Lafiyayyan Yara (Healthy Child) - Reducing Infectious Disease among Children under Five (RIDCU5) Bade LGA, Yobe State

ENDLINE REPORT

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@2023 Lafiyayyan Yara (Healthy Child) - Reducing Infectious Disease Among Children Under Five (RIDCU5), Bade LGA, Yobe State

Picture: during interview with caregiver in Bade LGA

Endline Evaluation Report
December 2023
Lafiyayyan Yara (Healthy Child)
Reducing Infectious Disease among Children Under Five (RIDCU5), Bade LGA, Yobe State, Nigeria

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Abbreviation and Acronyms

ANC	Antenatal Care
BEmONC	Basic Emergency Obstetric and Newborn Care
CBO	Community Based Organization
CARE	CARE International
CBVs	Community Based Volunteers
CSC	Community Score Card
FGD	Focus Group Discussion
CHEW	Community Health Extension Worker
KII	Key Informant Interview
HH	Head of Household
FP	Family planning
IMCI	Integrated Management of Childhood illnesses
iCCM	Integrated Community Case Management
IPC	Infection Prevention and Control
MEAL	Monitoring Evaluation, Accountability and Learning
PHCC	Primary Healthcare Centre
PHC	Primary Health Care
MoH	Ministry of Health
RIDCU 5	Reducing Infectious Disease among Children under Five
LGA	Local Government Area
SAA	Social Analysis and Action
WHO	World Health Organization

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Executive summary

The Lafiyayyan Yara (Healthy Child): Reducing Infectious Disease among Children under Five (RIDCU-5) project was a 27-month private donor funded project implemented from October 2021 through December 2023. The project strengthened health systems in Bade Local Government Area (LGA) of Yobe state by providing required equipment and medication for health facilities, increasing capacity of health personnel to use approved diagnostic methods, and engaging the community to improve uptake of health services.

The primary objective of the evaluation was to assess the project's performance and document its achievements, challenges, and best practices to guide future similar programming; and provide recommendations to CARE Nigeria and its partners to make informed decisions and enhance the effectiveness and efficiency of future initiatives.

Methodology

The evaluation used a mixed research method that included qualitative and quantitative data collection. The household selection method adopted the use of 'clustered-systematic random sampling'. The evaluation used a statistical approach from which an inference can be drawn about the project target population of approximately 40,000 households. The sample size was determined at 5% margin of error, 95% confidence interval of the target project participants to arrive at a representative sample size of 385 households.

Findings

Effectiveness

Evidence from the desk review showed that the project made remarkable progress towards reducing mortality in under-5 children through a community-based health systems strengthening approach that ensures that communities receive a core package of services. The major factors that influenced the effectiveness and achievement of the project results were the use of community structures (community health volunteers, model mothers, and community-based surveillance focal points), capacity building, the referral system and the Social Analysis and Action (SAA) approach through community dialogues, supportive supervision, routine monitoring visits and facility health promotion session. The SAA approach also helped to shift practices related to family planning, immunization and poor health seeking behavior, as evidenced from the qualitative findings.

Efficiency

In both the design and implementation of the project activities, CARE International RIDCU5 team ensured that the project was efficient. The project design allowed the RIDCU5 project to train and work with community members as volunteers and adequately build their capacity and work collaboratively with local partners and relevant stakeholders. The use of community structures and local partners made the project implementation cost effective and created the opportunity for sustainability.

The project's design engaged community volunteers[1] to serve as model mothers, community-based surveillance focal points, feedback and accountability volunteers, and community health volunteers, has enabled the project to increase community mobilization through a cost-effective approach. Through the community referral system, and health promotion sessions, many women were reached through the activities of the community volunteers.

Impact

Findings showed that the objectives and activities of the CARE RIDCU5 project were relevant in addressing the humanitarian needs of Bade Local Government communities. The weekly dialogue session with model mothers helped to address social norms and practices that negatively impact maternal and child health and the strengthened detection and referral of infectious disease (acute respiratory illness, malaria, diarrhea, and measles) through community-based surveillance (CBS) that included door-to-door visits and referrals for care. Also, health promotion sessions and supportive supervision in the 22 health facilities of the implementation contributed to quality of services. The project was able to respond largely to the needs of the target groups, including Community Health Workers (licensed and volunteers); children under five and their caregivers; pregnant and postpartum women and adolescent girls through support to strengthen referral systems, community engagement approaches to improve health behaviors and accountability of the health system as well as capacity building and provision of supplies and equipment to improve health service delivery.

Sustainability

The involvement of community volunteers assisted in the community ownership of the project. At present, community volunteers and community leaders, who benefited from the training conducted by CARE International, are engaged in community mobilization and awareness creation among community members on various aspects of the project. Respondents reported that that through the knowledge gained from CARE international, they were able to strengthen their cooperation among each other. The project has also built the capacity of the local partners and community members in a sustainable way through supportive supervision and training for health care workers and volunteers to improve and enhance their capacity to diagnose and detect infectious diseases.

Lessons Learned

The following were some of the lessons learned from the implementation of the RIDCU5 project:

- The door-to-door sensitization improved the health seeking behavior of pregnant women and caregivers of children under five in the community.

[1]Community members serving in these roles, collectively referred to as community volunteers, received a stipend for their work.

- The CARE's SAA approach played a significant role in shifting social norms related to family planning (reviewing side effects, cultural and religious beliefs) thereby contributing to improved uptake of services.
- The project's collaboration with relevant government agencies such as the Yobe State Primary Health Board, community leaders and local partners was pivotal to the project's success.
- Formal training on Infection Prevention and Control (IPC), Integrated Management of Childhood illnesses (IMCI), Integrated Community Case management (iCCM) for health care workers and volunteers were key to improving their capacity to diagnose and detect infectious diseases and provide quality service delivery.

Conclusions and Recommendations

Conclusions

Findings from the evaluation indicate that the RIDCU5 project has had a positive impact on the community and lives of the people of Bade Local Government. The project worked collaboratively with other stakeholders to create awareness and improve health seeking behavior. Community engagements were key to the success of the RIDCU5 project - community level capacity building and the engagement of community volunteers to improve maternal and child health seeking behaviors through the referral system and creating awareness in the community. The community volunteers were instrumental to the achievement and success of the project in increasing the use of health facilities, and routine immunization knowledge, coverage, and uptake.

Recommendations

The following recommendations were made to strengthen service delivery based on the evaluation findings:

- The Yobe State Primary Health Official and partners should continue to conduct supportive supervision to ensure adherence to the immunization schedule.
- Health workers should support community leaders to mobilize eligible children for timely vaccination, conduct defaulter tracing, and monitor infant immunization status in the community.
- The transition plan for the project must give a prominent role to community volunteers. They have and will continue to have a major influence on supporting routine immunization and maintaining trust in the primary healthcare system at community level.

Project Overview

The Lafiyayyan Yara (Healthy Child): Reducing Infectious Disease among Children under Five (RIDCU5) project was a 27-month private donor funded project running from October 2021 through December 2023. The project strengthened health systems in Bade state by providing required equipment and medication to health facilities, increasing capacity of health personnel to use approved diagnostic methods and strengthen service delivery, and engaging the community to improve uptake of health services. The approach contributed to improved health outcomes for children and pregnant women and adolescent girls by strengthening quality Integrated Management of Childhood illnesses (IMCI), Integrated Community Case management (iCCM), family planning (FP), Basic Emergency Obstetric and Newborn Care (BEmONC) services. The project worked with various community groups such as the model mothers, community-based surveillance focal points, feedback and accountability volunteers, and community health volunteers who supported the local partner to improve the community health seeking behaviors and key health related household practices.

The goal of the project was to:

- Reduce mortality in children under five through a community- b a s e d health systems strengthening approach

Specific objectives were:

- Increase immunization coverage and quality of care for children under 5 and pregnant women and adolescent girls
- Engage communities to address social norms and practices that negatively impact child health, including access to quality care and immunization uptake
- Strengthen infectious disease (acute respiratory illness, malaria, diarrhea, and measles) detection and the referral system through enhanced community-based surveillance

The RIDCU5 project used different approaches to achievement the project goal in the community such as:

a) Community meetings
b) Supportive supervision
c) Review meetings
d) Community outreach
e) House to house sensitization

The project utilized the Community Score Card (CSC) methodology to generate issues, developed and scored indicators, and conducted interface meetings with the community (service users) and service providers together to identify and jointly address issues affecting the access and quality of maternal and child health services. The project also used community dialogues following CARE's Social Analysis and

Action (SAA) approach to identify and reflect upon norms and practices that can negatively impact health.

The project's impact targets included:

- Percentage of children who complete their third DTP out of all children who receive their first DTP (*aim to increase baseline figure by 10%)
- Percentage of children who receive their second dose of measles (increased from baseline)
- Percentage of pregnant women and girls who complete at least 4 ANC visits (target=75%)
- Percentage of facilities fully equipped with providers trained to use diagnostic methods as determined by IMCI/iCCM (target=100%)
- Percentage of healthcare providers implementing IPC protocols (target=100%)
- Percentage of women and girls surveyed who report being satisfied with their service (target=80%)

Evaluation Objectives

The primary objective of the evaluation was to assess the project's performance and document its achievements, challenges, and best practices to guide future similar programming.

Program evaluation objectives

The program evaluation was based on the following four (4) objectives:

Objective 1: Evaluate the overall outcome of the project delivered, and to what extent CARE's "Reducing Infectious Disease among Children under Five (RIDCU5)" project has delivered effective, efficient, relevant, and timely activities to project participants.

Objective 2: Assess whether the collaboration between CARE and Yobe State Primary Health Care Board (under the Ministry of Health) has added value and if interventions have had a positive effect on project participants and other stakeholders. What has contributed to this added value and what has not?

Objective 3: Assess the Impact of CARE's community engagement and accountability approaches on maternal and child health behaviors and service provision at health facilities, including Social Analysis and Action (SAA), community-based surveillance, community awareness and referrals.

Objective 4: Document key lessons learned during the implementation of the program, assess what worked, what did not work and the recommendations from the project participants to inform and improve future programming along with the challenges encountered.

Evaluation Questions

The endline evaluation assessed the program based on the following evaluation criteria, including relevance/impact, timeliness, effectiveness, efficiency, quality,

sustainability, safety and safeguarding incorporating the relevant questions associated with each criterion.

Assessment Approach and Methods

The evaluation used a mixed method; qualitative and quantitative methods. Evaluation questions were broken into sub-questions with associated indicators and research questions. The following form of questioning/interviews were adopted for the endline evaluation: (1) Desk review of project reports, baseline report project document, project monitoring data, progress report, mid-term review report, field visit reports and assessments documents; (2) quantitative questionnaire for households; (3) focus group discussions (FGDs) and (4) key informant interviews using semi-structured questions for CARE International staff, local partner staff, government officials and health facility staff.

The quantitative method involved face-to-face interviews with project beneficiaries in all 10 wards where the project was implemented in Bade Local Government Area of Yobe State. Interviews were conducted with beneficiary households in the host communities. Target respondents in the households were head of household for male respondents and 'female' respondents were mothers or caregivers of under five children. If these categories of people were not around as at the time of visit and could not be confirmed to be available within the time the survey team works in the community, then the household was replaced with another household using the same household random selection approach.

The household selection method adopted the use of 'clustered-systematic random sampling.' For host communities, the team supervisor (with the help of the local partners, and village heads/leaders) divided the camps/communities into four clusters. A starting point was identified in each of the sub-clusters. The 'systematic' selection processing means that, after an initial random selection of a household from each of the sub-clusters, a constant skip pattern of 1 in 3 households/buildings was observed before selecting another household. For all interviews, interviewers ensured the constant skip pattern by moving along the 'right' path. The team supervisor using common and standard boundaries such as school, major road/street, etc. decided starting points.

The qualitative method involved the conduct of both Key Informant Interviews (KIIs) and Focus Group Discussion (FGDs). The FGDs were conducted with community members who have benefited from the program interventions and community volunteers who supported program activities. A total of 20 FGDs were conducted across 10 wards with an average number of eight participants per FGD. KIIs were conducted with CARE International staff, local partner staff, community leaders and heads of health facilities.

Sampling Techniques

The evaluation used a statistical approach about which an inference can be drawn about the project population of about 40,000 under consideration. The sample size was determined at 5% margin of error, 95% confidence interval of the target project

beneficiaries to arrive at a representative sample size of 385 sample size - using an online calculator[2].

End line Evaluation Participants

These included RIDCU-5 Project participants (health providers, community health workers, pregnant women and girls who access services, caregivers of children under 5 years of age, model Mothers/caregivers, Community Based Surveillance focal persons, etc.) in all project implementation sites within Dagona, Dawayo, Gwio Kura, Katuzu, Lawan Fannami, Lawan Musa, Sabon-Gari, Sarkin Hausawa, Sugum/Tagali and Zango wards of Bade LGA of Yobe State.

Key informant interviews, were held with RIDCU-5 CARE International project staff members, i.e., program manager, technical field staff, MEAL Officer and key community members/Project participants, local partner (Life Helper's Initiative), and representatives from the Yobe State Primary Health Management Board departments to gather substantial evidence on the effectiveness, efficiency, relevance and timeliness of the project activities implementation and delivery.

Focus group discussions, participants were drawn from community members (project beneficiaries)[3].

Approach for selecting KII participants

The KII used principles of diversity and representativeness of the relevant target groups – project participants, community representatives, government officials and other relevant stakeholders from the program LGA.

These principles include:

- A good spread of different participants from the community and stakeholders
- Gender balance
- Recognition of the positive value of issues of diversity such as ethnicity and culture
- Diversity of ages

Sample distribution

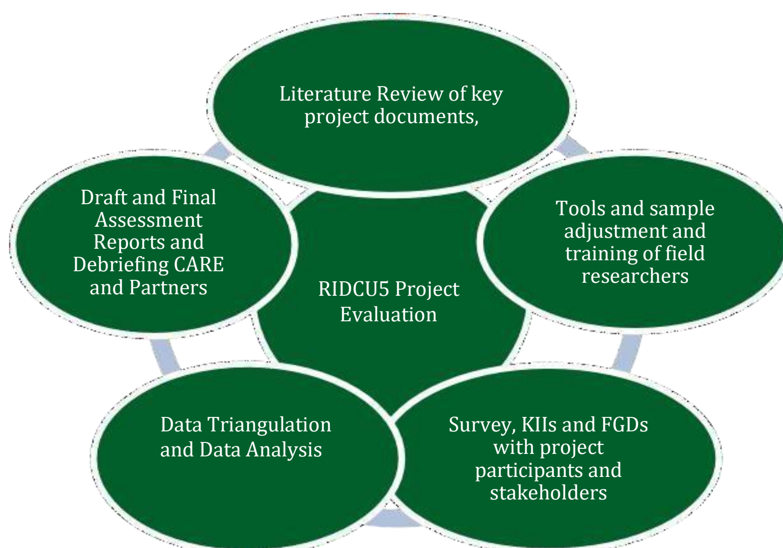
An equal sample size was distributed across all 10 wards where the project was implemented to support equal representation. Two focus groups (male and female grouping) were conducted in each ward. Ten of the project's 22 facilities were selected for the key informant interview with the head of health facility (See -Annex Table 1).

[2] https://www.calculator.net/sample-size-calculator.html

[3] This includes model mothers, CBS focus person and community-based volunteer

Evaluation Process Cycle

The evaluation process is described in the diagram below:



Survey Instruments

The quantitative questionnaire had three parts - a household questionnaire for the head of household, questionnaire for a mother or caregiver of under 5 children and health facility questionnaire. The questionnaire design for each consists of two parts, the socio-demographic information and question items designed on the project activities and outcome indicators.

Recruitment, training and data collection process

The field researchers were recruited and deployed from the Yobe State field office, whereas supervisors and data collectors were locally recruited from each of the 10 wards in Bade Local Government Area. A survey team was established consisting of one field Manager, two supervisors and ten interviewers (6 females and 4 males).

A two-day training was given to the survey team at Gashuwa. The training provided to the field Manager enabled them to have a better understanding of the evaluation objective, capacity to train supervisors and interviewers, and to conduct the HH Survey, focus group discussions and key informant interviews.

Data collection and analysis tools

A detailed assessment and question matrix were developed to guide the data collection process and ensure consistency and completeness of information. The matrix was later transformed into the survey questionnaire, KII and FGD guides, which were subsequently verbally translated into local languages for field use.

The questionnaire and guides were applied by well-experienced national field researchers, given top-up training in the specifics of the assignment, data

collection/handling procedures and the use of tools/instruments; overseen by the field/data manager. Data was collected using an electronic data capturing platform – Kobo Toolbox.

KIIs and FGDs were facilitated using pen and paper data collection methods and voice recorded where consented by the respondents. Complete transcriptions of the KII and FGD data were shared by field researchers with data management team in Abuja.

Translation of the field data collected through FGDs and KIIs from local languages to English was performed for the data management team in Gashuwa. Translation was quality checked by another team to ensure the notes matched the transcription and voice records. Translated notes were systematically aggregated and analyzed to develop and strengthen findings and recommendations. Excel, SPSS and Atlas Ti were used to analyze quantitative and qualitative data sets respectively by the Datadrill Data Analyst.

Findings

A total of 345 Head of Households were sampled across the 10 wards in Bade Local Government of Yobe State and Head of HH questionnaire was administered.

Social demographic information

Table 1 shows the socio-demographic information of the sampled heads of household. The result shows that 90% of the heads of households (HHs) were men while only 10% were female headed and more than half (52%) were 45 years and above. The findings further indicated that nearly (97%) of all the HHs were married. Regarding education, about a third receive Quranic education (36%), about a third received higher education such as a university degree (35%), a fourth received secondary education (25%), 2% attended primary school and 3% received no formal education.

In terms of residence status, over 81% lived in an owned or rented house for more than 3 years (table not shown).

Table 1: Socio-demographic Information of household heads

Variables	Frequency (n=345)	Percent
Sex of Head of Household (HH)		
Female	36	10%
Male	309	90%
Total	**345**	**100%**
Age of HH		
20 to 24	7	2%
25 to 29	23	7%
30 to 34	48	14%
35 to 39	85	25%
45 to 49	112	32%
50 and above	70	20%
Total	**345**	**100%**
Disability status		

Disabled	56	16%
Not disabled	289	84%
Total	**345**	**100%**
Marital status		
Married	333	97%
Divorce/Separated	5	1%
Widow	5	1%
Single	2	1%
Total	**345**	**100%**
Highest level of education		
None	12	3%
Quranic Education	125	36%
Primary school education	6	2%
Secondary school education	81	23%
Tertiary education	121	35%
Total	**345**	**100%**

Mothers or Caregivers of under-five characteristics

Mothers or caregivers of children under 5 in the households were asked questions to understand their health seeking behavior, including related to management of childhood illnesses, immunization, family planning and obstetric care. A total of 360 women responded to questions from the households in the community.

Results in Table 2 shows that majority of the mothers or caregivers were still in their youthful age between 25 to 39 years old, and nearly all (98%) were married with either Quranic or secondary school as the highest education completed. In terms of their status as at the time of interview, more than half (55%) were breastfeeding mothers and 29% were pregnant. The result also indicated that about 65% had more than three children.

Table 2: Demographic characteristics of Female Respondents

Variables	Frequency	Percentage
Age		
15 to 19	2	1%
20 to 24	56	16%
25 to 29	114	32%
30 to 34	104	29%
35 to 39	62	17%
40 to 44	0	0%
45 to 49	20	6%
50 and above	2	1%
Total	**360**	**100%**
Status of respondent		
Neither pregnant nor nursing	57	16%
Nursing (breastfeeding) mother	197	55%
Pregnant woman	106	29%
Total	**360**	**100%**
Number of children ever born		

One	54	15%
Two	69	20%
Three and above	230	65%
Total	**353**	**100%**
Marital status		
Divorce/Separated	3	1%
Married	351	97%
Single	3	1%
Widow	3	1%
Total	**360**	**100%**
Highest education completed		
None	17	5%
Quranic Education	135	38%
Primary school education	24	7%
Secondary school education	133	37%
Tertiary education	51	14%
Total	**360**	**100%**

Objective 1
Project efficiency, relevance, timeliness and appropriateness

The evaluation measured the appropriateness and relevance to the community and project participants of the services provided under the project. This assessment involved documents' review, discussions with field staff, local partners and project managers, and discussions with the service providers and community members.

It is clear from table 3 below that the project activities of RIDSCU-5 were timely and relevant to the humanitarian needs of the community.

It was apparent during the discussions with respondents that all healthcare services provided have been well received by them. The services for antenatal and postnatal care have been appreciated by the respondents. It was found from interactions with the Primary Health Centre (PHC) in-charge at the health center in various wards in Bade LGA, that a minimum of 25-30 patients per day were attending the health center - and all the 22 health facilities (100%) provide antenatal, immunizations and family planning services. Some services such as family planning service that includes long-acting reversible contraceptives methods and essential newborn care that were not available at baseline are now available at endline due to the support provided by the project.

REFLECTION BY MAHIRU ABBA

We are very pleased with CARE international, their efforts in seeing our pregnant women and children under 5 hale and hearty is very much appreciated, their presence in our community is a thing of joy. The drugs they give out are very good and they are being given for free, for the health of our wives and children.

During the last training, we were well cared for, courtesy of CARE; we are very much solidly behind them, and we don't want them to leave, not even for the next 100 years. All their efforts are seen and appreciated. With the coming of CARE, women are being sensitized about the importance of going to the hospital, gone are those days that men do not want their wives to visit the hospital or the women being scared to visit the hospital because of high cost of drugs or wasting of time by queuing up; all of these and more have been taken care of by CARE; they have also helped to equip our health centers with drugs thereby making us confident to visit the facility.

I was at Babuje, and I was surprised at the turnout of people who were present. They were being taught about the importance of visiting the facility while pregnant and to avoid giving birth at home. CARE also provided them with the necessary drugs and nutrition (taamua) to ensure the good health of both mother and child. We are not tired of having CARE around in our community as they are always assisting us. They go as far as visiting our women individually to enlighten and educate them through the volunteers about the dangers of not visiting the health facility when necessary.

CARE came at the nick of time to enlighten both men and women about the importance of visiting the health facility; they also discharge their duties without favoritism and do not give out substandard drugs. The coming of CARE has helped placed our community on a completely different level as there has been a lot of changes in the lives of both young, old, men and women alike. Before CARE, our health facility was an eyesore but all that has changed, all thanks to CARE.

Table 3: Relevance and timeliness of project activities

Relevance of Intervention	(n=345)
Very relevant	58%
Relevant	42%
Not relevant	0%
Timeliness of Intervention	
Very timely	58%
Timely	41%
Not timely	1%
Appropriate and Relevant of project intervention	
Very satisfied	54%
Satisfied	46%
Dissatisfied	0%
Neither satisfied nor dissatisfied	0%

Project effectiveness:

The endline evaluation, consistent with the evaluation principles noted above, explored the effectiveness of the CARE RIDCU5 project. The project made remarkable progress towards reducing mortality in under five children through a community-based health systems strengthening approach that ensures that communities receive

a core package of services. Desk review of progress made based on specific project indicators shows that the project surpassed that planned targets (See Table 4):

Table 4: Indicator value

Indicators	Baseline	Endline
Percentage of children who complete their third DTP out of all children who receive their first DTP (*aim to increase baseline figure by 10%)	54.5%	69%
Percentage of children who receive their second dose of measles	10.9%	64%
Percentage of pregnant women and girls who complete at least 4 ANC visits	42.4%	78.1%
Percentage of facilities fully equipped with providers trained to use diagnostic methods as determined by IMCI/iCCM	N/A	90%
Percentage of health care providers aware of/implementing IPC protocols	50%	90%
Percentage of women and girls surveyed who report being satisfied with their service	92.5%	96.1%

Community engagement using CARE's SAA approach, house to house sensitization on infectious disease prevention and treatment, commemoration of special days and outreach services were key factors that led to the achievement of the objectives of the project and contributed to reducing negative impacts related to maternal and child health.

Uptake of services including vaccination services

The project activities also encouraged the uptake of health services and practices among women and children in the community and relevant to addressing their immediate personal and family needs.

> *"The project was very effective because those mothers/pregnant women who have neglected health services are now utilizing the services because of the project"* - **Female FGD Dagona**

Data suggests that the pattern of vaccination of children has changed with a higher percentage (70%) of the caregivers now referring to Primary Health Centers for vaccination compared with baseline information when just 34.6% of mothers reported that their youngest child received immunization and could present their immunization card. This could be linked to the awareness generation of the CBS focus points and better accessibility of the community health centers. During the FGDs, many of the respondents generally chorused that the impact of the project on child immunization has improved the overall well-being in the community.

> *"This project has brought a lot of change and improvement into our community addressing our needs in terms of health services - child immunization which is very important and the fact that children which have been vaccinated and*

healthy, they have low rate of contracting any disease than those who have not been vaccinated" - **Female FGD, Sabo Gari**

"The project has influenced the mothers and pregnant women positively in terms of good health for both the mother and the child, especially the mama's kit and delivery kit [4]given to them" - **KII, Dagona Community Based Surveillance Focal Point (Volunteers)**

The majority of the FGD participants mentioned that the health facility they visited had all the necessary services and facilities to offer them support. In addition, family planning services were provided by all health facilities.

Community Score Card (CSC) Approach

The CARE's Community Score Card (CSC), a citizen-driven accountability approach for the assessment, planning, monitoring, and evaluation of public services. The CSC approach enabled the community members, health providers, and government officials to work together to identify and overcome health coverage quality and equity obstacles.

In one of the supportive supervision visits to health facility - the CARE Pfizer project rehabilitated the water supply system (and is now functioning optimally) which was part of the overall goal of improving IPC at the health facility.

"*Water is life.... We drink it; we use it for all our domestic activities. We appreciate Care International for renovating the water pump for us, while it was faulty; we had to buy water at the rate of 20 NGN per 20 liters jerry can...each household using an average of 12 jerry cans daily. It was difficult for many of us to afford.... now we have water available free of charge*." **Female, Resident of Babuje community.**

The Officer in Charge (OIC) of the health facility expressing his gratitude and excitement said "*We really appreciate Care International's effort in fixing the water supply system. This has brought a great relief to us in the facility as it had become very difficult and almost impossible to maintain minimum levels of hygiene practices in the facility, especially in the labor room, due to the lack of water supply, now whenever we need water, it's readily available, day and night*" **Male -OIC Babuje PHCC.**

An identified challenge included the lack of adequate personnel in some of the remote locations. With increased sensitization and improved health seeking behavior from the community members, most of the facilities with just single personnel are unable to provide quality services as the health providers are stretched beyond their

[4]The contents of the 'mama kit' for new mothers who delivered at a facility included a cloth used as clothing for the mother, bathing soap, and a set of sanitary pads. The contents of the 'delivery kit' for pregnant women and girls who complete at least 4 ANC visits included 20-liter bucket, sanitary pads, bathing soap, a bar soap, a bed cover used during delivery and cloth used as clothing for the pregnant women to wear.

limits and they have to depend on volunteer services of community members either still in training or with any sort of health-related training (whether formal or not).

> *"We really appreciate all that CARE is doing for us through this lafiyayyen yara project and not to sound ungrateful, but I personally will really urge CARE, if possible, to engage some of these our children that have health diplomas, equip them with the necessary training and be paying them some stipends to work at our facilities. This will really go a long way in improving quality of and access to care."* **Kuta Badega-OIC Gabarwa Primary Health Clinic**

In an interview with the MEAL Officer, he further described the CSC approach:

> *"We had community consultations where we heard their voices and opinions. We provided feedback desk and suggestion boxes to hear them and their issues (such as provision of mama kits) were addressed. We do have meetings with the volunteers, model mothers, community leaders and listen to their challenges. The health facilities too were not left out as we engaged with them regarding the feedback (challenges) we got from the communities to listen to their challenges and jointly address them."*

Health seeking behavior

Seeking medical care for sick children is an important aspect of child health. Many interventions were established by the RIDCU5 project to help ensure that children receive adequate care during illness. This included strengthening capacities and providing supplies to strengthen health services including Integrated Management of Childhood illnesses/ Integrated Community Case management (IMCI/iCCM), family planning (FP), Basic Emergency Obstetric and Newborn Care (BeMONC) alongside efforts to improve health seeking behaviors and key health related household practices.

Health practices

This data shows uptake in health seeking behavior over the last three months (**Fig. 1**). The result shows that nearly all (95.8%) the women interviewed had visited the community clinic or hospital. The result further indicated that about 48.7% visited the community facility in the same month that the interview was conducted and about 20.6% the previous month. The increase in appropriate health seeking behavior (evident by the facility visits/utilization of immunization services by mothers/caregivers) has the potential for reducing number of sick children/sickness episodes in children.

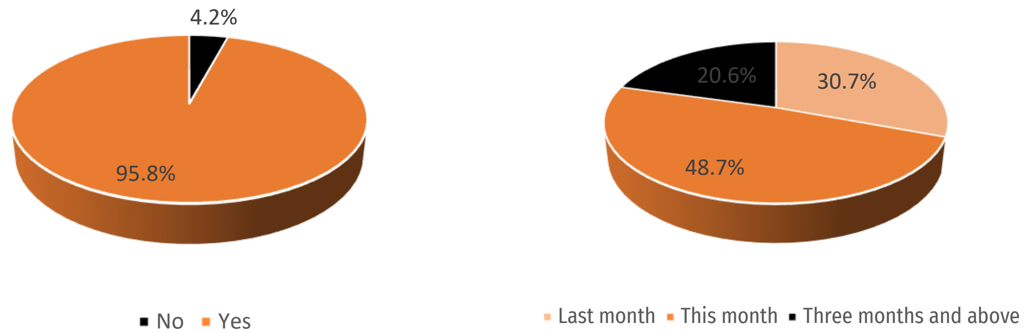


Figure 1: (a) Proportion of women/caregivers who had visited the health facility. (b) Period last visited

The project has also improved the health seeking behaviors of mothers and pregnant women in this community and the referral system played a significant role for pregnant women in accessing quality health care. In an interview with facility head in charge of Sarkin Hausawa PHC, she mentioned that:

> *"Child immunization has really increased as mothers now do bring the children for immunization to the facility. One of the factors that encouraged them is the Mama's Kits been given whenever a child completes certain months of immunization, and also the referral system of pregnant women in the community has greatly improved as the community people are encouraged and are aware of the need to visit the health facility"* - **KII, PHC in charge**

Reasons given for hospital visits

When asked for reasons for visiting the community hospital, figure 2 shows that 43% visited when their child was ill and 40% mentioned that they visited for self-care, these reasons for visiting hospital remains the same at baseline.

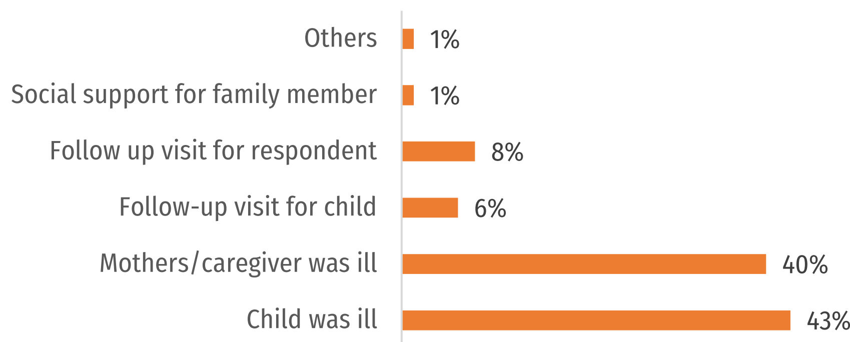


Figure 2: Reasons for visiting the hospital

Community Referral System

Participants in the FGD and KII sessions affirmed the effectiveness of the community referral system.

"The system is effective as the volunteers and model mothers do refer community members and their needs are being attended to" -**FGD CBS/Volunteers Sarkin Hausawa**

"The referral system is very effective, and it functions as per the guidance" - **KII, Dagona Community Based Surveillance Focal Point (Volunteers)**

"Seriously, we had a great referral system in this community since when CARE came especially when they brought their system of their Mama kit, many women or almost all are rushing to health facility in order to deliver" - **KII, Dagona Community Based Surveillance Focal Point (Volunteers)**

Free Healthcare services

Free health care policies aim to reduce the financial barriers that people may experience when trying to access health services. They eliminate formal user fees at the point of service. All the health facilities sampled (100%) mentioned they are providing free health services as supported by CARE/partner[5].

Evidence from the study revealed that through CARE and partner's interventions, the free healthcare service has increased service utilization in line with people's health needs and improved financial protection.

"For maternal services, those health workers really helped when I was pregnant and after delivery. They gave me free anti-malarial drugs for myself, and my baby and vaccinated with my consent. They went as far as going house to house for vaccination and to remind us to always come to the facility whenever we feel sick" ***- FGD, Community Project participant***

"The health workers care for me during pregnancy, the antenatal care and anti-malarial drugs are all free. After delivery, my baby was given the BCG vaccine and I was also given the mama kit for me to take care of my newborn baby" - ***FGD, Community Project participants***

"The family planning and the antenatal services have impact, a very good support for our well-being as mothers in this community. We receive free antenatal drugs, also child vaccination is now accepted even in the community, and parents now understand the usefulness of the vaccine. We like it when routine immunization is provided through home visit. We even go on our own to collect it for our children, the good thing is our children come out strong and healthy though they can have mild fever after the vaccination" - ***FGD, Community Project participant, Dawayo***

"Our service is accessible and affordable. Some services supported by CARE are free" - **KII, Facility In-charge, Zango**

[5] As part of close out, the project has recommended that the government continue to support ways to access free/affordable care.

Patient Satisfaction with Health Care Services

Patient satisfaction is a measure of the extent to which a patient is content with the health care they received from their health care provider. Patient satisfaction is one of the most important factors to determine the relevance of a health care facility in meeting the needs of clients.

Figure 3 shows that generally, the community members that received healthcare services were satisfied with the level of services received during their visit to the community health facility. Nearly all the respondents (96.1%) mentioned they were satisfied with the services received, a slight improvement from the baseline in which 92.5% of respondents reported satisfaction.

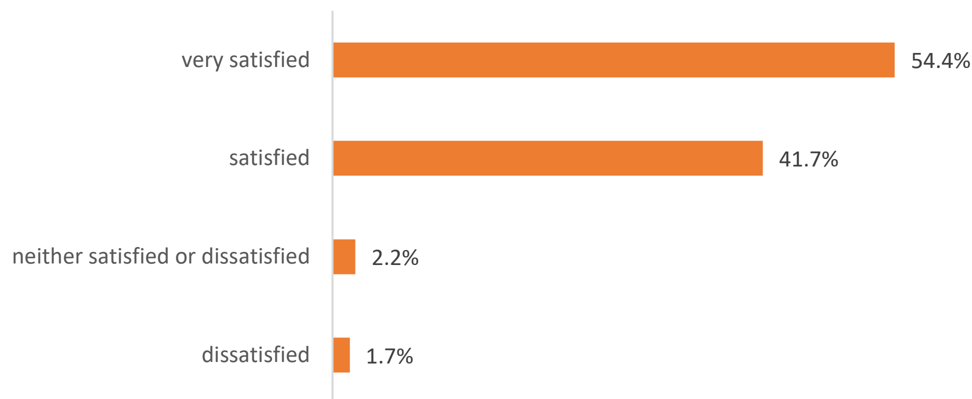


Figure 3: Patient satisfaction with Health Care Services

Healthcare delivery systems have also improved across the health facilities. In an interview with the Head of Facility, Katuzu PHCC, he mentioned that provision of service to the community members has changed positively, and people now have access to quality services and drugs.

> *"The healthcare service is better than what it used to be before without the help of CARE. Usually, the facility was nearly active but the provision of medical supplies and equipment to facility has enabled the facility to operate and function effectively by ensuring good health and better health of the community and the people at large all was because the drugs provided to the people"* - **KII, HEAD OF FACILITY katuzu PHCC**

Basic Emergency Obstetric and Newborn Care (BEmONC)

BEmONC quality is an important element to reduce maternal and children mortality in Bade LGA of Yobe State. The services are provided at the health centers to avert maternal and newborn mortality & morbidity.

A question was asked to understand if the respondents planned to be pregnant for the last/current baby. Figure 4 shows that about 74.2% mentioned that the pregnancy was planned.

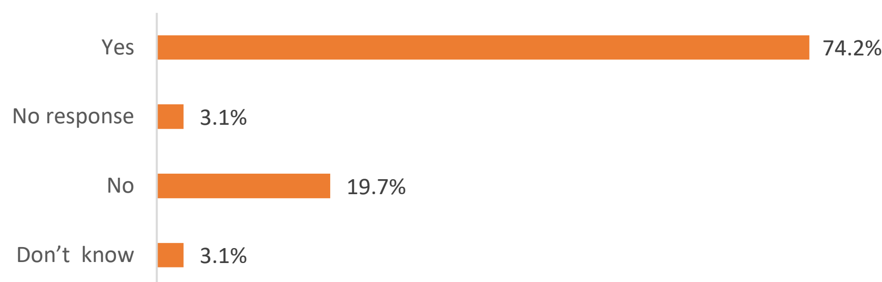


Figure 4: Response as whether last birth or current pregnancy was planned

Of the 19.7 (n=82) that did not plan their pregnancy, when asked why contraceptive was not used to prevent the pregnancy, more than half (54.9%) mentioned that they were not interested in the use of contraceptive while other reasons include side effects and health concerns (Table 5).

Table 5: Reasons for non-use of contraceptive

Non-use of contraceptive for prevention	Percentage
Husband refused	3.7%
Not available	2.4%
Not aware of any modern method	8.5%
Not interested	54.9%
Religion forbids it	1.2%
Want more children	9.8%
Others specify (side effects, health concerns)	19.5%
Total	**100.00%**

Integrated Management of Childhood Illness (IMCI)[6]is an approach that aimed to improve the prevention and management of common childhood illnesses and support children's healthy growth and development. Key components of IMCI include strengthening capacities of health providers, improving the health system and improving health practices at the household and community levels.

At baseline, most of the health workers had not received any in-service training which indicated gaps in knowledge of the most recent approaches to specific service delivery. Findings from the question on whether the health facilities were fully equipped with diagnostic equipment and supplies in line with IMCI/iCCM protocols showed that 70% (7 of 10 sampled facilities) had fully equipped diagnostic equipment and supplies for the management of childhood illness. This shows improvement compared to baseline information where less than 50% of the facilities were fully equipped. Findings further suggested that 90% of facilities have staff that have been trained to use diagnostic methods (Figure 5).

[6]https://www.who.int/teams/maternal-newborn-child-adolescent-health-and-ageing/child-health/integrated-management-of-childhood-illness

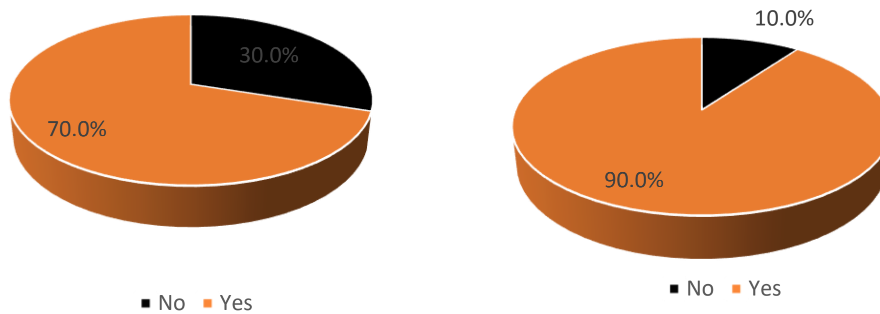


Figure 5: a) Availability of fully functional diagnostic method, (b). Response regarding health workers training

Access to ANC and other services

Antenatal care (ANC) coverage is an indicator of access and use of health care during pregnancy. The antenatal period presents opportunities for reaching pregnant women with interventions that may be vital to their health and wellbeing and that of their infants. Receiving antenatal care at least four times increases the likelihood of receiving effective maternal health interventions during the antenatal period[7].

A question was asked if at least four antenatal (ANC) visits were made for the last pregnancy. Figure 6 shows that 78.1% attended at least four ANC visits during their last pregnancy as compared with 42.4% at baseline.

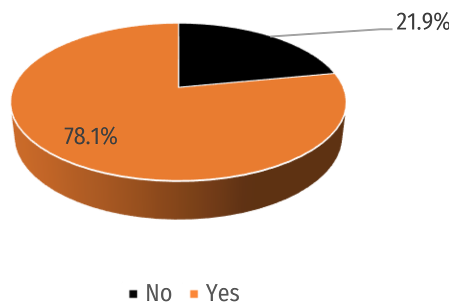


Figure 6: Attendance of at least four antenatal visits

Findings also show that The CARE RIDCU-5 project has brought healthcare closer to the people. The project has changed the previous narrative where pregnant women in the communities have to travel a distance to other villages to receive antenatal care.

> *"The most significant change that happened to me is the accessible antenatal and immunization services. Before I have to go to the nearby village for my*

[7] WHO recommendations on antenatal care for a positive pregnancy experience | | https://www.who.int/publications/i/item/9789241549912

antenatal, but now ''Alhamdillilah'' this project has really helped me a lot, and again whenever my children are sick, I take them to the health facility for proper care" - **FGD, community beneficiary**

"We utilize the family planning services provided by the facility in order to have the number of children we can cater for. Honestly, the project has given us a clear picture of what "family planning" is all about. It is accessible for everyone and also the immunization given to our children has made our children healthier as it protects them from diseases" **- FGD, Community Project participant**

Choice of Child delivery

The birth outcome and quality of life of women and newborn children after delivery are often dependent on place of delivery. Women who deliver in health facilities with access to skilled birth attendants have better outcomes with reduced risk of maternal and neonatal morbidity and mortality compared to those who patronize other delivery locations[8].

Unskilled home delivery is a threat to maternal and child health. In Northern Nigeria, many pregnant women attend antenatal care but opt to deliver at home despite knowing the potential consequences[9]. While 76.1% (274 of 360) mentioned that their last child was delivered at the health facility, 3.6% mentioned traditional birth attendant (TBA) as their choice of delivery respectively (Figure 7). There was a significant reduction in the number of respondents who mentioned they delivered at home from 51.9% at baseline to 20.3% at endline.

SUCCESS STORY FROM BINTU S MAIMADU

"One particular day I took my daughter to the health facility because she was not feeling fine. Right there the health workers were encouraging people to bring their children to the health facility for treatment and to stop giving children (herbal) concoctions at home. They also said there is free medication, that was how I learned about the activities, and I was happy and relieved.

In the past few years, nobody told me to space my pregnancies/children. Unknown to me, whenever I put to bed [delivery], and the next thing is I conceive again, this has made me, and my children look unhealthy and led to suffering.

However, CARE International Project, has helped me through the workers, they advise, counsel, and even show me how to use the family planning methods, I agreed and tried one of the methods and now, I really enjoy the fact that I am able to space my pregnancy, "Alhamdillah"!

I took all that they told me and discuss it with my husband and then commenced it. My children and I are now looking even better, good, and energetic. I am so happy".

[8] Darmstadt GL, Lee AC, Cousens S, Sibley L, Bhutta ZA, Donnay F, et al 60 Million non-facility births: Who can deliver in community settings to reduce intrapartum-related deaths? Int J Gynaecol Obstet. 2009;107(Suppl 1):S89–112

[9] Abubakar S, Adamu D, Hamza R, Galadima JB. Determinants of Home Delivery among Women attending Antenatal Care in Bagwai Town, Kano Nigeria. Afr J Reprod Health. 2017 Dec;21(4):73-79. doi: 10.29063/ajrh2017/v21i4.8. PMID: 29624953.

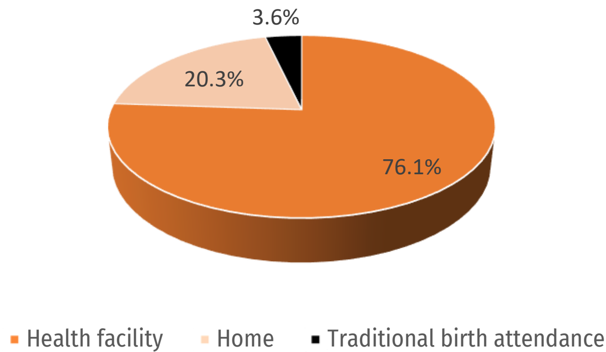


Figure 7: Place of delivery

Of the percentage that delivered at home and supported by a TBA (n=86 of 360), the evaluation further determined their reason for their choice of delivery. Figure 8 shows the percentages of the self-reported reasons for not delivering at a health facility. It is clear that the majority of the women in Bade LGA were not aware of the significance of health facility delivery as they described it as not necessary. More than a quarter of the women mentioned it as not customary. Apart from these, transportation and high expenses were reported by a significant proportion of the respondents. However, through the CARE RIDCU5 free service delivery program and provision of mama kits, and free medicals, these have reduced the effect of medical cost/expense on the project beneficiaries.

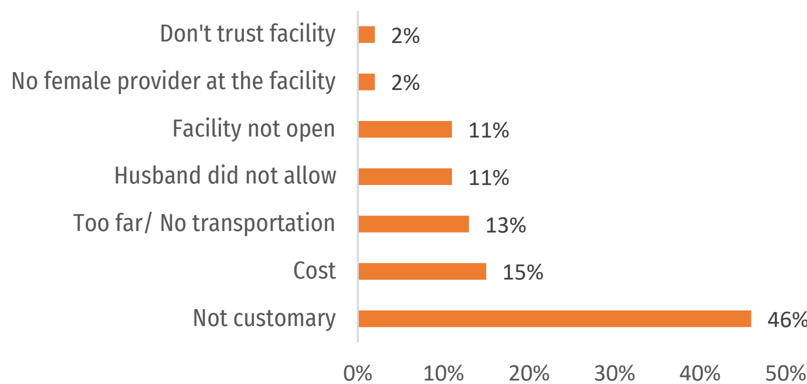


Figure 8: Self-reported reasons for not delivering at health facilities

Mode of delivery

Mode of delivery is one of the issues that most concerns obstetricians. Findings show that nearly all (96.7%) had their last delivery through normal vaginal process (figure 9).

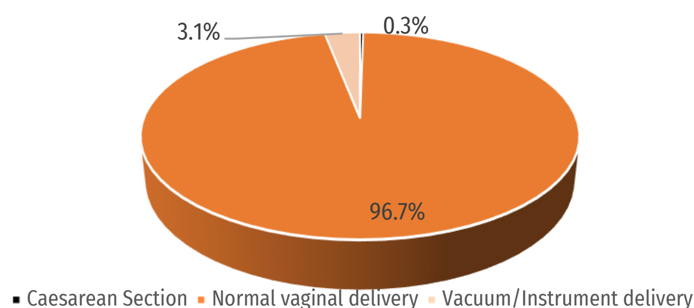


Figure 9: Mode of delivery

In terms of who assisted in delivery, figure 10 shows that 77.2% were assisted by a skilled provider, including 68.9% were assisted by Nurse/Midwife and 8.3% were assisted by a doctor.

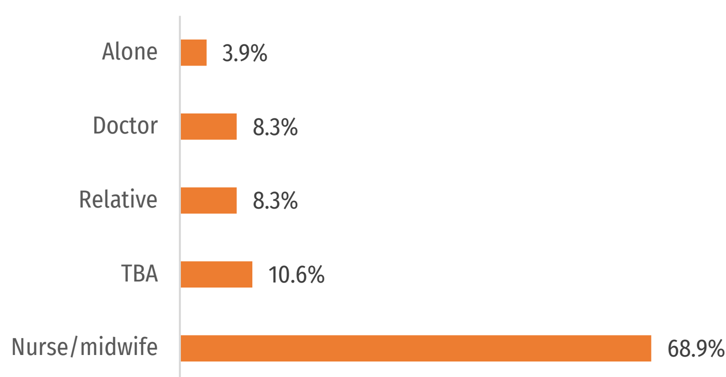


Figure 10: Who assisted in delivery

Care received during child delivery

Cord care is the series of steps applied in handling of the umbilical cord after delivery of the newborn. If not meticulously carried out, it contributes significantly to newborns' risk of infection and mortality[10].Table 6 shows that Scissors (69.4%) was generally used to cut cord after delivery at health facilities in Bade LGA and 89.7% mentioned that the instrument was sterilized before use while cord clamp (61.9%) was generally used to tie the cord followed by string. In terms of what was used for cord care, Nigerian government recommends the use of Methylated spirit or chlorhexidinec solution for cord care[11], the findings show that 41.7% used oil while 35.8% used Methylated spirit.

Table 6: Health related practices

Variables	Percent (n=360)

[10] Afolaranmi TO, Hassan ZI, Akinyemi OO, Sule SS, Malete MU, Choji CP, Bello DA. Cord Care Practices: A Perspective of Contemporary African Setting. Front Public Health. 2018 Jan 31;6:10. doi: 10.3389/fpubh.2018.00010. PMID: 29445723; PMCID: PMC5797764.

[11] Nigeria Federal Ministry of Health (FMoH). *Save the Children, Saving Newborn Lives in Nigeria: Newborn Health in the Context of the Integrated Maternal, Newborn and Child Health Strategy*. 2nd ed Abuja: JHPIEGO; (2011). p. 41–7

What was used to cut the cord after delivery?	
Blade	29.2%
Scissors	69.4%
Other	1.4%
Total	**100.0%**
Was the material above clean (sterilized)?	
No	10.3%
Yes	89.7%
Total	**100.0%**
What was used to tie the cord?	
Cord clamp	61.9%
Rubber band	11.9%
String	22.8%
Others	3.3%
Total	**100.0%**
What was applied on the cord stump?	
Cow dung	0.3%
Iodine	1.9%
Methylated spirit	35.8%
None	18.3%
Oil	41.7%
Others	1.9%
Total	**100.0%**

Through the Pfizer activities, a Community Health Extension Worker (CHEW) who worked at Azam-Kura Primary Health Clinic (one of the facilities in the rural area with "single health personnel") in Dawayo Ward of Bade LGA, performed all aspects of service provision including antenatal care and delivery of pregnant women (ideally to be performed by a midwife and/or nurse) with on the job learning experience. He participated in the BEmONC training organized by the project and had this to say (See Box 3).

Box 3 - Success Story

"There was a day that a recently delivered woman was brought to the facility convulsing on an occasion when CARE Clinical and Health Promotion officers were in the facility for supportive supervision. They quickly helped in examining the woman, supported me to make a diagnosis of Postpartum Eclampsia, administered pre-referral treatment and immediately referred her to a secondary facility where she received appropriate treatment and is currently doing well at home. Afterwards, they took time to teach me about Pre-eclampsia and Eclampsia and what to do when faced with such cases. This was very helpful to me as I wouldn't have known what to do considering my limited training, as I am not a midwife. A while after, I encountered another client; a young pregnant mother at term who presented with symptoms of labor and on examination, was confirmed to be in the early stage of labor. I counseled and reassured her and told her to return when labor was more established. The next day she returned with more severe symptoms and a blood pressure of 150/100 mmHg, pedal oedema: +++, and a urine dipstick showing proteinuria of +++. I was able to quickly identify this as a major sign of pre-eclampsia and immediately referred her to a larger facility where she delivered a healthy baby girl, thanks to the BEmONC training and continuous on the job coaching I had received from the CARE team. This has impacted me greatly as it's the first of its kind since I have been heading this facility and I can really boast of a betterment in the quality of care I now provide to pregnant women". **Habibu Nasiru Gambo, Male**

Delivery care services satisfaction

Satisfaction with delivery care services is a means of secondary prevention of maternal mortality, since satisfied women may be more likely to adhere to healthcare providers' recommendations[12]. Satisfaction is defined as the state of pleasure or contentment with an action, event or service and is determined by clients' expectations and experiences. Maternal satisfaction with the services provided during delivery has been recognized as a critical indicator of the quality of a healthcare system.

A question was asked about respondents' level of satisfaction with ANC and post delivery services received, figure 11 shows that nearly all (99.3%) were satisfied with the quality of ANC and post-natal services received. This is a slight improvement from the baseline wherein 92.5% of respondents mentioned that they were satisfied with the healthcare services received.

"We are satisfied because it met our needs, and we are treated with respects and our children and women are healthy. Our complaints and opinions are being received and addressed"

-**KII, Community Leaders, Sarkin Hausawa**

[12]World Health Organization. *WHO global strategy on people-centred and integrated health services: interim report* . Geneva, World Health Organization; 2015

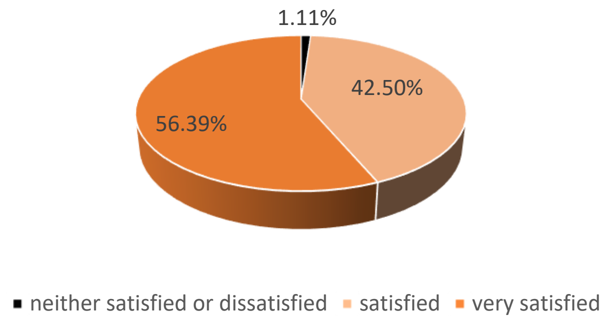


Figure 11: Level of satisfaction with ANC and post-natal services

Family planning

The Nigerian government recognizes that increasing access to family planning services is crucial to improving maternal and child health, reducing poverty, and promoting economic growth[13]. While a considerable number of women mentioned to have used family planning before, there are still knowledge and information gaps.

Knowledge status of participants

Compared to baseline of 51.1%, about 81.4% of the respondents mentioned to have ever heard of family planning before (figure 12) which shows a significant improvement. The result in figure 13 indicated that injection topped ever used family planning methods followed by pills. It is important to note that ever used does not translate to current use. Most of women in their reproductive age group know little or have incorrect information about family planning methods. Even when they know the name of some of the contraceptives, they do not know where to get them or how to use them.

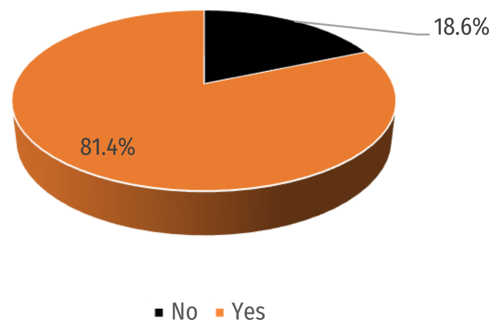


Figure 12: Ever heard of family planning?

[13] https://www.fp2030.org/nigeria/

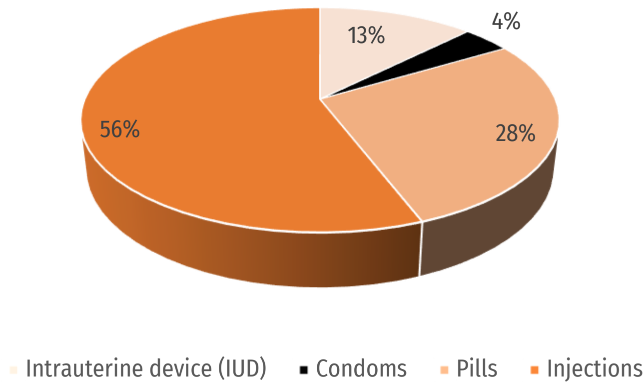


Figure 13: Method ever used (n=193)

Current use of family planning method

To further understand the current family planning methods the respondents were using, figure 14 shows that only about 41.1% of the respondents are currently using family planning (FP). The result in figure 15 indicated that injection topped ever used family planning methods followed by pills. The majority of the respondents also showed satisfaction with the level of FP services received.

"Honestly we appreciate a lot because Care International bring a lot of changes, including the opinion of women and creating awareness to our society because now women are coming for ANC in early pregnancy and they're using ANC drugs timely as if they exhausted drugs they use to rush to collect another continuously some they even buy in the chemist because they satisfied with that which ANC was given to them.

We have nothing to say rather than to thank for the CARE International because in the olden days women are not going for ANC with their early pregnancy until they reach five to six months but now Care International has overcome this problem. Care International helped us in tackling the problem of women and underage children, Care International encourage women for going to the hospital for ANC, Immunization, family planning and delivery because they provide a Mama kit for women" - **RH Coordinator - Yobe State Management Board**

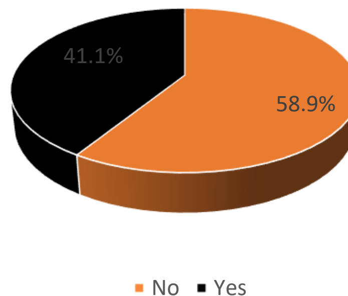


Figure 14: Currently using a family planning method

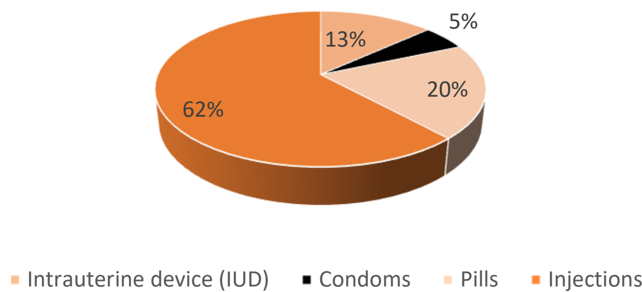


Figure 15: Current family planning method

One of the community beneficiaries expressed her satisfaction on the family planning service received in the community primary health center:

"I truly enjoy the family planning services; it's not harmful as we thought. It has really helped us and our children in terms of breastfeeding and spacing of pregnancy. About antenatal care, whenever I am pregnant, PHCC is the place I come to as I feel more relaxed, and it is comfortable for me to come for my checkup and other services. I like the services they give me. I am very much okay with the vaccination of my children and the health facility. My husband also encourages and reminds me about the remaining (immunization) dosages for the children" - **FGD, Community Project participant, Dawayo**

Immunization

The World Health Organization stated that immunization is one of the most important public health interventions and cost-effective strategies to reduce child mortality and morbidity associated with childhood infectious diseases.

According to the Nigerian Federal Ministry of Health definition, a child is considered fully vaccinated if he or she has received a BCG vaccination against tuberculosis; three doses of DPT to prevent diphtheria, pertussis (whooping cough), and tetanus; at least three doses of polio vaccine; and one dose of measles vaccine. All these vaccinations should be received during the first year of life, over the course of five visits, including the doses delivered at birth. According to this schedule, children aged 12–23 months would have completed their immunizations and be fully immunized. To keep track of the delivery of these immunizations, Nigeria also provides parents or guardians with a health card on which each dose is recorded.

SUCCESS STORY FROM Hadiza Zubairu

I heard about the program from my neighbor, and I went to the health facility to enjoy the services.

There is a positive change because before, we don't go for antenatal but now we do, and we appreciate that. Also, our children are also vaccinated now unlike before when we do not take them for immunization.

Table 7 shows that 82.5% received immunization by card sighted, however 11.4% self-reported that the child received vaccination while less than 7% do not know if the child received immunization or not.

Table 7: Child ever received immunization?

Variable	Percent (n=360)
Yes, card sighted	82.50%
Yes, card not sighted	11.39%
Don't know	1.11%
No	5.00%
Total	**100.00%**

Immunization coverage

At baseline, 34.6% of mothers reported that their youngest child received immunization and were able to present the child's immunization card. Figure 16 showed an improvement over the baseline data of about 63.2% fully immunized, following the immunization guideline (figure 17). Table 10 further shows vaccination coverage by vaccine type.

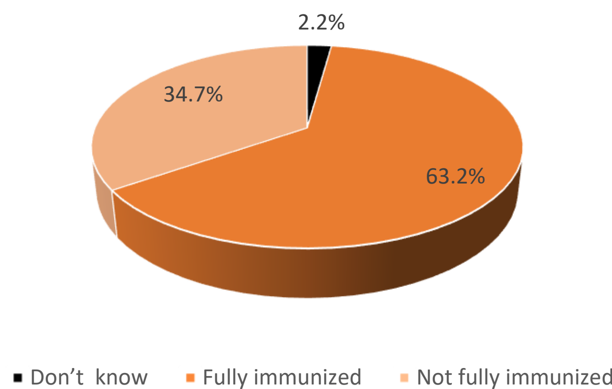


Figure 16: Immunization coverage confirmed by card

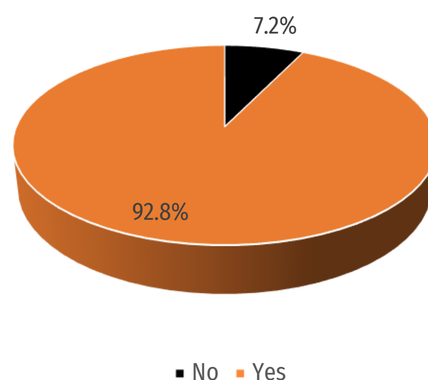


Figure 17: Immunization received by following guideline

Table 8 shows that mothers or caregivers of children under five were encouraged to follow the immunization guideline mostly by the health workers, followed by model mothers and family or friends.

Table 8: Who encouraged you to follow immunization guideline?*

Who encouraged you to follow immunization guideline?	Percent (n=257)
Friends, family, social circle encouraged me	26.90%
Health care worker encouraged me	68.50%
Model Mother encouraged me	27.60%
Community-based Surveillance Focal Point encouraged me	10.10%
I know it's good for my child/I encouraged myself	19.10%

**Multiple response*

Table 9: Vaccination coverage confirmed by card

Vaccination	Percent that received vaccination (n=360)
BCG at birth	98%
Hepatitis B at birth	83%
Hepatitis B at 6 weeks	74%
Hepatitis B at 14 weeks	71%
OPV at 6 weeks	84%
OPV at 10 weeks	79%
OPV at 14 weeks	79%
DPT at 6 weeks	72%
DPT at 10 weeks	71%
DPT at 14 weeks	69%
Measles at 6 months (1st dose)	68%
Measles at 9 months (2ND dose)	64%
Yellow Fever at 9 months	69%
Vitamin A at 9 months	65%
Vitamin A at 15 months	60%

Reasons behind parental refusal of vaccines (n=22)

Parental refusal of vaccines is a growing a concern for the increased occurrence of vaccine preventable diseases in children. These reasons vary widely between parents, but they can be encompassed in 4 overarching categories. The 4 categories are religious reasons, personal beliefs or philosophical reasons, safety concerns, and a desire for more information from healthcare providers.

Of the 6.1% (22 of 360) that refused their child vaccination, findings show that fear of side reaction, wrong idea about contradictions, rumors and unaware of the need to return for 2nd or 4th dose are the top reasons for not taking vaccination.

Reasons behind parental refusal of vaccines
Unaware of the need for immunization
Unaware of the need to return for 2nd or 3rd dose
Immunization unknown
Fear of side reaction
Wrong idea about contradictions
Postpond until another time
No faith in immunization
Rumors
Place of immunization too far/inaccessible
Time of immunization inconvenient
Vaccinator absent
Vaccine not available
Mother too bisy
Family issues
Mother ill
Child ill - not brought
Child ill brought but not given immunization
Long waiting time

Health facility implementation of Infection Prevention and Control (IPC)

Infection prevention and control (IPC) is a practical, evidence-based approach preventing patients and health workers from being harmed by avoidable infections. Effective IPC requires constant action at all levels of the health system, including policymakers, facility managers, health workers and those who access health services.

A question was asked if Infection Prevention and Control (IPC) protocol was implemented in the CARE-supported facilities. Figure 18 shows that 90% of the facilities implemented the IPC protocol, a significant increase from 50% of the facilities at baseline that said they were aware of IPC based on Standard Operating Procedures (SOP). These protocols include use of hand hygiene before and after all patient contact, the use of personal protective equipment, which may include gloves, impermeable gowns, plastic aprons, masks, face shields and eye protection, safe use and disposal of sharps, use of aseptic "non-touch" technique for all invasive procedures, including appropriate use of skin disinfectants, routine environmental cleaning and waste management.

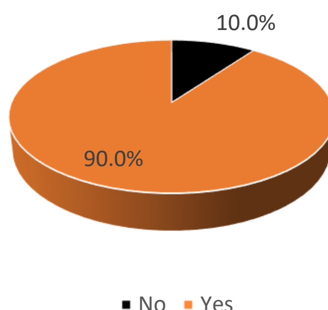


Figure 18: Implementation of IPC Protocol

Project Efficiency

In both the design and implementation of the project activities, CARE International RIDCU5 applied approaches to ensure that the project was efficient. The project design allowed the RIDCU5 project to train and work with community members as volunteers and adequately build their capacity and work collaboratively with local partners and relevant stakeholders. The use of the community volunteers enabled the project to increase community mobilization and the reach of the project within the available budget while reducing cost.

Through the community referral system, many women were reached through the activities of the community volunteers.

"Seriously, the referral system in this community has been effective. With the MAMA KIT introduced by the CARE Project, many women or almost now go to health facility in order to deliver." - **Community Volunteer, Zango**

"Community volunteers have contributed immensely to the identification of sick people within the community and referring them to the health facility. The community volunteers also engage in tracking of pregnant women and eligible children for immunization of under five children in the facility" - ***KII, Facility-in-charge***

In spite of these achievements, the project was challenged by flooding. This resulted in some communities not being reached.

"The program was implemented successfully, and the target was met. However, there were changes made due to the flood and we were unable to reach those facilities/communities affected by the flood" - **KII, Life Help's Initiative**

In order to improve the efficient process of future projects, it was recommended that:

"We recommend that those community that have not be reached, it would be great to select community volunteers from this community" - **KII, Life Help's Initiative**

Objective 2

Assessment of CARE International and Yobe State Primary Health Care Board Collaboration and effect on (under the Ministry of Health) Project participants and other stakeholders.

The evaluation also assessed the collaboration between the CARE International RIDCU5 project and the Yobe State Primary Heath Care Board and its effects on the project participants, communities and other stakeholders.

The importance of effective collaboration for a project's success cannot be overstated. When teams collaborated, they unlocked a higher level of creativity, innovation, and problem-solving prowess that simply is not achievable when individuals work in isolation. Moreover, collaboration has a ripple effect, enhancing team dynamics and fostering a positive work environment.

Findings from the study have shown the RIDCU5 CARE International project has had a positive impact on the community and on the lives of the people of Bade Local Government. In an interview, the Reproductive Health Coordinator of the Yobe State Primary Health Management Board mentioned that the main reason for the achievement of the project was the involvement of the community members in the project implementation project process. In his word:

"The collaboration/teamwork between Care International and Bade local Government is the main reason for this great achievement. Care International involved both the community leaders and members including teachers, health personnel, religious leaders etc. We thank God for these great improvements under this collaboration which CARE International brought to us. Surely, we are so excited for these opportunities, we are so grateful to Care International in Bade local Government" - **RH Coordinator**

"T*he program worked effectively with CBOs, community leaders, women group, religious leaders, etc., it has worked well based on collaboration with them"* -**RH Coordinator**

Not only that, but he also mentioned that the collaboration between CARE International and other stakeholders contributed efficiently and timely to coordination of logistic activities and processes of the project.

"This prestigious collaboration between Care International and our leaders is going well, because they are following the standard and guidelines as stipulated by the organization, Care International they use to hold a meeting with the members on how to handle and deliver their duties" - **RH Coordinator**

The project also worked collaboratively with other stakeholders to create awareness to improve the health seeking behavior of the community members.

"The health seeking behavior was poor before Lafiyayyan project intervention, but this has significantly improved with the support of community Volunteers (CBS focal points), who created awareness using behavior change communication approach" - ***KII, Facility In-charge, Zango***

"Care International collaborated with the teachers, health personnel, community leaders and this helped increase awareness and utilization of ANC services by community members to be aware of going for ANC" - **RH Coordinator**

"This program really influenced child immunization in the sense that mothers only take first dose of the vaccine but now they take a complete dose of the immunization and even the mother models do go for sensitization to remind them of the next visit for the immunization" - **KII, Progam Manager - Life Helper's Initiative**

Through CARE International RIDCU5 project collaborative approach, the community has benefited from an improved health care delivering system. Table 11 shows that 91% of the project participants mentioned that they were satisfied with the care provided by CARE and partners. Overall, the project efforts had made significant change in the community (Table 10).

Table 10: Project Impact

	Frequency	Percent
Are you satisfied with the service provided to you by the CARE/or partner?		
Satisfied	314	91%
Not Satisfied	31	9%
Total	345	100%
Overall, did the relief effort make any significant impact?		
Yes, significant impact has been made	309	90%
No significant impact has been made	36	10%
Total	345	100%

"The referred system is effective as the community volunteers use to conduct house to house visit in search of health care service do to one reason or the other educated them in health socking behavior and refer to the health facility" - **KII, facility in-charge, Zango**

"Community volunteers have contributed immensely to identification of sick people within the community and referring them to the health facility. In addition, they engaged in defaulter tracking of pregnant women and eligible children for immunization of under are children in the facility" - **KII, facility in-charge**

Through their meetings, the project impacted the community greatly because the health services were made accessible to everyone, hence child immunization are utilized as well by the mothers **(Program Manager, Life Helper's Initiative).**

Apart from the community volunteer - community based surveillance volunteers were trained to detect and report signs and symptoms of potential diseases, health risks and events, and support in community actions and response of local health authorities.

A community-based surveillance volunteer during an interview disclosed that "*We immediately reported the outbreak (Cholera) to the health facility in charge for him to know what is going so that he will take urgent action, and we shared the information with others. Taking samples of outbreak, identifying the source outbreak and reporting of outbreak through appropriate channel to immediately respond to the outbreak (intervention).*"

Evidence from the interviews suggested the community volunteers have worked to influence mothers' health seeking behavior and encouraged caregivers to visit the hospital for essential health services, highlighting that they will be free of charge and the mama kits that are available to pregnant women who deliver their babies at the health facility.

"Our services are free, and the behavior of mother and pregnant women in the community – they hate sitting and waiting in facility, and this project influenced them by giving them the free drugs and mama kits. Some they even tell others what they received in the facility, so this gift encourages them" - FGD **Community- Based Surveillance Focal Points, Sabon Gari**

"Community volunteers are readily doing a good job because they counsel and encourage pregnant mothers and parents of under 5 children to visit the hospital. They help them understand the importance of their health and teach, sensitize them thus making them understand what the Lafiyayyan Yara Project is all about. Due to training given to the volunteers, they do refer the community members to the health facility" - **KII, Facility Head (in charge) Sarkin Hausawa**

Objective 3

Assessment of the impact CARE's community engagement and accountability approaches on maternal and child health behaviors and service provision at health facilities

CARE's signature approach to gender norm transformation is Social Analysis and Action (SAA), a facilitated process through which individuals explore and challenge the social norms, beliefs, and practices that shape their lives and health.

Community engagement was key to the success of the RIDCU5 project community level capacity building and the engagement of community-based volunteers to improve maternal and child behavior though the referral system and creating awareness in the community. Training of change agents such as Model Mothers, CBS Volunteers who were important element in the RIDCU5 project community-based health interventions.

Findings show the impact of the community-based volunteers in improving maternal and child health behavior and service provision. Their tasks and activities included specific maternal health activities such as follow-up of pregnant women, providing education on danger signs, risk factors, and birth preparedness plans, counseling, to facilitate referrals and advocacy to influence or demand better obstetric care or health services[14]:

"As a volunteer, I had that capacity of influencing many community members to come to the facility for their health services or for their children" - **FGD, Community Volunteer**

"The community volunteers really did a good job to sensitize the community on the need to visit the health facility for treatment and also for pregnant women not to give birth at home." **- KII, Facility Head, PHCC Katuzu**

"Before this project, the facilities were faced with many challenges regarding equipment and drugs, which was very annoying to me as volunteer. But now as CARE INTERNATIONAL AND PARTNERS came, they helped in so many things like drugs, the kit and much more. Even the level of our social interactions with people has changed. In the sense that, we have mutual understanding with community members unlike before" - **FGD, Community Volunteer**

During an interview with the MEAL Officer, he described how the SAA approach has helped in sensitizing the community members on the norms and health the challenges affecting women. The approach was also developed to address these challenges. Some of the negative social norms were about family planning.

"The first negative norm was the issue of family planning as the women don't believe in it. They were so scared to discuss their issues, so we sensitized them on the importance of such discussions and the issue of a woman being attended to by a male doctor that was rejected by them before became acceptable though not by all. We sensitized then and there was a great improvement" - **KII, MEAL Officer**

Through the activities of the community-based volunteers, the health seeking behaviors of mothers and pregnant women in the community has changed as women can now access quality health services in primary health centers:

"The project has influenced the mothers and pregnant women positively in terms of good health for both the mother and the child, especially the mama's kit given to them" - ***FGD, Community based volunteer***

[14]Lankester T: Setting up community-based health program: A practical manual for use in developing countries. 2000, London: McMillan Education Ltd,

"As a community volunteers, we ensure that we create awareness and sensitize the mother and pregnant women on child illness" - ***FGD, Community based volunteer***

"Women before don't attend the ANC but now they do and immunization attendance section level of infection in the community have decreased drastically, hence delivery at home have decreased as well" - **KII, Program Manager, Life Help's Initiative**

The SAA engagement approach had helped in transforming existing social norms that negatively affect maternal and child health in the community. The application of various substances to the freshly severed cord is a common traditional practice in the community, women not taking their first son to the hospital and for men, support was lacking. In an interview with the Yobe State Primary Health Management Board, RH coordinator, it was gathered that the project has stopped these practices among women:

"It influenced social changes in mothers and children, most especially the bad ones to good practice e.g a woman not taking her first son to the facility. Through creation of awareness, it has stopped some practice of remedies in certain disease condition e.g putting a cow dung or toothpaste into the child umbilical cord" - **RH Coordinator**

Supported by the community volunteers in discussions with communities, the project created awareness for hospital delivery by discouraging home delivery and for mothers to bring their children for some preventable diseases.

Other achievements the approach led to

a) Increased awareness creation for mothers/caregivers to attend antenatal care and educate them on family planning services and immunization.
b) The general attendance for antenatal and other health related services improved due to the awareness created.
c) Early reporting of complicated cases, more especially Post-Partum Hemorrhage (PPH)
d) Reporting of childhood diseases such as whooping cough, measles, diphtheria etc.

Project Sustainability

In line with the evaluation matrix, the assessment of the sustainability criteria focused on 1) ability of partners to sustain the key program Outputs and Outcomes, 2) the development of effective exit strategies, and 3) the contribution of capacity development to sustain program results.

Involvement of community volunteers assisted in the community ownership of the project. At present, community volunteers and community leaders, who benefited from the training conducted by CARE International, are engaged in community mobilization and sensitization and awareness creation of community members on

various aspects of the project. Respondents reported that through the knowledge gained from CARE international, they were able to strengthen their cooperation among each other.

The project has also built the capacity of the local partners and community members in a sustainable way.

"The project has built the capacity of our community members to identify child illness, make referrals and this knowledge will help to continue the project activities" - **KII Community Leader, Dagona**

"The program has helped us and the volunteers because even when we are not around, the volunteers will continue with sensitizing the women because the impact has been seen already" - **KII, Life Help's Initiative**

The project impacts through capacity building, involvement of local community members for community volunteers and implementation collaborations were major motivations for partners to continue playing these roles even after project closure.

The weaknesses, however, remain human resources, which do not allow them to carry out activities requiring more substantial financial resources.

"This project should not end known because of huge gap that will be left, in terms of continuous capacity building for health workers, procurement of drugs and equipment for health facilities in the LGA" - **KII Facility in Charge, Zango**

The Reproductive Health Coordinator further mentioned that *"while we don't want the project to end, we will continue to work with the community volunteers to sustain the gains of the project."*

In terms of the mechanism put in place to sustain the key program outputs and outcomes these include:

- Training and creating awareness to the health workers and volunteers.
- Government support to continue to supply essential drugs and consumables.
- Regular supportive supervision

Safety and safeguarding

CARE's Complaints and Feedback Response Mechanism

The project activities were guided by protection principles; including 'Do No Harm,' equal access to impartial assistance and services, accountability to beneficiaries, participation, and empowerment.

During community awareness meetings, project information, including objectives, is shared with beneficiaries, as well as information about how to provide feedback. In line with the Core Humanitarian Standard (CHS), Feedback Response Mechanism (FRM) was made available to project beneficiaries.

Information from table 12 shows that the Feedback Response Mechanism was very responsive as nearly all (97%) were satisfied with the responsiveness of the feedback mechanism.

There was clear that the CARE Pfizer project provided Feedback Accountability Mechanism (FAM) for the community members/project beneficiaries' stakeholders to provide feedback or raise complaints about the project intervention including through the citizen- driven accountability using CARE Community Score Card approach.

Top FAM in the community include, community meetings (35%), through suggestion box (20%) and volunteer monitoring visit (16%) and 86% mentioned that their complaint/feedback were adequately addressed through these channels (Table 11).

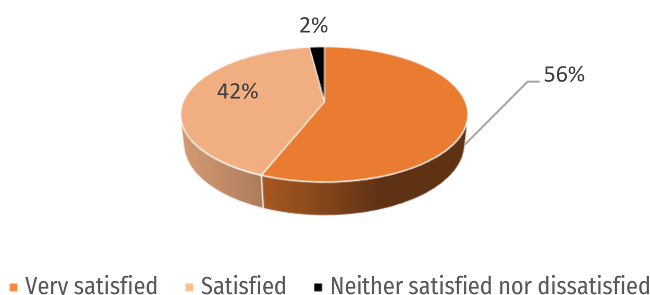
Table 11: Feedback mechanism

Responsive to feedback & complaint	n = 345
Very satisfied	54%
Satisfied	43%
Dissatisfied	1%
Neither satisfied nor dissatisfied	2%
Total	**100%**
Which Complaint and feedback mechanism exist in your community?	
Suggestion Box	20%
Community leader	19%
Feedback Desk	6%
Community Meetings	35%
Volunteer Monitoring Visit	16%
Focus Group Discussions	3%
Toll Free Number	0%
Radio Stations	0%
Total	**100%**
Complaint and feedback addressed?	
Addressed	86%
not addressed	14%
Total	**100%**

It was evidenced that the project beneficiaries were treated with dignity and respect through their involvement in the project activities and no incident of sexual exploitation or abuse was recorded. The result in Figure 19 shows that of the number respondents that mentioned they received assistance from CARE/partners (n=218; 200 men; 18 women), nearly all (99%) suggested that the assistance received mentioned that their rights were respected, this was also supported from the FGDs participants:

"Alhamdillilah! It's appropriate and relevant to needs, respectful of our rights, this program also helped reduce many risks, and as well respect to our complaints and feedback that we have" - **KII, Community leader, Katugu**

"CARE International has been a Saviour, we all like what they offered to us respectfully, responsive to all feedback. My community people are ever willing to participate in joining hands together to see that they have done justice to the providers, caregivers" - ***KII, Community leader Katuzu***



▪ Very satisfied ▪ Satisfied ▪ Neither satisfied nor dissatisfied

Figure 19: Rights being respected

Objective 4
Key lessons learned during the implementation of the program, assess what worked and recommendations.

The evaluation documented lessons learnt during the program implementation.

Lessons learned

The following were some of the lessons learned from the implementation of the RIDCU5 project:

- Improvement in the quality of services resulted in increased service uptake, thus stretching the available human resources. Hence, the need for deployment of additional human resources (service providers) to the health facilities and adequate supplies of materials and equipment in order to meet up with the expected surge in demand.
- The use of CBS volunteers contributed significantly to the success of the project through capacity building to identify childhood illness and make referral to health facility.
- The door-to-door sensitization improved the health seeking behavior of mothers and pregnant women of under five in the community.
- The CARE's SAA approach played a significant role in changing the negative social norms related to family planning thereby improving maternal and child health.
- The capacity building of community volunteers to identify child illness at an early stage and make referrals was an excellent approach.

- The project collaboration with relevant government agencies such as the Yobe State Primary Health Board, Community leaders and local partners was pivot to the project success.
- Implementation of the project through a community structure also supported the buy in and support from community members.

Conclusions and recommendations

Conclusions

The evaluation has shown that the implementation of the CARE International "Reducing Infectious Disease among Children under Five (RIDCU5)" was delivered effectively, efficiently, relevant, and timely in meeting the needs of the Project participants and community.

Findings from the study have shown that the RIDCU5 project has had a positive impact on the community and lives of the people of Bade Local Government. The project also worked collaboratively with other stakeholders to create awareness and improve the health seeking behavior of the meeting of the community.

Community engagement was key to the success of the RIDCU-5 project through capacity building and engagement of community-based volunteers to improve maternal and child behavior though the referral system and creating awareness in the community. Training of change agents who are commonly known as community volunteers or peers is an important element in the RIDCU5 project community-based health interventions.

Findings show the impact of the community-based volunteers in improving maternal and child health behavior and service provision. Their activities which included follow-up of pregnant women, providing education on danger signs, risk factors, and birth preparedness plans, counseling, to facilitate referrals and advocacy to influence or demand better obstetric care or health services contributed significantly to increased uptake of services in the health facilities.

The community-based volunteers were instrumental to the achievement and success of the project, just as community volunteers were to RIDCU5's success in improving healthcare behavior, use of health facilities, and increasing routine immunization knowledge, coverage, and uptake.

Recommendations

The following recommendations were made based on the evaluation findings to strengthen healthcare service delivery:

- Life Helper's Initiative should continue providing technical support to the immunization program in Yobe State
- The Immunization program should ensure that all children are vaccinated on time through community sensitization program
- The Yobe State Primary Health Care Management Official and partners to continue to conduct supportive supervision to ensure adherence to the

immunization schedule to ensure the best possible protection against child dangerous diseases

- The Yobe State Primary Health Care Management should continue the support the provision of free medical essentials and consumables to the Primary Healthcare Center
- Community Health Extension Workers (CHEW) should support community leaders to mobilize eligible children for timely vaccination, conduct defaulter tracing, and monitor infant immunization status in their villages.
- The transition plan for the project must give a prominent role to community volunteers. They have and will continue to have a major influence in supporting routine immunization and maintaining trust in the primary healthcare system at community level.
- The government (Ministry of Health) should be committed to the activities of the community-based volunteers to sustain the gain of the project.

Annex

Distribution of study sample size

		FGD		Key informant interview				
Ward	Survey	Community member	Community Volunteer/ Community Health workers	Care staff (Project Manager and MEAL Staff)	Community leader	Local partner	Yobe State Primary Health Management Board	Health facility Lead
Dagona	38	1	1					
Dawayo	38	1	1					
Gwio Kura	38	1	1					
Katuzu	38	1	1					
Lawan Fannami	38	1	1					
Lawan Musa	38	1	1					
Sabon-Gari	38	1	1					
Sarkin Hausawa	38	1	1					
Sugum/Tagali	38	1	1					
Zango	38	1	1					
*Central				3	5	3	4	10
Total	**380**	**10**	**10**	**3**	**5**	**3**	**4**	**10**

Evaluation tools

CARE RIDCU-5 Tools.docx

Field Activities

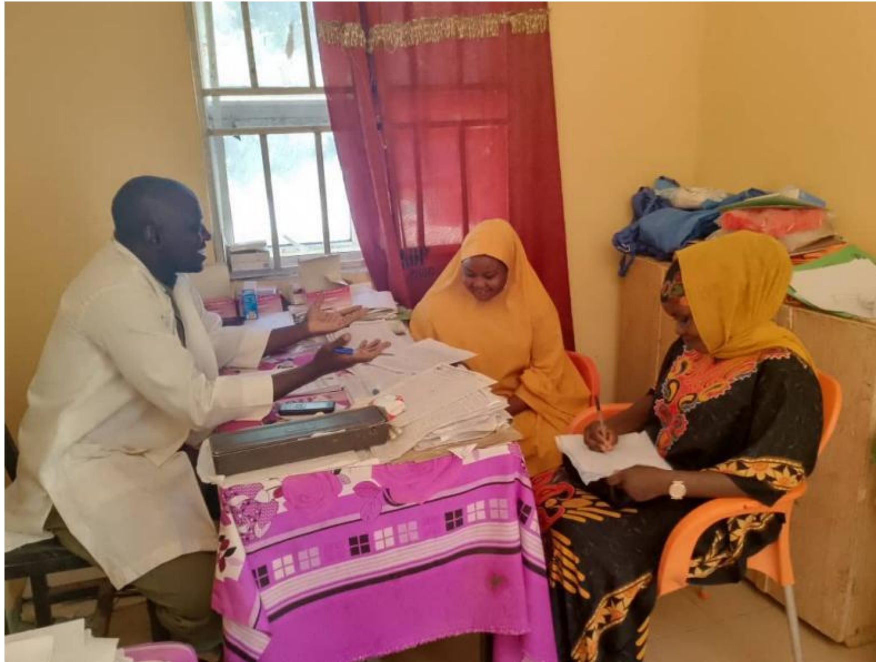


Figure 20: KII with Head of Facility

Figure 21: During KII and record verification

Figure 22: Interviews with Community Leaders