





Formative Research on Key Child Survival and Nutrition Practices in the First 1,000 Days of Life: Findings





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Abbreviations and acronyms

ANC	antenatal care
FANTA	Food and Nutrition Technical Assistance (project)
IFA	iron and folic acid
IYCF	infant and young child feeding
MICS	Multiple Indicator Cluster Survey
MIYCAN	maternal, infant, young child and adolescent nutrition
NDHS	Nigeria Demographic and Health Survey
PDG	participatory discussion group
PNC	postnatal care
SBC	social and behaviour change
SBCC	social and behaviour change communication
SSI	semi-structured interview
WASH	water, sanitation and hygiene
IITA	International Institute of Tropical Agriculture
NDHS	Nigeria Demographic and Health Survey
NPC	National Population Commission
NBS	National Bureau of Statistics
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WASHNORM	Water, Sanitation and Hygiene National Outcome Routine Mapping
WHO	World Health Organization

At a glance: Key child survival and nutrition practices in the first 1,000 days of life





STUDY PARTICIPANTS

lotal	lotal participants: 5/5					
71% women 29% men						
Ages:						
73	195	145	63	49	29	21

INFANT AND YOUNG CHILD FEEDING

23.1%

Mother initiated breastfeeding within 1 hour of birth

34.4%





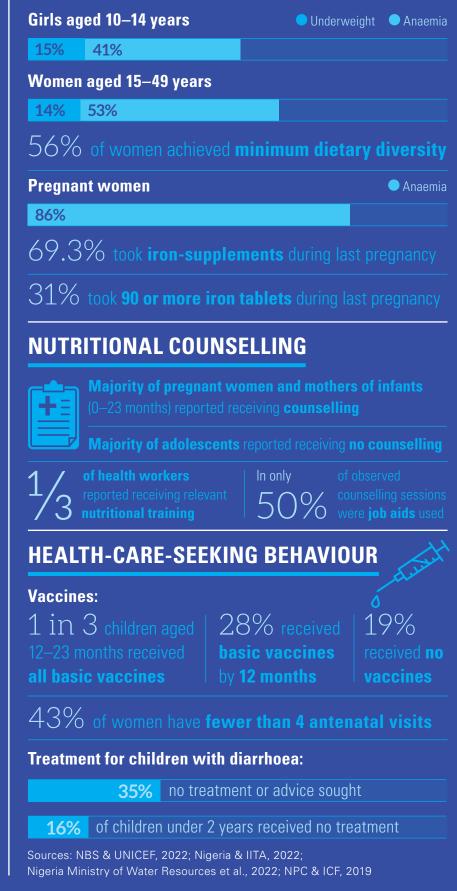


facility or drinking water treatment

1 in 5 people practises **open defecation**



ADOLESCENT GIRLS' AND MATERNAL HEALTH







Key child survival and nutrition practices in the first 1,000 days of life

Executive summary

The formative research was commissioned by UNICEF with an overall goal of obtaining an in-depth understanding of the factors leading to maternal, infant, young child and adolescent nutrition (MIYCAN), health and water, sanitation and hygiene (WASH) key practices in Nigeria during the most crucial period for children's growth and development: the first 1,000 days through pregnancy until a child's second birthday. The study was designed to complement previous research and current quantitative indicators through the use of qualitative methods to uncover contextual detail.

The interviews, discussion groups and observations focused on exploring the determinants of four key areas of interest: (i) adolescent and maternal nutrition, (ii) infant and young child feeding, (iii) healthcare utilization and (iv) WASH practices. Data was collected in semi-structured interviews (SSIs), interviews with observations and discussion groups (referred to in this document as participatory discussion groups, or PDGs) across 12 communities in six states: Cross River, Enugu, Gombe, Kano, Niger and Oyo. Selected states and communities were chosen to represent each of Nigeria's six geopolitical zones, as well as the diversity of religions, ethnicities, urban and rural and gender normative contexts, differing status on MIYCAN indicators and varying access to social amenities across Nigeria. Participants consisted of adolescent girls and young women (aged 15–19 years), pregnant women, mothers of children under 2 years of age, health-care providers, community and traditional leaders, fathers, husbands, mothers-in-law and grandmothers.

The interviews, discussion groups and observations focused on exploring the determinants of four key areas of interest: (i) adolescent and maternal nutrition, (ii) infant and young child feeding, (iii) health-care utilization and (iv) WASH practices. Subsequently, qualitative thematic analysis was conducted to identify themes and uncover insights to address a set of specific research questions relating to these practices.



Findings were organized into five chapters by research question(s). The topics of focus for each chapter and examples of key findings detailed in each chapter are as follows:

- Chapter 1 focuses on access and barriers to nutrition, health and WASH services and infrastructure;
- Chapter 2 summarizes findings related to current behavioural practices, knowledge, beliefs and social norms that affect MIYCAN in the first 1,000 days of life;
- Chapter 3 presents findings regarding gender dynamics and gender ideologies in the family and community that have implications for MIYCAN and health;
- Chapter 4 presents reported sources of information and support for MIYCAN, health and WASH practices; and finally
- Chapter 5 looks at all the presented study findings to identify sociocultural assets and factors that could potentially facilitate social and behaviour change (SBC) for MIYCAN, and recommends possible approaches to trigger and facilitate desired MIYCAN SBC.

Some key qualitative insights detailed in Chapter 1 include:

- The majority of pregnant women and mothers of 0–23-month-old infants reported receiving nutritional counselling, while the majority of adolescents reported never receiving it.
- Health-care providers in all observed counselling sessions made eye contact with mothers, used simple language and gave mothers the opportunity to ask questions. However, only half recognized and praised the mothers for correct practice.
- Many health-worker participants reported gaps in their own training, particularly on maternal nutrition topics, as well as gaps in the frequency of trainings and few refresher trainings.
- Health workers reported receiving supportive supervision more routinely for other topics and skills such as immunization services and not for nutritional counselling.
- Despite many health workers reporting that they had job aids (e.g., posters, flip charts and flyers), the use of job aids was observed in only half of the counselling sessions. Cooking demonstrations were rarely reported.
- Women and health-care providers noted gaps when it comes to women's ability to implement nutritional counselling recommendations. These gaps were largely due to financial issues, which can reduce the perceived usefulness of counselling and decrease women's interest in the services.
- Multiple barriers to accessing health services were discussed by participants, including financial barriers, distance, limited service hours, lack of supplies and staff and health-worker attitudes.

Some key qualitative insights detailed in Chapter 2 include:

- Adolescent girls, pregnant women and mothers participating in the study discussed eating from a variety of food groups and many were able to articulate correct knowledge about the nutritional benefits of some foods, e.g., fish, eggs and beans are high in protein and rice and yams are high in carbohydrates.
- Motivations for food consumption seemed to vary in women at different stages of the life course; adolescent girls placed greater priority on foods that were convenient to prepare, compared to mothers, who prioritized their husbands' or families' preferences.
- Women in all regions reported engaging in practices that undermine exclusive breastfeeding, such as expressing and discarding colostrum and feeding infants liquids soon after birth. Prelacteal feeding was a typical practice in communities and often done as part of traditional rituals.
- Almost all mothers learned from health workers that complementary feeding should start at 6 months, yet many reported starting complementary feeding before 6 months. Across locations, pap (maize meal porridge), rice, eggs and beans were most often mentioned as foods that mothers started feeding their children at 6 months, and continued feeding them up to 23 months.

- While all the pregnant women who participated in the study were taking iron and folic acid (IFA) supplements and most of pregnant women and mothers were aware of the benefits of IFA supplementation, almost none of the adolescent girls were taking IFA supplements, nor were they aware of the benefits of or recommendations for adolescent girls to do so.
- While almost all women reported using antenatal care (ANC) at some point during pregnancy, there was wide variation in when women reported initiating visits and how many visits they attended. Some mentioned thinking ANC is only necessary when the mother is sick or experiencing complications.
- Participants did not recognize most positive WASH behaviours as socially normative, with the exception of separating animals from infants.
- Open defecation was viewed positively, neutrally or as a necessity, and the reason cited most often for open defecation was a belief that latrines are a source of infection.

Some key qualitative insights detailed in Chapter 3 include:

- Participants described strong traditional gender ideologies that ascribe different spheres of influence to women and men. The women's sphere was described as limited to domestic and caregiving duties, whereas men were attributed a broader sphere of influence outside of the household and viewed as the key decision makers for most household matters.
- Decisions on food purchasing for the household were mostly made by husbands and largely based on their dietary preferences. Many participants reasoned that men have more purchasing decision-making power because of their status as financial providers.
- Men were seen as responsible for making decisions about seeking health care, including when to visit a health facility and which health facility to attend. Some husbands do not allow health workers to touch their wives because of their religious or cultural beliefs.
- Participants expressed the widespread norm that wives need to seek permission from their husbands before accessing health facilities, either for themselves or for their children.
- Participants discussed several serious social repercussions (i.e., social sanctions), ranging from social shame to divorce, that women and men face if they do not conform with normative expectations. Men face more sanctions outside the household than women do (e.g., from community leaders), while women face more sanctions within their own households from their husbands and families.

Some key qualitative insights detailed in Chapter 4 include:

- Practices that adolescent girls observe growing up impact behaviours later in life, including WASH practices and cooking, which they learn from mothers, grandmothers and other female relatives.
- The most trusted sources of information for adolescent girls and mothers included their own mothers, mothers-in-law, grandmothers, sisters, community health workers, community leaders and hospital health workers, as well as radio, TV and religious influences (e.g., mosque and church).
- Social media were also mentioned, but participants noted not trusting them as much as radio or TV.
- Barriers to adolescents accessing information included being at school when relevant radio or TV programmes aired and needing permission from a parent to visit health facilities for information.
- Mothers reported relying on their own mothers and mothers-in-law for information on breastfeeding. Mothers and grandmothers promoted giving prelacteal feeds, discarding colostrum and delaying initial breastfeeding.



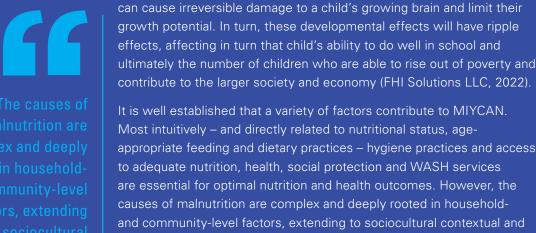
Some key considerations and recommendations detailed in Chapter 5 include:

- SBC campaigns should continue to encourage men, not only as household gatekeepers but also as "loving protectors", to ensure proper health-seeking practices and provision of healthy food for their wives and children.
- Providing women with food demonstrations, recipes and nutritional information in support groups, markets and food stores or over radio or TV channels would offer them additional knowledge, skills and support to provide nutritious meals for their families.
- Grandmothers and mothers-in-law are seen as protectors of tradition and in this role their support and shared responsibility for teaching and encouraging optimal nutrition practices is critical.
- Expansion of programmes in schools and greater involvement of teachers in imparting nutrition and health information would make an impact on adolescents.
- Given noted levels of social cohesion and regulation in communities, recognition and celebration at the community level of mothers and families practising optimal behaviours may serve as a strong motivator for SBC.
- Strengthening of capacity of health workers is needed to address reported training deficiencies and chronological training gaps, particularly on maternal nutrition topics.
- Gender transformative approaches are needed not only to enable women to be involved more fully in household nutritional decisions, but also to allow men to participate in child rearing and domestic work more fully, which are traditionally ascribed to women.
- In line with key study findings, 25 specific SBC activities are detailed and organized by five key SBC approaches.

The findings and recommendations laid out in this report are intended to contribute to the capacity of UNICEF, the Nigerian government and partners to design more tailored and contextually-aware SBC approaches to improve MIYCAN in Nigeria. Refined, more innovative, sustainable and nuanced SBC programmes to improve maternal and adolescent nutrition, health and well-being will play a critical role in helping Nigeria achieve the World Health Assembly Global Nutrition Targets in 2025 and contribute to Sustainable Development Goal 2 on zero hunger.

Malnutrition has critical consequences for lifetime health and development, as well as societal and economic development. Poor nutrition during the most crucial period for children's growth and development - the first 1,000 days through pregnancy until a child's second birthday can cause irreversible damage to a child's growing brain and limit their ultimately the number of children who are able to rise out of poverty and

Most intuitively - and directly related to nutritional status, ageappropriate feeding and dietary practices - hygiene practices and access to adequate nutrition, health, social protection and WASH services are essential for optimal nutrition and health outcomes. However, the causes of malnutrition are complex and deeply rooted in householdand community-level factors, extending to sociocultural contextual and structural factors in the larger society. Notable among these contextual factors, and less well understood, are social and gender norms, which affect women's and girls' ability to achieve equal health, education and socioeconomic outcomes.





As described in the 2023 UNICEF report *Undernourished and Overlooked*, globally women and adolescent girls are experiencing a 'triple threat' of undernutrition, overnutrition and micronutrient deficiencies (UNICEF 2023a). This is also the case in Nigeria, which falls considerably short of achieving the World Health Assembly Global Nutrition Targets for 2025, which were adopted as important stepping stones to achieving Sustainable Development Goal 2 by 2030 (WHO, 2014) (see Figure 1).

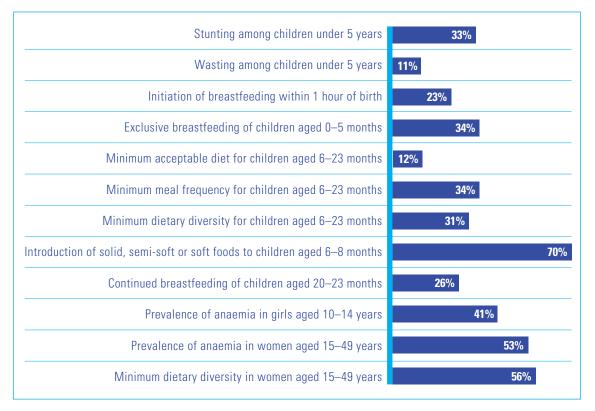


Figure 1: World Health Assembly Global Nutrition Targets

Source: Alive & Thrive using World Health Assembly targets (WHO, 2014)

In Nigeria, more than half of women of reproductive age are anaemic (see Figure 2). Poor nutrition is passed down through generations, as underweight mothers are more likely to deliver low birthweight children and have children who are undernourished (UNICEF 2023a). In Nigeria, the rate of child stunting (a sign of chronic malnutrition) is considered 'very high', the rate of child wasting (an indicator of acute malnutrition) is considered 'high' (Nigeria & IITA, 2022) and only about one in three children is breastfed exclusively for the first 6 months.

Figure 2: Key MIYCAN indicators for Nigeria



Data sources: Nigeria & IITA, 2022; NPC & ICF, 2019; NBS & UNICEF, 2022

Several recent social and geographic phenomena have contributed to the critical nutritional situation in Nigeria. The most notable of these are the COVID-19 pandemic and heightened conflict in northern Nigeria, which have contributed to urban migration and reduced farm labour availability, thereby impacting food production (Akpata, 2023). Nigeria is also vulnerable to climate change. Projected increases in temperatures, flooding, landslides and atmospheric carbon dioxide concentrations are expected to have a significant impact on Nigeria's food production and distribution (Morgan & Fanzo, 2020). Globally, the food security gap between men and women has widened and addressing gender inequalities and increasing the participation of women in agrifood systems has been called for as a necessary element for increased food production and improved nutrition at large scale (ReliefWeb, 2022). Demographic and gender challenges posed by Nigeria's large youth population and slow progress in addressing gender inequalities are also cause for concern. Nigeria's population is expected to double by 2050 (The Economist, 2020), and a large proportion of its people are currently in or approaching their reproductive years. To the extent that maternal malnutrition contributes to low birthweight and child undernutrition, the nutritional status of adolescent girls and young women is of particular concern, not only for themselves but also for their babies. Contextual understanding of key child survival and nutrition practices during the first 1,000 days through pregnancy until a child's second birthday is therefore needed to inform programmes, policies and interventions in this area.

Research objectives

The formative research project was commissioned by UNICEF with an overall goal of obtaining an in-depth understanding of the factors leading to key MIYCAN, health and WASH practices during a crucial period for children's growth and development: the first 1,000 days through pregnancy until a child's second birthday. The key practices of interest to the research are given in Table 1. The specific research objectives were as follows:

- To identify and analyse barriers and challenges to the adoption of positive nutrition, health and WASH practices, including the availability and quality of services and access to resources, as well as enablers that can facilitate and trigger improved practices.
- To explain and analyse the influence of gender dynamics and gender roles in families on childcare, including nutrition practices and health and WASH behaviours.
- To provide a deeper understanding of the prevailing social norms and cultural context that influence caregivers' behaviours in childcare.

The study results are intended to provide qualitative contextual insights to be used in the development of the national SBC strategy for MIYCAN, as well as future policies and programmes in Nigeria.

Table '	1:	Kev	practices	covered	in	the	research
Iupic		I C y	proctices	0000100			100001011

Adolescent and maternal nutrition	 Variety of foods consumed by adolescent girls and women during pregnancy and lactation IFA supplement uptake
Infant and young child feeding (IYCF)	 Breastfeeding behaviours (early initiation of breastfeeding, exclusive breastfeeding for 6 months, continued breastfeeding up to 2 years) Timely initiation of complementary feeding and variety of foods given to infants during complementary feeding after the first 6 months
Health	 ANC and postnatal care (PNC) visits Facility-based delivery Newborn care, including postnatal visits and management of diseases like diarrhoea Seeking health care
WASH	Handwashing with soapSafe disposal of infant faeces

"

The study results are intended to provide qualitative contextual insights to be used in the development of the national SBC strategy for MIYCAN, as well as future policies and programmes in Nigeria.

Methodology

Areas of inquiry for the study were guided by existing evidence on key child survival and nutrition practices during the first 1,000 days through pregnancy until a child's second birthday. The cross-sectional, descriptive formative study was conducted using one-on-one interviewing, observation and focus group discussion. The one-on-one interviews (SSIs) were semi-structured to ensure consistency and facilitate rapid comparative analysis of the results. The discussion groups (PDGs) included participatory activities to facilitate engagement with participants. Observational data was collected using a 'go-along' or 'walk-along' method, which is a form of in-depth qualitative interview method that is conducted by researchers accompanying individual informants on outings or as they engage in routine behaviours in their communities (Carpiano, 2009; Bibi & Ehgartner, 2021). Goalong interviews were used to observe and take notes on participants engaging in key behaviours while simultaneously asking participants about what was observed.

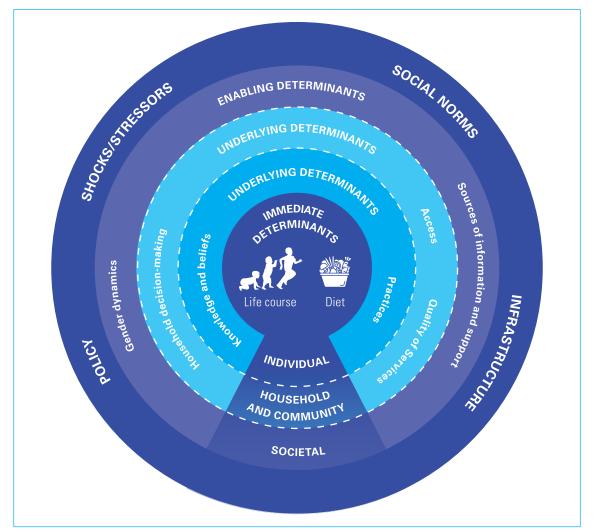
Areas of inquiry for the study were guided by existing evidence on key child survival and nutrition practices during the first 1,000 days through pregnancy until a child's second birthday (Victora et al., 2021) and the key findings of a rapid scoping literature review and resulting study conceptual framework. The study was conducted in six states, one in each of Nigeria's six geopolitical zones, and included a total of 575 participants. The protocol was reviewed and approved by the Nigerian National Health Research Ethics Committee and FHI 360's Protection of Human Subjects Committee. Data was collected by Insight Health Consulting.



Conceptual framework

The study's conceptual framework (Figure 3) builds on UNICEF's model of immediate, underlying and enabling determinants (UNICEF, 2021a) by placing these determinant types into a socioecological model (Bronfenbrenner, 1979) and identifying specific types of immediate, underlying and enabling determinants at each level of the model. Based on the findings of a rapid scoping review of literature published between 2018 and 2022, summarized separately (FHI Solutions LLC, 2022), and the research questions of interest to the study, 10 determinants were selected for focus in the study and included in the conceptual framework: diet, life course, related health and WASH practices, knowledge and beliefs, access to services, quality of services, household decision-making, gender dynamics, sources of information and support and social norms.



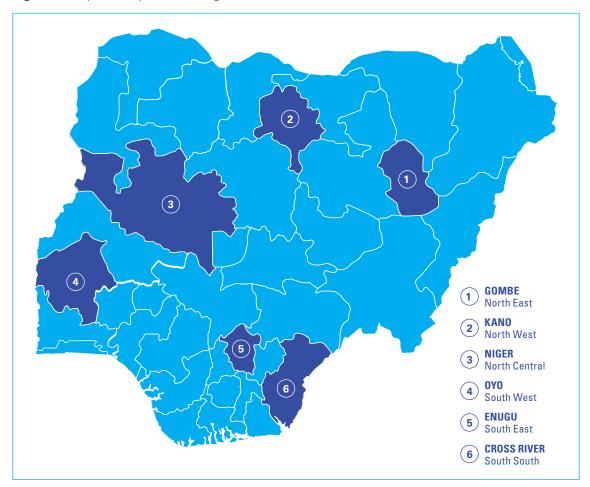


Source: FHI Solutions LLC, 2022

Site selection

With the goal of selecting diverse study sites, data was compiled from several sources on key maternal and adolescent nutritional status and practices, child health and nutritional status and practices, WASH indicators, gender indicators and the predominant ethnic and religious groups

in each state in Nigeria. States with high and low rates of performance on these indicators, and that were predominantly Islamic or Christian, were highlighted for consideration. After further deliberation of security concerns, availability of partners and locations of any ongoing or previous surveys and studies, six states with differing profiles on selected indicators were chosen (see Appendix A, page 107). One state in each of the six geopolitical zones was selected (Figure 4). The selection of states was subsequently discussed with UNICEF and the Nigerian Ministry of Health for their input and final agreement.





In Nigeria, states are divided into local government areas and each of these areas is further subdivided into a minimum of 10 and maximum of 20 wards or communities. To achieve diversity in the circumstances, perspectives and experiences of study participants, elements of randomization and stratification were added to the initial honing of study site locations. Specifically, a random number generator was used to select two local government areas in each state and three wards in each selected local government area. Since the current rural-to-urban makeup of Nigeria is 60 per cent rural and 40 per cent urban, selection continued until two thirds of the selected wards were rural wards. This list of 36 wards was presented to state-level stakeholders in each state, such as the directors of planning research and statistics, who, based on their extensive knowledge of the communities, purposively selected the final set of wards (i.e., communities) to serve as study sites. Ultimately, two communities in each state were selected as study sites: Yandunna and Sharada Bata A in Kano, Ubandoma and Kagarawal in Gombe, Kateregi and Dama A in Niger, Ndioke and Amachala in Enugu, Otu Ilesan and Idi Ape in Oyo, and Ugaga and Ikot Omin in Cross River.

Sampling and eligibility criteria

There is evidence that 80 per cent saturation of study themes can be achieved with 8–12 interviews per subpopulation (Namey et al., 2016). Therefore, 72 SSIs and 48 go-along interviews were conducted across the 12 communities. These sample sizes allowed for the four SSI interview guides and the four go-along interview guides to be discussed by 18 and 8 participants, respectively, and 12 SSIs and 8 go-along interviews to be conducted in each of Nigeria's six geopolitical zones. In terms of discussion groups, evidence indicates that 80 per cent saturation of study themes can be achieved with three focus group discussions and 90 per cent with five focus group discussions per subpopulation (Namey et al., 2016). Altogether, 54 PDGs were conducted, which resulted in nine per geopolitical zone and 7–12 in each of the seven focus areas. For each focus group discussion, an upper limit of 10 participants and a minimum of six participants were set, which resulted in 455 individuals participating in the PDGs.

Participant eligibility criteria

The study involved three primary types of participants: (i) adolescent girls; (ii) pregnant women and mothers of children under 2 years of age; and (iii) influential and knowledgeable individuals in the community who provide MIYCAN services, information and support. In each community, the SSIs were conducted with adolescent girls, pregnant women and mothers of children under 2 years of age, and the PDGs were conducted with adolescent girls, mothers, fathers, health-care providers, community and traditional leaders and mothers-in-law and grandmothers. Go-along participants were selected from SSI and PDG participants. Specific eligibility criteria for each type of participant are provided in Appendix B (page 109).

Data collection guides

The research collected uniquely qualitative data through three data collection methods, each with a distinct purpose and targeted participant types (Table 2).

Data collection method	Purpose	Participant types
SSIs	Obtain participant perspectives and insights regarding nutrition, health and WASH practices, and determinants of those practices	Adolescent girls and young women (15–19 years of age), pregnant women and mothers of children under 2 years of age
Go-along interviews	Observe key practices occurring in different community locations and interview those being observed about these	Mothers of children under 2 years of age, family members responsible for purchasing food, facility-based health-care providers, community-based health-care providers
PDGs	Collect input from members of households and communities who influence adolescent girls' and women's thinking and behaviour with regard to nutrition, health and WASH practices	Community gatekeepers, health-care providers, mothers, traditional leaders, mothers- in-law, grandmothers, fathers, adolescent girls

Table 2: Overview of data collection methods, purpose and participant types

Across these three data collection methods, 15 different guides were developed for data collection: four SSI guides, four go-along guides and seven PDG guides. The SSI, go-along and PDG guides were similar in structure, but each was tailored to elicit input on key practices and determinants from the perspective of different participant populations. Detailed information on the questions asked and populations enrolled for each guide are provided in Appendix C (page 110).

In total, 575 individuals were purposively sampled and enrolled for data collection between October 26, 2022 and November 25, 2022. Table 3 shows the total number of study participants by state and method. Most of the participants were female (71 per cent) and aged 20–39 years (59 per cent). Men and adolescents were also targeted for inclusion and made up 29 per cent and 13 per cent of all participants, respectively. Additional characteristics of the study participants are presented in Appendix D (page 112).

State	SSIs	PDGs	Go-alongs	Total
Cross River (South South)	12	94	8	114
Enugu (South East)	12	64	8	84
Gombe (North East)	12	89	8	109
Kano (North West)	12	60	8	80
Niger (North Central)	12	72	8	92
Oyo (South West)	12	76	8	96
Total	72	455	48	575

Table 3: Total study participants by state and method



Analysis

Audio recordings of the focus group discussions were transcribed and translated verbatim into English. Code books were created, consisting of structural codes from the interview guide, as well as structural codes for the domains of interest to the study. First, a team of coders coded the transcripts using Dedoose software. Analysts then summarized the data for each research question and subsection of the report using an Excel analysis matrix with all codes in the code books. The same process was followed for analysing the SSI, PDG and go-along transcripts. Given that different data collection approaches were used, not every behavioural practice or determinant of interest was asked about at each data collection event. Additional detail about the subset of transcripts that were analysed in each section of the report can be found in Appendix E (see page 113). As discussions were semi-structured and open-ended, not every topic or theme emerged in every discussion and resulting transcripts are not usually presented, rather general quantifying language like 'most' or 'a few' was used. In an effort to best represent what participants said in their own words, verbatim text is presented as much as possible throughout the findings section.

Organization of research findings

The study was designed to answer a set of research questions that had been defined prior to data collection.¹ This report is organized so that each chapter addresses distinct research questions. The research questions of central interest to each chapter are as follows:

Chapter 1: Nutrition, health and WASH services infrastructure

- How do caregivers and families access nutrition, hygiene and health services?
- What are the barriers and facilitators to utilizing these services?
- What is the quality of nutritional counselling, including the capacity of frontline health workers in counselling?

Chapter 2: Behavioural practices, knowledge and norms affecting MIYCAN in the first 1,000 days

- What are the current behavioural patterns among caregivers and families in relation to adolescent and maternal nutrition, IYCF, WASH and health-care utilization?
- What are the prevailing social norms and beliefs that shape these behaviours?

Chapter 3: Gender dynamics

• What are the gender dynamics and gender ideologies within the family and community and what are the implications for MIYCAN and health?

Chapter 4: Sources of information and support

- How do families seek and receive information on nutrition, WASH and health issues?
- Who are the most relied on and trusted sources of support and information?

Chapter 5: Recommendations

- What are the sociocultural assets and potential factors that can facilitate SBC for MIYCAN?
- What are the possible approaches that could trigger and facilitate the desired SBC?

¹ Notably, through the course of this research, the research team recognized the need for evolving some of the phrasing of the initial research questions. The list of research questions is therefore somewhat distinct from those initially posed by UNICEF.

Chapter 1: Nutrition, health and WASH services and infrastructure



Women and providers noted gaps when it came to women's ability to implement nutritional counselling recommendations, largely due to financial issues, which can reduce the perceived usefulness of counselling and decrease women's nterest in the services.



Nutrition counselling services

Key qualitative study insights regarding nutritional counselling services are:

- Nutritional counselling is mainly conducted by health workers and done in groups at the health facility level during ANC and PNC sessions and therefore is mostly limited to pregnant and breastfeeding women. Nutritional counselling in the community is rare.
- Adolescents reported not receiving nutritional counselling services in the community or health facilities.
- Many counsellors reported gaps in their own training, particularly on maternal nutrition topics, as well as gaps in the frequency of trainings and a dearth of refresher training opportunities.
- Counsellors reported receiving supportive supervision more routinely for other topics and skills – such as immunization services – and not for nutritional counselling.
- Women and providers noted gaps when it came to women's ability to implement nutritional counselling recommendations, largely due to financial issues, which can reduce the perceived usefulness of counselling and decrease women's interest in the services.
- Even though many health workers reported having job aids and tools to provide nutritional counselling, the majority did not use these during sessions with patients. Counsellors also reported a lack of funds for food demonstrations. Given high rates of illiteracy of patients, visual tools like posters with images and food demonstration items are viewed as significantly more useful than written materials.



Contextual background on nutritional counselling services in Nigeria

Nutritional counselling is a collaborative process between a trained counsellor and client to improve nutritional status through determining approaches that support healthy nutrition practices and overcome related barriers (FANTA, 2012). Nutrition counselling may leverage job aids to emphasize key messages and may be conducted in groups in health facilities or in the community (FANTA, 2012). It is well documented that efforts to provide nutritional counselling and support services to populations in low-resource countries are often hindered by shortages in the number of health workers with adequate knowledge and skills to provide quality nutrition services (Delisle, 2017).

In Nigeria, nutritional counselling is conducted by community volunteers, community health workers and health facility staff (Lamstein et al., 2018). The Population Council's Human Resources for Health project evaluated in-service training and continuing education programmes of health workers in Nigeria's Bauchi and Cross River states, finding that about a quarter of respondents had never participated in training activities and that, of the respondents in Cross River that had received training, only 27.3 per cent of respondents reported receiving training that covered topics related to nutrition (Okereke et al., 2019). Interventions that have aimed to improve the capacity of health workers for nutritional counselling in Nigeria through coaching, ongoing evaluation, provision of new visual job aids and supportive supervision have proven effective at increasing the number of people receiving nutritional counselling (FANTA, 2017). In 2020, the Alive & Thrive impact evaluation in Kaduna State found that mothers who received child nutrition counselling during a health facility visit while their child was 0-5 months of age had increased odds of exclusive breastfeeding. However, mothers' exposure overall to interpersonal counselling was low (Flax et al., 2021). To further contextualize understanding of nutritional counselling in Nigeria, both mothers and health workers were interviewed on the challenges and experiences of receiving and providing nutritional counselling specifically related to maternal nutrition or IYCF.

Detailed study findings on nutritional counselling services

Providers interviewed across communities reported that nutritional counselling on maternal nutrition and IYCF in health facilities is done by health workers with a group of women, either a group of pregnant women during ANC sessions or nursing mothers during immunization sessions. The frequency of group nutritional counselling sessions varies by community and by facility, ranging from one to three times per week and depending on the days set for antenatal and immunization sessions. If a nutrition-related health problem is identified, nutritional counselling can be carried out individually at a health facility. Some women said that after group counselling they can approach the health workers individually with more specific questions. Nutritional counselling in the community is done either individually by going house to house, or in groups by gathering community members.

We offer both group and individual counselling. As for the group counselling, we do it as a health talk before antenatal service starts in the morning. As for the individual counselling, it is done only when we observe [a] serious condition in the mother or the baby. What we normally do at the health talk or the group counselling is more prevention because we do tell them what they can do to prevent malnutrition in them and in their children. And for the individual counselling, it is mostly done when the problem has manifested; here we advise them to eat vegetables, eggs, tomatoes and other things like that. (Go-along interview, health worker, rural community, North West)

Neither adolescents nor providers reported nutritional counselling sessions with adolescents in health facilities or community settings as a regular practice. A few adolescents reported receiving information on nutrition from health providers during visits to health facilities to address specific health concerns. Table 4 summarizes the topics discussed in nutritional counselling.



Table 4: Topics discussed in nutritional counselling

Торіс	Example quote
 Maternal nutrition Balanced diet Food preparation Foods to eat and avoid during pregnancy Management of weight gain during pregnancy Foods to eat and avoid during lactation IFA supplementation and management of associated side effects 	We counsel them on the need to eat healthy and balance[d] diet food. We counsel them on how to use the available resources they have to prepare food that is good for their health and their children. We counsel them on what and what should they mix to give them the desired nutritional value. Again, we counsel women who are close to their expected delivery date on what they should do up to the time they deliver. We did not stop there; we also tell them what to eat after the delivery. (Go-along, health worker, rural community, North West)
	I counsel them on how to prepare certain foods, especially locally made food items. I teach them the different foods and what their nutritional gain [is]. I talk about what pregnant women should eat at different stages of their pregnancy. (Go-along, health worker, rural community, North Central)
 Breastfeeding Putting baby to the breast and breastfeeding position Early initiation of breastfeeding Exclusive breastfeeding for the first 6 months Treatment of health issues that impact breastfeeding, such as flat, inverted, cracked or sore nipples or low breast milk production 	Most [patients] say that breast milk is never enough to fill a baby. But we will respond and tell them that it is how much the baby sucks that will determine how much fluid will be in the breast. And mother also need[s] to feed well while breastfeeding so the baby will see something to suck. Some people say when a child suck too much the breast will sag. So, we just counsel them on it. When they get home, they can act on it. Even sometimes when they come and we see the way they position the baby, we correct them. Even the mothers, we tell them during postnatal on the things they can do that breastfeeding won't be a struggle. (Go-along, health worker, urban community, South West)
 Complementary feeding When to initiate complementary feeding Healthy diet for children aged 6 months and older, including dietary diversity and proper foods to give the child Food preparation Hygiene measures for food preparation Malnourishment treatment 	We tell them what to give the child as soon as he reaches 6–9 months. We also counsel them on what to give the child once he or she is 1 year and above because it is at this stage if care is not taken that the children become malnourished. In case of malnourished children, our facility is a CMAM centre. CMAM means community management of acute malnutrition. We counsel mothers of [these] children on what to do. (Go-along, health worker, rural community, North West)
 Other health topics General hygiene Newborn care Family planning Encouragement to attend ANC and PNC 	They do arrange them in [a] group and counsel them on hygiene practice and nutritional value of some food stuff like beans, vegetables and fruits, etc. (SSI participant, mother, rural community, North Central) They talk about giving breast milk, they talk about family planning. (SSI participant, mother, urban community, South West)

Access and quality barriers and facilitators

In addition to the barriers noted in the section on health services and infrastructure that are associated with visiting health facilities in general (see page 32), factors emerged that are specific to nutritional counselling services that create both barriers to and facilitators for accessing high-quality counselling (see Table 5).

	Example quote: Barriers	Example quote: Facilitators
Service quality and perceived usefulness	The challenges I experience is just that sometimes they won't even want to hear those things, they will be saying this is what government talks. Did they give us money to buy all those things? I beg leave us, we will be eating whatever we have and however we prepare it, let us be preparing it so. (Go-along, mother, rural community, South East)	It is very good and if you can follow because I follow it, it keeps the mother and child healthy so the food that is not good to eat, the time you are supposed to eat the right food, if someone can follow it. Me personally can testify to it that you will not have any problem at all, maybe the leg is swollen; the things that cause swollen legs too, we were told. It is really good. (SSI participant, pregnant woman, urban community, South West)
Counsellor training	Interviewer: "Tell me about any training you receive on providing counselling on breastfeeding?" Participant: "I have not received any Even if I did, it's a long time." Interviewer: "How long?" Participant: "Very long years." (Go-along, health worker, urban community, South South)	We talked on exclusive breastfeeding, complementary breastfeeding and we should make sure 4 stars is in the food. The 4 stars are legumes, carbohydrates, fat and oil, vitamins must be in every food the baby will take. They also spoke about breastfeeding for 2 years and exclusively for 6 months and after 6 months we start the complementary feeding. (Go-along, health worker, rural community, South West)
Supportive supervision for counsellors	If they can increase [the] period in which they come for supportive supervision, if they can put it quarterly, it will make us remember some stuff, because you know our job has increased, so whenever they come, they will tell us things we have forgotten or new things that we have not heard before. (Go-along, health worker, rural community, South West)	We have the opportunity to seek some clarifications and kind of rub minds together. It makes the health- care workers to step up their activities and I think it is a good quality improvement initiative. (Go-along, health worker, rural community, North Central)
Availability of job aids and tools	The job aids and posters we had have all fallen off or [were] damaged when the facility was renovated. (Go-along, health worker, rural community, North Central)	To me [the most useful tool] is the poster because not all of them are educated but all of them have eyes to see the poster on the wall but if you give them to read, they will not understand it and since they don't understand they won't practise what you said. (Go-along, health worker, rural community, South South)

Table 5: Access and quality factors affecting nutritional counselling

	Example quote: Barriers	Example quote: Facilitators
Food demonstration opportunities	The challenges why we do not do food demonstration very often is because there is no money. Because all those things need money you buy all those things and prepare then you prepare and call them here you have to dish that food and give to them to taste it so that is the challenge. (Go-along, health worker, urban community, South South)	The only thing I brought to them is the powdered soya bean and then I have bought pap, palm oil and salt and we have gas in [the] centre and prepared it in their presence and served every mother and told those with [babies aged] 6 months to give their baby to eat it and the babies ate it and after that I explained how I arrived to that powdered soya bean. (Go-along, health worker, rural community, South West)

Service quality and perceived usefulness

Almost all participants appreciated the quality of the nutritional counselling they received at health facilities, saying it was clear and detailed enough for them to understand the types of foods appropriate for them and their babies. In addition, participants said the counselling is most often focused on foods generally available in the community and that they are already accustomed to eating, which makes the advice easier to understand and put into practice. Some also said that they are seeing positive results from following the recommendations while some providers confirmed that they receive positive feedback from some women who put into practice the counselled recommendations:

They are happy about it, it's something that they are not aware of, so when they use the method, they sometimes come back and show appreciation. (Go-along, health worker, urban community, North West)

However, some counsellors interviewed noted that some women do not pay attention during counselling sessions, either because they are distracted by their children or because they are not interested in the counselling. According to providers, these women think that counselling is not necessary because they do not have the means to put it into practice. Some participating women expressed a similar idea, noting limitations in their ability to implement counselling recommendations. The main implementation challenge described by most women was a lack of financial resources to purchase necessary foods. Counsellors seemed confused by this challenge as they felt that advising women to purchase and cook local foods should overcome financial concerns.

In terms of implementing recommended breastfeeding practices, counsellors said that some women complained about health issues that impact their ability to practise counselling advice. Examples of such issues include feeling that they do not produce enough milk to breastfeed exclusively or nipple pain, which forces them to begin complementary feeding earlier than recommended.

During go-along sessions with health workers, researchers observed them conduct either a maternal nutrition or IYCF counselling session and made note of whether counselling was aligned with key messages and the criteria for effective counselling. Messages and criteria were selected from a package of key national IYCF counselling training and informational materials (Federal Ministry of Health, 2012; Federal Ministry of Health, 2013; Federal Ministry of Health, n.d.).² Not all key messages were delivered nor criteria for effective counselling met in the 24 counselling sessions, with some observed in half or fewer of the sessions (see tables 6 and 7 below).

² These materials are currently being revised by the Federal Ministry of Health.

Observed in almost all sessions	Observed in more than half the sessions	Observed in half or fewer sessions				
Maternal nutrition counselling						
 During pregnancy and breastfeeding, special nutrients will help your baby grow well and be healthy. You need to eat the best locally available foods, including milk, fresh fruit and vegetables, meat, fish, eggs, grains, peas and beans. Attend ANC at least four times during pregnancy. To prevent malaria, sleep under a long-lasting- insecticide-treated mosquito net and take antimalarial tablets, as prescribed. 	 Know your HIV status, attend all the clinic appointments and take your medicines as advised by your health provider. During your pregnancy, eat one extra small meal or 'snack' (extra food between meals) each day to provide energy and nutrients for you and your growing baby. Take IFA tablets to prevent anaemia during pregnancy and for at least three months after the birth of your baby. Take deworming tablets to help prevent anaemia, as prescribed. 	 Avoid drinking coffee, tea and sugary drinks during pregnancy. Drink clean water when you are thirsty. Use iodized salt to help your baby's brain and body develop well. 				
IYCF counselling	Γ					
 Wash your hands with soap and water before preparing food and before feeding your baby. Wash all bowls, cups and utensils with clean water and soap. Prepare food in a clean area and keep it covered. Always feed baby with a clean, open cup. Do not use bottles, teats or cups with a mouthpiece. Between the ages of 6 months and 2 years, a child needs to continue breastfeeding. When your baby reaches 6 months, begin to introduce other foods and continue breastfeeding on demand both day and night. Continue to take your child for growth monitoring and promotion and immunization, and to the clinic for well-baby check-ups. 	 Thoroughly reheat any food that has been kept for more than one hour. Enrich your baby's porridge with breast milk, animal milk, mashed groundnuts or soy flour. Babies need more than breast milk and porridge. Offer your baby a variety of foods, like mashed fruits, vegetables and tubers and animal-source foods. During illness, give the baby small, frequent meals and more fluids, including breast milk and other liquids. Avoid giving a baby tea, coffee, soda or other sugary or coloured drinks. After 6 months of age, children should receive vitamin A supplements twice a year. Start animal-source foods as early and as often as possible. 	 Serve food immediately afte preparation. Provider described the proper quantity and frequency of meals for children 6–23 months. If you are not breastfeeding, feed your baby two cups of milk divided throughout the day. 				

 Table 6: Selected key messages observed in maternal nutrition and IYCF counselling sessions

Table 7: Selected criteria for effective counselling observed in maternal nutrition and IYCF

 counselling sessions

Observed in all sessions	Observed in more than half the sessions	Observed in about half of all sessions
 Provider made eye contact with the mothers during the session. Provider used simple language the mothers could understand. Provider listened carefully to the mothers' concerns. Provider gave the mothers an opportunity to ask questions. 	 Provider maintained attention on the mothers during the session (was not interrupted or distracted). Provider removed physical barriers (table, chair, book, bag, etc.) between themselves and the mothers at the beginning of the session. Provider gave one or two practical suggestions to the mothers. Provider asked the mothers open-ended questions rather than 'yes' or 'no' questions. 	 Provider used a job aid, counselling tool or aid, poster or pamphlet during the session. Provider recognized and praised the practices the mothers were doing correctly.

Counsellor training

Participating maternal nutrition and IYCF counsellors were asked if they received training specific to maternal nutrition, breastfeeding and child feeding. Around two thirds of participants reported receiving training on all these topics. IYCF counsellors in the north reported more experiences of receiving maternal nutrition and breastfeeding training, compared to maternal nutrition counsellors in the south who did not receive as much training in either topic. Not all participants remembered which organizations had facilitated their training, but of those that could provide this information around half of the trainings were reported as provided by government agencies and half by non-governmental organizations and private companies. Training sources on all topics included local government, state government and the Accelerating Nutrition Results in Nigeria (funded by the World Bank). Other sources of training included the Ministry of Environment, the Ministry of Health's National Primary Health Care Development Agency, UNICEF, Pathfinder, FHI360 and the Society for Family Health with the United States Agency for International Development (USAID). Some health workers that reported not receiving training as part of their work stated that they rely on knowledge and skills obtained through pre-service education. Two maternal nutrition counsellors had not received specific training on maternal nutrition but reported receiving some information on maternal nutrition from a nutrition officer as part of regular immunization workshops. Many participants did not remember when training had last taken place, but of those that could recall this, it varied significantly. Around half of participants that could recall when they last received training reported receiving it within the past year and the other half reported receiving it longer than a year ago, even several years ago. One participant recalled that the most recent training on breastfeeding they had received was 12 years ago.

Supportive supervision for counsellors

Maternal nutrition counsellors were asked about receiving supportive supervision in the course of their work. Note that IYCF counsellors were not asked these questions. Most participants reported receiving supportive supervision. Overall, supportive supervision was described as helpful by providing opportunities for feedback, correcting mistakes and refreshing knowledge and skills. However, supportive supervision was largely related to disease surveillance and testing services, such as malaria testing and immunization, instead of nutritional counselling.

Organizations highlighted as providing supervision included Accelerating Nutrition Results in Nigeria, the Federal Ministry of Health, local governments, health departments, non-governmental organizations like Marie Stopes International, the state disease surveillance unit, World Health Organization (WHO), National Primary Health Care Development Agency and UNICEF. Some health workers noted that supportive supervision was tied to specific programmes and is not constant, such as when WHO provides supervision over a WHO project or the local government supervises during specific immunization campaigns. There was variation in how often supportive supervision occurred, from twice a year to quarterly to twice a week. When participants were asked how to improve supportive supervision, the main response was that there should be more visits. One participant noted that supportive supervision specifically related to nutritional counselling would be helpful.

Availability of job aids, tools and demonstrations

While researchers only noted the use of job aids in half of the sessions they observed, the majority of the maternal nutrition and IYCF counsellors that were interviewed reported having job aids and tools to leverage as part of their counselling work, including posters, pamphlets, flip charts, counselling cards, books with pictures and flyers. This may reflect that even when health workers have aids available, they often prefer verbal instruction over the use of these tools. One participant pointed to a bucket used for handwashing demonstrations and another shared a model of a breast and baby used to demonstrate breastfeeding. Several participants discussed having a food demonstration corner with props such as physical items representing different foods. It was more common for maternal nutrition counsellors and counsellors in rural areas to report a lack of job aids and tools.



Useful aids and tools noted most often included posters and physical items, such as handwashing buckets, food demonstration corner props and models of breasts and babies, because they provide a visual way to learn that is perceived as easier for patients to remember. In contrast, the least useful tool was commonly noted to be pamphlets because not all patients are able to read and many people throw them away them and forget the contents.

However, most providers complained that counselling sessions are usually limited to verbal instruction, with cooking demonstrations very rarely included. They do not receive funding and therefore do not have the necessary equipment and ingredients to perform these demonstrations at each counselling session. Only two providers noted currently conducting cooking demonstrations as part of counselling.

Table 8 summarizes the different types of capacity reported by health workers in each community for maternal nutrition and IYCF counselling.

	North				South							
	Niger (central)		Kano (west)		Gombe (east)		Enugu (east)		Oyo (west)		Cross River (south)	
	Kateregi	Dama A	Sharada Bata A	Yan- dunna	Uban- doma	Kaga- rawal	Ama- chala	Ndioke	Otu Ilesan	ldi Ape	Ugaga	lkot Omin
	Rural	Rural	Urban	Rural	Rural	Urban	Rural	Rural	Rural	Urban	Rural	Urban
Maternal nutr	ition co	unselli	ng					1		1		
Maternal nutrition training	•	•	•	•						•		•
Breastfeeding training	•	•	•						•	•	•	
Complementary feeding training	•	•	•	•			•		•	•	No response	
Job aids and tools			•	•	•		•		•	•	•	•
Supportive supervision*	•	•	•	•			•	•	•	•	•	No response
IYCF counsell	ing		1							1		
Maternal nutrition training	•	•	•	•	•	•			•	•	•	
Breastfeeding training	•	•	•	•	•	•	•		•		•	
Complementary feeding training	•		No response	•	•				•	•	•	
Job aids and tools	•	•		•	•	•		•	•	•	•	•

Table 8: Type of capacity for maternal nutrition and IYCF counselling reported by health workers in each community

* Only maternal nutrition counsellors were asked about supportive supervision; IYCF counsellors were not asked about this.



Many participants who faced substantial barriers to accessing health facilities discussed seeking medicines and advice from chemists.



Health services and infrastructure

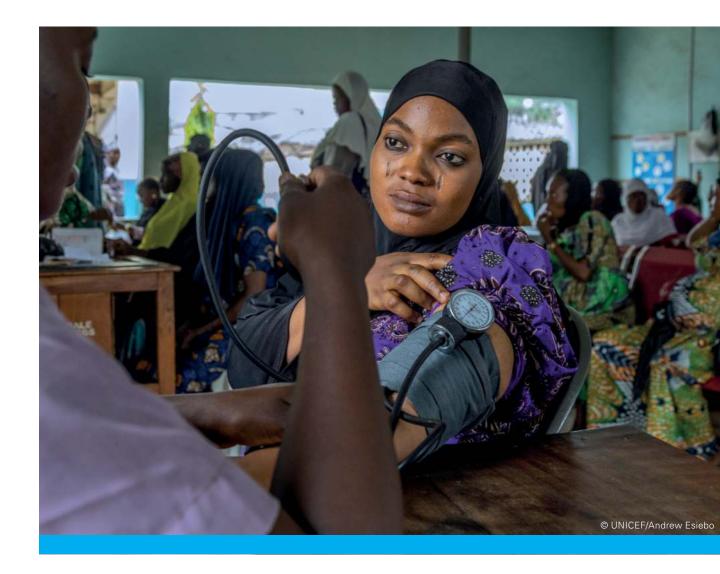
Key qualitative study insights regarding health services and infrastructure are:

- Many participants discussed lack of access to various types of health-care services in their communities, including wellequipped health facilities. The need to travel far, even to other communities, was raised as a limitation to accessing services. Participants in rural areas were more likely to state that accessing a health facility required travelling long distances and paying high transport costs.
- Across regions, participants shared issues with facilities lacking drugs, vaccines and medical equipment, and having limited working hours, long wait times, high financial costs and staff shortages, all of which hindered community members' ability to access facilities or obtain high-quality services. Many participants who faced substantial barriers to accessing health facilities discussed seeking medicines and advice from chemists.
- While the majority of participants said that services at health facilities were trusted and that health workers were welcoming and "try their best", a minority of participants, particularly in the south, mentioned service quality issues such as bad staff attitudes and underqualified staff.

Contextual background on health services in Nigeria

Access to health care in Nigeria remains a profound problem – socioeconomic inequalities and geographical inaccessibility for both urban and rural communities have caused unequal health-care use across the country (Omonona et al., 2015). Distance from health-care facilities, combined with lack of money for transport and transportation services, inhibits mothers' access to key health services (Fagbamigbe et al., 2021). It is also well established universally, as well as in Nigeria, that access to health facilities is affected by whether or not health facilities are adequately staffed and have sufficient resources (Okonofua et al., 2020). Quality of key health services, including ANC, delivery care and PNC, is inconsistent across Nigeria (Anikwe et al., 2020; Ishola et al., 2020). Prior research has identified factors impacting the quality of services in Nigeria, such as attitudes of health workers, staff shortages, lack of privacy, policies discouraging visitors (Shobo et al., 2020) and inaccurate and incomplete counselling messages (Hill et al., 2020). In terms of vaccine coverage, the 2018 Nigeria Demographic and Health Survey (NDHS) indicated that 31 per cent of children aged 12–23 months in Nigeria had received all basic vaccines, 28 per cent had received the basic vaccines by 12 months and 19 per cent had not received any vaccines (NPC & ICF, 2019).³

³ All basic vaccines for children aged 12–23 months refer to one dose of bacillus Calmette-Guerin vaccine, three doses of vaccine against diphtheria, pertussis and tetanus, three doses of oral polio vaccine and one dose of measles vaccine (NPC & ICF, 2019).



Alive & Thrive's Nigeria impact evaluation showed that receiving proper health education can enable correct and timely breastfeeding practices (Flax et al., 2021). Gaps in the literature that this study aimed to address included mothers' experiences with nutritional counselling, challenges and experiences of health workers providing nutrition services and how quality and access to health and nutrition services affects mothers' utilization of health services.

Detailed study findings on health services

The community mapping findings showed that most participants had at least one governmentfunded or private hospital or health facility in their community (see Appendix F, page 114, for more information about the community mapping activity). However, participants in three rural communities in the North Central, North West and South East geopolitical zones said that there were no health facilities in their communities and that they were required to travel to other communities for care.

A health facility is lacking. The health facility the community use[s] is the one in the neighbouring communities, which is a distance from here. This discourages the community members from using the health facility adequately for maternal, infant, young child nutrition and hygiene services, especially for those who do not have the means to go or do not have enough resources. (PDG participant, father, rural community, North Central)

Participants, including service utilizers and health workers, agreed on the types of services received or available at health facilities as part of ANC and PNC visits. Table 9 summarizes the types of services offered for ANC and PNC.

Service	Types of services	Example quote
ANC: Care provided by skilled health- care professionals to pregnant women and adolescent girls to ensure the best health conditions for mother and baby during pregnancy (WHO, 2016)	 Registration of women Monitoring of maternal and foetal vital signs Immunization Echography Urine testing HIV testing Packed cell volume (PCV) testing Provision of drugs (IFA [either combined or as separate tablets], calcium, vitamin A, multivitamins, paracetamol, capsules to boost blood levels to address anaemia) Provision of counselling on breastfeeding, maternal nutrition and newborn care 	When a woman is pregnant and comes for ANC, she will come and buy [a] card, when she is given follow-up, she will come with the card. They will observe [how the foetus is lying], they will measure the foetal heartbeat, they will test for her PCV and they will conduct urinalysis. So, when they finish the investigations, if there is any problem, she will be prescribed drugs and give her drugs and fix her appointment date. (PDG participant, mother, urban community, North East)
PNC: Care provided to the mother and baby during the postnatal period, beginning immediately after the birth of the baby and extending up to 6 weeks (42 days) (WHO, 2022)	 Monitoring of maternal and newborn health immediately following delivery Tracking weight of infants Newborn and child vaccination Identifying, diagnosing and treating child illness and malnutrition Provision of vitamins and deworming medications Provision of nutritional counselling 	They check [the baby's] weight. They will check whether their temperature, if their body is not hot or anyhow. They check for what their body should look like and if there is no complaint and everybody will depart, but we bring the children and they check their weight and if there is anyone that something is wrong, they will do test for the person. And after that, if it is hot, they will give us drug we can go and use and if it related to injection and if it is not, they tell us to go home. (SSI participant, mother, rural community, South West)

Table 9: Types of services offered for ANC and PNC

Access, infrastructure and quality barriers

Participants discussed many service access, infrastructure and quality barriers that impede community members' ability to gain access to health facilities for ANC, delivery, PNC or treatment of illnesses, but the majority of the discussions focused on seven types of barriers, as shown in Table 10, and additional detail on each is provided below.

Table 10	: Access	and	quality	barriers	to	health	services
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Access and quality barriers	Example quote
Distance and travel	The problem truly why women are not coming to delivery here is lack of good road. Firstly, when the labour starts in the night and you don't have a ride That is the first one. Secondly, still on the issue of bad road, in the night it is a problem before you enter here when the labour becomes active and there is no car. (PDG participant, mother, urban community, North East)
Service hours and availability	In the first place, like our hospitals in the neighbourhood, sometimes there is like private hospitals, some are not operating night duty You may come to the hospital and knock at the door without [anyone] opening the door because it do happen, sometimes you will come with your wife to this hospital and knock severally or find out that is only the gate man that is there. (PDG participant, mother, urban community, North East)
Availability of drugs	There are times they are supposed to give certain drugs and they postpone it to the following [appointment] and they keep postponing it again and the drugs are important to use. They tell us they have not been given because the government has not given them. (SSI participant, pregnant woman, urban community, South West)
Availability of equipment	They are lacking a lot of equipment, when they work to a stage they have to refer us to bigger towns. (PDG participant, community gatekeeper, rural community, South West)
	We needed some equipment like adults' and children's weighing scales, trolleys and trays, chairs, tables and others. (Go-along, health worker, rural community, South East)
Availability of staff	We want more staff and we want the health workers to be available in the night as well. We want to be meeting them whenever we come, be it in the night or during the day. (PDG participant, mother, urban community, North East)
Financial considerations	Not having money is the biggest problem. You send me scanning and I don't have money or you wrote a test and I don't have money, it is a big problem. (PDG participant, mother, urban community, North East)
	The money causes setbacks for me sometimes that I won't be able to bring [my baby] sometimes. He was sick last month but I could not bring him here, I didn't have enough money to bring him here, but I got him drugs at the chemist with what was on me. (SSI participant, mother, urban community, South West)
Health-worker attitudes	Their staffs do not attend well, they insult us, they treat us like slaves. (PDG participant, mother, urban community, South West)

Distance and travel

Participants in urban areas were more likely to say that health facilities were within walking distance or that they required little transport money. However, many participants, particularly from rural regions, said that health facilities were not accessible because of long distances, dangerous roads, overflowing rivers and a lack of affordable and reliable transportation.

Women who were not able to pay for or find adequate transportation had to walk to services. This was seen as especially difficult for pregnant women, and as limiting access to ANC and delivery services.

Service hours and availability

Participants were split on whether health facilities were accessible at convenient times, with the general perception being that facilities that were open on weekends and overnight were more helpful than those with limited hours. Participants highlighted that lack of overnight services is a deterrent to accessing facilities in their communities. This issue is particularly challenging for women seeking delivery services, as labour is unpredictable. The participants specified that when arriving at health facilities they often find no health workers capable of assisting them with delivery and are forced to resort to traditional birth attendants.

Some participants complained about long wait times at facilities before being served, as health workers are not always available on time or are sometimes completely unavailable. Other participants said that the facilities they went to had short wait times, which was appreciated as it allowed them to balance their visits to the health facility with their many responsibilities at home.

Availability of drugs, equipment and staff

A common complaint across all regions was that health facilities lack necessary medicines, vaccines and equipment. Participants were frustrated that when they were prescribed medicines,



they often had to leave the facility to purchase them at a chemist or market and bring them back to the facility. Many participants said that facilities often lack medical equipment, such as weight scales, equipment for blood testing and transfusions, scanning services and ambulances. Lack of basic resources and infrastructure, such as chairs and lighting, was also raised by some participants as a concern. This was noted as a barrier to all kinds of services, as individuals seeking out ANC were not receiving the drugs they needed, women going to a facility to deliver were not comfortable because of the lack of chairs and mosquito nets, and children receiving PNC were met with vaccine stock-outs.

Many participants also discussed staff shortages, either of the facility's overall workforce or of particular types of providers. For example, a woman in the North East zone complained that there is no paediatrician in the health facility in her community, and this sometimes forces her to travel to neighbouring communities to access paediatric care.

There is [a] problem with children doctor. There was a time I brought my daughter here; I wasn't having enough breast milk and I tried all the advice they gave me but no result. They had to refer me to go another hospital. You see, this is the problem. Had it been we have it here we wouldn't have suffered. (PDG participant, mother, urban community, North East)

Many health workers interviewed as part of go-alongs reported that the health facilities distribute vitamin A to children starting at 6 months as part of regular check-ups and immunization visits. Some health workers mentioned distribution of Plumpy'Nut to children with malnutrition. The main challenge noted with distribution is that supplements and micronutrients are frequently out of stock and not replenished by the government.

There was a time I took my baby for hospital for ... drug that could cure my baby of his sickness, but they don't have it. It pained me and I suggest that government should [make] drugs ... available at all the times. (PDG participant, mother, rural community, South East)

Financial considerations

Financial barriers were another important factor. Almost all respondents pointed out that the low economic status of many families results in their not visiting health facilities for services as they perceive drugs and services as having a high cost. Even those that do attend health facilities described challenges with high costs at facilities. The cost of delivering in a hospital was specifically noted as not affordable, leading to delivery at home.

The hospital's delivery requirement is very much and some women cannot afford it, it's among the things that deprive women from delivering in the hospital. (PDG participant, mother, rural community, South East)

Financial barriers emerged as the main reason participants gave for not accessing a health facility for treatment when they or their child is ill. Some participants felt that visiting a chemist and purchasing drugs to treat illness at home was more affordable. A small number of participants also noted that the chemist typically allows patients to pay for services later when they have the money, and this flexibility was appreciated. Additionally, some participants perceived chemists as more accessible, as they are open at all hours, close to home and attend to patients well. This was mentioned by mothers and fathers in the South South, North East and North Central zones particularly. One participant noted that chemists can make house calls if patients are too ill to travel.

However, some participants noted that some facilities offer cheaper or free services or are more flexible about payments. In some communities, women attending PNC discussed the advantage of receiving care even when they do not have the financial means to pay immediately, as they could return to pay off their debts afterwards. In addition, the medicines provided during ANC and immunizations for children during PNC visits are free, which is an incentive for women to access care.

During antenatal [care] when you go to the hospital, there's no way you go back without drugs. And the drugs are free. (PDG participant, mother, urban community, South South)

[The chemist] used to treat me very well, he will give me medicine. You know the situation we are into now, even if you don't have money, he will treat you then [you] bring the money later. (PDG participant, mother, urban community, North East)

Health-worker attitudes

The attitudes of health workers were seen as important for high-quality care and when choosing where to obtain health services. Many participants felt that ANC, delivery, PNC and other services at health facilities are largely trusted by their communities. They shared positive aspects related to service quality, such as that health workers attend to them well and are welcoming. Several participants appreciated feeling that health workers "try their best" and "do their best".

Honestly, they give care in the hospital. They care adequately. They don't harass, they don't harass, they don't show ... why you even come to them for help. They receive their patients as it should be done. (SSI participant, adolescent, urban community, North West)

However, some women complained about poor attitudes of health providers, particularly when it came to delivery services. They characterized health workers as impatient, angry or aggressive towards patients, often arriving late or absent altogether from the facility. Previous bad experiences with health workers and fear of being attended to by health workers with bad attitudes was a motivator for women to seek health services at a facility in a different community and even deciding to deliver at home with a traditional birth attendant. Criticisms of delivery service quality emerged mainly from the North East and South South zones. In contrast to delivery services at health facilities, the services offered by traditional birth attendants were appreciated, with no women reporting negatively on the quality of the care.

WASH services and infrastructure

Key qualitative study insights regarding WASH services and infrastructure are:

- Boreholes were the most commonly reported source of water in rural and urban communities, followed by streams and rivers (only in rural areas).
- Public community latrines are rare, with most community members relying on open defecation or private latrines in their own homes.
- Waste disposal in the bush, backyard or farm was the most frequently cited method, although four communities had centralized waste collection sites. Less frequently cited wastedisposal methods were burning waste and discarding it in the open.



Public community latrines are rare.

Contextual background on WASH services in Nigeria

Poor WASH conditions – a cause of diarrhoeal disease and other infectious disease – contribute to undernutrition and faltering child growth (Petri et al., 2008). While there is mixed evidence of a direct link between WASH interventions and improvements in childhood stunting (Pickering et al., 2019), recent research suggests that environmental enteric dysfunction, inflammation of the lining of the small intestine that affects nutrient absorption, could be linked to poor WASH conditions and child stunting and anaemia (USAID, 2022). Limiting environmental enteric dysfunction requires a variety of behavioural and infrastructural changes, including handwashing with soap at key times of the day, providing safe drinking water, implementing improved sanitation and ensuring a clean play environment for infants and young children (Ngure et al., 2014). More recently, safe disposal of infant and young child faeces, food hygiene and separation of poultry and livestock from children have been identified as additional key interventions (USAID, 2022).

The majority of households in Nigeria do not have any type of handwashing facility, improved sanitation services or drinking water treatment (NPC & ICF, 2019; Federal Ministry of Water Resources et al., 2022). According to the 2021 Multiple Indicator Cluster Survey (MICS) report, 75.9 per cent of respondents were using improved sources of drinking water at the time of the survey. Improved sources include tube wells/boreholes, protected dug wells or springs, collected rainwater, piped water and packaged or delivered water (NBS & UNICEF, 2022). Furthermore, one out of five people practise open defecation, raising a serious issue regarding sanitation and hygiene (NBS & UNICEF, 2022). A recent evaluation of a national WASH programme in Nigeria (2014–2017) found no impact on the prevalence of diarrhoea or stunting, although some states showed positive results (UNICEF, 2020). While population-level indicators on WASH are available, more research is needed on individual and household-level behaviours influencing health and nutrition outcomes, such as diarrhoea, environmental enteric dysfunction and child growth.



Detailed study findings on WASH services

As part of community mapping PDGs with participants from each of the 12 communities, participants were asked about sources of water in their communities. The most common water source is boreholes, as noted by participants in nine communities. However, several participants reported that particular public boreholes in their communities were no longer functional. Some participants noted that it is possible to buy and use private boreholes in the communities, all of them rural. However, one discussion group noted that the streams from which they had collected water in the past have all dried up as a result of climate change and infrastructure issues. Less commonly mentioned water sources include wells, which were noted in three communities. Rainwater, pipe-borne water and boosters were mentioned by only one community.

Participants from only four communities reported that public latrines are available for use near markets, in health facilities and in leaders' homes. Participants from three communities noted that some members of their community have private latrines in their own homes while other participants said that open defecation was the most common practice in their communities.

There are certain houses with toilets, they are not many but it is everybody's wish to have one but there is no money. Most of the time, whenever we want to defecate, we go to the bush, we go by motorcycle, bicycle or motor car. Toilets are not many even though it is our wish to have a lot, God helping us. (PDG participant, community gatekeeper, rural community, South West)

The community mapping exercise also identified primary means of waste disposal in the communities. Waste disposal in the bush, backyard or farm was the most frequently reported method, followed by burning waste. Four communities had a centralized waste collection site. One community reported open dumping of refuse in public.

Chapter 2: Behavioural practices, knowledge and norms affecting MIYCAN in the first 1,000 days

Adolescent girls' and maternal nutrition

Key qualitative study insights regarding adolescent and maternal nutrition are:

- Adolescent girls, pregnant women and mothers participating in the study discussed eating from a variety of food groups, and many were able to articulate correct knowledge about the nutritional benefits of some foods, for example that fish, eggs and beans are high in protein, and rice and yams are high in carbohydrates/starches.
- Various traditional and generally inaccurate beliefs about foods were described as barriers to their consumption.
- Motivations for food consumption seemed to vary in women at different stages of the life course, with adolescent girls placing greater priority on convenience of preparation and mothers prioritizing their husbands' or families' preferences.
- Common sources of food include markets, food stores, vendors, personal farms and gardens and restaurants.
- Some mothers experienced times when there was not enough food to eat and reported prioritizing food for their children and families and, if necessary, going without.
- The majority of mothers cited financial constraints, including household poverty, their lack of access to resources and inability to make financial decisions, as reasons for them not buying or preparing nutritious foods for their households.
- All the pregnant women who participated in the study were taking IFA supplements and most pregnant women and mothers were aware of the benefits of IFA supplementation. However, hardly any of the adolescent girls were taking IFA supplements and neither were they aware of their benefits or recommendations for them to take them.



Some mothers experienced times when there was not enough food to eat and reported prioritizing food for their children and families and, if necessary, going without.



Contextual background on adolescent girls' and maternal nutrition in Nigeria

Adolescent girls and pregnant and lactating women in Nigeria continue to experience high rates of malnutrition, as demonstrated in national surveys. Anaemia continues to affect most women of reproductive age (53 per cent of women aged 15–49 years), nearly half of adolescent girls (41 per cent of girls aged 10–14 years) and the majority of pregnant women (86 per cent) (Nigeria & IITA, 2022). In 2021, 14 per cent of women of reproductive age were reported to be underweight, compared to 15 per cent of adolescent girls 10–14 years (Nigeria & IITA, 2022). Around half (56 per cent) of women aged 15–49 years achieved minimum dietary diversity in 2018 (NPC & ICF, 2019). While some studies have looked more closely at women's dietary diversity (Akseer et al., 2021; Olatona et al., 2021), less information is available on food-related knowledge and beliefs and food preferences in Nigeria. This study attempted to fill this gap by discussing food attributes with mothers and adolescent girls.

Iron, in the form of tablets and syrup, is a proven intervention to address iron deficiency anaemia in pregnancy. A total of 69.3 per cent of pregnant women in Nigeria took iron tablets or syrup during their last pregnancy, with the highest adherence rates being in the south-east (NPC & ICF, 2019). However, just 31 per cent of women took 90 or more tablets during their last pregnancy. District Health Information System 2 data shows that the proportion of women receiving IFA during ANC has increased from 15 per cent of pregnant women in 2013 to 87 per cent of pregnant women in 2022 (Kaduru/UNICEF, 2022). Risk factors associated with noncompliance to routine iron therapy include poor utilization of antenatal services, low level of education, distance from a health facility, single or teenage pregnancy, older age of pregnant women, and living in rural areas (Ugwu & Uneke, 2020). The 2022 IFA barrier analysis commissioned by UNICEF found that a variety of products are available, including single iron and folic acid tablets, combined IFA and multiple micronutrient supplements. However, combined IFA was not available in the majority of facilities, stores and pharmacies visited (Kaduru/UNICEF, 2022). This study aimed to better understand IFA supplementation barriers and enablers for mothers and adolescent girls.

Detailed study findings on adolescent girls' and maternal nutrition

Variety of foods eaten by adolescent girls and mothers

Pregnant women, mothers of children aged 0–6 months and adolescent girls who participated in the SSIs were shown photos of foods organized by the following food groups:

- Group 1: Grains, roots and tubers (rice, maize, cocoyams, yams, potatoes, cassava, millet);
- Group 2: Pulses (white beans, brown beans, soya beans, soya flour);
- Group 3: Nuts and seeds (groundnuts, sesame seeds, pistachio nuts, tiger nuts, melons, bush mango seeds, tiger nut milk);
- Group 4: Dairy products (cow's milk, powdered milk, yogurt, cheese, fried cheese);
- Group 5: Meat, poultry and fish (beef, chicken, turkey, roasted or fried insects, crayfish);
- Group 6: Eggs;
- Group 7: Dark leafy greens and vegetables (waterleaf, afang leaves, spinach, amaranthus [green], ugu); and
- Group 8: Other fruits and vegetables rich in vitamin A (carrots, watermelons, cucumbers, pawpaws, mangoes, palm fruits).

They were asked a series of questions related to the foods they eat or do not eat in each of these groups. The replies of individual mothers and adolescent girls were analysed to see if they ate foods from each of the food groups.⁴ Note that questions about foods eaten by mothers and adolescent

⁴ Data from Niger State was not analysed because of quality issues.

girls did not give a time frame but asked which food on the food group card participants eat most often. Mothers and adolescent girls were also asked about their reasons for eating or not eating different types of foods.

All of the adolescent girls, pregnant women and mothers interviewed named at least one food from each of the eight food groups that they eat or have eaten. The most frequently mentioned foods were rice, beans, groundnuts, cow's milk, fish (for adolescent girls) or fish and beef (for pregnant women/mothers), eggs, waterleaf (for adolescent girls) or leafy greens (for pregnant women/ mothers) and watermelons. Iron-rich foods that adolescent girls and pregnant women and mothers reported eating included red meat, chicken, turkey, fish, spinach and beans. However, the food attributes exercise did not assess whether these foods are eaten daily or on a regular basis.

Mothers and adolescent girls were also asked to explain why they eat or do not eat certain foods. The most common reasons mothers and pregnant women gave for purchasing or eating a particular food were that their husbands and/or family members prefer eating the food or that it confers a health benefit, such as strengthening the body, providing hydration, providing vitamins or improving breast milk supply. Some women considered their own food preferences, but only after prioritizing those of their husbands and children. The most common reason given by adolescent girls for eating a particular food was that it is convenient and fast to prepare. Health benefits were also cited by girls as reasons for eating particular foods.

I: "What are the reasons why they said you should eat this food?"

P: "It is good in the body. Beans give us protein and the yam I also said earlier give carbohydrate and protein builds the body." (SSI, adolescent girl, rural community, South West)

Other reasons for women and girls eating certain foods were related to availability of the food, such as those grown on a personal farm; fruits and vegetables that are in season or available at the market; and foods from vendors, such as Fulanis (nomadic people), when they are in the vicinity.

The reason why I decided to prepare abacha [cassava salad] this afternoon is because it gives children joy. Then, when you compare it with other meals, my husband prefers eating abacha. Abacha is one of his favourites. (Go-along, mother, rural community, South East)

Only one or two participants said they considered what looks hygienic or what they ate the prior day. One participant said she prepared a specific meal twice a month because it is a family favourite and she buys foods for the meal even if it is expensive or out of season.

Even though like now beans is expensive, so, not the season, because my kids likes it and is part of our meal, like once or twice in a month every Saturday, you do moi moi [steamed bean pudding made from a base of beans and different peppers]. Apart from the nutritional value it has on adults, other adults and children like it. (Go-along, mother, urban community, South South)

I am the one who made the decision to buy so that me and my family will eat hygienic food and ... eat food that will build our body, me and my children. (Go-along, father, rural community, North East)

A main reason given for not eating certain foods was a lack of money to buy nutritious foods, which was reported equally in urban and rural communities in both northern and southern regions. Other barriers include lack of availability of foods at markets because they are out of season, or the need to travel to markets in other communities that are open only once a week. Mothers and

pregnant women also shared concerns about health and hygiene that stopped them from eating certain foods, such as foods that cause stomach aches or illness. Pregnant women, in particular, said that pregnancy results in certain preferences and aversions to specific foods.

[Beef] has not been cooked, it has not been preserved and I am not aware of any preservative from the sellers, the Fulanis bring it to town and I do not know what their environment looks like so I cannot eat it and also drink it. (SSI participant, pregnant woman, rural community, South West)

Negative beliefs and misperceptions about particular foods were also frequently given as reasons for not eating these foods. Some of these beliefs include that it is taboo for pregnant women to eat bush meat (north) or grasscutter (also known as greater cane rat) (south) and that eating nuts and seeds will make one cough. One belief that was mentioned in several interviews and discussion groups had to do with a common misperception about eating snails. Several mothers and health workers expressed the belief that eating snails during pregnancy would cause children to drool once they are born. All of the women sharing cultural beliefs on snails were from southern communities (both rural and urban).

There are some places that like snail[s], [it] is like ... a shrine to them ... so they will warn you in that community that you should not pick snail[s] or nobody there should eat snail[s]. Like they are taking snail[s] as their gods so [it] is a taboo for them to eat those things. (PDG participant, health worker, urban community, South South)



IFA supplement uptake

Of the 18 adolescent girls participating in the SSIs, all except for two said they were not taking IFA supplements at the time of the interviews. The two who were taking the supplements were both from rural southern communities. Most of the adolescent girls had not heard of IFA supplements, and most of those who had heard of them said they had been told that the supplements are for pregnant women, not for adolescents, and that they helped pregnant women produce enough blood for their babies. The few who had heard that adolescent girls should take IFA said they got the information from their doctor, mother or chemist. Most adolescent girls had not heard of not heard of any side effects of IFA supplements.

All of the pregnant women participating in the SSIs said they were taking IFA supplements at the time of the interview. While many pregnant women said they had heard about other women having side effects from IFA use, such as vomiting and insomnia, most said they had not experienced any side effects themselves. However, two women reported experiencing frequent urination and two reported dizziness and weakness. One woman from a rural northern community said that these side effects sometimes led her to skip her IFA without telling her health provider. Some women commented on an unpleasant smell and taste associated with IFA supplements.

The reason I don't like taking it is because of the smell so when they give me, I give them back that I don't want it and I will go and buy it outside. (SSI participant, pregnant woman, urban community, South South)

Several health workers who conduct nutrition counselling said that some mothers they counsel reported experiencing nausea from the supplements. Some health workers also described beliefs by their patients that supplements would make them lazy and eat too much or would increase the weight of their baby and lead to a difficult delivery.

Women are afraid to take the IFA supplement at the beginning of their antenatal [care] because to them this supplement is increasing the weight of the foetus there by making the childbirth a difficult one. (Go-along, health worker, rural community, North West)

Most of the pregnant women learned about the importance of taking IFA supplements from their health-care provider and one or two learned about IFA supplements from their mother or husband. When asked about their knowledge about IFA supplements, several pregnant women said that they increase blood and/or iron in their bodies; a few said the supplements make them and their baby strong; and one or two said the supplements boost their own immunity and the immunity of their child, and increase the well-being of the baby and the mother.

Most pregnant women said they received their IFA supplements from a health facility, including government hospitals, maternity wards and health centres. A few women in rural southern communities said that they would get IFA supplements from the chemist if they were not available at the health centre.

I rarely go to the chemist except if the drugs are not available at the maternity. (SSI participant, pregnant woman, rural community, South West)



Many mothers reported initiating complementary feeding before the recommended 6-month mark. The most common reason given for doing so was a belief that they lacked sufficient breast milk to satisfy their child.



Infant and young child feeding

Key qualitative study insights regarding IYCF are:

- Initiation of breastfeeding within an hour of birth was more consistently mentioned by women who gave birth at a facility than by those who delivered at home.
- Some women in both northern and southern Nigeria reported engaging in practices that undermine exclusive breastfeeding, such as expressing and discarding colostrum and feeding infants liquids other than breast milk soon after birth. Most women who reported these practices said they carried them out as a result of inaccurate knowledge and pressure from elders, usually mothers and mothers-in-law, to maintain traditional practices.
- In line with the MICS 2021 findings that giving infants water was a main barrier to breastfeeding (NBS & UNICEF, 2022), giving water to infants aged 0–6 months was discussed as a common practice across rural, urban, northern and southern participants.
- Many mothers reported initiating complementary feeding before the recommended 6-month mark. The most common reason given for doing so was a belief that they lacked sufficient breast milk to satisfy their child.
- Across locations, pap, rice, eggs and beans were mentioned most often as the foods that mothers started feeding their child at 6 months, and continued feeding them up to 23 months.
- Mothers residing in the south also discussed feeding their young children instant noodles (e.g., Indomie), which is a concern because they lack fibre, protein and important nutrients like vitamins A, C and B12.
- Most mothers reported feeding their young children (aged 6–23 months) a variety of foods. Grains, roots and tubers, as well as legumes and nuts, were mentioned most often in this regard. Meat, fish, fruits and vegetables were not mentioned as often.
- Inaccurate traditional beliefs around certain nutritious foods keep women from feeding these foods to their children.
- Most mothers observed during child feeding were actively engaged in feeding their child. Some mothers offered nonfood rewards to encourage their child's eating or gave positive comments about the food. One mother was observed to practise force-feeding.

Contextual background on IYCF in Nigeria

What, when and how children are fed during the first two years of life provides a critical foundation for survival, growth and development throughout the life course. WHO and UNICEF recommend the initiation of breastfeeding for all newborns within the first hour of life, exclusive breastfeeding for the first 6 months of life and continued breastfeeding for two years and beyond with nutritionally appropriate and safe complementary foods, which should be introduced at around 6 months. However, in 2021, only 23.1 per cent of Nigerian women initiated breastfeeding within one hour of birth and only 34.4 per cent of Nigerian women exclusively breastfed their babies until the age of 6 months, which falls short of the World Health Assembly target of 50 per cent (NBS & UNICEF, 2022). In terms of breastfeeding knowledge, Alive & Thrive research in Lagos found good knowledge of exclusive breastfeeding practices and the importance of colostrum in both the control and intervention groups (Flax et al., 2021). However, while many mothers claimed to understand and support exclusive breastfeeding, a significant proportion believed it was acceptable to give an infant water.

In terms of dietary diversity, the most recent MICS report (NBS & UNICEF, 2022) found that only one in three children aged 6–23 months receive a diverse diet (31 per cent), and the most recent NDHS found that few breastfeeding children under the age of 2 years had eaten fruits and vegetables rich in vitamin A the day prior to data collection, or meat, fish and poultry (19 per cent); in comparison, 56 per cent of non-breastfeeding children ate vitamin A-rich fruits and vegetables and 57 per cent ate meat, fish and poultry (NPC & ICF, 2019). Alive & Thrive's quantitative evaluation in Lagos and Kaduna found that most research participants understood the importance of feeding children a variety of foods and that animal source foods and green leafy vegetables build the body and blood (Flax et al., 2021). However, certain foods, including meat, green leafy vegetables and yams, were considered by some participants as difficult for the child to chew, swallow or digest. This formative research study aimed to complement existing research by exploring breastfeeding and complementary feeding practices and knowledge, beliefs and social norms related to these practices.

Detailed study findings on IYCF

Breastfeeding

Early initiation of breastfeeding

In general, many women who delivered at hospitals and health centres said that they started to breastfeed within an hour of birth, while only some who gave birth at home said they started to breastfeed within an hour after delivery (see Table 11).

Reasons for initiating early breastfeeding	Reasons for not initiating early breastfeeding
• Prevents illness in the baby	• Flat nipples
 Improves baby's health and immune system 	• Mother was unconscious, asleep or recovering from caesarean section or infection
• Builds baby's brain and increases	 Mother was hungry after delivery
intelligence	• Mother did not want her breasts to droop as her
 Improves love between mother and child 	husband did not want her to look old
 Knowledge that breast milk is the only food for the baby 	Influence of parents and grandparents may encourage traditional practices over exclusive breastfeeding
• Support from health workers or parents in placing the baby on the breast right	• Presence of elders right after the baby was born made women too embarrassed to breastfeed until they left
after birth	• Belief that colostrum is dirty and must be tested
	 Traditional beliefs around the importance of giving baby prelacteal feeds

Table 11: Reasons for mothers initiating or not initiating breastfeeding within an hour of birth

Some mothers reported that they expressed and discarded colostrum as it was considered to be dirty. In the North Central geopolitical zone, some women wait for a few days and then test if breast milk is good for the baby, as some perceive colostrum as dirty and poisonous to the baby. They express milk and place an ant in it to see if it will survive:

Culturally, too, some women would wait until after some days to test if their breast milk is good for the baby. Some see the first ones [colostrum]] that come out as being unclean and may poison the baby. In some households, they will extract the breast milk and put [an] ant in it to see if it will survive. (PDG participant, mother, rural community, North Central)

Mothers discussed the practice of giving prelacteal feeds like water, pap or a mix of glucose and water to newborn babies. A participant in the North West zone said that most mothers in her community gave their newborn babies water the day they were born. Traditional practices shared by participants around prelacteal feeds include giving water to the newborn to welcome them to earth; combining colostrum with water to "clean the dirty breast" (South East); giving newborns masticated date palm and Zamzam water (holy water from Saudi Arabia that is brought back by Muslims who go on pilgrimage) (North East); and cleaning the newborn with a local mixture and water and placing some of this mixture in the baby's mouth.

The baby is taken to be cleaned/bathed with some local mixture and water. A portion of that mixture used in bathing the baby is put into the baby's mouth. This is a form of ritual done after any baby is born. This is usually done before the baby is put to breast. (PDG participant, mother, rural community, North Central)

Some mothers highlighted that breastfeeding practices are changing in their communities. For example, participants in the North East and South South said that, in the past, mothers would express colostrum and discard it as it was not considered to be good for the baby. However, increased women's literacy and education levels have led to an increase in women attending ANC and learning the benefits of colostrum, and changing traditional beliefs and practices associated with the perception of colostrum as being dirty.

My mum said to me that [in] ancient days, they used to pump the breast milk out that it was not good but now when I came to the health centre, they say that that first breast milk is the one that is use for their brain, that's what give the child the ability to learn all those things. (SSI participant, mother, urban community, South South)

Similarly, a participant in the North Central zone said that it was common practice in the past to give newborns something to drink other than breast milk, but this is no longer so because awareness and counselling is now provided by health workers.

Exclusive breastfeeding for 6 months

Almost all mothers reported breastfeeding their children for 0–6 months, but it remains unclear whether the breastfeeding was exclusive or not. Table 12 summarizes reasons mothers gave for breastfeeding and for giving foods other than breast milk in the first 6 months. Besides prelacteal feeds, mothers reported that their children were given foods and liquids such as water (most commonly given), honey, pap and rice before 6 months of age.

I breastfeed my baby anytime she is hungry, except if I am not around, my motherin-law will give her water and honey. (SSI participant, mother, rural community, North Central) **Table 12:** Mothers' reasons for breastfeeding and giving foods other than breast milk inthe first 6 months

Reasons for breastfeeding	Reasons for giving foods other than breast milk
 To prevent illness in their child To help the baby's brain to develop Makes children intelligent More hygienic than bottle feeding 	 Felt child was not getting sufficient breast milk Child was always hungry Child showed signs of wanting to eat foods Influence of grandparents, who gave the child foods such as rice, water and honey

Continued breastfeeding up to 2 years of age

A few mothers of children aged 6–23 months said that they were still breastfeeding their child. All mothers who were asked about their breastfeeding practices said that breastfeeding is led by the child with no restrictions on when they breastfeed or the number of feeding times.

Mothers of children aged 0–23 months who were still breastfeeding were asked when they planned to stop. Most of these mothers said they planned to stop when the child was 12–18 months old. Quite a few mothers did not indicate a specific age but rather said they planned to stop when their child started walking.

Table 13 summarizes reasons for mothers continuing to breastfeed their children beyond 6 months and for discontinuing breastfeeding before their children are 2 years of age.

Reasons mothers continue breastfeeding beyond 6 months of age	Reasons mothers discontinue breastfeeding before 2 years of age
 Child continues asking for breast milk Ensures child will be strong Ensures child's brain will be well developed As a family planning method To prevent child malnourishment Fathers' approval of continued breastfeeding Interviewer: "Why did you decide it will be 2 years?" Participant: "I think breast milk works well in the body. If a child is properly breastfed the brain will be sharp. That is how I do mine, I breastfeed for 2 years." (SSI participant, mother, rural community, South West) 	 Child was eating different foods well Child was healthy and strong Child was intelligent and grown up already Child was walking Child was biting mother's nipple too much Breastfeeding for a long time was draining; not enough strength to continue Misconceptions/beliefs that breastfeeding too long would result in child having low intelligence or that the child was perceived as "sucking blood" Mother became pregnant Interviewer: "Why do you want to breastfeed her for 1 year and 3 months?" Participant: [laughs] "Because I don't have the strength for somebody to suck my breast for 2 years. I don't have the power to carry such load." (SSI participant, mother, urban community, South East)

Table 13: Reasons mothers gave for continuing to breastfeed beyond 6 months of age or for discontinuing breastfeeding before 2 years of age

Complementary feeding

Age of initiation of complementary feeding

Among mothers of children aged 6–23 months who participated in the SSIs, just under half said they initiated complementary feeding before 6 months, half at 6 months and a small number at 7 months.⁵ Mothers in the southern states introduced complementary foods earlier than those in the northern states.

Almost all mothers in the IYCF PDGs reported having learned from health workers that complementary feeding should start at 6 months. However, they said that, in practice, many mothers in their communities start complementary feeding between 3 and 6 months.

Table 14 summarizes the reasons mothers gave for initiating complementary feeding before 6 months.

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Table 14: Reasons to	r mothers initiating	i complementary	/ teedina betore 6	6 months, and first foods

Reasons for mothers initiating complementary feeding before 6 months	Complementary foods mothers frequently reported starting their infants on
 Lack of sufficient breast milk to satisfy the child Child showed interest in foods others were eating Breastfeeding challenges 	 Pap Rice Indomie Eggs Beans <i>Moi moi</i>

Mothers were asked the age of the child when they introduced different types of complementary foods. Pap was first introduced at 2 months in the South East zone. By 3 months, milk, fish, eggs, *ogbono* (seeds of the wild mango), soya beans, crayfish and eggs had already been introduced in two southern states. While complementary food was introduced in the North East and North West zones later than this, it was still introduced earlier than the recommended age of 6 months.

Variety of foods given to infants during complementary feeding after the first 6 months

As with other SSI participants, mothers of children 6–23 months were shown photos of foods organized by food group and asked about foods fed to their 6–23-month-old children. Participants were shown pictures of the following six food groups:⁶

- Group 1: Grains, roots and tubers (rice, maize, cocoyams, yams, potatoes, cassava, millet);
- Group 2: Legumes and nuts (beans, soya beans, soya flour, groundnuts);
- Group 3: Dairy products (cow's milk, powdered milk, cheese);
- Group 4: Meat and fish (chicken, fish, beef);
- Group 5: Eggs; and
- Group 6: Fruits and vegetables rich in vitamin A (carrots, watermelons, cucumbers, mangoes, pawpaws).

⁵ There is a possibility that participants may not have understood that water or other foods (e.g., honey or pap) are complementary foods.

⁶ Notably, two other food groups (breast milk and other fruits/vegetables) that are recommended for children aged 6–23 months were not included in this exercise. However, women were asked about breastfeeding their infants in a separate set of questions. The food group 'other fruits/vegetables' was not included to avoid potential participant confusion.

For each of the groups above, mothers were asked a series of questions related to the foods they fed or did not feed their child.⁷ The foods fed to each child were analysed to see if children had been fed with foods from each group. Questions about foods given to children did not have a time frame in terms of recency or frequency, but rather asked participants what types of food they fed their children from each food group, when they started feeding each specific food and why that food was given.

Almost all the mothers reported that they had fed their child with foods from each of the six food groups. Rice, beans, pap, eggs and watermelon were mentioned most frequently as foods that mothers fed their children. Some mothers in the south also discussed feeding their children instant noodles (e.g., Indomie). Only a small number of mothers mentioned feeding vegetables to their children and of these, green leafy vegetables were mentioned the least. Notably, almost all these mothers were still breastfeeding their 6–23-month-old children. Table 15 summarizes the foods in each food group most frequently reported as being given to children aged 6–23 months.

A small number of mothers reported not feeding at least one food group to their 6–23-month-old children. Notably, the food groups that they did not feed their children were meat and fish, eggs and fruits and vegetables.

Food group	Most frequently reported foods
Group 1: Grains, roots and tubers	Maize, rice, pap
Group 2: Legumes and nuts	Groundnuts, soya beans, beans
Group 3: Dairy products	Milk, cheese
Group 4: Meat and fish	Fish, chicken
Group 5: Eggs	Eggs
Group 6: Fruits and vegetables rich in vitamin A	Watermelons, pawpaws, cucumbers, mangoes, carrots

Table 15: Most frequently reported foods in each food group

Reasons for giving or not giving different types of foods

Mothers were asked to share their reasons for feeding or not feeding particular foods to their children. The reason most often mentioned for why mothers give a food was the perceived nutritional value to the child.

The reason [I started giving him beans at this age] is I see that it helps in boosting blood supply and health of the baby, and the baby needs what will build his body and health. (SSI participant, mother, rural community, North West)

Some mothers discussed perceived negative impacts on health as a deterrent to feeding a particular food to a child, such as the belief that even though fruits are nutritious, giving a large quantity of them to children results in upset stomachs.

They [women in the community, especially older women] believe that fruits are good for children, just that you would not give it a large quantity to a baby because fruits might upset the system of a baby [diarrhoea]. ... Giving all the carrot shown here will disturb his stomach and will cause frequent stooling. Even excess mango is not good to the stomach. (SSI participant, mother, rural community, South East)

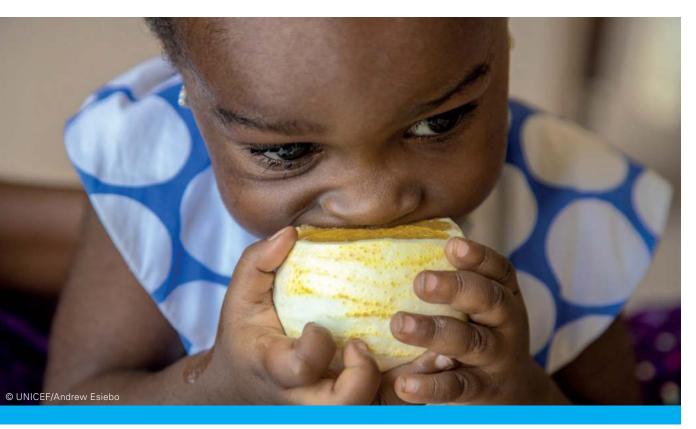
⁷ Data was not collected from Cross River (South South).

Other reasons commonly discussed by mothers for not feeding certain foods to their children included the mother's and child's personal preferences and dislikes of foods; financial limitations to purchasing some foods, such as eggs and chicken; and the food requiring biting and chewing (e.g., beans, carrots, cucumbers and *ganda* [cow skin]), which the baby could not do because it had no teeth Some mothers also shared misconceptions and negative beliefs around certain types of food (e.g., that eating eggs delays children's ability to speak and that consumption of palm seeds can cause malaria).

Active feeding practices

In each community, observations of children being fed were included in go-alongs with mothers in the home. In all the go-alongs, children were fed by their mothers, except in one home, where the child was observed feeding itself. Most mothers were actively engaged in feeding their children. In five of the go-alongs, the mother was observed dedicating most of her time and attention to the children while they ate. In six of the go-alongs, the mother was still paying attention to the children as she fed them, despite also doing something else at the same time. In only one of the go-alongs, the mother observed was not involved or engaged in feeding her child and the child fed itself.

Only one mother in one go-along was observed restricting her children's food consumption. This mother cautioned her child verbally to eat "bit by bit" and also physically took the remaining food from the child when she determined the child had eaten enough. In terms of encouraging children to eat, three mothers were observed using non-food rewards to encourage consumption. One of these mothers offered to buy the child a toy if the child finished the meal. Four mothers, all of whom said that the food was sweet and/or delicious, gave positive comments about the food to encourage consumption. One mother also offered to give the child Indomie as a reward for finishing the meal. In half of the go-alongs, no physical prompts for the children to eat were observed. However, in five go-alongs, feeding with a spoon was observed. In one go-along, food was placed on utensils for the children to feed to themselves. One mother was observed compelling her child to eat by forcing the food into the child's mouth.



Health-care utilization

Key qualitative study insights regarding health-care utilization are:

- While almost all women asked about ANC visits reported using this service at some point during a pregnancy, there was a wide variation in when women reported initiating visits, as well as how many ANC visits they attended.
- Although the benefits of ANC visits were known by most women, some still did not give them much importance, thinking that they are only necessary when the pregnant woman is sick or if there is a problem with the unborn baby.
 Fear of injections and using drugs during pregnancy are other factors that prevent women from early initiation of ANC visits.
- Home delivery is still a common practice in both rural and urban areas. However, with frequent sensitization and the presence of health facilities in most communities, delivery in a health facility is becoming more and more common.
- For both women who delivered in the hospital and those who delivered at home, the main area of care sought during PNC is newborn immunization. There is wide variation in the timing of the first vaccine. Certain beliefs, such as negative vaccine outcomes and non-effectiveness of vaccines for children, can impede immunization efforts.



With frequent sensitization and the presence of health facilities in most communities, delivery in a health facility is becoming more and more common.



Contextual background on health-care utilization in Nigeria

According to the NDHS, utilization of ANC, facility-based delivery and PNC services has increased in past decades (Table 16). Although eight ANC contacts per pregnancy are recommended in WHO guidelines, 43 per cent of women in Nigeria had fewer than four ANC visits (NPC & ICF, 2019). Women in the northern states and rural residences were less likely to receive any ANC, and women under 20 years attended ANC less frequently than older women (NPC & ICF, 2019). The determinants of ANC utilization were mainly levels of education and incomes of the respondents and/or their husbands. Facility-based deliveries were lowest in the North West zone and highest in the South East zone (NPC & ICF, 2019). Potential motivators for facility-based delivery included desire for safe delivery – referring to the presence of a trained health worker – detection and management of problems, availability of medicines and good hygiene (Hill et al., 2020). Hill et al.'s study in Nigeria's North East zone found those who delivered in a facility had a desire to be modern and rejected traditional practices.

When it comes to PNC, immunization coverage is key to reducing child mortality and morbidity. Twenty-three per cent of children aged 12–23 months received all recommended vaccines according to the 2017 MICS report (NBS & UNICEF, 2017). According to the 2021 Water, Sanitation and Hygiene National Outcome Routine Mapping (WASHNORM) report (Federal Ministry of Water Resources et al., 2022), about 1 in 10 households experienced diarrhoeal disease in the two weeks prior to the survey and 75 per cent of the affected household members were children under 5 years. However, according to the 2021 national MICS, no treatment or advice was sought for 35

per cent of children with diarrhoea and 16 per cent of children under 2 years with diarrhoea were not given any treatment or drug (NBS & UNICEF, 2022). This highlights the need to understand health-care-seeking behaviour to treat illness.

Table 16: Health service utilization statistics, 1990–2019

Health service utilization (by women who gave birth in past five years)	1990	2008	2018
ANC	57%	58%	67%
Health-facility-based delivery	32%	35%	39%
PNC	Not reported	30%	42%

Source: NPC & ICF, 2019

Detailed study findings on health-care utilization practices

ANC utilization practices

Almost all women who were asked about ANC visits obtained ANC services in general and went to a hospital or clinic. Most women interviewed knew that ANC visits and early ANC initiation were important, both for their own health and that of their unborn child. This knowledge motivated ANC attendance in general and in some cases encouraged women to initiate visits



early, although only a few women reported initiating ANC visits as soon as they found out they were pregnant. Most women started ANC visits in the third month of pregnancy.

Many women also knew that it was important to attend ANC on a regular basis or at least that they should make a minimum number of visits throughout a pregnancy. In terms of number and frequency of ANC visits, women said they followed the recommendations of health-care providers. Women reported attending ANC every month, twice a month or weekly, with visits becoming more frequent as the due date approached. Some women reported a maximum of 4–5 visits during each pregnancy. Women also reported being encouraged to visit the clinic or hospital before the next scheduled appointment in the event of any health problems.

A few participants gave reasons for why it is not necessary to make use of ANC, either early or at all. Participants shared a perception that they would only be allowed to give birth at a facility if they obtained an antenatal card from health workers at the same facility, as part of ANC services. Participants noted that for some women, obtaining this card to enable delivery at the facility was the only motivator to attend ANC. Therefore, if the facility policy did not require possession of this card to access delivery services, some would not attend ANC services.⁸

A few participants said early ANC initiation was not a priority for women who have experienced a miscarriage. In their opinion, it would not be appropriate to announce that they were pregnant without being certain that the pregnancy would be completed. It was also mentioned that some women do not want to have to use products throughout their pregnancies and that others are afraid of injections.

Some women would say if they started receiving drugs at their early stage of their pregnancies, when would they stop? So they prefer starting late, at their seventh or eighth month of their pregnancies. (PDG participant, mother, rural community, South East)

Table 17 summarizes some mothers' motivations for attending ANC and a few of their reasons for not attending or delaying ANC.

Mothers' reasons for attending ANC	Mothers' reasons for not attending ANC or delaying first ANC visit
 Helps prevent complications during pregnancy and delivery Identifies congenital malformations and allows for preparation for subsequent problem Ensures the child's optimal growth Assists understanding of how the child is growing Provides advice on nutrition during pregnancy Gives information on necessary steps for optimal maternal and child health To obtain an ANC card to be presented during delivery 	 Do not find ANC useful Only necessary if pregnant woman is sick or something is wrong with baby Fear of injections Do not want to use medical products throughout pregnancy If woman had previously miscarried, first visit is delayed until she is further along in pregnancy

Table 17: Mothers' motivations for attending or not attending ANC

⁸ According to Nigerian colleagues, this may represent a misconception on the part of participants, as it is not health facility policy for antenatal cards to be required for delivery services. While health workers may prefer antenatal cards as they provide insight into a patient's pregnancy, a woman would not be turned away if she presented for delivery services without a card.

Delivery care utilization practices

Most women interviewed reported giving birth at a health facility, but a few reported giving birth at home. Factors that women considered when deciding where to give birth are highlighted in Table 18 and largely relate to service access and quality issues, which were explored in Chapter 1.

A few of the women who gave birth at facilities were accompanied by their husbands. However, most reported that labour began when their husbands were not home, resulting in neighbours or relatives taking them to the hospital and their husbands joining them later. Women who reported giving birth at home were assisted by mothers, mothers-in-law, midwives, traditional birth attendants or neighbours.

Participants noted that home-based delivery is important for some women because of their traditional and religious beliefs. Some participants were advised by religious leaders that they should neither take medicine during pregnancy nor go to the hospital. Whatever complications may arise during home delivery, ways are found to manage them at home with traditional practices. In addition, some believe that when a woman gives birth in a hospital, there is a good chance she will lose her baby.

For example, the ljaw people, they have a strong belief that they [should not] go to hospital, all they [should] do is go to the river, take water, drink it and baby comes out easily. [If] they deliver at hospital, the baby might die. (PDG participant, mother, urban community, South West)

It's their culture that you are not going to the hospital, you just have to deliver at home, no matter the situation you will experience. Even if retain placenta, they will burn pepper, push you with muciya and so on. They will never take you to the hospital, you must deliver in that situation. (PDG participant, mother, urban community, North East)

Mothers' reasons for facility-based delivery	Mothers' reasons for home-based delivery
Safety for mother and child	• Family member is a health worker
Easy management of complications	Health facility is far from home
Ensures safe and normal deliveryReduces stress	 Labour was advanced; not enough time to go to hospital
• Option for caesarean section, if necessary	• Giving birth in hospital is a waste of money
	 Quality of service provided by traditional birth attendants is seen as better than at the hospital
	Midwives are available all night
	Fear of operations or injections
	• Previous home delivery with no complications
	 Traditional and religious beliefs on the importance of delivering at home
	Influence of family members or friends to deliver at home
	Desire for modesty/privacy during birth

Table 18: Mothers' reasons for facility- or home-based delivery

A woman's nudity remains sacred in some communities, and this motivates some women to practise home deliveries.

Some[times] you will find out it's shyness that prevents them from coming to the hospital. They believe people will see their body when they go to deliver, then they will stay at home. They don't want others to see their body. That's why they don't want to go to the hospital and deliver. (PDG participant, mother, urban community, North East)

PNC utilization practices

Almost all women went to a health centre for PNC care, regardless of whether they gave birth at the hospital or at home. One of the main areas of care sought after delivery was immunization of the newborn. If a women delivered in a health facility, the child usually received his or her first vaccine within hours or days of birth, at 2–3 days. In contrast, those who gave birth at home went to the health facility much later, at 1–3 weeks. Women mentioned that after this first vaccine, the frequency of PNC visits was in most cases monthly, as advised by health providers.

Immunization of the baby was important for most of the mothers. It should be noted that most women said that they did not take their babies for general check-ups, only for vaccination. Some mothers of children aged 6–23 months reported that they only take their children to the hospital when they have a health problem. However, some mothers noted that the only time they take their children to a health facility is for immunization. For example, one mother said: "If the child is okay, no need of you taking her for check-up" (PDG participant, mother, urban community, South South).

Because of lack of trust when someone brought her child for immunization once and he developed some fever, she would say she will not return again. (PDG participant, mother, urban community, North East)

Apart from their babies' check-ups, some women mentioned going to the health facility for their own sake, to ensure that they do not have complications that might be related to delivery.

Table 19 includes the reasons given by mothers for seeking or not seeking PNC services.

Mothers' reasons for seeking PNC	Mothers' reasons for not seeking PNC
 Beliefs that vaccines help to strengthen a baby's immune system and prevent disease Knowledge that children should be taken for immunization from birth to 15 months Beliefs that it is important to finish getting vaccinations 	 Negative beliefs and fears about vaccines for children, e.g., not effective, causes illness or makes children weak Lack of trust in health services

Table 19: Reasons given by mothers for seeking or not seeking PNC

Health-care-seeking and utilization practices during illness

Most participants said that women visit health facilities for treatment when they or their children are ill. However, some participants said that they or other women in their community do not visit health facilities, with many preferring services provided by chemists and herbalists, largely because of financial concerns and other barriers related to access and quality, as discussed in Chapter 1. Some participants noted that the chemist is their first stop before visiting a health facility. If the treatment from the chemist does not resolve the situation, they will attend the facility. Additionally, participants stated that chemists will refer their patients to the hospital if they have health issues that are beyond the capacity of the chemist to deal with.

Most women get health care for their children when they are sick. They usually use the government health facility or medicine vendors. No woman will like to see her child remain sick without seeking health care. (PDG participant, mother, rural community, North Central)

A small number of participants stated that women who do not attend the health facility are uneducated, and that culture and religion can also create a barrier to accessing health services when health workers do not belong to the same religion or tribe as the patient. Fears around consequences of immunization were shared by some participants, including a health worker. One participant in the South East zone described an illness that cannot be cured in hospitals, necessitating visits to an herbalist for traditional remedies.

What are those things that can make [a] woman go to herbalists for cures? The belief that some illnesses cannot be cured in hospitals. [An] example of such sickness is eshi era (contaminated breast milk). That it has no medical cure except through herbs by herbalist. It is a condition by which woman's breast milk is poison that can kill not only the baby but other animals, including flies and ants, if they come across it. There is this general belief that it can only be cured with herbs. (PDG participant, mother, rural community, South East)

However, one participant described a prior negative experience with a chemist that led to a lack of trust.

When I was sick, I went there. He collected a sample and said he had run a test on me. He gave me plenty injection and drug. After two days, I was like I want to die. I went, he told me that I have not finish taking the drug, I should come back and take the drug. One week later, the thing landed me in the hospital. So, I don't trust that person. I don't even want to go there and buy anything. (PDG participant, mother, rural community, South South)

Diarrhoea management

A common illness discussed by participants was diarrhoea in their infants. Participants said that visiting a health facility to treat infant diarrhoea was a widespread practice in their communities, as was treating children with oral rehydration salts and Flagyl syrup, especially at night. Many participants also stated that they often attempted to treat their infants for diarrhoea at home first, using home remedies or medications purchased from the chemist, including oral rehydration salts, Flagyl syrup, Oracel, paracetamol, zinc, Babyrex and vitamin C. Several participants noted that they do not change their child's diet when the child is ill with diarrhoea, but some participants discussed the importance of washing the faeces off the child, bedding, clothing, surfaces and their hands carefully with soap while caring for a child with diarrhoea. Participants said that they would take the infant to the health facility if treatments at home were not successful. A minority of participants stated that giving children traditional medicine and herbs, such as bathing and feeding children with traditional herbs from chemists and herbalists, is a common practice. Several participants believed that diarrhoea is caused by an unhygienic environment or dirty food or drink and could be prevented through hygiene practices and washing of dishes and breasts before feeding.

If your child is doing vomiting and diarrhoea, you will be careful with how you will wash the defecation and you will be putting Omo [washing powder] and be washing it. If you finished washing it you will wash your hands with soap. (PDG participant, mother, urban community, North East)

Water, sanitation and hygiene practices

Key qualitative study insights regarding WASH practices are:

- When asked about handwashing at critical times, participants were most likely to report washing hands with soap after using the toilet, before and after eating and before cooking.
- A few participants said it is a challenge to wash hands when not at home because water or soap are not available, e.g., while travelling, at church or at school. When soap is not available, participants use just water, sand, ash or sanitizer.
- Most participants viewed open defecation positively or neutrally and gave several reasons for open defecation, such as the misconception that toilets/latrines are a source of infections; there were too many family members in the household; or there was no access to a toilet.
- Most participants reported separating animals from children and other household members with a physical barrier or by keeping them in separate spaces.
- Leftover food is most commonly kept overnight in a pot with a lid, then reheated before serving. About half of the participants in urban and rural communities in northern and southern regions said they wash utensils and dishes with soap and water before serving food.



A few participants said it is a challenge to wash hands when not at home because water or soap are not available.



Contextual background on WASH practices in Nigeria

WASH practices, like dietary and health practices and services, are vital to appropriate maternal and child feeding practices during the first 1,000 days of life. One of the most essential WASH practices is handwashing with soap, particularly at critical times such as after using a latrine or handling child faeces, before and after eating, before food preparation and after handling animals. Survey data have shown that handwashing practices are well understood in Nigeria, with 99 per cent of household heads having knowledge of at least two critical times for handwashing (Federal Ministry of Water Resources et al., 2022). However, just 8 per cent of heads of households demonstrated the proper handwashing technique with soap and running water, with higher-income households more likely to demonstrate the proper technique than lower-income households (21 per cent and 2 per cent, respectively) (Federal Ministry of Water Resources et al., 2022). These findings are critical because poor access to WASH facilities, unsanitary living conditions and associated diseases are directly linked to undernutrition and faltering growth, lowered immunity and increased risk of morbidity and mortality, especially in the first 1,000 days. Unless communities have access to adequate water and sanitation services, and good hygiene is consistently practised by community members, there will be a risk of diarrhoea and other hygiene-related diseases, which are major contributors to undernutrition in the first 1,000 days.

The proportion of people practising open defecation in Nigeria has been declining steadily over the past two decades, from 26 per cent in 2000 to 23 per cent in 2020 (Federal Ministry of Water Resources et al., 2022). Open defecation practices align closely with disparities between urban and rural households' access to improved and unimproved toilet facilities. Thirty-one per cent of rural facilities practise open defecation, compared to 8 per cent of urban households (Federal Ministry of Water Resources et al., 2022). According to the 2018 NDHS, 58 per cent of households disposed of children's stools safely (NPC & ICF, 2019). Safe stool disposal includes a child using a toilet or latrine, or a child's stools being disposed of in a toilet or latrine, or buried. Correspondingly, safe disposal of infant faeces is practised more frequently in households with improved toilet facilities than in households practising open defecation (64 per cent and 22 per cent, respectively) (NPC & ICF, 2019). The 2021 WASHNORM survey found that one in three households left faeces exposed in the compound and a similar number allowed livestock to roam freely in the same yard or plot as the household lived (Federal Ministry of Water Resources et al., 2022). Children living in households with unpenned livestock or other poor sanitation and hygiene conditions will have greater opportunities for ingestion of faecal bacteria (both human and animal) and other pathogens. This study aimed to collect information on key factors influencing handwashing and hygiene practices, which have not been well documented to date. Factors explored in this study included knowledge, attitudes, norms and barriers to handwashing with soap, open defecation, safe disposal of infant faeces and separation of animals and people.

Detailed study findings on WASH practices

Handwashing with soap practices

Participants described several key times they practise handwashing with soap. Roughly half the participants from both northern and southern communities said they wash their hands after going to the toilet and before eating, and several participants said they wash their hands when cooking or preparing food. Less commonly noted times to practise handwashing include before prayers (also called ablutions); when waking up; after touching dirty things; after working or cleaning; after visiting the health facility; or before feeding the baby. Almost all participants said they wash their hands with detergent or soap. Some participants said if there is no soap or detergent available, they will use only water. Other alternatives to soap include sand, hand sanitizer and ash.



Challenges to handwashing included forgetting to wash hands, as well as being in a hurry or too tired to wash hands. Lack of soap or detergent is also a limiting factor, as one or two participants said they did not have soap or detergent because of a lack of resources, and several participants noted that access to soap and water is particularly challenging when they are not at home, such as while they are travelling, at church and at school. Some participants said that washing hands before breastfeeding is a particular challenge because breastfeeding is done on demand and frequently throughout the day. One of these participants said they hurry to begin breastfeeding when their child cries, so they are not able to wash their hands before breastfeeding.

I think that only those who feel they are obviously dirty wash their hands before breastfeeding the baby. Most will just bring the breast out and start feeding the baby and still continue what they are doing with one hand. (PDG participant, mother, rural community, North Central)

Almost all participants in both northern and southern communities said they wash their hands to prevent disease transmission through germs or to ensure cleanliness. A few participants mentioned washing their hands as part of coronavirus prevention. One participant said there is a belief that African men do not die from germs and that children's exposure to dirt builds immunity.

They always have that [in] mind that Africa[n] man no die from germs. So, they don't care. They are just living like that. It all boils down to mentality, there are some people that don't really care about hygiene. In fact, before I gave birth, one of my neighbours said when you give birth, you have to put your child under the rain, something like that, so that whenever rain touch the child, he or she will not fall sick and that you have to put your hand under the mud and rub on the child body so that whenever the child comes in contact with all those things he or she will not fall sick. (PDG participant, mother, urban community, South South)

Sanitation practices

The participants who discussed disposal of infant faeces described one of two key practices: that infants either have napkins, cloths or diapers; or they defecate in an open area. Mothers with infants using napkins, cloths or diapers said they either wash the used napkins for reuse or throw them away in the community waste collection areas or in their household trash. Mothers said that if children defecate in an open area they clean the area afterwards.

If your child defecate, you wash it for him, then you carry it with kettle and take it to the bathing room and throw it and rinse it ... then you wash your hand with soap. If there is no soap, then you put your hand on the wall or sand like that and put and rinse it. (PDG participant, mother, urban community, North East)

Most of the participants who discussed the practice of open defecation described it in positive terms or as a necessity because of a lack of toilets. These participants were all from rural communities in the south. The most cited reason for practising open defecation was to avoid infection from using a shared toilet. Other reasons included having many people in the household, being far from home or not having the resources for a toilet.

I: "Why do you go to the bush when [you] have a normal toilet in the house?"

P: "The reason why I go to the bush and not use normal toilet regularly is because we have many people in my house and also we don't normal[ly] [clean] it every time, so as for me, maybe I can have infection." (SSI participant, mother, rural community, South South) A few adolescent girls said they never use the bush, because "girls don't use the bush" or because their teachers or parents told them not to use the bush. Two mothers said children should not use the bush because it is dangerous.

Separation of children and animals

In discussions with participants about how they housed their domestic animals, most participants said they keep them separate from children and other family members. The majority of those who said this were from southern communities. Most participants said they keep animals outside in sheds, cages or pens. A few participants said they kept their animals in a separate area of the house. One or two participants in southern communities said that others in their community did not separate animals from family members:

I have seen people staying with goat. Yes. They keep paper like this and they sleep one side. That one is mainly in the villages they do it. Even here in town. I have a neighbour that have a dog. He use[d] to lie down with the dog. (PDG participant, mother, urban community, South South)

Participants who said they kept their animals in a separate space gave reasons related to hygiene and cleanliness, i.e., to prevent disease transmission from animals to humans and prevent children from playing or crawling in areas with animal faeces. A few participants said they swept the compound regularly to clear it of animal faeces, or after the animals ate. Only one or two participants mentioned keeping animal food separate from human food.

Hygienic food preparation practices

Almost all participants said they stored leftover food after a meal to reheat and serve later. However, one or two participants said they did not eat leftover food. Most participants in rural communities reported storing leftover food in a covered pot or bowl, and a few participants said leftover food was kept in a cupboard. A few participants said they gave leftover food to others, such as the dog, neighbours or the needy. Some participants, all of whom lived in urban communities, kept leftover food in a refrigerator or freezer.

In a case where this leftover is what I want to eat the next day, let me say maybe it is rice, I will leave it. I know that the next day I would eat it, I don't bother putting it in the fridge that is if I cooked it that evening. If I cooked it in the morning, I warm it and cover it up but in a case when I know I don't want to eat it even tomorrow that is when I refrigerate it. (SSI participant, pregnant woman, urban community, South South)

Roughly half the participants in urban and rural communities in northern and southern regions said they wash utensils and dishes with soap and water before serving food. When asked who is responsible for washing utensils and dishes, most participants said either the mother or the children in the household. Some participants said they wash the dishes with soap or detergent to prevent disease and ensure hygiene. A few participants said it is not possible to wash the dishes with soap or detergent because they lack resources, are fatigued or are rushed.

When feeding the baby, she will just keep the plate like that, when she wants to eat again, she will just rinse the plate and give the baby food. (PDG participant, mother, urban community, South South)

Social norms related to nutrition, health and WASH practices

Key qualitative study insights regarding social norms are:

- In terms of breastfeeding norms, participants do not consider continued breastfeeding of children up to 2 years of age as a typical behaviour, and there were mixed opinions about whether giving colostrum to newborn babies was typical or acceptable. There was general consensus that prelacteal feeding of newborn babies was widespread and approved of.
- Positive health-care utilization behaviours of obtaining vaccinations, seeking treatment for diarrhoea and taking children to health facilities when sick were all considered normative.
- There were mixed opinions about whether adolescent girls typically visit health facilities when sick. This finding could have something to do with the availability of health facilities and financial constraints, but was also linked in discussions to pervasive gender norms (see Chapter 4) dictating that women and girls must seek household permission to visit health-care facilities.
- There were mixed opinions regarding whether delivery in a health-care facility or utilization of ANC services were typical and approved-of behaviours. The lack of perception of societal expectations for these behaviours may be reflective of personal preferences or the diversity of health-care settings and availability of facilities and traditional birth attendants across the varied cultures and geographies making up Nigeria's 36 states. Alternately, it could be an indication that norms for these behaviours are changing from more traditional practices to greater use of health-care facilities.
- With the exception of separating animals from infants, which was discussed as a socially approved-of behaviour, participants did not recognize most positive WASH behaviours as socially normative. Notably, open defecation, a harmful WASH behaviour that has been targeted extensively in SBC efforts, was discussed as still acceptable and typical.



There were mixed opinions regarding whether delivery in a health-care facility or utilization of ANC services were typical and approved-of behaviours.



Contextual background on social norms in Nigeria

In Nigeria, it has been suggested that social norms are likely to be a large contributing factor to the disparity between investments in the health sector and health improvements (World Bank, 2019). Social norms are "the perceived informal, mostly unwritten, rules that define acceptable, appropriate and obligatory actions within a given group or community" (Institute for Reproductive Health, 2021). Social norms are learned, sometimes explicitly but often implicitly, and evolve over time (Institute for Reproductive Health, 2021).

Social norms influence behaviours and thereby impact development and health outcomes and associated programmatic costs across a variety of sectors (Vanderzanden, 2017; Heise et al., 2019). For instance, in Nigeria, social norms of child marriage are estimated to result in US\$7.6 billion annual loss in earnings and productivity of human capital (Obaje et al., 2020). In Nigeria and elsewhere, lack of awareness of the effects of social norms on behaviour at the programme design and development level lead to health and development projects that are designed without taking them into account. Programmes designed without sufficient understanding of and orientation to contextually specific social norms typically lead to implementation challenges and low levels of programme uptake. An understanding of prevailing social norms related to MIYCAN behaviours in Nigeria is a critical input for effective SBC programme design.

Detailed study findings on social norms

In social norms theory, the terms 'descriptive' and 'injunctive' norms are often used to distinguish between individual perceptions of what other people do and individual perceptions of what other people believe one should do, respectively. In an effort to discern whether and which MIYCAN behaviours were considered socially typical (i.e., descriptive norms) and/or approved of (i.e., injunctive) in participating study communities, SSI and PDG participants were asked about social norms related to 15 key MIYCAN behaviours involving breastfeeding, health-care utilization and WASH practices. Table 20 summarizes the findings related to descriptive norms for five of these behaviours.

Behaviour	Summary of social norm findings	
Breastfeeding behaviours		
Prelacteal feeding	Many discussion groups (mostly in the northern states) said that prelacteal feeding of water and other liquids to newborn babies during the first few days after birth was a typical practice in their communities. Participants explained that prelacteal feeding is often done as part of traditional rituals welcoming the baby to the world, as well as to reduce stress for the newborn after delivery and to "clean out the dirt" from the mother's breast. While water was the liquid most commonly described as being given to infants, several discussion groups described prelacteal feeding practices related to the traditional practice of giving infants Zamzam water [holy water from Saudi Arabia that is brought back by returning Muslim pilgrims].	
	They put Zamzam water in the child's mouth. It is the Zamzam water and date palm the mother will chew and give it to the child. If there is lack of breast milk, they will help the child with milk or hot water. If Zamzam water is available it can be used. (PDG participant, mother, urban community, North East)	

Table 20: Summary of key MIYCAN behaviours that were considered socially normative

Behaviour	Summary of social norm findings
Health-care utilization	
Seeking health care for sick children	Most participants believed that women visited health facilities for treatment when their children were ill. However, some participants said that they or other women in their community did not attend health facilities, largely because of financial concerns, as well as other barriers related to access, infrastructure and service quality. Many participants that said they did not visit health facilities preferred services from chemists because of the perception that buying drugs to treat an illness at home is more affordable.
	Most women get health care for their children when they are sick. They usually use the government health facility or medicine vendors. No woman will like to see her child remain sick without seeking health care. (PDG participant, mother, rural community, North Central)
How mothers treat children with diarrhoea	Many participants said that visiting a health facility to treat infant diarrhoea is a widespread practice in their communities, as is treating children with oral rehydration salts and Flagyl syrup, especially at night. A minority of participants stated that giving children traditional medicine and herbs is a common practice.
	They take them to the hospital, but at night, we give them Flagyl or Limotil or ORS [oral rehydration salts]. (PDG participant, mother, rural community, North Central)
Vaccination	There was a general consensus in all groups that were asked about vaccination practices that most children are taken for vaccinations and that doing so is approved of by the community. Some participants labelled women that do not access immunization services for their children as "negligent". One participant said that this is because people are now more educated and sensitized to the importance of vaccination.
	Most [community members] approve because they know the benefit of getting vaccinated. The few that do not approve of taking the children for vaccination are those that are not properly informed and are negligent because they believe the children will get sick if they get vaccinated. (PDG participant, mother, rural community, North Central)
WASH practices	
Separating animals and family members in the household	Most participants in rural communities said that it is typical to keep animals in a separate enclosure or space from the family living space. Just one participant in an urban community said some people have their animals living inside the home with them.
	Most people do not let their animals roam about in the community. They put them in an enclosed space to avoid them entering into people's farms. The enclosed space is separate from the family living space. (PDG participant, mother, rural community, North Central)

In discussions around the other behaviours, there was generally a lack of consensus regarding what was typical or approved of, although participants thought that continued breastfeeding up to 2 years of age was generally not socially approved of. Table 21 (page 66) presents a summary of key behaviours that were generally not considered socially normative as well as those about which participants remained ambivalent.

Behaviour	Summary of social norm findings
Breastfeeding behaviours	
Continued breastfeeding up to 2 years of age	Most participants said that breastfeeding a child until they are 2 years of age is generally not approved of, as mothers get tired of breastfeeding for such a long time. A lengthy breastfeeding period used to be the norm in the previous generation, but is no longer so, and mothers who used to breastfeed for longer than 2 years are perceived to be "old-fashioned".
	She is seen as adopting old model breastfeeding method. They will be saying "up to now you haven't wean[ed] this child, see how he grows big". (PDG participant, mother, rural community, North East)
Giving colostrum to newborn babies	When participants were asked if their community approves of mothers giving colostrum to their newborns, some participants said that colostrum is widely given to babies in their communities while others (mostly from the north) said that colostrum is discarded. According to participants, as women's literacy levels increase, they learn the benefits of giving colostrum to babies. They are also going to health centres or hospitals for antenatal visits, which is changing beliefs about colostrum being "dirty".
	Most people do give that part [colostrum] to the newborn as advised by the health workers. But we still have some that do not give them because they feel it is not clean. (PDG participant, mother, rural community, North Central)
Health-care utilization	
Delivery in a health-care facility	Participants expressed a variety of opinions about the most popular places for women to deliver their babies. While some believed that most women give birth in health facilities, others believed that they most often give birth at home or in a prayer home, with the assistance of a traditional birth attendant.
	Some prefer home, others prefer hospital. (SSI participant, mother of a 0–5-month-old infant, rural community, South South)
ANC	While participants generally said that pregnant women went for ANC at some point during their pregnancy, a considerable variety of opinions was expressed regarding when women typically initiate ANC and how many times they visit ANC during their pregnancy.
Adolescent girls going to the health facility when feeling sick	There was division regarding whether adolescent girls visit a health facility when sick. Some adolescent girls stated that adolescent girls visit a health facility when ill and perceived this as a norm in their communities. However, some adolescents felt that adolescents in their communities are more likely to visit chemists when ill than health facilities.
	They [girls in this community] go to health facility They have preference for orthodox medicine. (SSI participant, adolescent girl, rural community, North West)

 Table 21: Summary of key MIYCAN behaviours that were not considered socially normative

Behaviour	Summary of social norm findings
WASH practices	
Open defecation	Several participants discussing open defecation practices described it as a practice that most people do and said it was not disapproved of in their communities. Of these participants, all of whom were in southern communities, adolescent girls especially felt that most people use the bush, in some cases to avoid infection from shared toilets.
	They believe that it is good to defecate in the bush, it helps to increase manure in our farmlands, but it is not a bad thing if we have money to build our own toilet, you can freely use your toilet at home instead. (Go- along, mother, rural community, South East)
	I: "In your community, where do girls tend to use the toilet, girls, most girls, which particular one do they use more?"
	<i>P: "The bush some of them like to use it because it [toilet] cause them, it gives them infection." (SSI participant, adolescent girl, rural community, South South)</i>
Disposal of infant faeces	Of the participants who discussed the issue of disposal of infant faeces, a few participants, all of whom resided in the north, said it is not approved of in their communities to dispose of infant faeces on the ground. A few other participants, most in the north, said that infant faeces are packed up and thrown away, either at waste collection sites or in the bush, and that adults either approve of or are indifferent to this practice.
	It is not acceptable to pack and throw it outside. (PDG participant, mother, urban community, North East)
	They approved for those using napkins and those disposing immediately. It is acceptable, it is approved, it is a general thing. (PDG participant, mother, urban community, South South)
Washing hands with soap at key times	Several participants, all in rural communities, said some mothers, but not all, wash their hands with soap and water at key times. Those who do wash their hands at key times may not use soap but ash or sand instead. One participant in an urban community said it is not typically done.
	Truly it is not a common practice. They don't commonly wash their hands before breastfeeding, but awareness is ongoing to wash hands to protect the child from contacting disease. But they don't commonly wash. (PDG participant, mother, urban community, North East)
Washing dishes and utensils before and after cooking	Some participants in urban and rural communities in northern and southern regions said it is common to wash dishes and utensils with soap and water before feeding the baby. A few said it is not common, but some people do it.
	Not all of them. Not all. When feeding the baby, she will just keep the plate like that, when she wants to eat again, she will just rinse the plate and give the baby food. (PDG participant, mother, urban community, South South)
Washing hands before breastfeeding	It is not the norm to wash hands before breastfeeding, and even if some do wash their hands, it is not always with soap.
	I think that only those who feel they are obviously dirty wash their hands before breastfeeding the baby. Most will just bring the breast out and start feeding the baby and still continue what they are doing with one hand. (PDG participant, mother, rural community, North Central)

Chapter 3: Gender dynamics



The decision as to what type of food to buy does not rest entirely with women, as in most cases it is the husband that decides the family preference and type of food to buy.



Gender norms

Key qualitative study insights regarding gender ideologies and norms are:

- Strong traditional gender ideologies that ascribe women and men to different spheres of influence and gendered character expectations were described across discussion groups. The women's sphere was limited to domestic and caregiving duties, whereas responsibilities for household income provision were reserved for men.
- Men were perceived as key decision makers in respect of seeking of health care, diet, their wives' mobility, housing and factors regarding their children's lives, such as friends, school, work and marriage.
- While many participants viewed women as having limited or no influence in household decision-making, some discussions made mention of women having influence when it came to issues regarding running the household and caring for children, such as cooking meals for the family, chore distribution and discipline of children, as well as children's movements and health care. There was a notable tension between PDG participants who felt that mothers had authority over children in the household and others who stated that mothers have no authority compared to their husbands.
- The decision as to what type of food to buy does not rest entirely with women, as in most cases it is the husband that decides the family preference and type of food to buy.
- Many participants reasoned that men have more decisionmaking power as a result of their status as financial providers.



Contextual background on gender norms in Nigeria

It has been well documented that gender inequality contributes to inadequate nutrition and food insecurity among women and children. For instance, there is substantial literature demonstrating that harmful gender norms, such as those that limit women's mobility and influence providers' gender-discriminatory attitudes, serve as a barrier to women accessing services (Oduyeni et al., 2021; Bergman Lodin et al., 2019). The Alive & Thrive impact evaluation reported that in Kaduna State, most mothers and fathers observe traditional gender roles with fathers as "providers" and "supervisors" with limited involvement in hands-on support for feeding children; less traditional roles were more salient in urban areas (Allotey et al., 2022). Similarly, and also impacting maternal and child nutrition, there has been research documenting that women in households observing traditional gender roles give their children and husbands preference when distributing food (Ayogu, 2018).

Conversely, there is a growing body of literature evidencing that greater women's economic empowerment is linked to improvements in nutritional and health outcomes. According to the 2018 NDHS, as recently as 2021 only 33.5 per cent of women made their own decisions about health care and household purchases (NPC & ICF, 2019), and in 2022, only 48 per cent of women were part of the labour force (i.e., only this proportion of women supply labour both formally and informally for the production of goods and services) (World Bank, 2021). The literature review for this study found just one recent study in Nigeria that looked at associations between dimensions of women's economic empowerment and the dimension of maternal health (Kareem et al., 2021). An understanding of prevailing gender ideologies and norms and related social sanctions and exceptions to norms will provide key insights for the design of effective SBC programmes for MIYCAN.

Detailed study findings on gender norms

In some of the PDGs, participants were engaged in an activity to reflect on characteristics, tasks and decisions ascribed to typical fathers and mothers in their communities (see Appendix F, page 114, for a description of this activity). The word clouds below summarize these findings, with larger words indicating those that were more frequently used.⁹

⁹ Note that while the majority of facilitators followed the study guides and asked participants about the 'typical' fathers and mothers in their communities, a small number of facilitators used the word 'ideal' in place of the word 'typical'.

Figure 5: Characteristics of a 'typical' father and mother

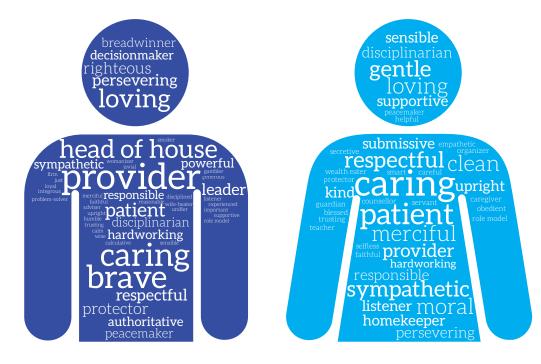
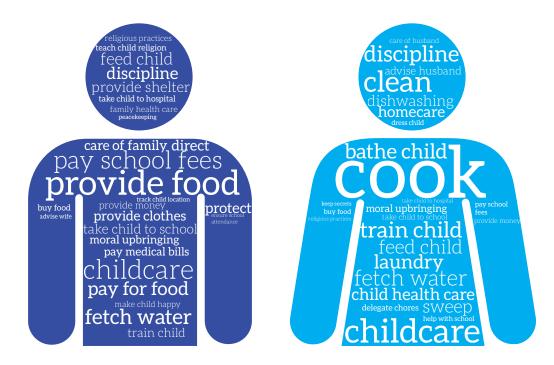


Figure 6: Tasks performed by a 'typical' father and mother



Mothers were described in positive, albeit passive, terms such as "submissive", "obedient", "servant", "respectful" and "supportive". Mothers were also characterized with words relating to caregiving, such as "caring", "patient" and "merciful", whereas fathers were described largely in terms related to power, such as "authoritative", "powerful", "leader", "head of house", "disciplinarian" and "decision maker". While participants generally shared positive terms to describe both fathers and mothers, some negative terms were used, such as fathers being described as "wife-beaters" and "gamblers", and mothers as "wealth eaters".

Box 1: Disagreement regarding the mother's authority in the household

It is the woman that the children move closer to, and it is there that they will be collecting different lessons, truly. We men are trying, our own woman has [more] authority. Truly, the man is the head of the house that this let's do it and they will agree, but about the children the woman has a lot of authority. (PDG participant, father, rural community, South West)

Starting from the children till when they get old, it is the man that makes the decision in the house, so it is not all families that women are second in command, the man is the first and second in command. (PDG participant, health worker, woman, urban community, South South)

The father must provide, because that is his right and duty. The mother should just be a support system. (PDG participant, mother, rural community, South West)

All the discussion groups developed distinct lists of tasks and decisions for mothers and fathers. Mothers were described as having authority in the household over responsibilities such as cooking, childcare, cleaning, fetching water and delegating household chores. Some participants felt that mothers have more authority over children than fathers, with mothers seen as responsible for preparing children for school, taking children to school, helping children study, monitoring child health, treating child illness and feeding children. However, other participants disagreed, noting that fathers are the ultimate authority over the family and that they also make many decisions that impact children's behaviour and lives, such as where they can go to school or for health care, future careers and who they can be friends with and marry (see Box 1).

Fathers were perceived as providers, powerholders and gatekeepers, and seen as responsible for the family's overall well-being and behaviour, as well as making decisions regarding their family's movement, health care and spending. The most commonly noted tasks that fathers were responsible for included providing food, money and clothes for the family, as well as paying school fees and medical bills.

Both fathers and mothers were labelled as responsible for advising each other, disciplining children and the moral upbringing of their children, as well as being involved in religious practices such as praying and attending the church or mosque with their children. However, teaching children about religion was more commonly noted as a father's responsibility. A smaller number of participants said that women are sometimes responsible for working and providing money for household purchases and school fees. This was seen as acceptable in situations where the father was not able to provide all of the money necessary, and was more commonly noted as acceptable by participants in the south.

When the father doesn't have, you as a mother should assist him just to live and help each other. Even if a newly wedded was taken to her home and it happens that there is no salt in the house, are you to wait for him? You have to look for it. (PDG participant, mother, urban community, North West)

The responsibility of a mother in the house is that she should be caring [for] the children and she should be caring [for] her husband and to have respect for her husband because it is all that the children will be looking at to move forward. ... If a woman does not have respect for her husband in the house, all her female children, that is the behaviour they will practise for their husbands, but if she is respectful it is all that lesson that the children will be learning from her. (PDG participant, father, rural community, South West)

Participants noted that the main decision both men and women were responsible for related to what meals to cook in the household. For women, what to cook was noted as highly dependent

on the food available to them in the home and at the market, which in turn depended on who made the food purchasing decisions. As part of the gender box activity, food purchasing decisions were more commonly attributed to women. However, in other data collection events, many participants stated that both men and women have influence over food purchasing decisions.

In terms of other decisions, men were seen as responsible for making a variety of decisions, including seeking health care, and factors influencing their children and wives, such as their child's and wife's jobs, child's school, child's friends, child's and wife's movements and child's marriage. They were also responsible for decisions related to the relationship, such as whether to get a divorce or marry more wives. In contrast, many participants, especially in the northern regions, noted that mothers make no decisions in the home because the father is head of the house and sole financial provider.

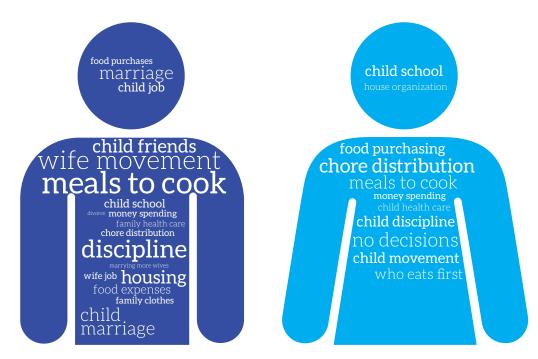


Figure 7: Decisions made by a 'typical' father and mother

However, a man's ability to make decisions for his family was connected to whether he is taking care of the tasks and responsibilities related to providing money and resources for the household. Some participants felt that women can make decisions about spending money or help husbands make spending decisions, with the caveat that this is only if the man finds it acceptable or if the woman makes more money than the man (see Box 2). Additionally, many of the decisions made by women are conditional on whether their husbands are present. For example, some participants said women can make decisions about seeking health care for children or who eats first, but only if their husbands are not at home. If the husband is at home, he is more likely to make that decision.

It is the man that has the authority on money inasmuch as he's doing his right concerning the money. ... He's the one providing most of the money they spend in the house. He's the one spending it, he has the authority on the money. But where it is 70:30 and the 70 is coming from the woman and the 30 from the man, it is possible for such father not to have authority on the money if the money is from his wife. (PDG participant, father, rural community, South West)

I can remember something happened in our house the day I want to pay for school fees, my money is not complete. It is my wife that give me more money. If is that her mother did not train her very well, she will not behave like that. That means the mother

Box 2: Disagreement regarding mothers' decision-making capacity

Mothers can make no decisions

There are some families in which the man takes all the decisions in the house instead of the woman; she has no say. (PDG participant, health worker, woman, urban community, South South)

Whatever will happen in his house has to be with his agreement. If he says they should process millet, it should not be corn. You cannot go out without his utter permission. If you want to live in peace with him, it has to be that you must obey his instruction. (PDG participant, father, rural community, North West)

If the father drop money for his wife, he has the right to give order that my wife – this is what I want to eat in the house today. (PDG participant, father, rural community, South West)

Mothers can make some decisions

On who decides on food purchase or what to cook, mothers too have say on this, because they know what is in the store and what is not there. Even if the husband says today, we should eat this or that, the mother can change this decision when she looks at what she has in her store or kitchen. So, mothers have power on the type of food to be cooked in the house. (PDG participant, mother, rural community, North West)

The decision of who eats first in the family is in the hands of the wife because she is the one that cooks. (PDG participant, mother, urban community, South South)

that are in our place here, they are mother that is merciful, mother that we are proud of. (PDG participant, father, rural community, South West)

Health-care decision-making

Participants discussed that in their communities, husbands are typically responsible for making decisions about when family members should visit a health facility and which health facility(ies) to attend. Specific types of health-care decisions that husbands were noted as making included decisions on when and where to attend ANC and PNC, treatment of illness and infant delivery. The most common reason that emerged for why men make these decisions rather than women was because men are in control of the household finances and therefore will ultimately pay for the health services. It was also noted that they may decide against using health care because they may not have enough money for it or may prioritize spending money elsewhere. Participants also noted that mothers are responsible for caring for a child's health and are relied upon to inform their husband when the child is ill so that he can make decisions related to utilization of health services. A minority of participants felt that in peaceful homes a couple can make decisions about health care together.

Religious or cultural beliefs also led some husbands to refuse to allow health workers to touch their wives. A participant said that the availability of male health workers only can impact access to care, as husbands may not want their wives to be seen by male health workers.

Some people will say they don't want a male to conduct labour for their wives. So, you can come and find that there is no woman, and as such you go back home and consult a traditional birth attendant. (PDG participant, mother, urban community, North East)

In discussions about seeking health care, participants described a widespread norm that wives need to seek permission from their husbands before accessing health facilities, either for themselves or their children. Participants agreed on an exception to this norm: if there is an emergency when the husband is not present, such as serious illness or a pregnant woman starting labour, it is acceptable for the wife to visit a facility without permission. However,

participants stated that in these situations, if the wife has a phone, she should still attempt to call and seek permission or inform her husband.

The authority is from the father, the father is the head of the house. Before the woman or the wife do something, she must get the authority from oga [the boss], except it is urgent in some cases. When my child is sick, the wife does not need to take permission from the husband. (PDG participant, father, urban community, South South)

Labour is an emergency situation that does not need permission from anybody before going. ... If the husband is unsupportive, the woman might seek his permission but go straight to the hospital to save her life and that of her baby. (PDG participant, mother, rural community, South East)

In comparison, all participants agreed that wives do not need to be accompanied by their husbands to visit health facilities, with some notable exceptions. Participants said that if a woman is too ill to travel alone, is in labour or is travelling far, she should be accompanied for safety reasons, whether by her husband, neighbour or relative. One participant noted that husbands who do not trust their wives with money will accompany them to ensure that the correct amount of money is paid for services.

Adolescent girls were also asked if they are expected to seek permission from parents or guardians before accessing health services. All participants agreed that this is a social expectation in their communities, with most participants not aware of any exceptional circumstances under which it would be permissible for an adolescent to seek health care without permission. Only two participants said that adolescents may seek health care without permission if a health issue occurs far from home, such as at school.

No matter what happens, she can't go to the health facility without asking, she has to ask her mother if the father is not around, or an uncle. (SSI participant, adolescent girl, rural community, North West)

Adolescent participants were divided on whether accessing services without parental permission would result in sanctions, with about half stating that nothing would happen and half noting that parents may scold, beat or punish them in some way. A small number of participants stated that seeking health services without parental permission would limit their care as they would not have money to pay for medications or services, and providers will often not attend without parents present.

When the adolescents go alone, people, including the health-care providers, will think they are there for an abortion and would not attend to them. (SSI participant, adolescent girl, rural community, North Central)

Decision-making on purchasing and allocating food

The majority of participants said that both husbands and wives are responsible for determining the types of food that are purchased. The husband has a say because he provides money, sets the budget for food expenses and makes requests based on his preferences. The wife has a say because she prepares meals and often decides what to cook. However, most of the women participants who said they decide what to buy at the market or store said they did not decide alone, but rather made the decision jointly with their husbands or heads of household. Some women said the husbands decide how much to spend on food, but the women decide what to buy. Some men interviewed said they decide what to buy at the store or market. Other decision makers of what to buy at the market included a co-wife, an elder sibling living in the same house and a first-born child, "when my husband is not around" (Go-along, mother, rural community, South West).

Additionally, the individual responsible for food purchasing plays an important part, because their purchases depend on food availability and costs. In the go-along interviews conducted in each community, participants were asked about who in their households typically does the food purchasing. Some participants stated that the wife must go to the market, others that the husband goes, and others that either one can go, depending on who is available.

If there is money, as his responsibility it is the father that must provide what the wife will cook in the house. (PDG participant, father, rural community, South West)

What made [it] my duty is that when my husband brings money, it is my responsibility to know what I will purchase. It is his duty to provide money, then I will go and purchase whatever I want to prepare. (Go-along participant, mother, rural community, South East)

No differences were reported between the quantity and type of food given to female or male children aged 6–23 months. Only one participant reported gender differences in breastfeeding. A mother in the South West zone said she stopped breastfeeding her baby at 15 months as the baby was a boy. She said that if the baby was a girl, she would have stopped breastfeeding earlier, at 12 months.

Participants gave mixed responses regarding who makes the decision of who eats first, with some participants saying that the husband is responsible since he pays for the food and others that the wife is responsible since she prepares the food. Participants did, however, discuss and generally agree that fathers are expected to eat first when they are home. However, it was noted by participants in several discussion groups that an exception to this prioritization of the father would be when there is not enough food for everyone. In such a case, participants generally agreed that feeding the children first would be prioritized.

The head of us went out to hustle and he brought home what was not like how he usually brings. After we cooked, the food was not enough. We gave the most portion to the kids since a child does not know what poverty is and we ate the little part. (Go-along participant, mother, urban community, North West)

Participants also noted that if husbands are not at home at mealtimes wives have decision-making power about portion allocations and typically feed children first. A minority of participants noted that the family eats together without anyone eating first, or that the mother eats before the children because she prepares the food.

In the problem tree activities, fathers were asked to discuss why men in their communities are not involved in child health and feeding activities (see Appendix F, page 114, for a description of this activity). The most common reason across regions was related to finances, such as poverty and lack of work hindering husbands' ability to provide money for food. The need to make money was also a factor, as work and searching for jobs can keep husbands away from home. In the northern regions, another main reason included a lack of interest or responsibility in child feeding due to cultural beliefs that mothers are in charge of household and childcare duties, and fathers are solely providers. In the southern regions, other main reasons included uneducated men, men who prefer to spend money on their own enjoyment, such as alcohol, and challenges within the marriage, such as adultery, lack of love and marrying a new wife who receives more support. A minority of participants discussed situations in which adultery can result in a wife becoming pregnant by another man or a man having a child with a woman they are not married to, leading to men feeling forced to provide while not feeling committed to supporting the woman and child.

It's not our culture, it's not a man's job. (PDG participant, father, rural community, North West)

Some men, because they cannot afford or have the means to take care of their family, they do not get involved in anything concerning caring for the children. (PDG participant, father, rural community, North Central)



Notably, the strength and source of sanctioning was seen as largely distinct for men and women.



Sanctions and exceptions

Key qualitative study insights regarding social sanctions and exceptions to norms are:

- Participants noted that there were some situations in which it would likely be acceptable for women to make more of the household decisions. These exceptions to the norm included women earning incomes or husbands being dead or incapacitated.
- Participants discussed a large number of serious social sanctions that women and men face if they do not conform to gender normative expectations. These range from social shame to divorce and domestic violence.
- Notably, the strength and source of sanctioning was seen as largely distinct for men and women. Men face more sanctions from outside the household (i.e., community leaders) compared to women. Compared to men, women face more sanctions within the household, from their husbands and families.

Contextual background on social sanctions and exceptions

Two aspects of social norms that require keen awareness for programmes looking to work within and/or shift social norms affecting behaviours are the related social sanctions and exceptions to the norm. The term 'social sanctions' refers to the "rewards or punishments enacted by a social group on individuals engaging in a behaviour" (Institute for Reproductive Health, 2021). Individuals and groups are motivated to follow or comply with social norms because of perceived social sanctions. In addition, for any social norm there are typically circumstances under which it is socially acceptable for individuals to not follow the norm. These, referred to as norm exceptions, can often serve as important starting points in trying to shift social norms. In discussions about social norms and gender dynamics, participants mentioned a variety of social sanctions that are faced by women and men who do not comply with norms in their communities, as well as some exceptions to prevailing gender norms.

Detailed study findings on social sanctions and exceptions to gender norms

Motivators to conform or not conform to gender norms

Participants were asked why someone in their community might decide to conform or not conform to widespread and accepted gender norms and roles. Participants noted two different ways in which individuals are seen as not conforming to gender norms. In some cases, an individual may be seen as not conforming to gender norms if they are not completing the duties typically assigned to their gender, such as tasks related to childcare, housekeeping and/ or providing for the family. In other cases, a man or woman is not conforming to gender norms when fulfilling duties typically assigned to the other gender. For example, a man performing the tasks that a woman is seen as responsible for, such as cleaning the home, was labelled as not conforming. Overall, most participants perceived individuals that do not conform to gender norms in a negative way, particularly when a man or woman was not fulfilling household and

family duties overall. However, there were some exceptions given for situations in which it was acceptable for a man or woman to perform the duties typically assigned to the other gender.

Why do community members conform to gender norms?

The main reason given for why men and women conform to gender norms was a desire for respect in the community, both for themselves and their families, and to avoid negative consequences of shame, disrespect and shunning from community members.

When they come to realize that what they are doing is totally not accepted in [community name] and most persons stop respecting them, they will want to 'stay inside the box' (adhere to gender norms). (PDG participant, father, rural community, North Central)

Participants also felt that individuals with feelings of love for and responsibility towards their families were more likely to conform to gender norms. Financial issues also impacted gender norms. Men were seen as more likely to conform to gender norms if they can provide necessary financial resources for the family, while women are more able to conform to gender norms if their husbands provide the resources that enable them to fulfil their tasks. Women were specifically viewed as conforming to gender norms because of a desire to support children and ensure their well-being. A minority of participants noted that both fathers and mothers want to set a good example for the children by following gender norms and roles.

Because your daughter will be watching you in everything you [do] and you will be encouraging her to learn from you and behave like you. (PDG participant, mother, rural community, South East)



Why do community members not conform to gender norms?

Participants expressed a more diverse range of reasons for why someone might decide not to adhere to gender norms, the majority of which were viewed in a negative light. The most common reason mentioned by participants for why men might go against gender norms was because of spousal conflict or discord (i.e., frequently fighting with or not loving one's wife). The wife was often blamed for this situation, with the wife seen as abandoning her husband or leading a man to commit adultery or become a bad husband because of her lack of love and respect for him. A possibility noted by a minority of participants was that the wife could be a witch and/or using diabolical or abusive means to control the husband.

The main reason given for why women do not conform to gender norms was because of negative personal characteristics ascribed to them, such as having a "strong head", covetousness, wickedness and/or a selfish desire to do what they want despite their husbands' direction, such as being interested in partying and buying clothes. Men who went against gender norms were also described as having a bad attitude, including similar characteristics such as covetousness, arrogance and lack of focus. However, this reason for not conforming to gender norms was much more commonly attributed to women than men.

Both men's and women's ability to conform to gender norms was also seen by many participants as tied to financial status. Men were described as having to rely on their wives if they did not have enough money to provide for their families or if their wives had more money than them, resulting in shifting gender roles. Women whose husbands were not fulfilling their duty as providers were impacted as they did not have the resources to fulfil their household tasks, such as feeding the children. Other less commonly given reasons for both men and women included negative influence of friends, alcohol use and/or a bad upbringing.

If there is no money with the father, there is no order that the father can give. Yoruba say a proverb – they say an elder that does not have money will become a lout. So, if there is no money with the father, it is compulsory he will become a lout in the house. (PDG participant, father, rural community, South West)

Others will say that the man does not have money any more that is why has turn to a puppy for his wife to feed him. ... He is not man enough. He will be called woman wrapper.¹⁰ (PDG participant, mother, rural community, South East)

Some participants described circumstances in which they expected men or women might act contrary to gender norms. For example, some participants noted that a man might help his wife with household duties if she is sick, tired or pregnant. A minority of participants noted that if the wife and husband are at peace in the home, the husband will feel comfortable helping her. One participant noted that if the wife is also working, the father may also help with domestic tasks. Many participants discussed these exceptions as circumstances under which it would be more socially acceptable for a husband or wife to not conform to gender norms. The possibility that men might go against gender norms by helping wives with their tasks was discussed more frequently by participants in the southern regions.

It is a responsibility of a woman to fetch water in the house, to wash plates and to wash all, to do all things, but sometimes maybe the woman is pregnant and is her time we need to help them. Maybe it has reached eight months that her time to deliver has come. She will not be able to bend, to do most things at that time. The man must take care of the woman at that time. (PDG participant, father, rural community, South West)

^{10 &#}x27;Woman wrapper' is a Nigerian colloquial term used to refer to a male whose actions and ideas are aimed at gaining the approval and/or affection of females.

Additionally, many participants stated that a woman may have to take on more of the responsibilities typically ascribed to men to account for her husband's shortcomings, such as being unable to make enough money or lacking the skills necessary to perform his duties. While some participants personally viewed this as acceptable, they noted that the fact that the wife has taken on his role should be kept private as others may judge them.

There are some homes where the father does not have the requisite skills, if the woman assists in taking the decision, it is not bad as long as she does not neglect the husband in the process, but people around will see the woman as one that controls the husband. (PDG participant, mother, rural community, South East)

Some participants also felt that when women make more money than men, women may become responsible for more tasks and decisions within the home, causing them to go against gender norms and fulfil a role similar to that of men. Situations where the wife needs to take on more of the man's role were more socially acceptable when the husband is absent or has died.

Most women that do the work of their husbands in the home are those that their husbands have died. So, people will not blame them as such. (PDG participant, mother, rural community, South East)

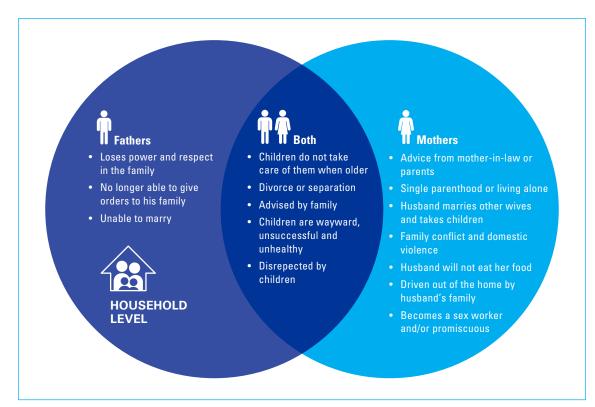
Figure 8 illustrates how fathers and mothers that do not act according to gender norms are perceived by community members.



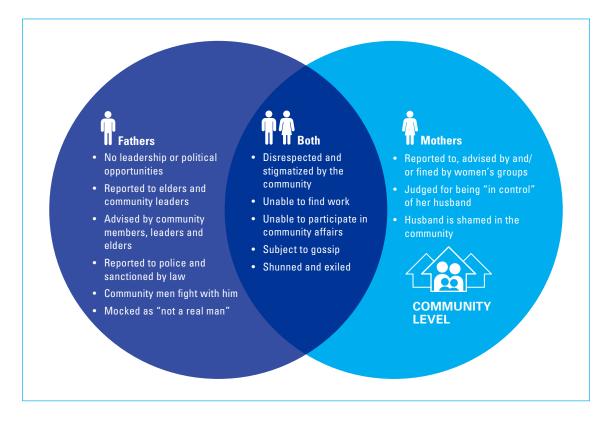
Figure 8: Sanctions faced by mothers and fathers who do not adhere to gender norms

The words most used to describe fathers and mothers who do not conform to gender norms were "irresponsible", "useless", "immoral" and "bad", including "bad man", "bad mother" and "bad wife". Participants also characterized their mental capacity with terms such as "mad", "mentally unstable" and "senseless". Men who are perceived as being under the power and control of their wives leads to characterizations such as "powerless", "shameful" and "woman wrapper". Women are labelled "dirty", "foolish" and "promiscuous". Figures 9 and 10 show additional sanctions faced by men and women who do not conform to gender norms at the household and community levels.

Figure 9: Household-level sanctions







Both men and women potentially face social sanctions for going against gender norms, but women are more likely to face sanctions in the household (e.g., domestic violence, being sent away from the home, or the husband marrying a new wife) compared to men, who are more likely to face sanctions from community members and leaders. At the household level, the sanction that emerged most prevalently as a concern for both men and women was that children would no longer take care of their parents when they were older, described as "not enjoying the fruits of their labour" and missing the "benefits of parenthood".

She will be alone and the children will also neglect her because she did not do well earlier. She will not enjoy the fruit of her labour. (PDG participant, mother, rural community, South West)

Anybody who refuses to take care of his children is irresponsible, especially the alcoholics, and the children will desert him and also get stigmatized among community members. ... It is the father that takes care of the children that will enjoy the fruit of his labour. We should exist in unison because childcare is not easy. (PDG participant, mother, rural community, South West)

Participants also considered divorce and separation to be a significant consequence that could impact both men and women, with some labelling it as the most serious possible consequence. However, single parenthood was only noted as a sanction for women.

At the end of the day, mothers like that become single mothers, the father might abandon the mother and child, the mother can divorce or pack out of the husband's house and they later become single mothers. (PDG participant, mother, rural community, South West)

Additionally, many sanctions could be imposed on children if either their fathers or mothers were to go against gender norms. Participants perceived that children could be highly impacted, both in childhood and adulthood, becoming wayward and turning to begging or stealing if they do not get the necessary food and resources at home from their parents. They could be seen as a nuisance to the community and some participants said they might also turn to drinking, smoking or gang membership. As they grow older, children may also continue to be stigmatized by the community as they are seen as having had a "bad upbringing", resulting in community members shunning them, disrespecting them, refusing to be their friends, rejecting marriage with them and not giving them higher positions in the community.

A mother who doesn't do the right thing, the child of such women will not be successful. The bond from child to mother is very strong and it shows that the child will also be irresponsible due to this trait from the mother. An irresponsible mother won't have time for her children in order to train them right and give them good morals, because she also does not behave in a righteous way. (PDG participant, mother, rural community, South West)

If a mother doesn't possess these qualities she won't be respected in the community, she will be sidelined always in the affairs of the people, particularly when it links with moral upbringing. Even her neighbours wouldn't be doing things with her. This in turn will affect her children and wards, people will be citing example with her house, suitors of her daughter will be mocking the house, saying, "Don't relate with her daughters because they are not morally upright", which in turn will affect her children, grandchildren and great grandchildren. So, people should be careful. (PDG participant, mother, urban community, North East) At the community level, both women and men face potential disrespect, stigma and exile from the larger community and could be less likely to participate in community affairs or given work. For women specifically, participants noted that if they are traders, other community members will be less likely to agree to trade with them. In terms of separate sanctions for women and men, women face possible intervention from community women's groups, who will advise them to change their behaviour. Men, on the other hand, face possible sanctions from community representatives, such as community leaders, police and elders.

If you want to do politics your community they will first look that where did he come from, how does he do to his wives at home? This one cannot lead us because he cannot control his house. Is this who we will appoint as leader? This is what causes setback to anything to what you want to do in the community, either in the community, in the environment, in politics, what it cause later for not being a good father for your wife and children. (PDG participant, father, rural community, South West)

If he behaves the way he's not supposed to behave in our community, they will take you to the palace, our chief will question you. If you don't behave as a man and father, they will drive you out of the community. (PDG participant, mother, rural community, South South)

Many participants also discussed the concern that a man may be mocked and insulted for being seen as under his wife's control and "not a real man", and that a woman may also be judged for being in control of her husband. Many participants thought that if a man no longer adhered to gender norms, he would lose the power to make decisions in the household, and this would be met with widespread stigma within the community. This discussion of men being mocked for being under their wives' control was more prevalent among participants in the south.

An irresponsible father won't be respected and cannot decide for the family because he is irresponsible and cannot give command to the child or the wife anyhow. This is because he is not seen as important ... because he does not do his roles. Even the wife will be so free because there will be no restriction due to the irresponsibility of the father. (PDG participant, mother, rural community, South West)

They will say that the man is a woman wrapper. They will say that the man is a stupid man, that there is no real man that will stoop low to wash his wife's clothes. (PDG participant, mother, rural community, South East)

Chapter 4: Sources of information and support

Key qualitative study insights regarding sources of nutrition and health information and support are:

- The influence of particularly parents and other female relatives on children's nutrition and WASH practices starts early in the home, when children are still young. Women of all ages noted that the practices and foods they grew up with stayed with them as they got older. The influence of husbands and mothers-in-law grew as women married and had children. However, information on child feeding was mostly obtained from health workers, with family members having less influence over the diets of the children.
- Health workers at health facilities were mentioned most frequently as trusted sources of information regarding nutrition, WASH and health-care-seeking practices. Health workers were viewed as encouraging women to attend health facilities for different services. Many participants specifically mentioned ANC as a time when they learned significant and important health and nutrition information.
- Media sources, such as TV, radio and social media, were seen as useful and trusted platforms for health workers to share information with community members who did not regularly access health facilities.
- Information about nutrition that participants recalled learning from school teachers seemed to be the most accurate.
 Information shared by mothers and health workers was mixed in terms of accuracy, and information shared by friends seemed to be largely inaccurate. However, this is likely impacted by participant memory.
- Individuals who are present during child delivery are seen as having the most impact on initial and continuing breastfeeding practices, and are also seen as the most trusted. However, opinions on whether the influence was positive or negative was mixed, with some promoting healthy breastfeeding practices and others encouraging less healthy practices.

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Media sources, such as TV, radio and social media, were seen as useful and trusted platforms for health workers to share information with community members who did not regularly access health facilities.



Contextual background on sources of information and support in Nigeria

Understanding the people and mechanisms through which individuals receive key information and support regarding health, nutrition and WASH issues provides insight into the influencers that can promote behaviour change. In terms of communication channels through which to reach mothers and families with information and support, the 2021 MICS report found that 47.6 per cent and 34.6 per cent of households in Nigeria owned a radio and TV, respectively, and only 9.4 per cent had access to the Internet at home (NBS & UNICEF, 2022).

A variety of studies have also attempted to identify influencers for different health and nutrition behaviours in Nigeria. Alive & Thrive's evaluation in Lagos and Kaduna found that health workers were most frequently cited as trusted sources of IYCF information (Flax et al., 2021). That evaluation also reported that religious leaders, family members, TV and radio are key information sources on IYCF (Flax et al., 2021). Another study (Nduagubam et al., 2022) found that antenatal clinics are a common source of information on breastfeeding behaviours by nursing mothers in Enugu. Additional research has identified significant influence on breastfeeding and child feeding practices by older generations, such as mothers and mothers-in-law, as well as husbands and babies' fathers (Agudile et al., 2020; Osibogun et al., 2018; Allotey et al., 2022). In school-aged children, schools have also been found to be an important source of nutritional information (Ayogu et al., 2018).

In terms of health-care utilization, a literature review exploring the social and cultural barriers to women's behaviour in seeking health care in northern Nigeria found that men, mothers, mothers-in-law and religious and traditional leaders were important influencers in promoting positive health-care-seeking behaviours by women (Sinai et al., 2017). Another qualitative study with mothers, health workers and community leaders in Lagos, Nigeria, identified influencers for childhood immunization across the socioecological model, finding that mothers, mothers-in-law and husbands were important influencers at the household level, health workers at the facility level and traditional and religious leaders at the community level. These authors recommended that interventions target multiple levels of the socioecological model (Olaniyan et al., 2021). This study aimed to build on the existing research by identifying trusted sources of information for different MIYCAN behaviours, at different stages of the life course and at different levels of the socioecological model.

Detailed study findings on sources of information and support

When female participants were asked who they would turn to with questions about nutrition, IYCF, health-care utilization and WASH practices, the sources of information that were most frequently mentioned were mothers and facility health workers. In contrast, in the smaller sample of men that was included in this study, one of the most common sources was mosques. Other important sources of information for participants included other female relatives, neighbours, friends and media sources, such as TV and radio. Husbands and mothers-in-law emerged as sources of information for pregnant women and mothers, but not for adolescents if they were not married yet. School teachers were noted as common sources of information for adolescents, but their influence decreased as the women grew older and started families. In particular, practices around diet and WASH that girls observe in the home when they are growing up impact their behaviours later in life.

Some female participants also highlighted that gender held influence, specifying that they would be influenced by certain groups of women. An example given was that of finding female elders, female community members or female family members more influential than their male counterparts. Additionally, as mothers-in-law, grandmothers and elders in general are highly respected in the culture, participants noted that it was difficult to defy their wishes, even if participants thought their beliefs were incorrect or that they were promoting unhealthy practices.



Other influences included witnessing the positive behaviours of neighbours, peers, friends and community members, e.g., seeing that a neighbour regularly goes to ANC, observing a friend breastfeed or noting that a particular healthy food is widely consumed throughout the community. However, neighbours, friends and community members also seemed to be responsible for misinformation, and were not trusted by many participants when it came to getting accurate information on child feeding, diet, ANC and delivery. Some participants viewed them as having negative reasons for passing on this information, such as wanting to force their own opinions on others, or jealousy.

When you have a neighbour and she is going for ANC, you are seeing how she takes care of herself and she is telling you about the services. You may start going because of that. (PDG participant, mother, rural community, North East)

Some neighbours, like in my compound, there was a lady that neighbour advised her to take "hundred disease" cure (gbogbonishe), after delivery she died. Some neighbours are jealous. (PDG participant, mother, urban community, South South)

In comparison, information given by community leaders and educated community women, and during organized community meetings, was more trusted and relied on than information given by peers.

Health workers were seen as highly trusted sources of information. Family members who were also health workers, whether current or retired, were noted as having additional influence because they are both close to the woman and have health-related education and employment. Some participants said that the credibility of health workers was due to their education in biology and medicine.

The health-care workers are in the best position to help someone or provide advice because of their experience, or anyone who studied biology or health and nutrition in a higher institution. (SSI participant, pregnant woman, rural community, South West)

What causes the ignorance is because someone was never taught or he don't know how the thing is. So, it is good to be having that enlightenment in the hospital; how a woman should be pregnant, when a pregnancy is supposed to start and then at what time is she supposed to come for ANC and follow up and so on. (PDG participant, mother, urban community, North East) Radio and TV programmes emerged as highly trusted sources of information on diet, breastfeeding, ANC and delivery, particularly when used as a platform for health workers to share information. Some participants specified that health-related programmes on radio, TV and social media are often led by health workers, giving these programmes more credibility and trustworthiness. These programmes also allow health workers to reach community members who do not regularly access health facilities.

The radio station is the health workers that are being given the chance to go and explain because other people don't go to the hospital. But majority of people listen to radio. And they will say it [so that] everyone will hear. (PDG participant, mother, urban community, North East)

However, a minority of adolescents and pregnant women noted that it was difficult for them to listen to radio or TV programmes because of a lack of time or their being at school when programmes air. Social media, particularly Facebook, emerged as influencers, although not as frequently or as trusted as radio and TV. Mobile phones were mentioned by only two participants, who also labelled them as not trusted. Posters were mentioned by one participant.

Many SBC models use the socioecological model to consider the involvement of influencers who are situated at differing proximities (i.e., different levels of the model) from the intended target audiences (Bronfenbrenner, 1979). Figure 11 shows sources of information that are most trusted identified through this research at different levels of the model.

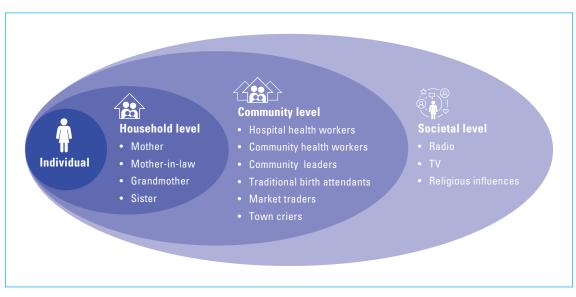


Figure 11: Most trusted sources of information across the socioecological model

Sources of information for adolescent and maternal nutrition

Mothers were most often noted as sources of information on nutrition by the participants (see Table 22, page 88). The main reason given for why participants ate specific foods was that their mothers bought, cooked and fed them these foods when they were growing up.

Most of the things children consume, it is the parent that introduces it to them first before it is consumed outside because I cannot consume what my parent did not give me and be expected to eat it outside, it will be strange to me. (SSI participant, pregnant woman, rural community, South West) Adolescent girls reported getting more information from other female and male relatives within their immediate families. However, this was not the case for pregnant women and mothers, who got more information from their husbands and mothers-in-law when they married and started families. Mothers and other female relatives, including grandmothers, sisters and aunts, were reported as influencing nutrition by teaching participants to prepare meals. Adolescent girls noted that male relatives sometimes provide foods through farming or market purchases, thus influencing the girls' dietary options. Husbands and mothers-in-law, through their food preferences and food purchasing decisions, impacted what was eaten in the home and thus influenced the diets of pregnant women and mothers.

In terms of sources of information from outside the household, school teachers were noted frequently by adolescents, and health workers were mentioned by pregnant women and mothers. One participant noted that even after leaving school, she was able to speak to her previous teacher about diet.

The teacher enters the class and has course on nutrition, they will start learning us on the type of food to eat that will give us something. (SSI, adolescent girl, rural community, South South)

Notably, pregnant women highlighted that health workers were their main advisers on using IFA during pregnancy. Media, such as TV and radio, were also noted by some participants. Peers, neighbours, friends and community members were discussed by many participants as sources of information related to diet. For example, adolescents talked about friends sharing particular foods with them and mothers discussed eating foods that are largely accepted within the community.

It is my friend, when we go to school, she frequently buys it. If she buys it then she gives me. That is why ... she is the one that buys me groundnut. (SSI, adolescent girl, urban community)



In terms of accuracy, participants reported that the accuracy of the information on diet they received from mothers and health workers was mixed, with some being accurate (e.g., balanced diets are important) and some potentially harmful (e.g., eating high protein foods while pregnant will make the baby too big). Information obtained from teachers about diet was reported as more consistently accurate than information from family members or friends, such as promotion of food diversity and education on healthy foods. Radio and TV were also perceived as providing accurate information on healthy eating and food preparation. In contrast, a lot of information about diet that participants reported learning from peers were misconceptions, such as that beef causes injuries to the legs and rice makes the face swell. However, this may have been impacted by participant recall.

Information sources	Maternal nutrition	IYCF (including complementary feeding and diet)	Health-care utilization	WASH
Most frequently mentioned	 Mothers Health workers at facilities 	 Health workers at facilities Mothers Mothers-in-law Other female relatives 	 Health workers at facilities Mothers Husbands Peers, friends and neighbours 	 Mothers School teachers
Mentioned sometimes	 Other female relatives School teachers 	 Peers, friends and neighbours Husbands Radio and TV Religious influences 	 Other female relatives Mothers-in-law Religious influences 	 Health workers at facilities Other female relatives
Least frequently mentioned	 Peers, friends and neighbours Radio and TV Husbands Fathers Mothers-in-law Social media Other male relatives 	 Other male relatives Fathers School teachers Traditional birth attendants Market traders Phones and social media Town crier 	 Community health workers Radio and TV Community leaders Traditional birth attendants Fathers Town crier 	 Fathers Peers, friends and neighbours

Table 22: Sources of information by behaviour, listed from most to least mentioned

Infant and young child feeding sources of information

Health workers were noted most often as sources of information on complementary feeding and child diet (see Table 22). Many participants mentioned learning from health workers that complementary feeding should begin at 6 months, but a minority of participants stated that health workers promoted giving infants other foods before 6 months, including pap and baby formula. Health workers were also seen as providing helpful information on breastfeeding, such as promoting giving colostrum, exclusive breastfeeding and breastfeeding soon after delivery. They also help with putting the baby to the breast when delivery takes place in a health facility. ANC was highlighted by many participants as a key time for learning significant information from health workers around IYCF. I think the extent to which newborn[s] are given something else other than breast milk has reduced. This is mainly because of the awareness and counselling; the health workers do both at the hospital and within the community. A lot of us have learned the right things to do. (PDG participant, mother, rural community, North Central)

Mothers and mothers-in-law were relied on more for information on breastfeeding than on complementary feeding. Other female relatives, including sisters, sisters-in-law and grandmothers, were also noted as sources of information and support on breastfeeding. These relatives are often present when a baby is born, resulting in their influencing initial breastfeeding practices, such as helping put the baby to the breast and giving colostrum. However, some participants noted that mothers and grandmothers promoted giving prelacteal feeds, discarding colostrum and delaying initial breastfeeding in order to first check breast milk quality. Some participants said that female relatives encouraged breastfeeding for two years, while others noted that these individuals promoted stopping breastfeeding earlier.

I think some mothers, especially the younger ones, are influenced by their mothers. ... They complain that they oftentimes get influenced not to continue exclusive breastfeeding. They are advised to introduce water and other foods even before the baby is 6 months. (Go-along, health worker, rural community, North Central)

When a woman delivers, her mother or mother-in-law will most times be present to make sure she is okay and doing alright. So, in case the woman is not able to properly put the baby to [the] breast, these people will support her to direct her how to do it. (PDG participant, mother, rural community, North Central)

Media, such as TV and radio, was perceived by some participants as providing accurate information on IYCF. Several participants also noted religious influences, such as from mosques, churches, religious leaders and religious beliefs. While the majority of data on influencers came from women, mosques were more often noted by men as places where they could learn about child feeding and health. Women are generally not able to attend mosques, but some participants stated that women are allowed to attend lectures on IYCF. A minority of women participants said that mosques taught them about breastfeeding, such as the need to breastfeed for two years. Participants also said that they learned about IYCF at church, with some participants noting that churches were the most trusted sources of information on IYCF in their communities. Mosques were noted as sources of information only by participants residing in the north, while churches were noted as sources only by participants residing in the south, largely in rural areas.

I am a Muslim and Islamically we have to give baby breast milk for two years and Allah's will I will give him for two years, may He help me. (SSI participant, mother, urban community, South West)

A minority of participants also mentioned market traders as being trusted sources on child feeding, as they can be asked about the nutritional value and characteristics of foods they sell at the market. When asked if there are sources of information on IYCF that are not trusted, a minority of participants mentioned traditional birth attendants.

Sources of health-care utilization information and support

Health workers were perceived by pregnant women and mothers as key promoters of women attending health facilities for ANC, delivery and PNC services, as well as to treat illnesses (see Table 22, page 88). Participants felt that once a woman visits a facility for services such as ANC or delivery, they will be encouraged by health workers to return for future ANC, delivery, PNC and other services. Community health workers were mentioned less frequently than facility health workers, but were perceived by a small number of participants as helpful promoters of services at facilities.

In the facility, during their lectures, they used to tell us if we notice our children are not feeling well we should quickly rush them to the hospital without any delay, so that [they] get medical attention. (SSI participant, mother, urban community, North East)

The majority of participants said that mothers encouraged them to attend a health facility for different services. However, a minority of participants noted that mothers encouraged home delivery. For many adolescent girl participants, mothers made decisions regarding whether the girl would visit a health facility at all. Husbands were seen as positive influences, particularly on ANC attendance and encouraging their wives to attend ANC, as well as arranging and taking their wives to appointments. Husbands were also seen as largely supportive of facility delivery, taking their wives to the facility, accompanying them to pray and providing food and water during delivery. However, some participants said that husbands' promotion of home delivery is due to concerns about finances or traditional customs. While mothers-in-law were not mentioned frequently as influential in seeking health care, some participants said that they promoted home delivery and could overrule a husband's desire for a wife to give birth at a facility.

You will find out that sometimes the husband had given approval, but his mother will say no to hospital delivery, saying that during her time she never went to deliver in the hospital. Even your husband – she delivered him at home. (PDG participant, mother, urban community, North East)

The husband and the village head encourage them to go to the health facilities, especially when they are pregnant. Hence, when a woman realizes that she is pregnant, whenever she starts feeling unwell or get signs, she will be encouraged to go to the health facility for ANC. (PDG participant, mother, rural community, North Central)

Some participants said they learned about health services at their mosque or church. Specifically, a small number of participants said that religious influences, whether Islamic or Christian, can encourage delivery in the home instead of at the hospital.

[The pastor tells] the women not to take drugs nor go to the hospitals but pray always as God is always there to assist them [to deliver] their babies. (PDG participant, mother, rural community, South East)

Some participants noted that community leaders, at events such as community meetings, encourage accessing ANC and delivery at health facilities. Some participants felt community leaders are the most trusted sources of information on health-care utilization.

The community head encourages the community members to always endeavour to go to the hospital, especially for ANC and delivery. (PDG participant, mother, rural community, North Central)

A minority of participants stated that the town crier shares information on services at health facilities, such as ANC, delivery and nutritional counselling. Additionally, a minority of participants noted traditional birth attendants as sources of information on ANC and delivery services. Two participants viewed traditional birth attendants as the most trusted sources of information on ANC and delivery services, while one participant felt they could not be trusted to provide information on medications for pregnant women.

[Traditional birth attendants] can give advice on drugs, but I cannot follow their advice, I will say let me come and confirm first in the hospital whether what they are saying is right, but some do follow what they say. (PDG participant, mother, urban community, South South)

WASH

Many participants noted that mothers and other female relatives promoted handwashing with soap, animal separation and the use of toilets and latrines over open defecation (see Table 22). Participants continued the practices they had learned in their youth into adulthood (see Table 23). Health workers were not regarded as sources of information on WASH by adolescents, but were noted by pregnant women and mothers to give information on handwashing, animal separation and sanitizing utensils for meals. School teachers, mentioned as teaching participants about animal separation, faeces disposal and handwashing, were influential on adolescents' WASH behaviours. In general, school teachers were seen as promoting positive hygiene practices.

They have taught us in school. In a situation where the chicken has no place to stay, the chickens dump is the floor and there are children ... that are crawling, [they] will carry it in their hand. And you know children – whatever is in their hand, they take it to their mouth. So, in that case, it is not hygienic. (SSI participant, pregnant woman, urban community, South South)

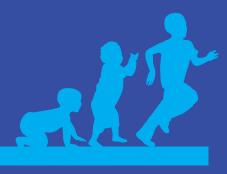
Adolescent girls	Pregnant women	Mothers of children under 2 years of age
 At this stage: Family members, particularly mothers, are most influential. Practices observed and taught, e.g., WASH practices and foods to cook, are remembered and continued later in life. School teachers are noted frequently as sources of accurate nutrition information. Radio and TV are mentioned, but infrequently. There are fewer sources of information overall, including sources of information from 	 Pregnant women At this stage: Mothers continue to be a main source of information. Husbands are noted as greater sources of information, particularly on health-seeking behaviours, such as ANC utilization. School teachers' influence starts to diminish. Health workers are introduced as a source of key information, particularly during ANC. Mothers-in-law and religious influences are first mentioned as sources 	 years of age At this stage: Health workers are mentioned most often as sources of information across all behaviours, particularly for IYCF. Mothers, other female relatives, mothers-in-law and husbands were also mentioned frequently, particularly for breastfeeding and maternal diet. Radio and friends were mentioned more frequently than in younger years. Community health workers and social media are
outside the household.	 of information, though infrequently. Radio and TV are mentioned, but some women expressed difficulty finding time to listen or watch at the scheduled broadcast times. 	mentioned for the first time as sources of information.

Table 23: Sources of information and support across the life course

Chapter 5: Key considerations and recommendations



Within the household and family unit, grandmothers and mothers-in-law are seen as the protectors of tradition and their influence presents an important opportunity to increase support and shared responsibility for optimal nutrition practices.



This formative research study adds to the evidence base regarding determinants of MIYCAN in Nigeria. In addition to documenting perspectives and insights of study participants, this chapter summarizes key considerations – including sociocultural assets and factors that can potentially facilitate SBC – and possible approaches recommended for future MIYCAN SBC programmes and activities.

Key considerations

Sociocultural assets

This study was undertaken to inform the development of Nigeria's national MIYCAN social and behaviour change communication (SBCC) strategy. Encouragingly, the findings of this formative research indicate a variety of existing sociocultural assets at various levels of the socioecological model - individual, household and community - that can be drawn upon for SBC for improved nutrition. While the roles and responsibilities for the 'typical' mother and father differ, with mothers being seen as responsible for domestic and caregiving duties in the household and fathers being seen as the decision makers and leaders of the household, both men and women contribute to and feel a sense of responsibility for the well-being of their families and children. MIYCAN SBC interventions should seek to invoke and build upon this shared parental desire for children's successful growth and development. Husbands and fathers are highly involved in MIYCAN to the extent that they are typically not only the main household income providers, but also make the majority of household decisions affecting nutritional status, such as health-care utilization and purchasing of food. Participants described having great respect for fathers in these roles and therefore SBC campaigns can continue to encourage men, not only as household gatekeepers, but also as "loving protectors" to ensure proper health-seeking practices and provision of healthy food for their wives and children. Participants indicated that mothers do have some level of influence regarding the purchase and preparation of food for their families, albeit less decision-making power. Providing women with additional food demonstrations, recipes and nutritional information in support groups, markets and food stores, or over radio or TV channels, would offer them additional knowledge, skills and support to provide nutritious meals for their families. Also, within the household and family unit, grandmothers and mothers-in-law are seen as the protectors of tradition and their influence presents an important opportunity to increase support and shared responsibility for optimal nutrition practices.



Outside of the household, health workers are seen as a trusted source of information by mothers and adolescent girls, and as such they are an important influence group to involve in improving mothers' and girls' understanding of good nutrition practices and helping them to overcome barriers and challenges. Notably, however, strengthening of capacity of health workers is needed to address reported training deficiencies and chronological training gaps, particularly on maternal nutrition topics.

Among adolescent girls, schools and school teachers were frequently reported as sources of information and support, which suggests expansion of programmes in schools and greater involvement of teachers in imparting nutrition and health information would make an impact. Finally, discussions with communities indicate that they are socially cohesive and that community members are involved in sanctioning and thus regulating each other's behaviours. Given these sociocultural patterns of noting and rewarding other community members' behaviour, recognition and celebration at the community level of mothers and families practising optimal behaviours may serve as a strong example for other families to follow.

Study limitations

In reading and reflecting on the findings presented in this report, it is important to keep in mind several notable distinctions about its design, implementation and study setting. This study employed uniquely qualitative approaches to data collection, with the aim of providing contextual insights and perspectives rather than describing quantitative patterns, rates and trends. Although efforts were made to select a diverse sample of communities for this assessment, in a nation as large and diverse as Nigeria, it is not possible to generalize themes found in small qualitative sample sizes to all of the geographic and cultural contexts represented within the country.

Notably, participants in the study were not asked about multiple micronutrient supplementation, since it was not available at the national level during the study implementation. In light of its recent inclusion in the updated national MIYCAN guidelines (Federal Ministry of Health, 2021), additional research will be needed on factors related to adherence and uptake. *This study did not*

attempt to assess minimum dietary diversity or other population-level indicators of micronutrient adequacy or nutritional status.

As with any in-person data collection effort, and as is often the case with qualitative assessments, some facilitators were more skilled than others in engaging participants in discussion and eliciting open-ended in-depth responses. Data collector training was on a tight schedule and left little time for facilitators to practise, which undoubtedly contributed to some of the discussions yielding considerably fewer insights than others. Some data collection teams also encountered data capture issues with their audio recorders, leading to the loss of recordings for one state and the necessity for analysis based solely on notes.

Other factors

Notwithstanding these study limitations, these findings add to the evidence base regarding key child survival and nutrition practices in the first 1,000 days of life and provide useful insights into additional needs for SBC. The goal of the last SBCC strategy for 2016–2020 was to promote IYCF practices through optimal breastfeeding and complementary feeding, as well as other related maternal interventions (Federal Ministry of Health, 2016). The new SBCC strategy for Nigeria presents an opportunity to place greater emphasis and attention on maternal and adolescent nutrition and address additional determinants of poor nutrition, health and WASH in mothers, infants, young children and adolescents. The conceptual framework that guided this study focused on 10 determinants identified from relevant literature that impact MIYCAN in Nigeria: diet, life course, related health and WASH practices, knowledge and beliefs, access to services, quality of services, household decision-making, gender dynamics, sources of information and support and social norms. The findings documented in this report are largely consistent with and provide greater support for previous quantitative and qualitative studies, indicating that these determinants are significant contributors to child survival and nutrition practices in the first 1,000 days of life. For instance, in the previous Nigeria SBCC strategy for 2016–2020, the main barriers identified for the proper implementation of IYCF practices were (i) giving water to babies at birth and under 6 months of age and (ii) giving babies solid or semi-solid foods before 6 months. Our findings provide confirmation that these practices persist and therefore continue to serve as barriers to good nutrition.

In addition to sociocultural assets that can serve as foundational elements for SBC programming, certain findings pertaining to the determinants of the study's conceptual framework may be of particular interest and utility to SBC programmes. For instance, in terms of immediate determinants (i.e., diet and life course), the findings bring attention to specific moments in the life course at which it may be particularly opportune to initiate interventions. Specifically, adolescent and adult participants alike brought attention to the importance of SBC messaging, education and skill-building with youth by emphasizing how nutrition and WASH practices learned during youth endure into adulthood. Participants also noted ANC and delivery, particularly of the first pregnancy, as critical moments at which women are most likely to interact with the health system and be open to receiving information and guidance, and establishing behavioural patterns. For instance, individuals who are present at the delivery and the advice given at the time of delivery appear to be highly influential in encouraging or discouraging subsequent breastfeeding practices among mothers of newborns. Regarding other nutritional practices, the feeding of some babies with instant noodles (e.g., Indomie), as observed and reported in discussion groups, and the emphasis on selecting food based on convenience by adolescent girls, raise a red flag in terms of increased consumption of processed foods in the Nigerian diet.

Turning to the underlying determinants (i.e., knowledge and beliefs, practices, household decisionmaking, access to and quality of health services), many women were able to articulate correct knowledge about the nutritional benefits of some foods, indicating a strong starting point from which to expand nutritional educational efforts. Certain cultural beliefs, such as taboos regarding particular foods and beliefs that shared latrines and toilets cause infection, urgently need to be addressed to facilitate adoption of healthier nutrition and WASH behaviours. Notably, only separation of children from animal faeces was discussed as a typical WASH practice in communities, indicating that substantial work needs to be done in terms of education on and promotion of WASH practices. Access to health-care facilities and the quality of health-care services were commonly discussed as substantial barriers to health-care utilization and nutritional counselling. Many of these infrastructure barriers are not within the purview of SBC programmes to overcome. However, they are factors for programmes to be attentive to, and where possible, to find ways to bring programming more directly to women in their homes and communities.

Finally, with regard to the enabling determinants (i.e., sources of information, gender dynamics and social norms), it is notable that unlike the previous SBC strategy, which listed traditional birth attendants as main influencers of mothers, birth attendants were only mentioned infrequently by this study's participants. The infrequent mention of traditional birth attendants seems to align with the mixed opinions expressed around norms on delivery location. This could possibly be an indication that norms for these behaviours are changing from more traditional practices to greater use of health-care facilities. To the extent that certain harmful practices, such as prelacteal feeds, are passed down across generations and continued because they are considered traditional cultural practices, new traditions and positive new norms need to be developed and disseminated throughout communities. Perhaps most importantly, participants in this study described strong traditional gender ideologies upholding restrictive gender norms of behaviour for both men and women. Gender transformative approaches are needed that not only enable women to participate more fully in household nutritional decisions, but also allow men to more fully participate in child rearing and domestic chores, traditionally ascribed to women.



Recommendations

Drawing on insights distilled in the previous chapters, the previous Nigeria SBCC strategy for 2016–2020, results of the literature review and expertise and experience with development and implementation of SBC programmes, a list of possible approaches to trigger and facilitate SBC for MIYCAN was developed. The list was then further refined into a set of specific recommendations (see Table 24). Recommendations were organized according to the five distinct types of SBC approaches found in the Alive & Thrive framework for large-scale SBC programmes (Alive & Thrive, 2014): interpersonal communication, community mobilization and demand creation, mass communication, strengthening of capacity and policy advocacy. These SBC approaches are intended to work in unison, as part of a multi-stakeholder, multicomponent programme to improve MIYCAN practices, as shown in an adaptation of the Alive & Thrive framework (see Figure 12).

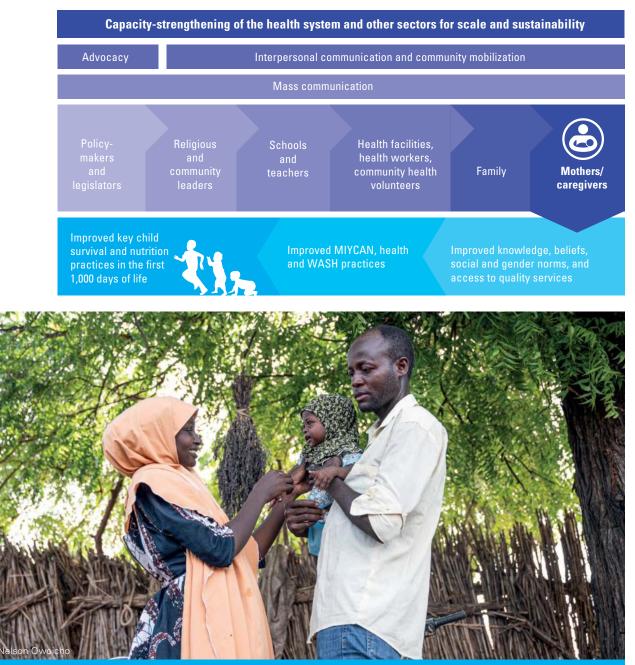


Figure 12: Framework for multicomponent SBC approaches to improve MIYCAN

Table 24: Potential SBC	approaches and	activities and	related b	pehavioural	determinants
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Recommended SBC activities	Influencers on target population	Target population for SBC	Key findings addressed	Related determinants from study's conceptual framework
Interpersonal counselling				
 During ANC and PNC counselling, health workers and midwives should: Recognize and praise what women are doing well in terms of nutritional practices, while encouraging them to eat from 1–2 target food groups about which they may have misconceptions. Address myths and misconceptions about specific foods and taboos through dialogue and discussion. Reinforce mothers' awareness of the link between exclusive breastfeeding and healthy, intelligent children. Address mothers' specific breastfeeding challenges with small, doable actions and explain that breast milk alone is enough to satisfy children's hunger before 6 months. Promote handwashing with soap, especially before breastfeeding, drawing on mothers' motivations for handwashing, e.g., good hand hygiene prevents illness and keeps the child healthy. Health workers and midwives should also organize community-based support groups and counselling sessions: To create positive new norms for breastfeeding and PNC attendance. To promote PNC attendance by mothers so they can benefit from quality MIYCAN support and services and address lactational challenges, e.g., latching and positioning. To facilitate discussion among mothers of the challenges with continued breastfeeding and identify doable solutions. 	Health workers and midwives	Pregnant women and mothers	Pregnant women and mothers can articulate correct nutritional knowledge about some foods (e.g., beans, eggs, rice and yams), yet hold traditional, generally inaccurate beliefs about specific foods. Mothers stop breastfeeding at certain points of child development (e.g., when child starts to walk, seems healthy or strong or seems interested in food) rather than keeping to the recommended 6 months of exclusive breastfeeding and continued breastfeeding up to 2 years and beyond. Mothers find handwashing with soap before breastfeeding is done on demand and throughout the day. Almost all mothers learned from health workers that complementary feeding should start at 6 months, yet many reported starting complementary feeding before 6 months. Mothers introduce complementary foods too early because of challenges with breastfeeding or because their child is "crying from hunger".	Knowledge, beliefs and socia norms
Interpersonal counselling	-			
 Through schools, teachers and school administrators should: Establish or revive nutrition clubs to promote healthy diets and encourage girls to eat from 1–2 target food groups about which they may have misconceptions. Identify and promote nutritious alternatives to convenience foods in adolescent girls through clubs, science and health courses and peer groups (e.g., girl guides). 	Teachers and school administrators	Adolescent girls	Adolescent girls can articulate correct nutritional knowledge about some foods (e.g., beans, eggs, rice and yams), yet hold traditional, generally inaccurate beliefs about specific foods. Adolescent girls prefer to eat foods that are quick and convenient to prepare, especially before school.	Knowledge and beliefs

Recommended SBC activities	Influencers on target population	Target population for SBC	Key findings addressed	Related determinants from study's conceptual framework
 During well-child visits and IYCF counselling, health workers and health volunteers should: Promote, in counselling sessions with mothers, specific nutrient-dense foods or recommended food classes (e.g., animal-source protein and leafy green vegetables) as key for young children to grow healthy and strong. Explain that processed foods like instant noodles offer little or no nutritional value to children and can lead to poor health. Identify and promote healthy alternatives to processed foods for children. Emphasize the benefits of immunization services in terms of staying healthy and strong, and correct misconceptions around negative vaccine outcomes. Health workers and volunteers should conduct home visits to: Promote the types and amounts of foods, frequency of feeding and means of preparation of food recommended for children aged 6–23 months. Emphasize the disadvantages of mixed feeding at birth and up to 6 months. Identify and share information on more affordable and accessible, but still nutritious, food options for mothers with different financial means. 	Health workers and community volunteers	Mothers of children under 2 years of age	Mothers choose foods for their children aged 6–23 months that they see as nutritious and making them healthy and strong. Some mothers feed their 6–23-month-old children instant noodles (Indomie). Fears of negative vaccination outcomes are a deterrent to seeking health-care services at a facility. Women feel that nutritional counselling recommendations are not actionable as they cannot afford nutritious foods.	Knowledge and beliefs
Interpersonal counselling	1	1	1	
 Through home visits and community counselling sessions, traditional birth attendants should: Promote, among mothers who deliver at home, early initiation of breastfeeding and consumption of colostrum. Promote ANC attendance and hospital deliveries where quality MIYCAN services are offered through demand-creation initiatives and platforms. Engage trusted family members (e.g., parents, mothers-in-law and female relatives), often present at home deliveries, to support early initiation of breastfeeding. 	Traditional birth attendants	Mothers who deliver at home	Initiation of breastfeeding within an hour of birth is more consistently mentioned by women who gave birth at a facility than by those who delivered at home.	Sources of information and support, knowledge and beliefs

Recommended SBC activities	Influencers on target population	Target population for SBC	Key findings addressed	Related determinants from study's conceptual framework
Community mobilization and demand creation				
 Community leaders should facilitate meetings, dialogues or religious sermons to address key MIYCAN barriers to: Promote optimal nutrition practices, e.g., early initiation of breastfeeding, exclusive breastfeeding, continued breastfeeding and consumption of colostrum. Ensure that men feel included – but are not controlling – over market purchases by encouraging them to make resources available for the best, most nutritious foods for their families. Highlight the importance of fathers' engagement in complementary feeding for children aged 6–23 months. Promote kitchen and household gardens for mothers and their families to grow vegetables and fruits. Promote shared household decision-making around health-care utilization. Highlight the importance of accessing preventative services, such as ANC and PNC, rather than relying only on health-care services in emergencies. 	Community leaders (religious and traditional leaders)	Fathers and husbands	Men and women are both responsible for what meals to cook in the household and men may be engaged in what food to buy. Typical fathers are seen as providers, holders of power and gatekeepers. Women feel that nutritional counselling recommendations are not actionable as they cannot afford nutritious foods. Some women are unable to access health- care services because husbands serve as gatekeepers who must give permission.	Gender dynamics, household decision-making, knowledge and beliefs
Community mobilization and demand creation	1	1		
 Mother's and women's groups should include in their regular meetings and discussions how to address key MIYCAN challenges to: Develop strategies to overcome challenges and misperceptions about foods associated with misconceptions or negative beliefs, e.g., deboning and mashing fish before serving and cutting, mashing or juicing vegetables before serving. Conduct food demonstrations on how to prepare and serve foods for infants by cutting or mashing foods from the "family pot", and promote this as convenient and practical. Identify where to find locally available and affordable nutritious foods and whether food exchanges are possible. Raise awareness of the importance of washing dishes as a means of preventing illness and ensuring the good health of the household, and reinforce messages of handwashing at critical times. 	Women's support groups and mothers' groups	Mothers	Mothers do not feed children certain foods because they require biting and chewing, are hard on digestion or in some cases, because of misconceptions and negative beliefs. Women feel that nutritional counselling recommendations are not actionable as they cannot afford nutritious foods. Washing utensils and dishes with soap before serving food is done some, but not all, of the time.	Knowledge, beliefs and sources of information and support
 Health workers and community volunteers should organize group counselling sessions and home visits to: Promote ANC attendance through demand-creation activities with mothers in sensitization and counselling sessions and community-wide campaigns. Undertake sensitization activities to promote eight ANC visits per pregnancy, as recommended by policy. 	Health workers and community volunteers	Mothers	Some women do not attend or delay ANC because they view the care as only necessary when there is a pregnancy complication, or they fear using injections and drugs during pregnancy. The maximum number of ANC visits reported by women was 4–5, with most women having even fewer.	Social norms

Recommended SBC activities	Influencers on target population	Target population for SBC	Key findings addressed	Related determinants from study's conceptual framework
Community mobilization and demand creation				
 Health workers and community leaders should: Work with parents and adolescent girls to identify contextually appropriate opportunities and platforms for adolescent girls to access services when parents are not able to attend. Introduce in- and out-of-school adolescent nutritional assessment and IFA administration activities. Develop or mobilize adolescent-friendly platforms to reach adolescent girls, including adolescent girls who are not in school, with nutrition counselling. 	Health workers and community leaders	Adolescent girls	Some adolescent girls are unable to access health-care services because parents serve as gatekeepers who must give permission, and health workers refuse to attend to adolescents without parents present. Adolescents report gaps in receiving nutritional counselling.	Access to services
 Health workers should conduct sensitization sessions with parent-teacher groups and school authorities to: Emphasize the importance of preventing micronutrient deficiency in adolescent girls and the role of IFA supplements and eating iron-rich foods. Emphasize the importance of handwashing with soap at critical times. 	Parents and school authorities	Adolescent girls	Adolescent girls are not aware of the benefits of and need for them to take IFA supplements. Adolescents give reasons for not handwashing such as being in a hurry or too tired.	Knowledge, beliefs and sources of information and support
Community mobilization and demand creation	1	1		1
 Health workers and partners should engage community media, e.g., local theatre groups, storytellers, dance troupes and town criers, to: Counter myths and misperceptions about specific food items and eating certain foods during pregnancy. Promote recommended food as alternatives and emphasize the benefits of the recommended food. Promote ANC attendance and hospital deliveries, including for pregnant adolescent girls. Promote the benefits of early initiation of breastfeeding for the child. Introduce counselling through community-based service delivery channels, e.g., traditional birth attendants and support groups. Communicate the benefits and importance of IFA supplements for adolescent girls through youth-based peer support groups. Promote latrine use and discourage open defecation. Address mothers' and adolescent girls' perceptions of health risks from using latrines. Promote proper hygiene, including handwashing and its benefits. Establish an adolescent WASH Champion programme through which handwashing discussions and demonstrations will be promoted. Provide adolescent-based nutrition communications materials with key WASH actions. 	Community media groups	Mothers who deliver at home, adolescent girls and mothers	Negative beliefs and misperceptions about particular foods are frequently given as reasons for not eating certain foods. Some of these beliefs include that it is taboo for pregnant women to eat bush meat (north) or grasscutter (also known as greater cane rat) (south). Initiation of breastfeeding within an hour of birth is more consistently mentioned by women who gave birth at a facility than by those who delivered at home. Adolescent girls are not aware of the benefits of and need for them to take IFA supplements. Adolescent girls and mothers in some communities believe shared toilets/latrines can be a source of infection, so they choose to practise open defecation instead.	Social norms and sources of information and support

Recommended SBC activities	Influencers on target population	Target population for SBC	Key findings addressed	Related determinants from study's conceptual framework
Community mobilization and demand creation		, 		
 Government and partners should seek to develop gender transformative approaches to incrementally begin to shift harmful gendered social norms regarding women's involvement in and contributions to family health and diet. They should: Create safe spaces (i.e., community forums, WhatsApp Groups) for critical community reflection on the benefits of women having greater decisionmaking power. Root the issue within the community's own value systems of wanting healthier children and mothers. Identify gender champions to model new gender roles and champion the promotion of recommended practices. Use organized diffusion to disseminate new, positive gender norms of gendered division of labour and decision-making. 	Multiple influence groups (i.e., mothers- in-law, grandmothers, community leaders, etc.)	Mothers and fathers	Women have limited mobility and decision- making power to purchase healthy foods and seek and obtain nutrition and health-care services. Men are also restricted by gender norms that limit their ability to more fully engage in feeding and rearing their children.	Household decision-making, gender dynamics and social norms
 Conduct sensitization sessions and community dialogues with grandmothers and elders to: Explain that breast milk alone is sufficient to nourish the child in the first 6 months and therefore water, pap, glucose and other liquids and solid foods should not be given. Highlight the water content in breast milk and that babies under 6 months do not need to be given water when the weather is hot, and that colostrum is not poisonous to the infant. Discuss and counter existing negative norms, myths and misconceptions promoting mixed feeding before 6 months. 	Grandmothers and older women	Mothers of children under 2 years of age	Grandmothers and elders are influential and protectors of tradition when it comes to breastfeeding beliefs, e.g., that prelacteal feeding is necessary or that infants 0–6 months are to be fed with water. In many communities, it is a common and traditional practice to give newborns something other than breast milk immediately after birth.	Social norms, sources of information and support

Recommended SBC activities	Influencers on target population	Target population for SBC	Key findings addressed	Related determinants from study's conceptual framework
Mass communication				
 Engage media firms and partners to: Research dedicated communication channels and safe spaces to reach distinct audiences. Develop a campaign and messages based on audience segmentation results and key behavioural drivers, e.g., to: Illustrate the benefits of a healthy meal for the whole family. Emphasize that breast milk alone for the first 6 months makes children strong and "builds their body", featuring testimonials from mothers who breastfed exclusively for the first 6 months in TV, radio and social media. Encourage mothers to continue breastfeeding up to 2 years and beyond. Promote ANC utilization early in pregnancy, and for a minimum of eight contacts. Promote the benefits of optimal breastfeeding practices, including reduction of out-of-pocket expenses for breast milk substitutes and reduction of hospital bills due to the baby falling ill as a result of mixed feeding. 	TV, radio and social media	Mothers	Mothers prefer to cook foods their family members/husbands find appealing. Typical mothers are seen as caring, patient and merciful, putting their family's needs ahead of their own. Mothers stop breastfeeding at certain points of child development rather than keeping to the recommended 6 months of exclusive breastfeeding and continued breastfeeding up to 2 years and beyond. Some women do not attend or delay ANC because they view the care as only necessary when there is a pregnancy complication or they fear using injections and drugs during pregnancy.	Gender dynamics knowledge and beliefs, sources of information
 Mass communication Engage media firms and partners to: Promote positive nutrition and WASH behaviours through media campaigns on TV, radio and social media at different times of the day, building on the existing Start Strong and Zero Water branding and messages, adapting for state-specific contexts. Share key messages in other places commonly visited by mothers, such as places of worship, community meeting centres and markets, as well as through electronic means (e.g., SMS and WhatsApp), after examining social media use patterns to inform platform choice and contents. 	TV, radio and social media	Mothers and adolescent girls	Some adolescents and pregnant women noted having a difficult time listening to radio or TV programmes because of lack of time or being at school when programmes air.	Knowledge, beliefs and sources of information

Recommended SBC activities	Influencers on target population	Target population for SBC	Key findings addressed	Related determinants from study's conceptual framework
 Engage media firms and partners to: Leverage media campaigns over TV, radio and mobile phone-based platforms (e.g., SMS and WhatsApp) to reach fathers and mothers with accurate information about vaccination and involve community leaders and religious leaders in correcting vaccine misconceptions. Project consequences of not vaccinating through practical illustration and testimonials. Promote benefits of immunization. Promote immunization session attendance and its benefits. 	TV, radio and community leaders (traditional and religious leaders)	Fathers and mothers	Fears of negative vaccination outcomes are a deterrent to seeking health-care services at facilities.	Social norms
 Engage health workers and community leaders to: Hang up posters on the importance of food safety and safe food preparation practices. Promote proper hygiene – especially handwashing with soap – as a healthy practice that helps to prevent infection and has other benefits. Specify and promote critical moments for handwashing with soap. 	Health workers and community leaders	Mothers and family members	Washing utensils and dishes with soap before serving food is done some, but not all, of the time.	Knowledge and beliefs
Strengthening capacity	1	<u> </u>		1
 Government and partners should: Sensitize health workers to provide more welcoming, empathetic and patient-centred care. Provide psychosocial support skills and knowledge through continuing education for health workers. Implement reward and incentive systems for friendly services. Put feedback mechanisms in place for clients to report unfriendly services. 	Health workers	Mothers	Mothers avoid seeking health services or prefer home delivery because of prior bad experiences with health workers and associated fears (e.g., they were angry, impatient or abusive).	Quality of services
 Government and partners should: Develop a list of key messages and criteria for effective nutritional counselling. Provide additional competency, knowledge and skills-based training to health workers on delivering the key messages and fulfilling criteria for effective nutritional counselling. Provide user-friendly nutrition counselling job aids to aid clients' understanding and assimilation of key nutrition messages. 	Health workers	Mothers	In observations of nutritional counselling sessions, many of the messages were not delivered and criteria for effective nutritional counselling were not met. Written and visual job aids are not available and/or not used by health workers during nutritional counselling sessions.	Quality of services, infrastructure and policy

Recommended SBC activities	Influencers on target population	Target population for SBC	Key findings addressed	Related determinants from study's conceptual framework
 Government and partners should: Develop tailored materials, particularly in the form of visual aids and demonstrations that can be used in interpersonal communication sessions. Develop dedicated adolescent-friendly materials with details on adolescent nutritional requirements and key messages. Conduct refresher trainings for health-care providers on knowledge and skills to deliver nutrition services, including interpersonal communication. 	Health workers	Mothers	Written and visual job aids are not available and/or not used by health workers during nutritional counselling sessions. Given high rates of illiteracy in patients, visual tools, such as posters with images and food demonstration items, are seen as more useful than written materials.	Quality of services and infrastructure
Strengthening capacity				
 Government and partners should: Provide regular training and consistent supportive supervision to health workers to strengthen knowledge and skills for nutritional counselling services and create opportunities for feedback. Develop an online nutrition training resource to increase health workers' access to basic nutrition knowledge and skills. Introduce and mainstream a mentoring and coaching mechanism for providers of health care. 	Health workers	Mothers	Nutritional counsellors report gaps in training around nutrition topics, inconsistent frequency of trainings and a dearth of refresher training opportunities. Building and maintaining staff capacities requires continuing professional development through in-service training and continuing education. Nutritional counsellors receive supportive supervision more routinely for other topics and skills – such as immunization services – and not for nutritional counselling.	Quality of services and infrastructure
Policy advocacy		1	1	
Government and partners should work to:	Federal	Adolescent	Adolescent girls are not accessing IFA	Infrastructure
 Advocate for improved supply and easier access to IFA supplements at health facilities and community centres to ensure adolescent girls can easily access IFA supplements. Advocate for inclusion of IFA/multiple micronutrient supplements on the essential medicine's list, thus prioritizing them for procurement. Advocate to recommend IFA/multiple micronutrient supplements for use by adolescents, specifying the starting age. Advocate for school-based distribution and administration of IFA/multiple micronutrient supplements for adolescents. 	Ministry of Health Nutrition Division and partners	girls	supplements at health facilities or chemists.	and access to services
Policy advocacy		1	1	1
 Government and partners should work to: Develop and implement a nation-wide school curriculum that emphasizes positive nutrition and WASH practices with consistent key messages and content tailored for the different states. Review the existing School Health Policy (Federal Ministry of Education, 2006) to expand the content on nutrition to promote dietary diversity and consumption of healthy nutritious foods, and create an enabling environment for its operationalization across the country. 	Federal Ministry of Health Nutrition Division and partners	Adolescent girls	Adolescent girls lack knowledge of important nutrition, WASH and health practices, including latrine/toilet use, IFA supplementation and healthy foods.	Policy

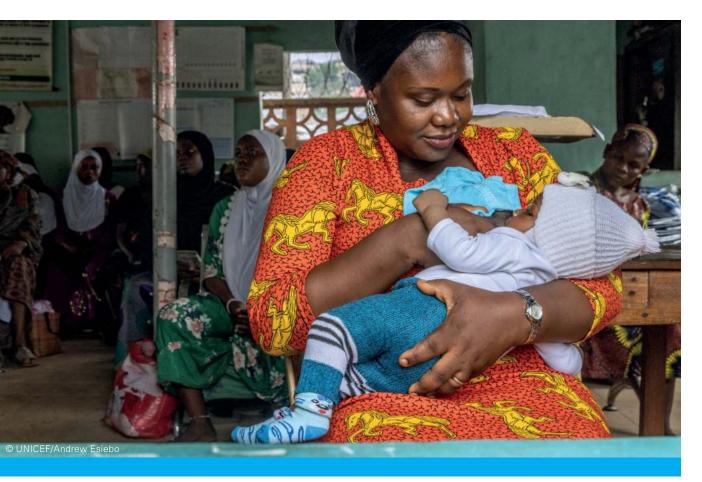
Recommended SBC activities	Influencers on target population	Target population for SBC	Key findings addressed	Related determinants from study's conceptual framework
 State governments and partners should work to: Promote knowledge and compliance with Marketing of Infant and Young Children Food and Other Designated Products (National Agency for Food and Drug Administration and Control, 2005). Adapt the revised national MIYCAN guidelines (Federal Ministry of Health, 2021) to the state level and operationalize them in annual operational plans. Advocate for dedicated funding for health-worker training in the states' annual operational plans. 	State government and partners	Mothers	Many health worker participants reported gaps in their own training, particularly on maternal nutrition topics, as well as gaps in the frequency of trainings and few refresher trainings.	Policy
State governments and partners should work to: Popularize the National Gender Policy (2021–2026) (Federal Ministry of Women and Gender Affairs, 2022) at state level and implement its recommended actions to promote inclusion and give voice and agency to women and adolescent girls.	Community leaders	Mothers	Participants described strong traditional gender ideologies that ascribe different spheres of influence to women and men. The women's sphere was described as limited to domestic and caregiving duties, whereas men were attributed a broader sphere of influence outside of the household, and viewed as the key decision makers for most household matters.	Policy and gender dynamics

Source: Adapted from Alive & Thrive SBC Framework (2014)

Concluding remarks

Nigeria is the most populous country and largest economy in sub-Saharan Africa. However, it currently has the highest burden of malnutrition of any African nation, with over 12 million stunted children (second highest globally after India) (Sguazzin, 2023), and is contending with levels of undernourishment and food vulnerability that are on the rise and have recently been the subject of urgent calls for action (UNICEF, 2023b). Globally, the widening food security gap between men and women (UNICEF, 2023b) and the growing 'triple threat' of undernutrition, overnutrition and micronutrient deficiencies (UNICEF, 2023a) call for interventions that address multiple nutritional challenges simultaneously and a focus on nutrition for adolescent girls and young women particularly. In Nigeria, impending demographic and climate challenges and persistent gender inequalities make such intervention and focus particularly crucial.

The findings and recommendations laid out in this report are intended to contribute to the capacity of UNICEF, the Nigerian government and implementing partners to respond to these challenges through the design of more tailored and contextually aware SBC approaches to improving MIYCAN in Nigeria during the first 1,000 days of life. Given the complex and multifaceted nature of nutrition and related health challenges in Nigeria, qualitative contextual insights provide additional in-depth understanding to better inform how longstanding nutritional challenges may be addressed. Refined, more innovative, sustainable and nuanced SBC programmes to improve maternal and adolescent nutrition, health and well-being will play a critical role for Nigeria as the country works towards achieving the World Health Assembly Global Nutrition Targets in 2025 and contributing to Sustainable Development Goal 2.



Appendices

Appendix A: Selected indicators for the study communities¹¹

Table A1: Maternal nutritional, child nutritional, WASH, gender and other relevant indicators

	MICS 2017	Full child vaccination rate	15.9	17.6	22.5	5.1	2.9	6.8	8.2
tors									
lth indica	MICS 2017	Child dietary diversity	53.4	37.3	54.4	44.5	32.0	27.4	40.2
nal and hea	NDHS 2018	Child anaemia (any)	69.8	65.0	58.9	75.0	72.9	77.3	67.9
Child nutritional and health indicators	MICS 2017	Wasting	5.5	7.6	3.6	8.8	10.8	13.4	10.8
5	MICS 2017	Stunting	20.1	17.4	8.5	37.3	58.0	54.4	43.6
	MICS 2017	Early initiation of breast- feeding rates	44.1	23.3	39.7	38.6	30.8	26.8	32.8
ndicators	NDHS 2018	Maternal dietary diversity	58.2	44.3	70.1	27.2	64.9	64.7	55.6
Maternal nutritional indicators	NDHS 2018	IFA consumption (90+)	25.9	2.6	40.6	8.9	22.5	21.1	30.5
Materi	NDHS 2018	Maternal body mass index (total thin)	5.3	11.8	8. C	11.1	17.7	21.4	12.1
	NDHS 2018	Maternal anaemia (any)	46.1	49.7	60.2	64.2	46.6	63.6	57.8
		Selected state	Cross River	Oyo	Enugu	Niger	Kano	Gombe	age
	Source	Geopolitical zones	South South	South West	South East	North Central	North West	North East	National average

11 The red and blue shadings depict state-level indicators that either outperform the national average (blue) or underperform the national average (red).

Other demographic characteristics	Alive & Thrive Nigeria	Predominant ethnic groups	Efik, Yakkur, Agbo, Boki, Iyala, Yalla and Mbube, among others	Predominantly Yoruba with pockets of other ethnic nationalities, e.g., Hausa-Fulani and Ibo	Predominantly Ibo	Hausa, Fulani, Nupe and Gbagi	Hausa and Fulani	Fulani, Tangale, Tera, Bolewa, Kanuri and Waja, among others	
Other demogra	Alive & Thrive Nigeria	Predominant religion	Christianity	Islam, Christianity	Christianity	Islam, Christianity	Islam	Islam, Christianity	
	NDHS 2018	Women's home ownership rates (alone)	16.4	0.7	7.9	0.4	1.4	1.4	2.5
Gender indicators	NDHS 2018	Women's participation in decision- making (health)	94.8	94.1	62.8	29.3	33.0	29.B	44.2
Gender in	NDHS 2018	Median age of first marriage	22.4	22.4	23.2	17.5	15.9	15.8	19.1
	NDHS 2018	Literacy rates in women	73.6	71.7	83.6	25.9	37.8	32.1	53.1
	UNICEF WASHNORM 2021 Report	Open defecation	41	54	48	46		25	23
	NDHS 2018	Use of improved sources of drinking water	53.9	82.8	59.2	52.9	57.9	39.2	64.1
WASH indicators	NDHS 2018	Access to handwashing facility (basic)	62.6	61.7	25.3	6.2	23.9	45.0	31.4
	NDHS 2018	Access to improved sanitation facility	46.5	62.7	39.2	38.5	54.0	73.5	53.4
	UNICEF WASH- NORM 2021 Report	Access to basic sanitation services	30.0	29.0	28.0	41.0	50.0	47.0	44.0
		Selected state	Cross River	Oyo	Enugu	Niger	Kano	Gombe	erage
	Source	Geo- political zone	South South	South West	South East	North Central	North West	North East	National average

Appendix B: Participant eligibility criteria

SSI participants

In each study community, adolescent girls were considered eligible for participation in the adolescent SSIs if they met the following study criteria:

- Resident of that community for two or more years;
- Single, unmarried and not living with a partner;
- Not currently pregnant and does not have any children;
- Between 15 and 19 years of age, inclusive;
- For 15–17-year-olds, willing to provide assent and parental/guardian consent; and
- For 18–19-year-olds, willing to provide informed consent.

In each study community, women were considered eligible for participation in the pregnant women's SSIs if they met the following study criteria:

- Resident of that community for two or more years;
- Aged 18 or over; and
- Self-identifies as pregnant.

In each study community, women were considered eligible for participation in the SSIs with women of children under 2 years of age if they met the following study criteria:

- Resident of that community for two or more years;
- Aged 18 or over; and
- Has given birth within the last two years to a child who is now living at home and is between the ages of 0 months and 2 years of age (i.e., up to 23 months and 30 days at the time of data collection).

PDG participants

Individuals were considered eligible for participation in a PDG if they were identified by a community stakeholder as a member of a group that influenced MIYCAN in that community (for example, but not limited to, community gatekeepers, facility-based health workers, community health workers, adolescent girls, mothers, fathers, grandmothers and mothers-in-law) and met the following study criteria:

- Aged 15 years or over;
- For 15–17-year-olds, willing to provide assent and parental/guardian consent;
- For those aged 18 or older, willing to provide informed consent; and
- For fathers, father of a child who was currently living at home and under 2 years of age.

Go-along interview participants

In each study community, individuals were considered eligible for participation in a go-along interview if they met the following study criteria:

- Resident of that community for two or more years;
- Aged 18 years or over; and
- Is the mother or father of children under 2 years of age; or
- Is a community health worker, health extension worker or health-care provider who provides infant and young child nutrition education or counselling to mothers and caregivers.

Appendix C: Data collection discussion guide topics

Discussion guide	Participant type	Topics covered
SSIs		
SSI with unmarried adolescent girls	Unmarried adolescent girls	 Specific dietary practices and knowledge and beliefs about different foods Experiences with iron folate supplementation Household WASH behaviours and hygienic food preparation Experiences seeking and using health-care services, including nutritional counselling
SSI with pregnant women	Pregnant women	 Specific dietary practices and knowledge and beliefs about different foods Household WASH behaviours and hygienic food preparation Experiences with iron folate supplementation Use of prenatal services and nutritional counselling services
SSI with mothers of infants aged 0–5 months	Mothers of infants aged 0–5 months	 Specific dietary practices and knowledge and beliefs about different foods Early initiation of breastfeeding practices Birthing experiences and barriers to and facilitators of facility-based delivery Use of postnatal services and nutritional counselling services
SSI with mothers of children aged 6–23 months	Mothers of children aged 6–23 months	 Specific dietary practices for children and knowledge and beliefs about different foods Continued breastfeeding practices Use of newborn care services and nutritional counselling services
PDGs	1	
Community mapping	Community gatekeepers	 Creating an initial map of the community Community norms for nutrition, WASH and hygiene practices
Maternal nutrition	Health-care providers and mothers, including adolescent mothers	 Gender roles in household decision-making Root causes of maternal nutrition issues Community norms for maternal nutrition and WASH practices
IYCF	Mothers, mothers- in-law, grandmothers and fathers	 Gender roles in household decision-making Brainstorming on community services available for IYCF Community norms for IYCF practices

Table C1: Discussion guide topics

Discussion guide	Participant type	Topics covered
PDGs		
Paternal involvement in childcare and IYCF	Fathers	 Gender roles in household decision-making Root causes of fathers not being involved in IYCF Brainstorming on services that provide information on IYCF to fathers in communities
Use of ANC and delivery services	Health-care workers and mothers	 Root causes of central issues related to ANC and delivery services Brainstorming on community ANC services Community norms for ANC and delivery services
Use of postnatal and child health services	Community health workers and mothers	 Brainstorming on community postnatal and child health services Community norms for WASH and hygiene practices
Breastfeeding	Health-care workers or mothers	 Root causes of central issues related to breastfeeding Community norms of breastfeeding and WASH practices
Go-alongs	1	
Household	Mother of child under 2 years of age	 Observation of food preparation and feeding of infants and young children Hygiene and toileting practices and breastfeeding as applicable Decision-making on food preparation and allocation
Market or other food access point	Household food purchaser: mother or father of child under 2 years of age	 Observation of food availability and sanitary conditions Decision-making on food purchases
IYCF counselling	IYCF counsellor	• Key nutritional counselling practices and messages
Maternal nutrition counselling	Maternal nutrition counsellor	Key nutritional counselling practices and messages

Appendix D: Demographic characteristics of study participants

State	Women	Men	Total
Cross River (South South)	80	34	114
Enugu (South East)	68	16	84
Gombe (North East)	77	32	109
Kano (North West)	54	26	80
Niger (North Central)	53	39	92
Oyo (South West)	76	20	96
Total	408	167	575
Percentage	71%	29%	100%

Table D1: Participants' gender by state (all)

Table D2: Participants' age by state (all)

State	15–19 years	20–29 years	30–39 years	40–49 years	50–59 years	60–69 years	70 years and older	Total
Cross River (South South)	26	36	25	10	11	5	1	114
Enugu (South East)	3	27	23	9	10	6	6	84
Gombe (North East)	23	35	27	9	9	4	2	109
Kano (North West)	5	18	27	16	8	3	3	80
Niger (North Central)	13	64	11	2	2	0	0	92
Oyo (South West)	3	15	32	17	9	11	9	96
Total	73	195	145	63	49	29	21	575
Percentage	13%	34%	25%	11%	9%	5%	4%	100%

Table D3: Participants' religion by state (non-health-care workers)

State	Christianity	Islam	Other	Total
Cross River (South South)	99	0	0	99
Enugu (South East)	68	0	6	74
Gombe (North East)	1	94	0	95
Kano (North West)	0	70	0	70
Niger (North Central)	0	88	0	88
Oyo (South West)	60	31	1	92
Total	228	283	7	518
Percentage	44%	55%	1%	100%

Appendix E: Analysis data sources

The following data sources were analysed for each of the chapters in the report.

Table E1: Data sources, by chapter

Chapter	Analysis data sources
Chapter 1: Nutrition, health and WASH services and infrastructure	 SSIs with 18 adolescent girls, 18 pregnant women, 18 mothers with children under 6 months of age and 18 mothers with children aged 6–23 months PDGs with adolescent mothers aged 15–19 years, adult mothers, fathers, health workers and community gatekeepers Go-along interviews with and observations of nutritional counselling sessions with 24 health workers Go-along interviews with and observations of 12 mothers and fathers at markets
Chapter 2: Behavioural practices, knowledge and norms affecting MIYCAN in the first 1,000 days	 SSIs with 18 unmarried adolescent girls from nine different communities, 18 pregnant women, 18 mothers with children under 6 months of age and 18 mothers with children aged 6–23 months PDGs with adolescent mothers aged 15–19 years, adult mothers, fathers, health workers, grandmothers and mothers-in-law Go-along interviews with and observations of 48 mothers, fathers and health-care workers at the home, market and health facility
Chapter 3: Gender dynamics	 PDGs with mothers, fathers, grandmothers and mothers-in-law, health workers and community gatekeepers SSIs with 18 pregnant women and 18 mothers of children aged 6–23 months Go-along interviews with 36 mothers, fathers and health workers at homes, markets and health facilities
Chapter 4: Sources of information and support	 SSIs with 18 unmarried adolescent girls from nine different communities, 18 pregnant women, 18 mothers with children under 6 months of age and 18 mothers with children aged 6–23 months PDGs with adolescent mothers aged 15–19 years and adult mothers

Appendix F: Illustrative examples from PDG activities

PDGs that focused on different topics leveraged a combination of various activities to facilitate engaging and insightful discussions. Table F1 indicates which activities were included as part of each type of PDG.

PDG topic	Problem tree	Gender box	Community mapping
Postnatal and child health		•	
Breastfeeding	•		
ANC and delivery	•		
IYCF		•	
Maternal nutrition	•	•	
Paternal involvement	•	•	
Community mapping			•

Table F1: PDG topics and related activities

Problem trees

Objective: To identify root causes, social and non-social, and how they affect behaviour(s) of interest (domains: access, quality, practices, gender dynamics and knowledge)

Problem tree activities explored different topics, depending on the focus of the PDG. Table F2 indicates the discussion topic explored in each PDG.

Table F2: Problem tree discussion topics

Торіс	Problem tree behaviours for discussion
Breastfeeding	Factors that lead women to not start breastfeeding within the first hour after delivery
ANC and delivery	Factors that lead women to not go to the hospital to deliver their babies
Maternal nutrition	Factors that lead women to not eat a variety of foods during pregnancy
Paternal involvement	Factors that lead fathers/husbands to not be involved in childcare and feeding

Participants were asked to reflect on the reasons or root causes that impact the behaviour under discussion and write them down on flip chart paper, on the roots of a drawing of a tree. Participants were then asked to categorize these root causes by household, community and societal level and then vote on the root cause they perceive as most influencing the behaviour under discussion. Participants also discussed what might happen to community members whose actions differ from the behaviour under discussion. This activity allowed researchers to further explore particular behaviours related to seeking of health care, WASH and nutrition, and gain insight into the structural factors and social norms that create barriers and facilitators for positive behaviours.

Gender boxes

Objective: To provide data on beliefs, attitudes and norms around gender

As part of this activity, participants were asked to reflect on the characteristics, tasks and decisions that the 'typical' father and 'typical' mother are responsible for. These reflections were written on flip chart paper within a box to represent the 'gender box'. Participants also discussed what happens in their communities when fathers and mothers do not act in these 'typical' ways, as well as what factors may motivate someone to remain within the gender box or leave it. This activity allowed researchers to explore widespread gender roles, norms and ideologies within the studied communities, as well as possible sanctions for not complying with socially acceptable norms and exceptions to adhering to them.

It is important to note that while the concept of the gender box is used to facilitate discussion, there is an understanding that gender norms, roles and expectations are not always clear or solid, but rather nuanced and evolving issues that exist on gradients and continuums.

Community mapping

Objectives: As a group, create a map that identifies locations within the community where activities that influence nutrition and WASH behaviours occur

Participants worked together, under the guidance of the facilitator, to draw a map of their community on flip chart paper with the key locations, as shown in Table F3.

Landmarks	Nutrition and WASH facilities	Health services	Food access points
 Schools Churches Community centres Meeting places 	 Water sources Toilets Electricity sources Government health facilities Private health facilities 	 Sites where women give birth Traditional healers Sites where women receive PNC Sites where people buy medications Immunization services 	 Central market Sites where people buy food Other sites where people obtain food, e.g. gardens, fishing areas, restaurants or agricultural lands

Table F3: Community mapping by location and activity

Figure F1: Example of a community map from North West



The maps and findings used as part of this activity provided insight into the infrastructure and services available in each community of study. Additionally, maps were used to facilitate further discussions regarding sources of information, services and access to services in other PDGs. Participants in other PDGs were asked to elaborate on the types of services provided at each location, as well as the types of service providers, who receives services, barriers to access and whether these services are trusted by community members.

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