while Calabar South has 12. It is a cosmopolitan city that embraces all ethnic groups in Nigeria. The metropolis is predominantly Christian, with a few Muslim and traditional religious groups, and is mainly occupied by civil servants, businessmen, and traders. The metropolis has three levels of healthcare facilities: 41 primary, 2 secondary, and 1 tertiary. The metropolis has 100 health facilities; among them, 56 are private. Calabar people are famous for their rich cultural heritage, warm hospitality, and peace-loving disposition.

2.3. Study Design

The baseline survey design was cross-sectional. Both qualitative (key informant interviews [KIIs]) and quantitative (structured questionnaires) research methods were employed for the survey. The research team also conducted a desk review of existing FP data in the state and Calabar Municipal LGA.

2.4. Study Population

The sample selection for the study was purposive. The study drew key informants from the relevant ministries, and the study team administered the questionnaires to selected middle- and junior-level officers at the state and LGA levels.

2.5. Data Collection and Analysis

The study team collected data using a structured questionnaire which was interviewer-administered to respondents and pre-tested prior to use. A MEASURE evaluation data demand and use tool was also applied to harness stakeholder's perspective on use of RHI and decision and actions plans were developed to address the gaps (MEASURE Evaluation, 2011). The team performed qualitative data analysis using a ZyINDEX table to summarize responses to each of the listed themes in a tabular form (stakeholders' knowledge on budgetary process, level of involvement in budgetary process, perceptions on the importance of RHI to inform health budgetary allocations, proportion of state budget allocated to RH, proportion of budget allocated to FP commodities, etc.). The quantitative and desk review data were analyzed using SPSS software version 16.0.

The study team used frequency distribution tables, pie charts, and histograms to depict respondents` perceptions, observations, knowledge, and insights. The desk review data were analyzed to generate frequency distributions.

Discussions from KIIs about the opinion and perception of key stakeholders towards the nature of the budgetary process, budgetary allocation to RH and FP, data demand, barriers and constraints to data

demand, and the importance of RHI in RH and FP budgetary allocation were transcribed and translated verbatim. Analysis involved developing a system of indexing the data into sets of categories or codes that provided structure to the data, based on the research objectives and the topics included in the interview guides. The study used a ZyINDEX table to summarize responses to each of the listed themes in a tabular form and also for textual data analysis.

2.6. Ethical Considerations

The study team obtained ethical approval from the Cross River State Research Ethics Committee of the SMOH. Verbal informed consent was sought and obtained from each research participant who volunteered to take part in the study. Before each interview, the participant completed a consent form. The research participants were assured of confidentiality of information elicited.

FIELDWORK

3.1. Planning Activities

On the first day of the baseline exercise, researchers held a survey planning meeting with key stakeholders from the SMOH and Calabar Municipal LGA. This meeting aimed to establish good rapport with the collaborating Department of Planning, Research, and Statistics and with other selected line ministries and agencies. The meeting sought to ensure a joint and uniform understanding of the research objectives and expected outcome of the baseline assessment survey, while putting in place a proper logistics plan.

The Association of Reproductive and Family Health (ARFH) team leading the study visited the Calabar Municipal LGA to create project awareness at the LGA level and to obtain approval from appropriate authorities to conduct the baseline survey in the Department of Health and Budget. Unfortunately, the Director of Budget at the Department of Budget Monitoring and Evaluation was not available to be interviewed despite repeated advocacy visits. Therefore, the team met the secretary and other department staff members to discuss the project. The Chief Accountant at the state level also provided information.

The ARFH study team made prebaseline contacts with the Principal Health Record Technician Officer, and with selected ministries, departments, or agencies (MDAs), which greatly facilitated the baseline exercise. However, at each MDA they visited, the team still had to meet with relevant officers to inform them of the activity and seek their permission before commencing.

3.2. Field Survey

The study team conducted KIIs concurrently, by administering the questionnaire in each of the selected MDAs. The KIIs were conducted with the relevant stakeholders of the SMOH; State Ministry of Finance, Budget, Monitoring and Evaluation; State Ministry of Social Welfare and Communities; Department of Health Calabar Municipal; Department of Budget Calabar Municipal; and nongovernmental organizations (NGOs).

A total of 31 middle- and junior-level staff completed questionnaires. The study team completed this work with the assistance of the head of the following MDAs: Department of Planning, Research, and Statistics, RH/FP Unit SMOH; Ministry of Social Welfare and Communities, Department of Budget Monitoring and Evaluation; Department of Health, Calabar Municipal LGA; and Department of Budget, Calabar Municipal. Some potential respondents, especially junior-level staff, were unwilling to participate in the study.

The study team conducted a desk review of FP data in the health management information system (HMIS) for both the state and Calabar Municipal. Data on commodity distribution and consumption disaggregated by method and LGA in the last two years (2012–2014) were assessed and extracted by the database manager and forwarded to the ARFH study team.

RESULTS

4.1. Characteristics of Respondents

Almost one of five respondents (19.2%) are from the SMOH, followed by the Cross River State Project and the Department of Planning, Research, and Statistics (both at 11.5%). The remaining respondents work in 10 different offices or facilities. The majority of respondents (29.2%) are from Calabar Municipal Council, followed by Calabar (16.7%). More than half of the respondents (56%) are at the state level; very few (4%) are at the local government level. The majority (56.5%) do not work in any vertical disease control program, but about a quarter (26%) work in HIV and AIDS. Most self-identified as statisticians and computer analysts at the elementary level (26.1%), followed by program officers (13%). The remaining gave 13 different titles.

Almost half of the respondents (46%) have been working in their current job between 1–10 years, while those that have been in their current job for a period of 31–40 years were very few (5%). The majority of respondents (43%) have worked in the health system between 1–10 years while one out of every 20 (5%) have worked in the health system between 31–40 years. Almost three-fifths of the respondents (59%) expect to work in the health system between 1–10 years more, 23 percent respondents are to stay between 11–20 years more, and a small number of respondents (18%) expect to stay in their current position between 21–30 years more.

Nearly one-third of the respondents have an intermediate level of education (30%) followed by those with a bachelor's degree (26%), master's degree (13%), and diploma level (9%). Only five respondents hold a different level of education or more advanced degree.

Slightly more than half of the respondents (52%) have never worked for an NGO or in the private sector. Among those that have, 29 percent worked in monitoring and evaluation (M&E). The other positions in which respondents had worked previously were hospital/medical superintendent, data analysis, data monitor, research officer, and field coordinator.

Almost all the respondents (94%) feel there are major differences in the public and private sector, such as supervision of service delivery, while only a few respondents (6%) said they did not think so. Among the respondents who believe there are major differences, 27 percent attribute the differences to budgeting provided for M&E, while others attribute differences to data quality, program monitoring in the public sector being too shallow, discipline, and equipment, among others.

Eight out of 10 respondents (81%) have acquired the necessary skills to use data and information to help in making decisions, while 19 percent of respondents claim not to have the necessary skills. Around 41 percent of respondents have received formal training in data analysis, data utilization, and leadership, while a huge proportion of respondents (68% and 83%, respectively) have never received any formal training in HMIS or planning. Half of the staff (50%) have been trained and benefited from statistical analysis, understanding current HMIS, and how to ensure good quality data. In addition, 45 percent of respondents have been trained in using database software.

4.2. Budgetary Process in Cross River State

In Cross River State, the traditional budgetary process has used the incremental budget approach, which requires only the addition of new budget lines and amounts on already existing budget items. This approach does not require rational use of data and does not require a rigorous process of justification based

on previous year's performance. The lack of a holistic state-specific health policy in the previous years has also contributed to the inefficient budgetary process. Below is a schematic diagram of the budget cycle in the state (Figure 2).

Figure 2. Schematic diagram of the budget cycle in Cross River State
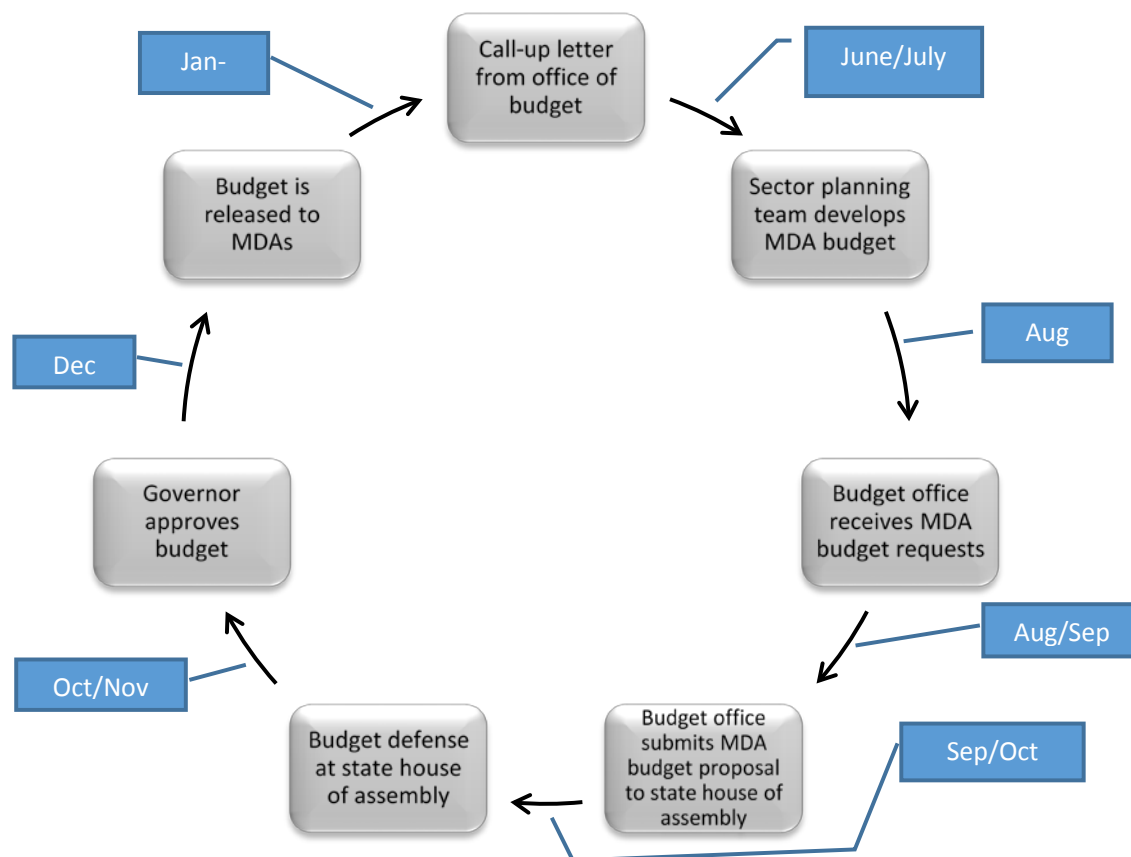
Each year the budget preparation begins in June, with a call for proposals from the Office of Budget in the governor's office to all the MDAs, parastatal organizations, and CSOs in the state. Usually, the budget is disaggregated by thematic areas and also by LGAs. For instance, RH, HIV, tuberculosis, malaria, immunization, and so forth are all grouped under public health. In the SMOH, as in other ministries, a sector planning team coordinated by the directors of planning, research, and statistics and these directors' counterparts in the accounts department coordinates the team. The sector planning team is usually made up of the directors of all the thematic areas and departments in the ministry. This team prepares the budget for the SMOH; once it's ready (usually in August), it is forwarded to the Office of Budget. The Office of Budget reviews and collates all submitted proposals and forwards only those with convincing justification to the State House of Assembly. The State House of Assembly usually takes about four weeks (September) to review, and the process of budget defense begins. At the State House of Assembly, the Commissioner leads the sector planning team in the budget defense; after this scrutiny, the budget is finalized and sent to the State Governor for his approval. This process may span another four to eight weeks. All things being equal, the governor's approval and passage of the budget may occur before the end of December, and funds are usually released at the beginning of the next fiscal year (January/February).

There are concerns about who participates at each level, especially at the budget preparation and ministry level. The involvement of disease-thematic focal persons within the ministry and with development partners and CSOs is often undermined. Similarly, when the budget is finally released, there may be alterations in the original submission, which are not always adequately communicated to the officers or departments concerned. For each request for release, the Office of Budget must issue an "Approval to Spend/Procure" to safeguard abuse of the budget application. There are also situations where the approved budget was not applied and had to be reclassified, resulting in a series of applications and reapplications before actual release. Occasionally, the budget for a particular department may be rolled over into another year if it was not utilized. This was the case with the RH budget in 2014, which was rolled over into 2015, because the State RH Coordinator claimed she was unaware of the allocated amount.

The KIIs revealed that the SMOH activity work plan describes in detail the activities planned by the RH/FP Department. In the 2014 budget, the Cross River State government allocated N9.8 billion (approximately US$6 million) to the health sector, of which just N10 million (about US$61,000), or approximately 0.1 percent of the health budget, was allocated to RH and FP. In 2015, the health budget dropped to N7 billion including hospitals and health-related institutions and departments, while N10 million allocated to RH in 2014 was reallocated in 2015 due to nonutilization of the budget in the previous year (Table 1).

Table 1. Budget allocation in Cross River State and Calabar Municipal LGA between 2012 and 2016

Year	Cross River State			Calabar Municipal LGA	
	Budget allocation for health	Budget allocation for RH and FP	Budget release	Budget allocation for health	Budget allocation for RH and FP
2012	N/A	0	0	NA	NA
2013	N/A	0	0	NA	NA
2014	N9.8b	N10m	0	NA	NA
2015	N7.0b	N10m	0	NA	NA
2016		N5m	N/A	NA	NA

Between 2014 and 2015, the allocated fund for health was reduced by N2.8 billion, which is an approximately 16.7% decrease. Consequently, fewer RH and FP programs are being implemented in the state, and the ones that are being implemented are poorly funded. However, it is noteworthy that FP is prioritized based on the RH budgetary allocation and the efforts made by CSOs. The funds allocated to FP have not been released for use since 2014 and are rolling over to another year—a form of negligence and lack of budgetary implementation that are colossal detriments to RH. A key informant reported:

> A total health budget for the year is 9.8 billion; the proportion of the health budget specifically "earmarked" for family planning is 10 million naira, and it has been rolling over since 2014 till date. For the year 2015, 7 billion is allocated to the health sector that is the hospitals, health-related institutions, etc. and 47 million to the health subsectors.

4.3. Criteria and Factors for Budget Formulation, Allocation, and Adjustment

The process of budget formulation has certain standards. The first standard is to ascertain the level of progress made in the previous year pertaining to programs and sectors in the state. The government policy for the year is also used to formulate strategies for developing programs to execute the policy. The level of achievement of programs and the government policy and annual work plan serve as criteria for the formulation of the budget.

The needs assessment (i.e., the identified needs on the ground), prepared by the SMOH, is the basis on which they receive budgetary allocation, although the SMOH does not usually get everything they require from the state government. In 2013, 27.3 percent of the total budget was allocated to the SMOH.

When there are outbreaks, additional funding can be accommodated in the supplementary budget. Further opportunities for budget adjustments are provided for during the budget defense or hearing and the budget review that takes place mid-way through the year.

> *If you talk about RH, it has to do with the consumption that is already done for the year because this is what determines what the procurement will be in the next budget. Therefore, we use data that is already in place.*—Key Informant

> *"During the budget hearing at the budget office level, the Ministry of Finance is part of the hearing. The budget office can then question and make adjustments; that is the first level of adjustment.*—Key Informant

The political, social, and economic environments have a significant effect on getting data and influencing the decision-making process. The extent to which these factors outweigh the importance of RHI data in making budgetary allocation depends on the quality and completeness of the data.

> *Let me start with the economy; it is the money that will determine the expenditure. On social aspect, no social hindrance affects us in this state. On political, the government has the portfolio to ensure that every state member lives a healthy life and that is why we are here to do the job.*—Key Informant

The key informants stated that RHI is frequently used in the budgetary allocation. The data are primarily used for budget preparation, policy formulation, and decision making. When key informants were asked why they use RHI data, they said it helps them know the numbers of men and women of reproductive age who are accessing FP, understand where the gaps are, make projections, determine where to allocate more resources, and assist with good planning. RHI is used to prepare advocacy briefs for the House of Assembly, Commissioner for Health, and Special Advisor on the Department of Budget Monitoring and Evaluation. Respondents said that at times they do not have the needed RHI to make RH and FP budgetary decisions.

The key informants believe that RHI is very relevant. The majority of them agreed that the data serve as the basis for the planning and budgetary process. RHI data are seen as being more important in allocation, especially with regard to FP commodity data. Malaria RHI was noted as being particularly important by some key informants.

4.4. Trends in Family Planning Use

Key findings from the baseline assessment in Cross River State and Calabar Municipal LGA showcased the effort of the government and partners supporting the state. Within the state, the contraceptive prevalence rate (CPR) data are promising. Although there were no state-level data in 2003 and 2008, despite the generally low CPR in the country, Cross River State had an above-average performance in 2013: 14.4 percent. This is approximately 4.4 percent higher than the national average for modern contraceptive use, and the 24 percent average use for any method in CRS represents a rate 8 percent higher than the national average (Figure 3).

Figure 3. Comparison of contraceptive prevalence rates: Cross River State and national averages between 2008 and 2013
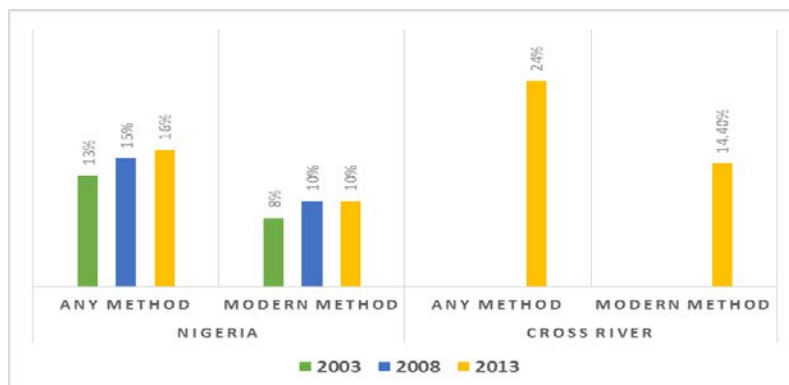
Source: NDHS

4.5 Family Planning Use in Cross River State

Comparisons between the numbers of clients counseled on FP and new acceptors of FP services were done for both the state and Calabar Municipal LGA data between 2012 and 2014. Comparisons showed that there was a steady increase in both the number of clients counseled and new acceptors. In the state, the number of new acceptors increased from 114 in 2012 to 25,005 in 2013 and 80,344 in 2014, while the number counseled increased from 366 in 2012 to 82,032 in 2013 and 161,915 in 2014 (Figure 4). Further analysis of the RHI data revealed that there was no correlation between the incremental increase in service utilization and the reporting rate by health facilities. (The reporting rate represents the proportion of health facilities who submit monthly activity reports among all registered health facilities providing RH/FP services in a given year.) Out of the 1,211 health facilities in the state, there were only 145 health facilities in 2012 (12%), 623 health facilities in 2013 (51%), and 302 health facilities in 2014 (25%) that provided services and reports on family planning services.

Figure 4. Comparison of number of clients counseled and new acceptors of FP in CRS and CMLGA
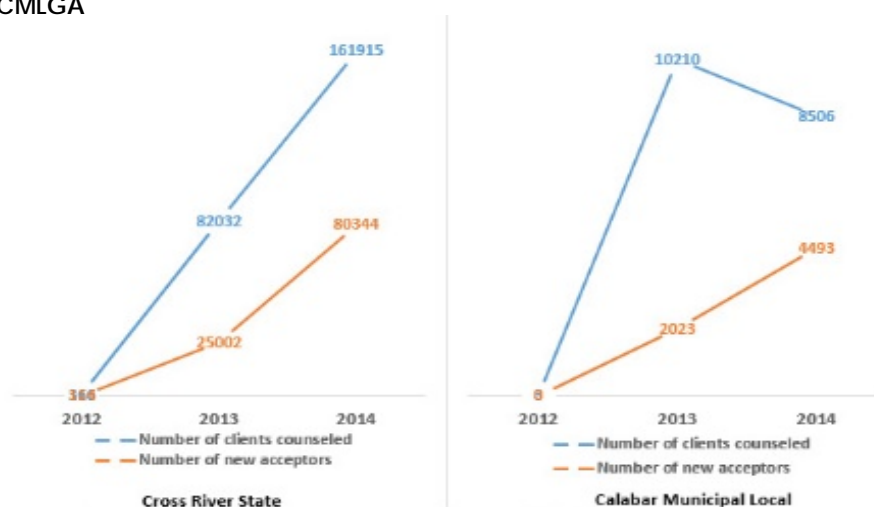
Cross River State, Nigeria

The increase in service utilization and commodity uptake can be attributed to more facilities reporting into the system (Table 2). Thus, the observed increase in new acceptors of FP may be a true reflection of actual service uptake. However, the upward trend observed at the Calabar Municipal LGA correlates with the increase in number of health facilities reporting.

Table 2. Proportion of clients counselled and new acceptors of FP in Cross River State

|	Year	Number of reporting units	Reporting rate	Number of clients counselled for FP	Number of new acceptors of FP
Cross River State	2012	145	12.0	366	114
	2013	623	51.4	82032	25002
	2014	302	24.9	161915	80344
Calabar Municipal	2012	5	6.2	3	0
	2013	30	37.0	10210	2023
	2014	49	60.5	8506	4493

Nonprescription FP methods, which include male and female condoms, spermicides, withdrawal, breastfeeding, and rhythm/fertility awareness are important contraceptive options because of their widespread availability, relative ease of use, and efficacy when used correctly. From 2012 to 2014, the trend of nonprescription FP method use in Cross River State revealed the male condom to be the most commonly used. In 2012, male condom distribution in Cross River State was reported at 27,557 compared to female condom distribution at 5,699; this increased in 2014 to 648,626 and 11,104, respectively.

Prescription contraceptive methods include oral contraceptive pills (OCPs), injectable, patches, contraceptive rings, intrauterine devices (IUDs), implants, and permanent methods (tubal ligation and vasectomy). The most commonly used prescription FP methods in Cross River State from 2012 to 2014 were injections followed by implants, then IUDs. In 2012, the frequency of use of injections, IUDs, and implants was 5,297; 623; and 34, respectively; in 2014, these figures increased to 34,504; 3,365; and 6,465, respectively (Cross River State District Health Information System).

4.6. Source of Family Planning Information

When asked about the source of information the stakeholders used to inform planning, budgeting, and decision making in the state, more than two-thirds of the respondents affirmed that they had not used published research data, financial reports, national surveys, and national HMIS data. About a third of the respondents agreed that they used national HMIS data (Figure 5).

Figure 5. Information sources and perceived usefulness by respondents in CRS
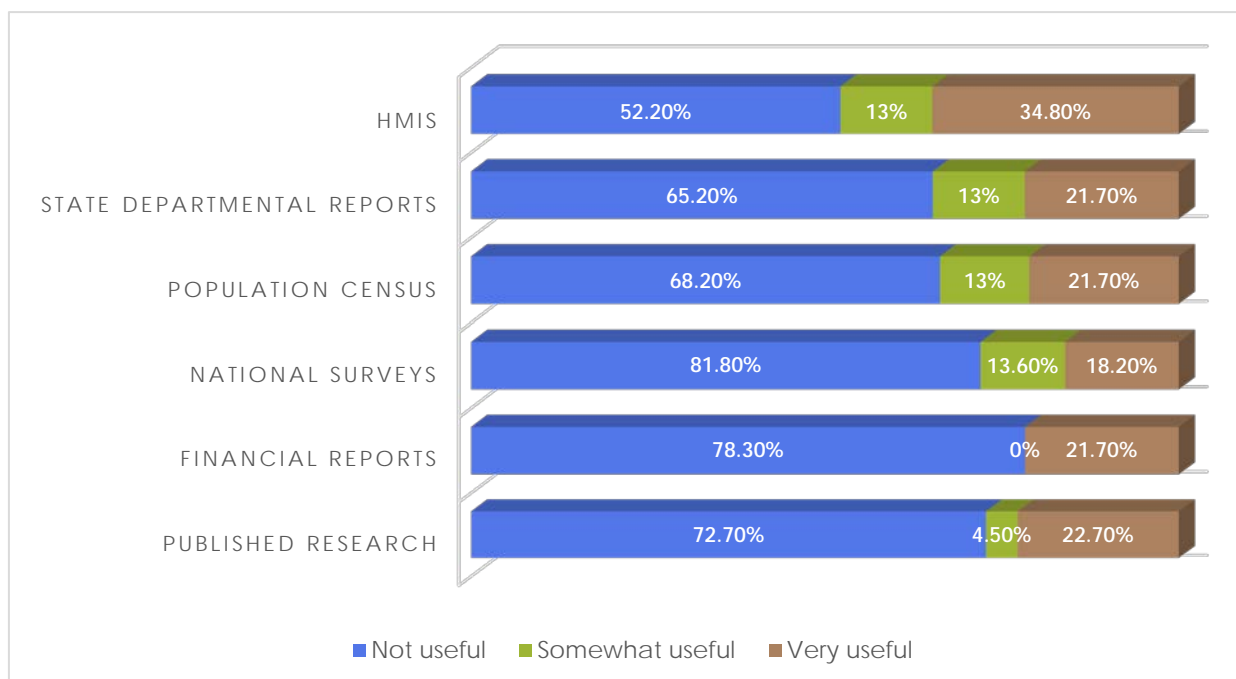
4.7. Stakeholder Involvement in the Budgetary Process and Allocation at the State Level

Sixteen out of 18 interviewees affirmed their participation in the state budgetary process. However, key informants who are not involved at the state level are involved in their respective local government budgetary process. CSO/NGO officers reported they had not been involved during the budgetary process and allocation at the state level.

> *No, Calabar Municipality has its own budget, which is prepared by the council, not the state. The LG has its own health department, which is equally doing its own budget. I am involved in the implementation as an exco."*—Key Informant

Table 3. Stakeholder involvement in state-level budget process and budget allocation

Ever engaged at budget process at state level	State gov't.	Local gov't.	CSO/NGO	BTAN
Yes	+++	++	+	++
No	-	++	-	-
Stakeholders' level of involvement				
High	+++	+	-	+
Partial	+	-	+	-
None	-	++	-	-

+++   Opinion expressed by most of the respondents (above half of the group>= 75%)
++   Opinion expressed by some of the respondents (below half of the group=<50%)
+   Opinion expressed by individual respondent
-   Opinion not expressed at all

Key informants' roles and levels of involvement in the budget process range from the preparation of the budget from lower levels to defending before the budget committee at the State House of Assembly. Key informants were involved in the collation of budget estimates from various arms of government and assessment and evaluation of the estimates before including it in the overall budget for submission.

> *I have been involved in the budgetary process for over 20 years, most especially in the allocation of the budget provision as well as in the preparation of the budget from the lower level before allocation and also the defense of the budget before the budget committee.*—Key Informant

Preparing the state budget usually starts in the third quarter (July–August) of every year. The government adopts the fiscal policy/budget in the first quarter (January–March) of the next year.

> *The state budget normally commences every year from June and by August we normally do our defense with the state budget office. By October/November we normally have our defense with the State House of Assembly and the State Assembly, then pass the budget by mid-December. This means that we always enter into the new year with the already passed budget.*—Key Informant

Various units or departments are involved in drawing up the budget proposal for the fiscal year, particularly the budget office and planning commission or department at the different levels (local and state) of government. The stakeholders involved in forming the budget and fiscal policy are health supervisors, primary health coordinators, project directors or managers, department heads, Permanent Secretary, commissioners, etc. In general, people in leadership positions in various departments, units, subunits, or projects are involved.

Table 4. Index summarizing the use of RHI

Stakeholders' use of RHI	State gov't.	Local gov't.	CSO/NGO	BTAN
High	++	+++	+	+
Low	-	-	-	-
Poor	-	-	-	-
Purpose for which RHI is being used?				
Budget	+++	+	+	-
Policy formulation	-	+	+	++
Decision making	-	++	++	+
Donor use	-	-	++	-
Was there any RHI that you needed but was not available?				
Yes	++	++	-	-
No	-	-	-	-
Don't Know	-	+++	-	-
Who are the primary stakeholders who use RHI?				
NGOs	++	+	++	+
CSOs	-	+	+	+
Government	+++	+++	+++	+
Donors	+	+	++	+
Individual	++	-	+	+

+++   Opinion expressed by most of the respondents (more than half of the group)
++   Opinion expressed by some of the respondents (less than half of the group)
+   Opinion expressed by an individual respondent
-     Opinion not expressed at all

4.8. Preparing the SMOH/LGA Budget

Preparation of the SMOH/LGA budget usually falls within the third and fourth quarter of the year. It is the budget department's duty to distribute the SMOH/LGA budget circulars for each year. These circulars are sent out (with the timeline and deadline) between June and October. The stakeholders involved include the Department of Planning, Research, and Statistics with some donor agencies.

The key stakeholders revealed that the state handles their budget while local governments handle their own budgets separately. The Local Government Counselor is responsible for liaising with the local government. The account department does not submit a budget to the governor but to the Budget Monitoring and Evaluation Department in the governor's office, which collates all the budgets of other MDAs and sends it as a single booklet to the executive council for consideration. There is always variation, which is higher or lower in the SMOH and LGA budget line and cost.

> *The state handles their budget while the LG handles its own. The communities have counselors representing them so (they) interface with the LG.*—Key Informant

In 2012, per capita allocation on health in the SMOH/LGA budget was N1,475 (US$9). To create the health budgets, logistics data and client acceptor data (i.e., number of clients accepting an FP method) are used.

Preparing the budget involves deliberation among the state governor, budget office, State House of Assembly and the Honorable Commissioners on which areas the funding will come from. Some of the respondents believed that it was strictly based on need. The SMOH and LGA usually base their decision making, monitoring, and planning for RH and FP on available data from the Planning, Research, and Statistics Department and information received from the RH department. They use a framework for determining RH needs, which is part of the national HMIS.

The primary stakeholders using RHI were identified as civil society, SMOH, State Planning Commission, and development partners, as well as RH desk officers, and the Department of Primary Health Care (PHC).

The HMIS provides relevant data on health, which are used to plan budgetary allocations. The data provide required information on health services, morbidity, mortality, etc. in which key informants rely on the data for decision making. Data quality is an issue, as well as the need to triangulate data from multiple sources of information.

> *That is why we do validation. The staff do go out for data validation before transfer into the DHIS, so we try to correct all the anomalies, and besides the PHC coordinators normally have their unit meetings where data is cross-checked.*—Key Informant

Analysis of the KIIs revealed that all the respondents interviewed in different work settings have a potentially major role in budget processes and allocations. A high level of knowledge of the budget process and allocations at the state level was revealed among officers working with the state government and the BTAN. However, the level of knowledge among the officers in the local government and in CSOs and NGOs is fair. This is because respondents reported that the state does not involve the local government in the budget process and budget allocation. The level of commitment and support to enhance use of RHI in the budgetary process and allocation among CSOs was high, although there are some reported constraints limiting their inputs.

Cross River State, Nigeria

4.9. Sending Reports

Key informants said that the channel they adopted for sending reports is the monthly performance evaluation report; whereas, some health facilities send in their reports through the state planning commission, while others send it through the office of the counselor. They usually have town meetings where reporting issues are deliberated and informed feedback is provided. The key informants said the reports are not sent on a regular basis, which for some was seen as problematic, while some said they are sent quarterly.

4.10. Access to Information and Use in Decision Making

Slightly more than half of respondents (53%) said they are involved in or influence the decision making process. When asked the extent to which they use data for decision making, nearly 90 percent reported they "always use data" for medical supply and drug management and identification of emerging issues such as emerging epidemics. In most categories, respondents reported that they use data for programmatic decision making.

Most respondents claim they have access to data, with HMIS and disease surveillance data being the most useful. Microsoft Excel is used by respondents mostly for data keeping and presentation, along with PowerPoint and other database systems. However, the majority of respondents (66.7% and above) do not use software for analysis and presentation of data. Most respondents (85.7%) use reports that involve data, while even more (94.1%) claim they frequently use data in their own reports.

Most respondents (83.3%) think data are used for program monitoring. Among them, all clearly expressed that data are used for program monitoring of FP acceptance followed by maternal and child health programs.

About 7 in 10 respondents (73.3%) have heard of results-based financing. They described it as funding activities that have a positive impact on outcomes; or providing overtime for staff. Further enquiries revealed that the budget for finances has been tight to project and to execute programs before all payments are made.

4.11. Behavioral Factors

Evidence/facts and political interference both stand out among respondents as being strong factors in which their organizations base decision making. Most "somewhat agree" that decisions are based on superiors' directives. Furthermore, one-fifth of respondents "strongly agree" that decisions are based on personal liking.

Figure 6. Organizational behavioral factors
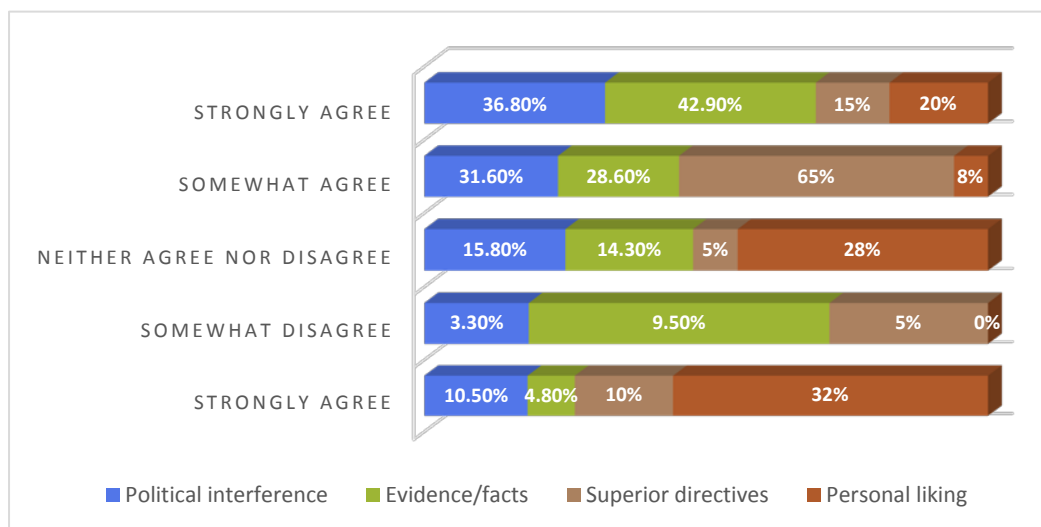
Most reported that superiors emphasize data quality in reporting, while an equal number felt their superiors seek feedback from concerned persons and make use of evidence/facts (65% and 35%, respectively).

4.12 Data Use Issues and Remedies

Many respondents felt that collected data take too long to reach the intended level. Half of respondents agreed that there is little culture of looking at outputs and outcomes. However, nearly three-quarter of respondents disagreed ("strongly" or "somewhat") that data are only used for record keeping and not for program support/monitoring. In addition, 45 percent of respondents "strongly disagree" that there are no set criteria for data collection and analysis (Table 5).

Table 5. Data use issues

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
There is little culture of looking at outputs and outcomes.	0(0.0)	2(10.0)	4(20.0)	10(50.0)	4(20.0)
There is little agreement on what the key indicators of performance are.	1(5.6)	4(22.2)	4(22.2)	3(16.7)	6(33.3)
There is often data duplication and confusion as to the real figures.	7(31.8)	5(22.7)	0(0.0)	8(36.4)	2(9.1)
There is too much information.	4(20.0)	3(15.0)	7(35.0)	4(20.0)	2(10.0)
There is no analysis and feedback from supervisors on data that are collected.	8(36.4)	4(18.2)	5(22.7)	3(13.6)	2(9.1)
Government discussions are based on political issues, not information.	2(9.5)	6(28.6)	5(23.8)	6(28.6)	2(9.5)
There are no set criteria for data collection and analysis.	9(45.0)	3(15.0)	3(15.0)	5(25.0)	0(0.0)
There are no incentives for data utilization; too much trouble.	2(9.5)	2(9.5)	4(19)	8(38.1)	5(23.8)
Data are of poor quality	6(30)	6(30)	3(15)	4(20)	1(5)
There is an unwillingness to accept shortcomings in data.	3(15.8)	5(26.3)	5(26.3)	4(21.1)	2(10.5)
There is a general lack of skills to analyze and use data collected.	4(19)	4(19)	0(0.0)	9(42.9)	4(19)
Collected data take too long to reach at relevant level.	4(18.2)	3(13.6)	1(4.5)	6(27.3)	8(36.4)
Use of data is only for keeping records and not for program support/ monitoring.	8(36.4)	8(36.4)	1(4.5)	3(13.6)	2(9.1)

Most respondents (72.7%) "strongly agree" that providing training to healthcare providers is important for data collection, analysis, and use as a strategy for improving data use. However, 39.1 percent of respondents "strongly disagree" with the strategy of regular reviews of health sector performance by politicians (Table 6).

Table 6. Strategies to improve data quality

Strategies to improve data quality	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Have independent data collection for HMIS data	3(12.5)	2(8.3)	1(4.2)	6(25.0)	12(50.0)
Make results available to the public	5(20.8)	4(16.7)	6(25)	3(12.5)	6(25.0)
Improve the timeliness of data	0(0.0)	0(0.0)	2(8.3)	7(29.2)	15(62.5)
Implement simple to use software for data presentation at all levels	0(0.0)	3(13.0)	5(21.7)	4(17.4)	11(47.8)
Establish uniform data reporting/feedback systems across all levels	0(0.0)	0(0.0)	1(4.2)	11(45.8)	12(50.0)
Ensure that data reports are available for all appropriate levels	0(0.0)	1(4.2)	1(4.2)	10(41.7)	12(50.0)
Encourage top level leadership to use evidence-based decision making	0(0.0)	0(0.0)	1(4.2)	9(37.5)	14(58.3)
Provide incentives for results, linked to performance measurement	1(4.2)	2(8.3)	1(4.2)	8(33.3)	12(50.0)
Ensure that data needs are clearly identified and linked to needs at all levels	0(0.0)	1(4.2)	0(0.0)	8(33.3)	15(62.5)
Improve the quality of data	0(0.0)	0(0.0)	3(13)	5(21.7)	15(65.2)
Provide training of healthcare providers in the importance of data collection, analysis, and use	0(0.0)	2(9.1)	1(4.5)	3(13.6)	16(72.7)
Provide training for management on the use of data for policy and program management	1(4.2)	3(12.5)	1(4.2)	5(20.8)	14(58.3)
Regular reviews of health sector performance by politicians	9(39.1)	1(4.3)	1(4.3)	4(17.4)	8(34.8)
Regular reviews of health performance by advocacy groups	4(16.7)	2(8.3)	7(29.2)	3(12.5)	8(33.3)

DISCUSSION

The South-South political zonal region is classified as a region with high fertility, with fertility peaks in the ages of 25–29 years in urban areas. The South-South region's CPR gradually increased from 25.4 percent in 2003 to 28 percent in 2013 (NPC & ICF Macro, 2013). Although Cross River State's CPR lags at 24 percent (any method) and 14.4 percent (modern methods), it is above than the national-level CPR. Meanwhile, the unmet need for FP in the South-South region is 22 percent, while in Cross River State it is 31 percent, indicating that access to acceptable methods of contraception is still very limited. Due to the high unmet need in the state, it appears from the data that FP programs and services are poorly funded.

Data on current FP use generated from the RHI system from 2012–2014 revealed an increasing trend in the uptake of modern contraceptive methods among women of reproductive age in Cross River State. As observed in this study, this increase in uptake over the three years could be attributed to a continuing trend in the increase of modern contraception utilization, as reported by Ezire, et al. in 2014. It could also be attributed to better facility record keeping. According to the 2006 Population and Housing Census, Cross River State's population is growing fast, yet awareness and utilization of FP is still very low.

Fluctuations in the frequency of new FP acceptors could be attributed to the low rate at which clients become aware of contraception from healthcare workers (Omo-Aghoja, et al., 2009; Agbo, Ogbonna, & Okeahialam, 2013). Also, community practices and cultural beliefs play significant roles in making decisions vital to women's RH, regardless of the facts provided. For instance, certain aspects of our culture strongly discourage modern contraceptive usage (Omo-Aghoja, et al., 2009).

From 2012 to 2014, the trend for nonprescription FP method use in Cross River State revealed the male condom to be the most commonly used. This is consistent with national-level data, showing male condoms to be the most popular contraceptive method next to pills (Osakinle, 2003; NPC & ICF Macro, 2013).

Although IUDs were 18 times more common than implants in 2012, in 2013 implants were 31 percent more popular than IUDs, while injection use soared. This change could be related to the findings from a study by Ojule, et al. (2012) that reported 51.8 percent of FP clients change to implants, possibly because of their convenience, effectiveness, safety, and discreteness. Hence, the progressive increase in the uptake of implants and injectables in Cross River State could mean that the majority of clients that accepted these contraceptive options made a change from their initial choice, which showed a preference for implants in keeping with findings from other studies (Horacio, Janos, Rebecca, & Herjan, 1999).

A study conducted in a rural community in Plateaus (Agbo, Ogbonna, & Okeahialam, 2013) showed that the main source of FP information is family and friends (46.4%), while health workers and media houses, at 19.1 percent and 7.2 percent, respectively, make up the least popular sources of information. Another study conducted among reproductive age women in a rural community in Lagos reported the prevalence of contraceptive use among respondents as 38.6 percent (Oluwole, Kuyinu, Goodman, Odugbemi, & Akinyinka, 2016) despite the level of awareness about contraception being 83.2 percent.

The current study seeks to report the processes for aligning service data with the budget process in Cross River State. The study found that there is no overarching state health plan that incorporates a global state-level health budget. The perspective and understanding of the budget process by stakeholders in the state varies depending on their level of involvement. This is also reflected by the extent to which the routine health data are utilized. The budget cycle in the state extends from the fiscal year beginning in July each year and runs through June of the succeeding year. The existing budget process is skewed towards incremental budget allocation based on previous performance. However, this paradigm may be altered with the realization that routine health data may contribute and suggest better innovative options to assure

improved budget performance. The state is therefore considering an innovative budget process by making use of program-based budgeting where evidence-based informed decision making that uses available data will be used in allocating budgets. This then will form the basis for evaluating program effectiveness and performance in the state.

Keeping in mind the new budget process, the study also demonstrated measures for improving budget allocation. It is imperative to ensure timely release of funds since evidence from the previous budget process shows that allocation does not necessarily equate with actual release of funds. Ensuring prompt and substantial budget release to support program implementation is an area that should be given priority in the state.

The study also noted that stakeholder awareness of the sources of data for the budget process varies across the entities. The state MDA and LGA staff are aware of the data sources, but there is limited awareness and access to budget process data at the CBOs and NGOs implementing in the state. While government entities act as duty bearers, the CBOs are expected to play a significant role in ensuring accountability and providing feedback to the government and general public on whether public funds are being used properly or improperly. With limited access to budget data, CBOs will have difficulty playing this role. Therefore, this accountability framework should be strengthened to improve budget performance.

The study also revealed concerns about the quality of routine health data and the level of reliability and credibility for these data to be used in the budget process. When data are not of sufficient quality, there is the possibility that the data might misinform the decision maker and generate concerns for equity and moral consideration. Stakeholders expressed differing views on the quality of the data. Respondents generally perceived that the data are of poor quality and are not being used for decision making. The results from the analysis of the collected data are not being reported back to the source level, and these data are mainly being used for record keeping and not for actual analysis and use for decision making.

CONCLUSION AND RECOMMENDATIONS

The HMIS remains extremely relevant when considering budgetary allocations for RH and FP in planning, policymaking, program design, and implementation. This study revealed that budgetary allocations for program M&E are perceived as the major difference between the private and public sectors, where the private sector is seen as been more engaged in oversight functions.

Half of the participants queried for this study have not received any training in HMIS and planning, which is an extremely important aspect that needs to be improved in order to engender informed decision making that is driven by quality data. Half of the participants believe data are useful in the areas of FP program acceptance, commodities and logistics (e.g., medical supply and drug management), and day-to-day management of program activities; whereas, numerous other applications of data are also possible.

Participants equally believe HMIS and the vital registration system are the best sources of data. Training on data management is imperative in order to ensure availability of quality data for decision making by policymakers. Even though the participants have a fairly good understanding of data management, they believe they need further training as this will strengthen their capacity to understand and use data. In turn, this is an important way to enhance service delivery in the health sector because virtually nothing can be done well without data acting as the raw material for planning and appropriation.

Our recommendations are as follows:

State Policymakers

- Clearly articulate the strategic direction for use of RHI in the decision making process.
- Make conscious efforts to ensure adequate funds are available for policy implementation through appropriate budget releases.
- Encourage involvement of all relevant stakeholders in the budget process.
- Make provisions to harness and create basket funds for all donor and implementing partner support.
- Make provisions for performance monitoring of the budget and demand feedback on the allocation of funding.
- Articulate and budget for strategies for effective distribution and dissemination of policy briefs and documents on RH and FP.
- Consistently provide an adequate budget for the distribution of FP commodities and procurement of consumables.
- Clearly spell out the strategies for civil society involvement, community engagement, and private sector and community participation.
- Make deliberate efforts to train frontline health workers on RHI use. They should also be oriented on the budget process.
- Track the budget as part of the budget process and establish a system to monitor and evaluate budget implementation at all levels.
- Facilitate the active involvement of the private sector in RH and FP policy formulation, implementation, and evaluation.

CSOs and the Media

- Ensure CSOs and the media play a crucial role in creating awareness and increasing the use of RH and FP services.
- Ensure use of routine health information for budget development and implementation.
- Monitor and track the implementation and funding of the RH and FP budget and programs at the state and LGA levels, and hold governments and the donor community accountable for implementation of those RH and FP budgets.
- Advocate to communities and religious leaders for RH and FP programming support.
- Lobby local governments to increase the RH and FP budget in the government's main budget.
- Monitor the release of budget allocation and its expenditure on RH and FP at all levels.

REFERENCES

Agbo, H. A., Ogbonna, C., Okeahialam, B. N. (2013). Factors related to the uptake of contraceptive in a rural community in Plateau State Nigeria: A cross-sectional community study. *Journal of Medicine in the Tropics, 15*(2), 107–112. Retrieved from http://www.jmedtropics.org/article.asp?issn=2276-7096;year=2013;volume=15;issue=2;spage=107;epage=112;aulast=Agbo.

Amadi, O., Effiong, E., Okoro, C., Adeeyo, B., & Obiwole. (2004). Promoting advocacy as a strategy for the reduction of sexuality and reproductive health challenges among faith based organisations in Lagos. International AIDS Conference (15th: 2004: Bangkok, Thailand). *International AIDS Conference*. 2004 Jul 11–16; 15: abstract no. ThPeE8137.

Bujari, P., & McGinn, E. (2013). Influencing government health budgets in Tanzania: A guide for civil society. Washington, DC: Futures Group, Health Policy Initiative, Task Order 5. Retrieved from http://advancefamilyplanning.org/resource/influencing-government-health-budgets-tanzania-guide-civil-society.

Donald, D., & Ahmed, A. A. (2013). *Advocacy for family planning: understanding the budget process in two Nigerian states: Cross River and Zamfara*. Washington, DC: Health Policy Project, USAID, 1–18. Retrieved from http://www.healthpolicyproject.com/index.cfm?ID=publications&get=pubID&pubID=104.

Ezire, O., Idogho, O., Theophilus, A., Ikani, S., & Oluigbo, A. (2014). Study on the patterns and trend in contraceptive use in South-South and North-Western zones of Nigeria: 2003–2011, *Journal of Contraception,* (5), 65–72. Retrieved from https://www.dovepress.com/study-on-the-patterns-and-trend-in-contraceptive-use-in-south-south-an-peer-reviewed-article-OAJC.

Federal Ministry of Health. (n.d.). National Health Management Information System: Cross River State [database]. Retrieved from https://dhis2nigeria.org.ng/dhis/dhis-web-pivot/index.html.

Federal Ministry of Health. (2001). *National reproductive health policy and strategy to achieve quality reproductive and sexual health for all Nigerians*. Abuja, Nigeria: FMOH. Retrieved from http://www.youth-policy.com/Policies/Nigeria%20National%20Reproductive%20Health%20Policy%20and%20Strategy.pdf

Fotso, J. C., Ajayi, J. O., Idoko, E. E., Speizer, I., Fasiku, D. A., Mberu, B., & Mutua, M. (2011). *Family planning and reproductive health in urban Nigeria: Levels, trends and differentials*. Chapel Hill, NC: Measurement, Learning & Evaluation Project, University of North Carolina, USA and National Population Commission, Nigeria. Retrieved from https://www.urbanreproductivehealth.org/resource/family-planning-and-reproductive-health-urban-nigeria-levels-trends-and-differentials.

Horacio, B., Janos, B., Rebecca, M., & Herjan, C. (1995). A multi-centre efficacy and safety study of the single contraceptive implant Implanon®. *European Society of Human Reproduction and Embryology, 4*(14), 976–981. Retrieved from http://humrep.oxfordjournals.org/content/14/4/976.long.

International Planned Parenthood Federation. (1995). *Advocacy guide for sexual and reproductive health & rights*, 1–61. London, United Kingdom: International Planned Parenthood Federation. Retrieved from https://youthsextion.files.wordpress.com/2011/05/ippf_advocacy_guide.pdf.

Jangu, W. I. (2013). Attitude and willingness of men towards the use of modern family planning methods in Budondo Sub-County, Jinja, Uganda. Kampala, Uganda: School of Public Health, Makerere University. Retrieved from http://www.academia.edu/4239220/Attitude_and_willingness_of_men_towards_the_use_of_modern_family_planning_methods_in_Budondo_Sub-County_Jinja_Uganda.

MEASURE Evaluation. (2011). *Tools for data demand and use in the health sector: Information use map.* Chapel Hill, NC: MEASURE Evaluation, University of North Carolina. Retrieved from https://www.measureevaluation.org/resources/publications/ms-11-46-c.

Nathan, S., Rotem, A., and Ritchie, J. (2002.) Closing the gap: building the capacity of non-government organizations as advocates for health equity. *Health Promotion International, 17*(1), 69–78. Retrieved from http://heapro.oxfordjournals.org/content/17/1/69.full.

National Population Commission, Nigeria (NPC) & ICF International (2014). *Nigeria demographic and health survey 2013.* Abuja, Nigeria, and Rockville, Maryland, USA: NPC and ICF International. Retrieved from http://www.dhsprogram.com/what-we-do/survey/survey-display-438.cfm.

National Population Commission (NPC) [Nigeria], & ICF Macro. (2009). *Nigeria demographic and health survey 2008.* Abuja, Nigeria: NPC and ICF Macro. Retrieved from http://dhsprogram.com/pubs/pdf/fr222/fr222.pdf.

National Population Commission, Nigeria (NPC). National and State population and Housing Census: 2006 Census Priority Tables (Vol 1). 2006. Abuja, Nigeria: NPC. Retrieved from http://www.population.gov.ng/index.php/publications/138national-and-statepopulation-and-housing-tables.

Oluwole, E. O., Kuyinu, Y. A., Goodman, O. O., Odugbemi, B. A., & Akinyinka, M. R. (2016). Factors influencing the uptake of modern family planning methods among women of reproductive age in a rural community in Lagos State. *International Journal of Tropical Disease & Health, 11*(3), 1–11. Retrieved from https://www.researchgate.net/publication/283849439_Factors_Influencing_the_Uptake_of_Modern_Family_Planning_Methods_among_Women_of_Reproductive_Age_in_A_Rural_Community_in_Lagos_State.

Omo-Aghoja, L. O., Omo-Aghoja, V. W., Aghoja, C. O., Okonofua, F. E., Aghedo, O. A., Umueri, C., . . Onowhakpor, E. A. (2009). Factors associated with the knowledge, practice and perceptions of contraception in rural southern Nigeria. *Ghana Medical Journal, 43*(3), 115–121. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/20126323.

Ojule, J. D., Oranu, E. O., & Enyindah, C. E. (2012). Experience with Implanon in southern Nigeria. *Journal of Medicine and Medical Sciences*, 3 (11), 710–714. Retrieved from http://www.interesjournals.org/full-articles/experience-with-implanon-in-southern-nigeria.pdf?view=inline.

Osakinle, E. O. (2010). The use of barrier methods in preventing unwanted pregnancies among women in Ekiti State, Nigeria. *Ozean Journal of Social Sciences*, 3 (3), 201–207.

Population Reference Bureau. (2008). *World population data sheet: family planning worldwide data sheet.* Population Bulletin (63) 3, 1–14. Retrieved from http://www.prb.org/Publications/Datasheets/2016/2016-world-population-data-sheet.aspx.

Shiffman, J., & Okonofua, F. E. (2007). The state of political priority for safe motherhood in Nigeria. *BJOG an International Journal of Obstetrics and Gynaecology*, 114(2), 127–133. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/17305890.

Warhurst, J. (1997). Changing relationship between governments and interest group. In: Prasser, S., Starr, G., editors. *Policy and Change: The Howard Mandate*. Sydney, Australia: Hale & Iremonger Pty Ltd.

8.0. APPENDIXES

Appendix 8.1. Names and Contact Details of Key Stakeholders for Survey Planning Meetings

S/N	Name of Officer(s)	Designation	Ministry, Dept., and Agency
1	Dr. O. Ikpoti	Director, Medical Service/Rep. Permanent Secretary	SMOH
2	Elder Dr. (Mrs.) Comfort Ekanem	Ag. Director, Department of Clinical Governance, Servicom and E-Health	SMOH
3	Pastor Dan Micheal	Principal Officer, Department of Pharmacy	Pharmacy, SMOH
4	Com. Otu O. Otu	Deputy Director, Administration	SMOH
5	Celestina Owuna	Chief Health Record, Department of Planning, Research and Statistics	SMOH

Appendix 8.2. List of Stakeholders and Officers Interviewed in the SMOH and Calabar Municipal LG Council

1. Budget Transparency and Accountability Initiative Nigeria—Executive Secretary
2. Department of Budget Monitoring and Evaluation—Director of Budget and Director of Planning, Research Statistics
3. Ministry of Health—RH/FP Coordinator
4. Ministry of Health—Director of Planning, Research, and Statistics
5. Ministry of Health—Family Planning Focal Person
6. Ministry of Health—Agricultural Director Department of Clinical Governance, Servicom and E-Health
7. Ministry of Health—Chief Accountant
8. Ministry of Health—Pharmacy
9. Ministry of Social Welfare and Communities—State Program Manager
10. MDGs Department of International Development Cooperation—Program Manager
11. Nongovernmental organization—Pathfinder International
12. Nongovernmental organization—FHI 360
13. Department of Health Calabar Municipal—Director PHC
14. Department of Health Calabar Municipal—Focal Persons for Reproductive & Family Health
15. Supervisor for Health, Calabar Municipal Council LGA

Appendix 8.3. Key Informant Interview Participant Characteristics

Designations	State Govt.	Local Govt.	MDG/ NGO	CSO (BTAN)
Executive Officer				1
Director	8			
Coordinator	1	1		
Manager	1		1	
Senior Officer	2	2		
Officer		1		

Appendix 8.4. Research Team

From left, Dr. Abiodun Hassan, Monitoring and Evaluation Coordinator, ARFH; Mrs. Kehinde Osinowo, Director of Programs; Prof. O.A. Ladipo, President and Chief Executive Director; Dr. (Mrs.) Olushola Osinowo, Program Officer; Mr. Joseph Majiyagbe, Director, Finance and Administrative; Mrs. Adeola Olakunle, Research Officer.

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