Barrier Analysis

Liberia

Concern Enumerator Naomi Moore with a respondent Ella Tokpah in Karkuekpo Community Dugbe River District, Sinoe County. Photo by Joseph Macharia 16th February 2020

March 2020

ACTION AGAINST HUNGER

CONCERN worldwide

OXFAM

tearfund

WaterAid

Supported by

Irish Aid
Rialtas na hÉireann
Government of Ireland

Table of Contents

List of Abbreviations

ANC	Antenatal Cate
BA	Barrier Analysis
CLTS	Community Led Total Sanitation
CSLA	Community Saving and Loans Association
DBC	Design for Behaviour Change
EBF	Exclusive Breastfeeding
IEC	Information Education and Communication
IYCF	Infant and Young Child Feeding Practices
LWC	Liberia WaSH consortium
NGO	Non-Governmental organisation
OD	Open Defecation
PNC	Post Natal Care
SBCC	Social and Behaviour Change Communication
TTMs	Trained Traditional Midwives
UNICEF	United Nations Children Education Fund
WASH	Water Sanitation and Hygiene
WHO	World Health Organisation

Summary

The Liberia WASH Consortium (LWC) was launched in 2007 and it quickly established itself as one of the two leaders, along with UNICEF, for addressing Liberian WASH challenges. The Consortium effectively engaged donor representatives, government officials and other NGOs in policy discussions, strategic planning, and learning events, apart from delivering improved WASH services in a complex environment. The LWC remains a key actor in the sector, as evidenced by its recent success promoting policy reform (2015 – 2018).

The current project; Strengthening Sustainability in Schools and Communities, involving three (3) other members of LWC (Action Against Hunger, Concern Worldwide and Water Aid), aims at researching the different immediate and underlying causes of the high rates of child stunting in Liberia: 35.5% at national level, with peaks of 41% in Grand Bassa and 38% in River Cess. The results of this Barrier Analysis (BA), along with Nutritional Causal Analysis and Cost of Diet results will inform the development of a Social Behaviour Change Communication (SBCC) framework that will be developed and promoted for adoption across future and current programmes.

The BA study sought to identify the factors preventing the priority groups (people who are supposed to practice the behaviour) from adopting key behaviours, as well as identifying the enablers facilitating the adoption of those behaviours. Discussions with the consortium partners settled on six priority behaviours around water, sanitation and hygiene (WaSH), health and nutrition sectors. These included (1) exclusive breastfeeding, (2) minimum dietary diversity (3) handwashing (4) use of modern family planning (5) use of latrines and (6) safe water storage all relevant to the programmes the partners are currently implementing in their areas of operations.

The exercise included a five (5) day training: three (3) days classroom training, one (1) day field test and one (1) day analysis of data collected during the pilot involving 22 enumerators preparing the team for the 18 days data collection and analysis exercise. Twenty of the 22 enumerators were selected for the actual data collection and were divided in 2 teams one covering Rural Montserrado and Grand Cape Mount counties while the second covered Sinoe, Rivercess and Grand Bassa counties. Aside from Grand Cape Mount, which was assessed for all the six behaviours, in all the other counties, three of the six behaviours were studied.

During the survey, 1,732 interviews were conducted with different groups of doers (those practicing the behaviour) and non-doers (those not practising) who included mothers of children under five years, mothers of children 6-12 months and women of child bearing age (15-49 years) on different behaviours. A summary of interviews in each county is shown in table 1 below.

Table 1 Number of interviews by behaviour and county

	1. Exclusive breastfeeding		2. Minimum Dietary Diversity		3. Handwashing	
	Doers	Non-Doers	Doers	Non-Doers	Doers	Non-Doers
Sinoe	51	47				
Grand Cape Mount	49	48	49	49	51	47
Grand Bassa	46	48				
Rivercess			48	50	51	49

Montserrado			40	44	48	48
	4. Use of modern Family Planning		5. Latrine use		6. Safe water storage	
	Doers	Non-Doers	Doers	Non-Doers	Doers	Non-Doers
Sinoe	49	51	49	50		
Grand Cape Mount	50	42	49	51	43	49
Grand Bassa	47	47	47	47		
Rivercess					49	49
Montserrado					51	49

Below is a summary of key findings for each behaviour studied:

1. **Exclusive breastfeeding (EBF)**

In two of the three counties doers were more likely to say that they felt that they had enough knowledge, resources and skills to enable them practice exclusive breastfeeding, while in one county there was no statistical significance on knowledge with a huge proportion 93% of doer and 89% of non-doers mentioning that they did have enough knowledge. With respect to what made it easy for them to breastfeed their children, the doers and non-doers pointed out varying responses. These included the fact that they had enough knowledge, moral support from spouses, appropriate maternal nutrition and having money to purchase various foods. In two of the three counties, the doers perceived that the encouragement from the health workers made it easy for them to practice exclusive breastfeeding. Lack of time was also mentioned in two of the three counties as a barrier to EBF and more so when the mothers had to go to the farm and leaving the child at home. Both doers and non-doers mentioned several advantages of EBF with the most statistically significant advantages being that the child would become healthy as pointed out by the doers in Grand Cape Mount and that the child was more likely to be clever and perform well in school as pointed out in Grand Bassa by the non-doers. The two significant negative consequences highlighted were the perception that EBF would make the breasts sag and that the child would overgrow. These are perceptions that would need to be addressed during the nutrition education and counselling sessions. In two of the three counties, the doers perceived that other distant relatives including aunties and uncles approved of EBF and thus an important influencer who would need to be targeted in the Infant and Young Child Feeding (IYCF) messaging. Non-doers were more likely to say that finding time to breastfeed exclusively was either very difficult or somewhat difficult in two of the three counties with the doers highlighting that it was not difficult at all. Across the three counties, there was not much significant difference in other determinants around cues for action, divine will, culture and policy.

2. **Minimum Dietary Diversity**

Both doers and non-doers in two of the three counties perceived that having a farm and practicing some agriculture made it easy for them to feed their children foods from at least four of the seven food groups. Equally, the doers and non-doers also pointed out that the lack of support from the spouses both moral and financial made it difficult for them to practice dietary diversity. Unavailability of foods was found to be a significant determinant in Montserrado where the doers were 4.8 times more likely to mention this than the non-doers. In all the three counties, majority of both doers and non-doers were likely to mention that attaining the minimum dietary diversity ensured that the child

grew healthy. When asked about the negative consequences, some of the significant responses from both the doers and the non-doers included the concern around spending too much money on these foods, that preparing these diverse foods all the time was time consuming and that the child was likely to become upset whenever these foods were unavailable. When asked about people who approve of this practice, the non-doers in two of the three counties were more likely to mention close friends while the doers in one county mentioned the husbands. Interestingly across the three counties there was near consensus that nobody disapproved the practice. In all the three counties, there was no statistical significance on the question about difficulty in getting these foods with a significant proportion of both doers and non-doers indicating either somewhat difficult or not difficult at all. There was no notable significant difference on the determinants around policy, action efficacy, culture and divine will.

3. Handwashing with water and Soap/Ash

In two of the three counties, doers were more likely to indicate that having adequate knowledge around handwashing made it easy for them to practice the behaviour while in one the doers were more likely to indicate that the availability of soap made it easy for them. The cost of soap and the lack of the handwashing facilities was however mentioned as what made it difficult for them to practice this behaviour. In all the three counties, there was no statistical significance on the advantages of handwashing with both doers and non-doers mentioning prevention of diseases and keeping the child healthy as the advantages. There was no statistical significance on the question about the disadvantages of handwashing with near equal proportion of doers and non-doers mentioning the cost of soap and the fact that hand washing was time consuming. In two of the three counties, health workers and community leaders were perceived to approve handwashing at these two critical times (before handling food and after attending to a child who has defecated). Doers in two of the three counties were more likely to say that it was not difficult to remember to wash hands during these two times while the non-doers in two of these counties indicated that it was somewhat difficult to remember. Doers were more likely to say that it was not likely at all for their children to suffer from diarrhoea due to their hygiene practices while the non-doers in these two counties indicated that it was somewhat likely that their children would suffer from diarrhoea. There was no significant difference on divine will, policy and culture across the three counties.

4. Use of modern family planning

The doers and the non-doers cited different factors that made it easy to use a modern method of family planning with the doers more likely to mention availability at the heath facility, contraceptive provided free, their proximity to the clinic, knowledge about the different methods available and the ease to administer. The non-doers were more likely to say that the assurance on the side effects would make it easy for them. When asked about what made it difficult, the doers were more likely to point out stock out and absence of health workers as the most significant barriers. The non-doers on the other hand were more likely to indicate inadequate knowledge and unavailability of the different methods at the heath facility. In all the three counties, the doers were more likely to cite prevention of unwanted pregnancy as the positive consequence of using modern contraceptives. It is only in Grand Cape Mount where a significant negative consequence was found with doers 12 times more likely to indicate that the use of modern contraceptives led to disruption of the menstrual cycle. In the same county, the non-doers were more likely to cite heavy bleeding as the negative consequence. In two of the three counties, the doers were more likely to say that it was not difficult at all to get the

contraceptives a factor that would need to be reinforced. Doers in two of the counties were more likely to indicate that it was very likely that they would be able to provide adequately for their family. Reinforcing this would most certainly ensure that more non-doers are encouraged to adopt the use of modern contraceptives.

5. Use of Latrine

In two of the three counties the doers were more likely to say that they had enough knowledge, resources and skills to use a latrine every time while there was no significant difference in Sinoe. When asked what made it easy for them to use a latrine every time, doers in two counties mentioned availability of water while in Sinoe the doers were more likely than the non-doers to mention having knowledge. The non-doers in all the counties were more likely to say that the availability of the latrine would make it easier for them. While there was no statistical significant difference between the doers and the non-doers in Sinoe on what made it difficult, in Grand Cape Mount and Grand Bassa, the unavailability of water and unavailability of the latrines were more likely to make it difficult for them. With regards to the advantages, prevention of disease was significant across the three counties with doers more likely to give this feedback in Grand Cape Mount and non-doers in Sinoe and Grand Bassa. Some of the significant disadvantages found included the perception that it required more water, people had to walk long distances to access the latrine and that the latrines were perceived as breeding grounds for insects. When asked how difficult it was to access a latrine the non-doers were more likely to say that it was very difficult while the doers said that it was not difficult at all. This reflects the need to scale up Community-led Total Sanitation (CLTS), which has been seen to be effective in supporting more communities eliminate open defecation. With respect to susceptibility to diarrhoea, the non-doers were more likely to mention very likely or somewhat likely than the doers were.

6. Safe water storage

Across the three counties, there was no significant difference on knowledge, resources and skills with both doers and non-doers indicating that they felt that they had everything they needed to store water. When asked what made it easy for them to store water doers in two of the three counties were more likely to indicate having knowledge and proximity of the water source. The doers were more likely to mention that availability of a gallon would make it easy for them while the non-doers were more likely to say that having money to buy a gallon would make it easy for them. The cost of the gallon was cited as a significant barrier, a factor that would need to be ascertained considering that majority of households among the non-doers were found to have these containers only that they were more likely to use them for other purposes for example storing palm oil. Some of the positive consequences cited by the doers and the non-doers included avoiding water contamination, ensuring good health for children and preventing diarrhoea all significant in at least one of the three counties. The only significant negative consequence highlighted by doers in Rivercess was that storing water in a clean narrow mouth container was time consuming. This is a perception that would need to be reduced through continued sensitisation at the community level. Like other behaviour studied, there was no significant difference around action efficacy, divine will, policy and culture.

Background

Concern and the LWC partners sought to examine the significant determinants across six (6) behaviours in the areas around health, nutrition, water sanitation and hygiene (WaSH) which the partners have been promoting across the different counties, but that have not shown any significant improvement.

The Designing for Behaviour Change (DBC) framework, a key output from the barrier analysis will be useful in the development of Social Behaviour Change Communication (SBCC) strategies for the different behaviours within the LWC partner's operational areas. The interviews with Doers and Non-doers presents new insights on the barriers as well as the enablers for specific behaviours that are essential in aligning the current programming to addressing these particular determinants. This report summarises the methodology used, the significant determinants discovered and the activities suggested overcoming the barriers for each of the six (6) behaviours studied across the five (5) counties the LWC partners are working in. While not all the six barriers were studied in each county, the results indicate significant similarities across different counties, which means that the findings in one county can be used to inform programming in another county.

Methodology

The Barrier Analysis methodology, as specified in "A Practical Guide to Conducting a Barrier Analysis (2013)", was followed right from the training, data collection analysis and interpretation. For each behaviour studied, at least 45 "Doers" and 45 "Non-Doers" were sampled, and one-on-one interviews were conducted with each participant. The BA researched twelve (12) main behavioural determinants and equally incorporated an additional determinant on universal motivators that sought to look into factors that motivated people to practice a behaviour, irrespective of other variables for example desire for education. The 12 determinants studied are as listed below.

1. Perceived Self-efficacy / skills
2. Perceived positive consequences
3. Perceived negative consequences
4. Perceived Social Norms
5. Access
6. Cues for actions/ reminders
7. Perceived severity
8. Perceived susceptibility
9. Action efficacy
10. Perceived divine will
11. Policy
12. Culture

After the data collection the BA team jointly coded the survey responses for open-ended questions and tallied the responses for the closed ended questions. All these responses were then analysed for statistical significant differences between Doers and Non-Doers. Significant determinants, as recommended in the practical guide were those that showed a difference of at least 15% between the responses doers gave compared to the ones non-doers gave. The standard Excel tabulation template was used enabling calculation of more statistical indicators such as the odds-ratio, the p-value and the related risk ratio.

The BA lead conducted initial interpretation of findings, and drafted *"Bridges to Activities"* which were presented in a one-day workshop with consortium partners alongside the study. During the workshop, the participants discussed at length the findings and came up with a set of recommendations that have been incorporated in this report.

Behaviour 1: Mothers of children aged 0-6 months feed them on breastmilk alone for the first 6 months

To assess this behaviour, mothers with children aged 6-12 months were interviewed as they had already passed the recommended 6 months. UNICEF and WHO recommend that children are fed on only breastmilk during the first 6 months of life. Exclusive breastfeeding (EBF) is recommended

because breast milk is uncontaminated, contains all the necessary nutrients for the first few months of life, and provides immunity to disease through maternal antibodies, among other benefits.

Behaviour 2: Mothers of children aged 6 – 23 months feed them meals each day containing foods from at least four (4) of the 7 food groups

To assess this behaviour, mothers with children aged 6-23 months were interviewed. Complementary feeding is the transition from exclusive breastfeeding to solid or semi-solid food covering the period from 6-23 months. To meet evolving nutritional requirements of the developing child during this period, minimum dietary diversity requires children receive foods from four (4) or more of the seven (7) food groups (1. Grains, roots and tubers; 2. Legumes and nuts; 3. Dairy products; 4. Flesh foods; 5. Eggs; 6. Vitamin-A-rich fruits and vegetables; 7. Other fruits and vegetables).

Behaviour 3: Caregivers of children under 5 years wash their hands with soap/ash and water before handling food and after attending to a child who has defecated

The WHO recommends that caregivers wash their hands at the five (5) critical times: 1) after defecation, 2) after cleaning a child's bottom or changing nappies, 3) before feeding a child, 4) before eating and 5) before and after preparing/handling food. Considering the challenges reported around handwashing, the team agreed to focus on two (2) of these critical times before handling food and after attending to a child who had defecated. This study settled on broadening the pool of respondents from just mothers of children by including caregivers of these children as well.

Behaviour 4: Women of child bearing age (15 to 49) who do not want to become pregnant use a modern contraceptive method (implants, hormonal i.e. pills, barrier i.e. condom, emergency contraception)

Modern contraceptive use remains an important public health intervention and a cost-effective strategy to reduce maternal mortality, avert unintended pregnancies, and reduce the need for abortion especially unsafe abortion and ultimately reinforcing people's right to determine the number and spacing of their children. Despite these benefits, contraceptive use in Liberia is still low despite the government efforts to increase uptake. The National Health and Social Welfare Policy and Plan (2011–2021) proposes initiation of counselling on family planning (FP) at Antenatal Care (ANC) and Postnatal Care (PNC) and availing the FP commodities at the community level. The National Plan envisions that within the health system a team of trained traditional midwives (TTMs) would complement the services offered at the health facility level hence achieving better coverage. While quantifying the progress of these initiatives is difficult, the study sought to investigate this behaviour and have a deeper understanding on the barriers that still prevailed at the community level.

Behaviour 5: Caregivers of children under 5 years use latrines every time they need to defecate

To assess this behaviour, the study conducted interviews with caregivers of children under 5 years to ascertain what either motivated or hindered their use of latrines. Concern and the LWC partners have been promoting community led total sanitation (CLTS) an innovative approach for mobilising communities to completely eliminate open defecation (OD) and breaking the cycle of faecal-oral contamination that leads to the spread of diseases for example diarrhoea. Despite the investment in this approach, open defecation is still prevalent in the majority of communities and thus making this behaviour one in need to better understand the most important barriers and enablers.

Behaviour 6: Caregivers of children under 5 years store drinking water in a clean, covered, narrow mouth container

A large proportion of communities in the counties assessed rely on underground water for their drinking and household use. During the dry season, most of the wells are at very low levels if not dried up with the alternative using the creek water that quite often is unsafe. The study sought to investigate the storage aspect where most of the contamination is believed to occur. The consortium has been

promoting the use of narrow mouth containers that have the potential to limit the chances of water contamination during storage and use. Interviews were conducted among caregivers of children under 5 years to determine the enablers and the barriers to use of these recommended containers. The interviews also included a physical assessment of the containers to ascertain the cleanliness as well.

Data collection and analysis took place over a period of 18 working days from 14th February to 5th March using two (2) teams of 10 enumerators each. Each enumerator aimed at conducting five (5) interviews with doers and another five (5) with non-Doers. In the end, the team conducted 1,732 interviews across the five (5) counties for the six (6) behaviours as shown in table 1 above. The working day following the data collection, the questionnaires were analysed by the enumerators under facilitation of the EU Aid Volunteer in one team and the Surge Nutrition Programme Manager leading the exercise with the other team. The Programme Manager-Nutrition then compiled data sets from both teams and analysed the data for presentation to the stakeholders in a workshop held in Monrovia. During the workshop, the participants provided insights to the BA findings and participated in group-work to formulate some recommended activities to be incorporated in the DBC framework to address the proposed bridges to activities.

Training

Concern globally has endorsed a behaviour change approach based on the design for behaviour change (DBC) method. The Nutrition Programme Manager-Surge facilitated a five-day training (7th to 12th March) with a total of 22 (15M 7F) enumerators. The training covered the theoretical aspects of a BA using a variety of participatory learning tools, a practical field-testing of the questionnaires followed by data coding, tabulation and analysis on day 4 and 5. The detailed training agenda and the participant list have been included under Annex 1 and 2 at the end of the report. Prior to the training, all the participants took a pre training test and took a post-test on the last day of the training. The average performance in the pre-test was 4 points while that in the post-test was 6 points. Two of the 22 participants answered correctly all the 10 questions during the post-test. One participant did not take the pre-test having arrived on the second day of training but ended up scoring seven (7) of the 10 questions correctly. Figure1 below illustrates the capacity enhancement during the training.

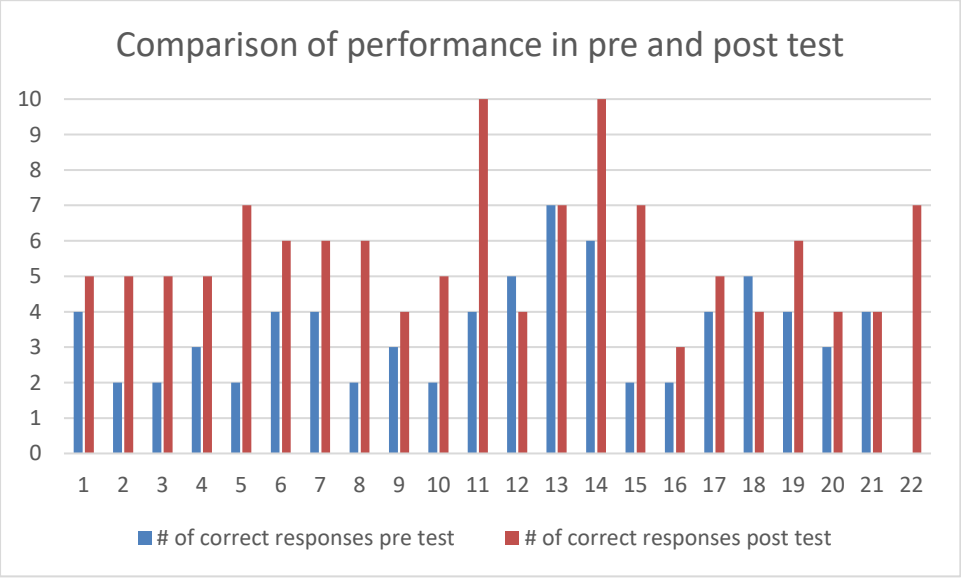

Figure 1 Comparison of pre and post-tests

Data collection

Questionnaires for the different behaviours were developed using the standard BA questionnaire format in consultation with the Country programme team, the Senior Advisor- Food and Nutrition Security and the Senior WaSH Advisor at the headquarter. The final questionnaire used is attached in annex 3.

Fieldwork lasted 18 days, with data collection for each behaviour being conducted on one day and coding of the responses during the following day. Data collection was supported by a team of 10 enumerators in each team with the Surge Nutrition Programme Manager leading one team and the EU Aid Monitoring and Evaluation Volunteer leading the second team. Upon arriving at the selected community, the team sought audience with the community chief informing them of the exercise and seeking their consent to enter the community and undertake the exercise. In all the sampled communities, the leadership was very receptive, allowing the enumerators to engage and interview the community members on the different behaviours.

At the household level, the data collectors approached each potential participant, found a semi-private place to conduct the interview, introduced the study and obtained informed consent. Those who met criteria and consented to be part of the study were then screened to determine whether they were Doers or Non-Doers, before proceeding with the survey interview. The enumerators then administered the questionnaire, which contained a series of close-ended questions that required probing and open-ended (multiple-choice) questions related to the twelve determinants assessed. For the open ending questions, the enumerators probed and all responses were noted until the respondent had nothing else to add. One interview took approximately 20 minutes. The last question in each behaviour assessed, referred to universal motivators the priority group has. For each behaviour, each enumerator was expected to undertake 5 interviews with Doers and another 5 interviews with the non-Doers This allowed the entire team to have adequate questionnaires at the end of the day since if some of the enumerators were unable to get either doers or non-doers another member of the team would have reached that target. To ensure data quality, the two supervisors in each team did regular checks and follow ups with the enumerators supporting them if they struggled with any of the questions.

Prior to the study, the WaSH Coordinator shared a list of communities in each of the districts where the LWC partners had presence. The team sampled a minimum of seven communities in each of the sampled districts. Upon arrival at the district, the data collection team verified the sampled communities with the partner staff and the local administration to ascertain the population size and accessibility. Since the research allowed for purposive sampling, enumerators selected the interviewees as they walked through the community including asking respondents if they know a household that met certain criteria for a given behaviour for example one that had a latrine for latrine use or a child 6-12 months for minimum dietary diversity. This made it easy for the enumerators to save time and head to households that qualified for that particular behaviour. Whenever the team was unable to reach the target in a selected community, the team moved on to the next neighbouring community to finish the survey.

Coding, tabulation and interpretation of results

Data analysis consisted of coding, tabulating and analysing of the responses. The responses of the open ending questions were first coded using as many categories as felt required. In a second step each enumerator counted how many responses they had recorded fitting under the defined codes. The frequencies were filled on flip charts and later entered into the Barrier Analysis Tabulation Excel Sheet for quantitative analysis. This was useful in order to establish which determinants were found to be significantly different ($p<0.05$) or had a 15 percentage point difference among responses

between Doers and Non-Doers. The Excel tabulation sheet also gave additional information on the odds ratio and the relative risk factor essential in interpreting the results.

Upon completion of the data collection and analysis, the Nutrition Programme Manager-Surge interpreted the results and formulated the bridges to activities for each determinant found to be significant. This then allowed the team during the workshop to develop activities, which were feasible, receptive of the priority group and relevant to the determinant.

The findings were then compiled in a DBC framework that forms the behaviour change strategy. These findings will be used to further fine-tune and contextualize the already ongoing activities to further increase the chances of seeing real change within the programme. The Consortium partners will also use these findings, while designing new programmes addressing the identified barriers and equally reinforce the identified enablers.

Findings

This section describes the findings for each behaviour studied across the different counties. The tables below indicate the determinants that were found to be significant with those highly significant highlighted in red. A brief discussion on the findings has been incorporated for each county.

1. Exclusive Breastfeeding

The below table shows the significant determinants found for the assessed behavior; a complete list of all the findings has been included in annex 4.

1.1 Sinoe

Barrier Analysis Tabulation Sheet						
Mothers of children aged 0-6 month's feed them on breastmilk alone for the first 6 months						
Total Doers	**51**				**SINOE**	
Total NonDoers	**47**					
Determinants	**Doers: +Exp. (A)**	**Non-doers: +Exp. (B)**	**Diff.**	**p-value**	**Relative Risk Ratio: Doers are…..**	**Relative Risk Ratio: Non-Doers are….**
1. Perceived Self- Efficacy 1: Do you think you have ***enough knowledge***, ***resources, and skills***, for you to feed your child on only breastmilk until the child is 6 months?						
yes	49	31	30%	***0.000***	Doers are 11 times more likely to give this response than NonDoers are.	
no	0	11	-23%	***0.000***		#DIV/0!
2. Perceived Self- Efficacy 1: What *makes it easier for you* to of feed your child on only breastmilk for the first 6 months of life						
Having enough food/food being available at the HH at all times/Eating enough food/Eating 3 meals a day	36	41	-17%	***0.038***		NonDoers are 2.5 more likely to give this response than Doers
Financial support from spouse/Having money to buy foods	15	26	-26%	***0.008***		NonDoers are 2.7 more likely to give this response than Doers
Having knowledge on breastfeeding	13	5	15%	***0.050***	Doers are 2.5 times more likely to give this response than Non Doers	
Moral support/encouragement from Husband	19	7	22%	***0.011***	Doers are 2.9 times more likely to give this response than Non Doers	
Having safe drinking water	8	0	16%	***0.004***	Doers are 11.7 times more likely to give this response than Non Doers	

3. Perceived Self- Efficacy 1: What *makes it difficult* for you to feed your child on only breastmilk for the first 6 months of life						
Time consuming/Being away from the child/Distances to the farm	10	3	13%	***0.050***	Doers are 2.9 times more likely to give this response than Non Doers	
5. Negative Consequences/ Disadvantages: What are the disadvantages of feeding your child on only breastmilk for the first 6 months of life						
Child stomach get too large/child will be too big/child will be overgrown	1	6	-11%	***0.044***		NonDoers are 6.6 more likely to give this response than Doers
Child will become sick	0	9	-19%	***0.001***		#DIV/0!
7. Perceived Social Norms: Who are the people who disapprove of you feeding your child on only breastmilk for the first 6 months of life						
Brothers/sisters/uncles/aunts	12	3	17%	***0.017***	Doers are 3.5 times more likely to give this response than Non Doers	
Myself	3	9	-13%	***0.044***		NonDoers are 3.5 more likely to give this response than Doers
8. Perceived Access : How difficult is it to for you find the time you need to feed your child on only breastmilk for the first 6 months of life						
not difficult at all	39	26	21%	***0.023***	Doers are 2.4 times more likely to give this response than Non Doers	
9. Perceived Access : How difficult is it getting the support you need to feed your child on only breastmilk for the first 6 months of life						
somewhat difficult	9	24	-33%	***0.000***		NonDoers are 4.3 more likely to give this response than Doers
not difficult at all	36	16	37%	***0.000***	Doers are 4 times more likely to give this response than Non Doers	
10. Perceived Cues for Action/ Reminders: How difficult is it to remember to feed your child on only breastmilk for the first 6 months of life						
somewhat difficult	2	12	-22%	***0.002***		NonDoers are 7.5 more likely to give this response than Doers
not difficult at all	47	31	26%	***0.001***	Doers are 5.4 times more likely to give this response than Non Doers	
13. Perceived Action Efficacy: How likely is it that feeding your child on only breastmilk for the first 6 months protects the child from common illness and malnutrition?						
very likely	38	23	26%	***0.008***	Doers are 2.8 times more likely to give this response than Non Doers	
somewhat likely	7	16	-20%	***0.016***		NonDoers are 3 more likely to give this response than Doers

While the research found a number of significant determinants, only the highly significant ones were looked at in the formulation of activities incorporated in the DBC framework. The Doers had the perception that they had enough knowledge that enabled them to feed their infants exclusively on breastmilk while the non-doers felt that they did not have enough knowledge, skills and resources to practice EBF. The non-doers were 2.5 times more likely to say that having adequate food would make it easy for them to practice EBF. The support by the spouse was also found to be a significant determinant with the financial support cited by the non-doers as what would make it easier for them. On the other hand, the doers cited the moral support and encouragement from spouses as critical to making it easy to breastfeed their children exclusively. Other relatives (brothers, sisters, uncles and aunt) were perceived as disapproving EBF. This could be investigated further and if ascertained, measures put in place to either seek buy-in from them for the support of EBF or where they approve already, ensuring they communicate this to the women who are breastfeeding. The relationship between prevention of malnutrition and EBF was found to be unclear among the non-doers who cited that their children were somewhat likely to be malnourished if they were exclusively breastfed.

1.2 Grand Cape Mount

Barrier Analysis Tabulation Sheet		
Mothers of children ages 0 – 6 months feed them with only breast milk for the first 6 months of life.		
Total Doers	49	Grand Cape Mount

Total NonDoers	48					
Determinants	Doers: +Exp. (A)	Non-doers: +Exp. (B)	Diff.	p-value	Relative Risk Ratio: Doers are…..	Relative Risk Ratio: Non-Doers are….
1. Do you think you have *enough knowledge*, *resources, and skills*, for you to feed your child on only breastmilk until the child is 6 months?						
yes	*49*	*39*	*19%*	*0.001*	#VALUE!	
possibly	*0*	*5*	*-10%*	*0.027*		#DIV/0!
2. What *makes it easier for you* to of feed your child on only breastmilk for the first 6 months of life						
knowledge/ health worker support	*26*	*13*	*26%*	*0.008*	Doers are 2.7 times more likely to give this response than Non Doers	
3. What *makes it difficult* for you to feed your child on only breastmilk for the first 6 months of life						
no time	*2*	*10*	*-17%*	*0.012*		NonDoers are 5.6 more likely to give this response than Doers
4. What are the *advantages* of you feeding your child on only breastmilk until the child is 6 months?						
child will be healthy	*48*	*31*	*33%*	*0.000*	Doers are 22.7 times more likely to give this response than Non Doers	
6. Who are the people who approve of you feeding your child on only breastmilk for the first 6 months of life						
myself	*14*	*23*	*-19%*	*0.040*		NonDoers are 2.1 more likely to give this response than Doers
other relatives (brother, sister, aunt, uncle)	*22*	*12*	*20%*	*0.032*	Doers are 2.2 times more likely to give this response than Non Doers	
7. Who are the people who disapprove of you feeding your child on only breastmilk for the first 6 months of life						
husband/ boyfriend	*0*	*5*	*-10%*	*0.027*		#DIV/0!
8. How difficult is it to for you find the time you need to feed your child on only breastmilk for the first 6 months of life						
very difficult	*4*	*11*	*-15%*	*0.041*		NonDoers are 3.1 more likely to give this response than Doers
9. How difficult is it getting the support you need to feed your child on only breastmilk for the first 6 months of life						
very difficult	*5*	*15*	*-21%*	*0.010*		NonDoers are 3.6 more likely to give this response than Doers
12: How serious would it be if your child became ill?						
very serious	*23*	*33*	*-22%*	*0.024*		NonDoers are 2.3 more likely to give this response than Doers
not serious at all	*14*	*4*	*20%*	*0.010*	Doers are 3.5 times more likely to give this response than Non Doers	
13. How likely is it that feeding your child on only breastmilk for the first 6 months protects the child from common illness and malnutrition?						
somewhat likely	*3*	*10*	*-15%*	*0.032*		NonDoers are 3.7 more likely to give this response than Doers

Doers were 2.7 times more likely to say that the support from the health workers made it easy for them to practice EBF. This positive element could be utilized to influence the non-doers since the

health workers are seen as an enabler, equipping them with the necessary information around breastfeeding will be an asset in seeing more of the non-doers embrace EBF. The doers also perceived other relatives including brothers, sisters, aunts and uncles as people who approve exclusive breastfeeding. This group should be targeted and equipped with appropriate messages around breastfeeding to ensure that they continue supporting the priority group adopt this behavior. The non-doers perceive that it is very difficult to get the support they need for exclusive breastfeeding. While this may need to be ascertained, seeing that spouses were not cited highly as a barrier, efforts could be made to work with spouses of breastfeeding mothers ensuring that they also understand particular roles they could play to support their spouses to practice exclusive breastfeeding.

1.3 Grand Bassa

Barrier Analysis Tabulation Sheet						
Mothers of children aged 0-6 month's feed them on breastmilk alone for the first 6 months						
Total Doers	46	Grand Bassa				
Total NonDoers	48					
Determinants	Doers: +Exp. (A)	Non-doers +Exp. (B)	Diff.	p-value	Relative Risk Ratio: Doers are…..	Relative Risk Ratio: Non-Doers are….
2. Perceived Self Efficacy:: What makes it easier for you to of feed your child on only breastmilk for the first 6 months of life						
Encouragement from health worker	7	0	15%	*0.005*	Doers are 11.6 times more likely to give this response than Non Doers	
3. Perceived Self Efficacy: What makes it difficult for you to feed your child on only breastmilk for the first 6 months of life						
Food is unavailable/Market too far away/No food varieties	5	17	-25%	*0.005*		NonDoers are 4 more likely to give this response than Doers
4. Positive consequences (Advantages): What are the *advantages* of you feeding your child on only breastmilk until the child is 6 months?						
Child will become clever/Smart in school	17	29	-23%	*0.019*		NonDoers are 2.4 more likely to give this response than Doers
5. Negative Consequences/ Disadvantages: What are the disadvantages of feeding your child on only breastmilk for the first 6 months of life						
Breasts will fall	2	10	-16%	*0.016*		NonDoers are 5.2 more likely to give this response than Doers
6. Perceived Social Norms:: Who are the people who approve of you feeding your child on only breastmilk for the first 6 months of life						
Sisters/Aunts/brother including inlaws	19	10	20%	*0.027*	Doers are 2.4 times more likely to give this response than Non Doers	
8. Perceived Access : How difficult is it to for you find the time you need to feed your child on only breastmilk for the first 6 months of life						
somewhat difficult	6	16	-20%	*0.018*		NonDoers are 3 more likely to give this response than Doers
not difficult at all	40	27	31%	*0.001*	Doers are 4.6 times more likely to give this response than Non Doers	
9. Perceived Access : How difficult is it getting the support you need to feed your child on only breastmilk for the first 6 months of life						

not difficult at all	27	17	23%	*0.020*	Doers are 2.3 times more likely to give this response than Non Doers	
11. Perceived Susceptibility: How likely is it that your child becomes malnourished/ill if she/he is not fed on only breastmilk for the first 6 months of life?						
not likely at all	13	3	22%	*0.004*	Doers are 4.3 times more likely to give this response than Non Doers	

Similar to the findings in Grand Cape Mount (GCM), health workers were also perceived as strong enablers to adoption of exclusive breastfeeding where doers were 11.6 times more likely to indicate that their support made it easy for them to practice EBF. The non-doers felt that unavailability of food would make it difficult to breastfeed their children, a barrier that could be addressed through different avenues including home gardening to ensure that households are supported to produce foods for home consumption. The doers also indicated that it was not difficult for them to get the support they need to feed their children on breastmilk alone, considering that they were already practicing this is valid and reflects that they are aware of the support they need. For the non-doers, it would be necessary to have a clear understanding of the support caregivers would need and support them to get this support. The doers felt that their children were less likely to become malnourished if not exclusively breastfed. This reflects a lack of understanding of the link between malnutrition and children who are not exclusively breastfed.

2. Minimum Dietary Diversity

2.1 Rivercess

Barrier Analysis Tabulation Sheet						
Mothers of children ages 6 – 23 months feed them meals each day containing foods from at least 4 of the 7 food groups						
Total Doers	48	RIVERCESS				
Total NonDoers	50					
Determinants	Doers: +Exp. (A)	Non-doers: +Exp. (B)	Diff.	p-value	Relative Risk Ratio: Doers are…..	Relative Risk Ratio: Non-Doers are….
1. Perceived Self-Efficacy: What makes it easy for you to feed your baby foods from at least four of these 7 different food groups each day?						
Farming	37	20	37%	*0.000*	Doers are 4.3 times more likely to give this response than Non Doers	
Having Money/Being employed	22	34	-22%	*0.022*		NonDoers are 2.3 more likely to give this response than Doers
2. Perceived Self-Efficacy: What makes it *difficult* for you to feed your baby foods from at least four of these 7 food groups each day?						
Lack of financial support from husband	18	9	20%	*0.026*	Doers are 2.4 times more likely to give this response than Non Doers	
Child refusal of some foods	0	6	-12%	*0.015*		#DIV/0!
4. Negative Consequences (Disadvantages): What are the *disadvantages* of feeding your baby foods from at least four of these 7 different food groups each day?						
Spend a lot of money on food	16	8	17%	*0.039*	Doers are 2.3 times more likely to give this response than Non Doers	

Time consuming	11	4	15%	*0.037*	Doers are 2.8 times more likely to give this response than Non Doers	
5. Perceived Social Norms: Who are the people that approve of you feeding your baby foods from at least four of these 7 food groups each day?						
Husband/boyfriend	44	38	16%	*0.033*	Doers are 3.2 times more likely to give this response than Non Doers	
Close friends/Neighbours	3	11	-16%	*0.025*		NonDoers are 3.9 more likely to give this response than Doers
6. Perceived Social Norms: Who are the people that disapprove of you feeding your baby foods from at least four of these 7 food groups each day?						
Husband	1	8	-14%	*0.018*		NonDoers are 8 more likely to give this response than Doers
Nobody	32	19	29%	*0.004*	Doers are 2.9 times more likely to give this response than Non Doers	
10. Perceived Susceptibility: How *likely* is it that your child will become malnourished in the coming year?						
somewhat likely	8	24	-31%	*0.001*		NonDoers are 4.1 more likely to give this response than Doers
not likely at all	35	20	33%	*0.001*	Doers are 3.5 times more likely to give this response than Non Doers	
11. Perceived Severity: How *serious* would it be if your child became malnourished?						
not serious at all	17	6	23%	*0.006*	Doers are 3.3 times more likely to give this response than Non Doers	

Doers were 4.3 times more likely to cite farming as what made it easy for them to feed their children on foods from at least four (4) food groups while the non-doers were 2.3 times more likely to say that having money to purchase diverse foods would make it easy. The NonDoers equally cited lack of financial support as what made it difficult for them to feed their children on diverse foods. Considering that these factors were found to be strongly significant, indeed the capacity of households to feed children diverse foods highly depends on the availability of these foods either produced by the household or purchased from the market. This indicates the need look into issues around access to these foods through different avenues including home gardening. With this kind of support, households would have an additional source of diverse foods and where feasible households could sell surplus (to others) to purchase additional types of foods to further diversify. The doers had the perception that feeding children foods from four of the seven food groups made them spend a lot of money on foods. Considering the cost of some of those foods, there is a need to address this perception by messaging around the long-term cost benefits of feeding a diverse diet to children (better health status hence reducing time and expenditure for medical care). Notably the research found out that there was no disapproval for feeding children on foods from at least four (4) of the seven (7) food groups. The Doers felt that it would not be serious if their children suffered from malnutrition; this reflects a limited understanding of the relationship between dietary diversity and malnutrition.

2.2 Montserrado

Barrier Analysis Tabulation Sheet					
Mothers of children ages 6 – 23 months feed their children foods from at least four (4) of the 7 food groups each day?					
Total Doers	40	Montserrado			
Total NonDoers	44				
Determinants	Doers: +Exp. (A)	Non Doers: +Exp.	Diff.	Relative Risk Ratio: Doers are…..	Relative Risk Ratio: Non-Doers are….
1. Perceived Self-Efficacy: What makes it easy for you to feed your baby foods from at least four of these 7 different food groups each day?					
Availability of money	24	37	-24%		NonDoers are 3 more likely to give this response than Doers
child enjoys it	8	0	20%	Doers are 12.3 times more likely to give this response than Non Doers	
has farm/ garden	3	16	-29%		NonDoers are 6.2 more likely to give this response than Doers
2. Perceived Self-Efficacy: What makes it *difficult* for you to feed your baby foods from at least four of these 7 food groups each day?					
unavailability of foods	16	4	31%	Doers are 4.8 times more likely to give this response than Non Doers	
lack of familial support	0	10	-23%		#DIV/0!
3. Positive Consequences (Advantages) :What are the *advantages* of feeding your baby foods from at least four of the different food groups each day?					
child gains weight/ gets fat	0	9	-20%		#DIV/0!
4. Perceived Negative Consequences/ Disadvantages: What are the *disadvantages* of feeding your baby foods from at least four of these 7 different food groups each day?					
child upset when new foods aren't available	12	0	30%	Doers are 13.9 times more likely to give this response than Non Doers	
10. Perceived Susceptibility: How *likely* is it that your child will become malnourished in the coming year?					
not likely at all	26	14	33%	Doers are 3.4 times more likely to give this response than Non Doers	
11. Perceived Severity: How *serious* would it be if your child became malnourished?					
not serious at all	14	6	21%	Doers are 2.9 times more likely to give this response than Non Doers	

The non-doers were 3 times more likely to say that having money would make it easy for them to feed their children a diverse diet. The non-doers were also 6.2 times more likely to say that having a farm and producing foods would make it easier for them to feed their children foods from at least four food groups. The doers also perceived unavailability of foods as a significant barrier to dietary diversity. This points to the potential impact home gardening could have on dietary diversity for non-doers and doers alike. There is also a need to look into the care-takers knowledge on what are the cheapest foods in every food group in any given season. This would increase the understanding that a diverse

diet does not have to be expensive if using indigenous and seasonal foods. One significant negative consequence cited by the doers was that they felt that their children would be upset if certain foods that they had been introduced were no longer available. This indicates the need to promote foods that are available and affordable to majority of the population.

2.3 Grand Cape Mount

Barrier Analysis Tabulation Sheet						
Mothers of children ages 6 – 23 months feed their children foods from at least four (4) of the 7 food groups each day?						
Total Doers	49	Grand Cape Mount				
Total NonDoers	49					
Determinants	Doers: +Exp. (A)	Non Doers: +Exp.	Diff.	p-value	Relative Risk Ratio: Doers are…..	Relative Risk Ratio: Non-Doers are….
2. Self-Efficacy: What makes it *difficult* for you to feed your baby foods from at least four of these 7 food groups each day?						
lack of support from father	11	20	-18%	*0.041*		NonDoers are 2.2 more likely to give this response than Doers
5. Social Norms: Who are the people that approve of you feeding your baby foods from at least four of these 7 food groups each day?						
friends	4	12	-16%	*0.027*		NonDoers are 3.3 more likely to give this response than Doers
10. Perceived Susceptibility: How *likely* is it that your child will become malnourished in the coming year?						
not likely at all	34	21	27%	*0.007*	Doers are 2.7 times more likely to give this response than Non Doers	
11. Perceived Severity: How *serious* would it be if your child became malnourished?						
somewhat serious	18	9	18%	*0.035*	Doers are 2.3 times more likely to give this response than Non Doers	

In Grand Cape Mount, there were fewer significant determinants, which included; the lack of support from the child's father that was perceived more among the non-doers as making it difficult for them to feed their children on diverse diets. Considering the significant role played by spouses in ensuring appropriate IYCF practices, it is thus essential to seek opportunities to engage them to ensure they offer the necessary support to their spouses. The doers perceived that their children were unlikely to become malnourished in the coming year. They also mentioned that if the children were to become malnourished they felt that it would not be serious. While this may be related to the fact that they were already practicing the behaviour thus making them feel not being at risk, the link between inadequate diet diversity and malnutrition will need to be reinforced.

3. Hand washing

3.1 Grand Cape Mount

Barrier Analysis Tabulation Sheet						
Caregivers of children under 5 years wash their hands with Soap/ash and water before handling food and after attending to a child who has defecated.						
Total Doers	51	Grand Cape Mount				
Total NonDoers	47					
Determinants	Doers: +Exp. (A)	Non Doers: +Exp.	Diff.	p-value	Relative Risk Ratio: Doers are…..	Relative Risk Ratio: Non-Doers are….
1. With your present *knowledge, resources, and skills,* do you think that you could wash your hands with water and soap before handling food and after attending to a child who has defecated?						
Yes	50	37	19%	*0.003*	Doers are 12 times more likely to give this response than Non Doers	
Possibly	1	7	-13%	*0.022*		NonDoers are 7.9 more likely to give this response than Doers
2. What makes it easy for you to wash your hands with soap/ash and water before handling food and after attending to a child who has defecated?						
knowledge	28	14	25%	*0.010*	Doers are 2.6 times more likely to give this response than Non Doers	
10. How difficult is it to remember to wash your hands with soap/ash and water before handling food and after attending to a child who has defecated?						
very difficult	0	4	-9%	*0.049*		#DIV/0!
somewhat difficult	13	23	-23%	*0.014*		NonDoers are 2.5 times more likely to give this response than Doers
not difficult at all	38	20	32%	*0.001*	Doers are 3.5 times more likely to give this response than Non Doers	
10. How *likely* is it that your child could suffer from diarrhoea in the next few days						
somewhat likely	12	27	-34%	*0.001*		NonDoers are 3.8 times more likely to give this response than Doers
not likely at all	33	13	37%	*0.000*	Doers are 4 times more likely to give this response than Non Doers	
12. How *serious* would it be if your child would suffer from diarrhoea?						
very serious	16	26	-24%	*0.014*		NonDoers are 2.5 times more likely to give this response than Doers
not serious at all	20	9	20%	*0.025*	Doers are 2.4 times more likely to give this response than Non Doers	
13. How *likely* is it that your child would suffer from diarrhoea if you did not wash your hands with soap/ash and water before handling food and after attending to a child who has defecated?						
not likely at all	5	0	10%	*0.035*	Doers are 11 times more likely to give this response than Non Doers	

Doers were 10 times more likely to indicate that they had enough knowledge, skills and resources to practice handwashing while the non-doers felt that they did not have enough confidence in their capacity to wash their hands. The doers were also 2.6 times more likely to indicate that having the knowledge about handwashing made it easier for them to practice. The non-doers should be supported to build their knowledge and capacity around handwashing. While the doers felt that it was not difficult to remember to wash their hands, the non-doers felt that it was somewhat difficult to wash their hands during these two critical times. The non-doers also indicated that it was somewhat likely that their children could suffer from diarrhoea. The relationship between handwashing and diarrhoea prevention would need to be reinforced ensuring that the non-doers clearly understand that their children are susceptible to diarrhoea if they do not adopt appropriate handwashing practices.

3.2 Montserrado

Barrier Analysis Tabulation Sheet						
Caregivers of children under 5 years wash their hands with Soap/ash and water before handling food and after attending to a child who has defecated.						
Total Doers	48				Montserrado	
Total NonDoers	48					
Determinants	Doers: +Exp. (A)	NonDoers: +Exp. (B)	Diff.	p-value	Relative Risk Ratio: Doers are…..	Relative Risk Ratio: Non-Doers are….
2. Perceived Self- Efficacy: What makes it easy for you to wash your hands with soap/ash and water before handling food and after attending to a child who has defecated?						
water+ soap available	48	38	21%	*0.001*	#VALUE!	
3. Perceived Self- Efficacy: What *makes it difficult* for you to wash your hands with water and soap before handling food and after attending to a child who has defecated?						
lack of handwashing bucket	8	1	15%	*0.015*	Doers are 5.4 times more likely to give this response than Non Doers	
cost of soap	9	2	15%	*0.025*	Doers are 3.9 times more likely to give this response than Non Doers	
4. Positive consequences (Advantages): What are the *advantages/ benefits* of washing your hands with soap/ash and water before handling food and after attending to a child who has defecated						
prevents disease	21	34	-27%	*0.006*		NonDoers are 2.7 more likely to give this response than Doers
keeps you healthy	34	20	29%	*0.004*	Doers are 3 times more likely to give this response than Non Doers	
7. Perceived Social Norms: Who are the people who approve of you washing your hands with soap/ash and water before handling food and after attending to a child who has defecated?						
health workers	*12*	*4*	17%	*0.026*	Doers are 3 times more likely to give this response than Non Doers	
myself	*10*	*1*	19%	*0.004*	Doers are 6.4 times more likely to give this response than Non Doers	

13. Perceived Action Efficacy: How *likely* is it that your child would suffer from diarrhoea <u>if you did not wash</u> your hands with soap/ash and water before handling food and after attending to a child who has defecated?						
not likely at all	0	5	-10%	*0.028*		#DIV/0!

This group indicated that the availability of soap and water made it easy while the lack of these essential products made it difficult to wash their hands. Additionally the cost of soap was felt as a significant barrier that made handwashing difficult. Support to the households to access these essential items or make them understand that they would benefit (in longer term) from defining their priorities differently is thus essential to support the non- doers to adopt this behaviour. Both the doers and the non-doers had a strong understanding on the advantages of practicing the behaviour citing that handwashing contributed to preventing diseases and keeping children healthy. This could be reinforced during the health education sessions at the community level. With respect to the social norms, health workers were cited as positive influencers the programmes can engage to reinforce that indeed handwashing is critical.

3.3 Rivercess

Barrier Analysis Tabulation Sheet						
Caregivers of children under 5 years wash their hands with Soap/ash and water before handling food and after attending to a child who has defecated.						
Total Doers	51				Rivercess	
Total NonDoers	49					
Determinants	**Doers: +Exp. (A)**	**Non-doers: +Exp.**	**Diff.**	**p-value**	**Relative Risk Ratio: Doers are…..**	**Relative Risk Ratio: Non-Doers are….**
1. Perceived Self- Efficacy: With your present *knowledge, resources, and skills,* do you think that you could wash your hands with water and soap before handling food and after attending to a child who has defecated?						
Yes	49	38	19%	*0.006*	Doers are 6.4 times more likely to give this response than Non Doers	
Possibly	2	11	-19%	*0.006*		NonDoers are 6.4 more likely to give this response than Doers
2. Perceived Self- Efficacy: What makes it easy for you to wash your hands with soap/ash and water before handling food and after attending to a child who has defecated?						
Having knowledge on benefits of Hand washing	25	4	41%	*0.000*	Doers are 6.9 times more likely to give this response than Non Doers	
3. Perceived Self- Efficacy: What *makes it difficult* for you to wash your hands with water and soap before handling food and after attending to a child who has defecated?						
Lack of money to buy soap/cost of soap is high	19	28	-20%	*0.036*		NonDoers are 2.1 more likely to give this response than Doers
It's not difficult at all	8	0	16%	*0.003*	Doers are 11.7 times more likely to give this response than Non Doers	
10. Perceived Cues for Action/ Reminders: How difficult is it to remember to wash your hands with soap/ash and water before handling food and after attending to a child who has defecated?						
somewhat difficult	11	23	-25%	*0.007*		NonDoers are 2.9 more likely to give this response than Doers

not difficult at all	40	23	31%	*0.001*	Doers are 3.6 times more likely to give this response than Non Doers	
11.Perceived Susceptibility: How likely is it that your child could suffer from a diarrhea disease in the next few days?						
somewhat likely	12	21	-19%	*0.032*		NonDoers are 2.3 more likely to give this response than Doers
not likely at all	36	20	30%	*0.002*	Doers are 3.1 times more likely to give this response than Non Doers	
13. Perceived Action Efficacy: How *likely* is it that your child would suffer from diarrhoea if you did not wash your hands with soap/ash and water before handling food and after attending to a child who has defecated?						
somewhat likely	1	6	-10%	*0.050*		NonDoers are 6.3 more likely to give this response than Doers

The study indicated that the non-doers lack the confidence to wash their hands during those two critical times while the doers cite having knowledge is what makes it easy for them to wash their hands. These results show the need for continued health education around handwashing to give the non-doers more confidence that they can practice this. The non-doers perceive lack of money as what makes it difficult for them to practice handwashing but considering that doers have found a way out of this behaviour, they can be used to motivate the non-doers to see that cost need not be a challenge and alternatives for example use of ash are equally acceptable and readily available.. With regards to remembering to wash their hands, the non-doers indicated that it was somewhat difficult to remember to wash at those critical times. The doers possibly due to their handwashing practices perceive that they are unlikely susceptible to diarrhoea while the non-doers felt that they are somewhat likely. The relationship between diarrhoea and handwashing needs to be reinforced among both the doers and non-doers to ensure that they have a clear understanding that children under 5 years are at risk of diarrhoea if children and their caretakers do not practice proper handwashing.

4. Use of Modern Family Planning

4.1 Grand Cape Mount

Barrier Analysis Tabulation Sheet						
Women of child bearing age (15 to 49) who do not want to become pregnant Use a modern contraceptive method						
Total Doers	50	Grand Cape Mount				
Total NonDoers	42					
Determinants	Doers: +Exp. (A)	Non-doers: +Exp.	Diff.	p-value	Relative Risk Ratio: Doers are…..	Relative Risk Ratio: Non-Doers are….
1. Perceived Self-Efficacy: What makes it *easier* for you to use a modern contraceptive method?						
FP available in the town	26	4	42%	*0.000*	Doers are 6.8 times more likely to give this response than Non Doers	
FP is free	25	8	31%	*0.002*	Doers are 3.5 times more likely to give this response than Non Doers	
health centre is close	9	2	13%	*0.049*	Doers are 3.4 times more likely to give this response than Non Doers	

2. Perceived Self-Efficacy: What makes it *difficult* for you to use a modern contraceptive method?						
lack of knowledge	3	11	-20%	*0.008*		NonDoers are 5 more likely to give this response than Doers
no difficulty	18	3	29%	*0.001*	Doers are 5 times more likely to give this response than Non Doers	
stock outs	5	0	10%	*0.043*	Doers are 11 times more likely to give this response than Non Doers	
not available in clinic	5	12	-19%	*0.022*		NonDoers are 3.3 more likely to give this response than Doers
3. Positive consequences (Advantages): What are the *advantages* of using a modern contraceptive method?						
prevent unwanted pregnancy	31	5	50%	*0.000*	Doers are 8 times more likely to give this response than Non Doers	
provide for family	0	5	-12%	*0.017*		#DIV/0!
4. Negative Consequence (Disadvantages): What are the *disadvantages* of using a modern contraceptive method?						
no cycle/ disrupted cycle	9	0	18%	*0.003*	Doers are 12 times more likely to give this response than Non Doers	
heavy bleeding	8	15	-20%	*0.027*		NonDoers are 2.7 more likely to give this response than Doers
5. Perceived Social Norms: Do most of the people you know approve of you using a modern contraceptive method?						
yes	47	31	20%	*0.008*	Doers are 5 times more likely to give this response than Non Doers	
no	1	7	-15%	*0.016*		NonDoers are 8.8 more likely to give this response than Doers
6. Perceived Social Norms: Who are the people that *approve* of you using a modern contraceptive method?						
myself	35	19	25%	*0.014*	Doers are 2.6 times more likely to give this response than Non Doers	
nobody	0	4	-10%	*0.040*		#DIV/0!
7. Perceived Social Norms: Who are the people that *disapprove* of you using a modern contraceptive method?						
myself	1	6	-12%	*0.033*		NonDoers are 7.4 more likely to give this response than Doers
community/ enemies	1	6	-12%	*0.033*		NonDoers are 7.4 more likely to give this response than Doers
12. Perceived Action Efficacy: *How likely* is it that you would be able to provide adequately for your children if you used a modern contraceptive method?						
very likely	30	16	22%	*0.030*	Doers are 2.2 times more likely to give this response than Non Doers	
don't know	0	5	-12%	*0.017*		#DIV/0!

The doers felt that availability of the family planning methods and knowing that they are available free of cost made it easy for them to utilise a modern family planning method. Lack of knowledge on family planning and unavailability of these family planning methods made it difficult for the non-doers to embrace family planning methods. The doers cited periodic stock-outs as making it difficult for them to use modern family planning methods. The doers were 8 times more likely to cite that family planning was key in preventing unwanted pregnancies; a positive consequence that would be useful for influencing non-doers to adopt this behaviour. Both doers and non-doers expressed concerns around side effects including disruption of the menstrual cycle and heavy bleeding. Efforts to sensitize

the mothers on any side effects during counselling would be critical in clearing out these concerns and enabling mothers to make informed choices of what methods to adopt. A significant proportion of the doers felt that they themselves approve of family planning, which is reflective that women themselves have the choices to adopt any of the methods without necessarily seeking approval from anyone. The doers felt that they were more likely to provide for their families considering that they were using a modern family planning method. This can be useful to reinforce among the non-Doers

4.2 Sinoe

Barrier Analysis Tabulation Sheet						
Women of child bearing age (15 to 49) who do not want to become pregnant use a modern contraceptive method ((Implants, hormonal ie pills, barrier ie condom, emergency contraception)						
Total Doers	52				Sinoe	
Total NonDoers	48					
Determinants	Doers: +Exp. (A)	Non-doers: +Exp.	Diff.	p-value	Relative Risk Ratio: Doers are…..	Relative Risk Ratio: Non-Doers are….
1. Perceived Self-Efficacy: What makes it *easier* for you to use a modern contraceptive method?						
Access/Living close to the clinic	18	7	20%	*0.018*	Doers are 2.7 times more likely to give this response than Non Doers	
Having knowledge on the importance of FP	14	3	21%	*0.005*	Doers are 4.1 times more likely to give this response than Non Doers	
2. Perceived Self-Efficacy: What makes it *difficult* for you to use a modern contraceptive method?						
Absence of HWs to administer/advice on FP	6	0	12%	*0.017*	Doers are 11.2 times more likely to give this response than Non Doers	
Lack of time to go to the HF	1	7	-13%	*0.023*		NonDoers are 7.8 more likely to give this response than Doers
3. Positive consequences (Advantages): What are the *advantages* of using a modern contraceptive method?						
Makes women look good	9	2	13%	*0.035*	Doers are 3.6 times more likely to give this response than Non Doers	
Stops getting pregnant once finished with child birth	0	6	-13%	*0.010*		#DIV/0!
6. Perceived Social Norms: Who are the people that *approve* of you using a modern contraceptive method?						
Parents/mother-father in-law	42	21	37%	*0.000*	Doers are 4.7 times more likely to give this response than Non Doers	
8. Perceived Access : How *difficult is it* to get a modern contraceptive method?						
very difficult	4	14	-21%	*0.005*		NonDoers are 4.4 more likely to give this response than Doers
not difficult at all	37	25	19%	*0.039*	Doers are 2.1 times more likely to give this response than Non Doers	

In Sinoe, the doers were 4.1 times more likely to indicate that knowledge about family planning made it easy for the doers to use a modern method of family planning. The doers were 11.2 times more

likely to say that absence of health workers made it difficult for them to use a modern method of family planning. With regards to the people who approve, the doers were 4.7 times more likely to indicate that it is the parents in law which is an important aspect that can be utilised when promoting modern family planning methods. The non-doers were 4.4 times more likely to mention that it was very difficult for them to access a modern contraceptive method while the doers were 2.1 times more likely to indicate that it was not difficult at all. This shows that the doers have found a way to access the modern FP methods; they can be used to motivate the non-doers showing them how they managed to access modern contraceptive with ease.

4.3 Grand Bassa

Barrier Analysis Tabulation Sheet						
Women of child bearing age (15 to 49) who do not want to become pregnant use a modern contraceptive method ((Implants, hormonal ie pills, barrier ie condom, emergency contraception)						
Total Doers	49	Grand Bassa				
Total NonDoers	46					
Determinants	Doers: +Exp. (A)	Non-doers: +Exp.	Diff.	p-value	Relative Risk Ratio: Doers are…..	Relative Risk Ratio: Non-Doers are….
1. Perceived Self-Efficacy: What makes it *easier* for you to use a modern contraceptive method?						
Having knowledge on the importance of FP	26	15	20%	*0.035*	Doers are 2.1 times more likely to give this response than Non Doers	
If easy to take administer/take/swallow	9	0	18%	*0.002*	Doers are 12 times more likely to give this response than Non Doers	
2. Perceived Self-Efficacy: What makes it *difficult* for you to use a modern contraceptive method?						
Unavailability of FP at the clinic/in the community	15	24	-22%	*0.027*		NonDoers are 2.3 more likely to give this response than Doers
Nothing	11	3	16%	*0.027*	Doers are 3.3 times more likely to give this response than Non Doers	
3. Positive Consequences (Advantages): What are the *advantages* of using a modern contraceptive method?						
Helps avoid (early/unplanned) unwanted pregnancies	30	19	20%	*0.041*	Doers are 2.1 times more likely to give this response than Non Doers	
Helps family reduce expenditure/ make savings	7	1	12%	*0.036*	Doers are 4.8 times more likely to give this response than Non Doers	
Stops getting pregnant once finished with child birth	10	2	16%	*0.018*	Doers are 4.1 times more likely to give this response than Non Doers	
5. Perceived Social Norms: Do most of the people you know approve of you using a modern contraceptive method?						
Yes	43	29	25%	*0.005*	Doers are 3.8 times more likely to give this response than Non Doers	
No	0	5	-11%	*0.024*		#DIV/0!
7. Perceived Social Norms: Who are the people that *disapprove* of you using a modern contraceptive method?						

Parents (mother, father) /Grandparents	6	14	-18%	*0.027*		NonDoers are 2.9 more likely to give this response than Doers
8. Perceived Access: How *difficult is it* to get a modern contraceptive method?						
not difficult at all	38	27	19%	*0.039*	Doers are 2.2 times more likely to give this response than Non Doers	
9. Perceived Cues for Action/ Reminders: How difficult is it *to remember* how to use a modern contraceptive method?						
very difficult	0	5	-11%	*0.024*		#DIV/0!
somewhat difficult	5	13	-18%	*0.023*		NonDoers are 3.2 more likely to give this response than Doers
not difficult at all	43	27	29%	*0.001*	Doers are 4.5 times more likely to give this response than Non Doers	
10. Perceived Susceptibility: *How likely* is it that you won't be able to provide adequate housing, clothes, food, education and land for your children?						
somewhat likely	14	24	-24%	*0.016*		NonDoers are 2.5 more likely to give this response than Doers
12. Perceived Action Efficacy: *How likely* is it that you would be able to provide adequately for your children if you used a modern contraceptive method?						
very likely	38	24	25%	*0.008*	Doers are 2.9 times more likely to give this response than Non Doers	
somewhat likely	6	20	-31%	*0.001*		NonDoers are 4.8 more likely to give this response than Doers
not likely at all	5	0	10%	*0.033*	Doers are 11 times more likely to give this response than Non Doers	
13. Divine will: Does your *religion approve* of you using a modern contraceptive method?						
Maybe	2	8	-13%	*0.036*		NonDoers are 4.5 more likely to give this response than Doers

The doers were 2.1 times more likely to mention that having appropriate knowledge around use of family planning made it easy for them to adopt a modern method of family planning. They were also more likely to indicate that nothing made it difficult for them to use a modern family planning method unlike the non-Doers. On the other hand, the non-doers indicated that unavailability of the modern methods at the community level made it difficult for them to use them. This illustrates the need to ensure that the non-doers are equipped with the necessary knowledge around family planning and that the different forms are availed to the majority of the community. The non-doers also felt that they were somewhat likely to provide adequately to their families if they used a modern method of family planning. The relationship between family planning, smaller families and the ability of households to provide adequately to all family members will be essential in ensuring that the non-doers see the benefits of modern family planning.

5. Latrine Use

5.1 Grand Cape Mount

Barrier Analysis Tabulation Sheet						
Caregivers of children under 5 years use latrines every time they need to defecate						
Total Doers	49				Grand Cape Mount	
Total NonDoers	50					
Determinants	Doers: +Exp. (A)	Non-doers: +Exp. (B)	Diff.	p-value	Relative Risk Ratio: Doers are…..	Relative Risk Ratio: Non-Doers are….
1. Perceived Self-Efficacy: With your *present knowledge, resources, and skills*, do you think that you could use a latrine every time you need to defecate *(toilet)*?						
Yes	48	37	24%	*0.000*	Doers are 14.8 times more likely to give this response than Non Doers	
2. Perceived Self efficacy: What *makes it easy* for you to use a latrine every time you need to defecate *(toilet)*						
water is available	23	10	27%	*0.004*	Doers are 3 times more likely to give this response than Non Doers	
latrine is clean	15	7	17%	*0.040*	Doers are 2.4 times more likely to give this response than Non Doers	
own their own latrine	11	1	20%	*0.002*	Doers are 6.9 times more likely to give this response than Non Doers	
3. Perceived Self-Efficacy: What *makes it difficult* for you to use a latrine every time you need to defecate *(toilet)*?						
latrine not available	7	15	-16%	*0.050*		NonDoers are 2.4 more likely to give this response than Doers
latrine is far	6	14	-16%	*0.044*		NonDoers are 2.6 more likely to give this response than Doers
water unavailable	15	5	21%	*0.010*	Doers are 3.2 times more likely to give this response than Non Doers	
4. Perceived positive consequence: What are the *advantages/ benefits* of using a latrine every time you need to defecate *(toilet)?*						
prevent disease	27	13	29%	*0.003*	Doers are 3 times more likely to give this response than Non Doers	
5. Perceived Negative Consequence: What are the *disadvantages* of using a latrine every time you need to defecate *(toilet)*?						
requires more water	10	3	14%	*0.033*	Doers are 3.2 times more likely to give this response than Non Doers	
left dirty	0	5	-10%	*0.030*		#DIV/0!
9. Perceived Access: How *difficult is it* to for you to access a latrine every time you need to defecate *(toilet)*?						
very difficult	3	24	-42%	*0.000*		NonDoers are 12 more likely to give this response than Doers

not difficult at all	31	12	39%	*0.000*	Doers are 4.4 times more likely to give this response than Non Doers	
10. Perceived cues for action/reminders: How *difficult is it to remember* to use a latrine every time you need to defecate *(toilet)*?						
very difficult	1	8	-14%	*0.017*		NonDoers are 8.2 more likely to give this response than Doers
11. Perceived Susceptibility: How *likely* is it that your child could suffer from a diarrhoea disease in the next few days?						
very likely	3	13	-20%	*0.007*		NonDoers are 4.8 more likely to give this response than Doers
not likely at all	25	10	31%	*0.001*	Doers are 3.5 times more likely to give this response than Non Doers	
12. Perceived Severity: How *serious* would it be if your child would suffer from a diarrhoea disease?						
very serious	14	31	-33%	*0.001*		NonDoers are 3.5 more likely to give this response than Doers
not serious at all	16	3	27%	*0.001*	Doers are 5.1 times more likely to give this response than Non Doers	

Doers were 14.8 times more likely to indicate that they had enough knowledge, skills and resources to enable them to use a latrine every time they needed. The non-doers on the other hand seemed to lack this confidence to use a latrine. Doers felt that having their own clean latrine and easy access to water made it easy for them to use it every time they needed to defecate. The non-doers perceived that lack of the latrines or distance to the latrine would make it difficult for them. Lack of water necessary for cleaning and flushing cited by the non-doers as what made it difficult for them. The doers were 4.4 times more likely to indicate that it was not difficult at all to access a latrine while the non-doers were 12 times more likely to say that it was very difficult. When asked about the cues for action the non-doers were 8.2 times more likely to indicate that it was very difficult for them to remember to use a latrine every time they needed to defecate. On susceptibility to diarrhoea, the doers were 3.5 times more likely to say that it was not likely at all for their children to suffer from diarrhoea while the non-doers were 4.8 times more likely to say that it was very likely for their children to experience diarrhoea, which could be true for both groups owing to their behaviour. The relationship between diarrhoea and use of latrines is well understood among both groups.

5.2 Sinoe

Barrier Analysis Tabulation Sheet						
Caregivers of children under 5 years use latrines every time they need too defecate						
Total Doers	49					Sinoe
Total NonDoers	51					
Determinants	Doers +Exp.	Non-doers: +Exp.	Diff.	p-value	Relative Risk Ratio: Doers are…..	Relative Risk Ratio: Non-Doers are….
2.Perceived Self- Efficacy What *makes it easy* for you to use a latrine every time you need to defecate *(toilet)*						
Latrine available/ being at home all time/close to my house	40	50	-16%	*0.007*		NonDoers are 6 more likely to give this response than Doers

Having knowledge on the importance	6	0	12%	*0.012*	Doers are 11.3 times more likely to give this response than Non Doers	
Privacy/Feeling of safety	7	0	14%	*0.005*	Doers are 11.5 times more likely to give this response than Non Doers	
4. Positive consequence (Advantages): What are the *advantages/ benefits* of using a latrine every time you need to defecate *(toilet)?*						
Reduces flies/prevents from sickness ie Diarrhoea	35	48	-23%	*0.002*		NonDoers are 4.5 more likely to give this response than Doers
No bad odour in the environment/surrounding	0	12	-24%	*0.000*		#DIV/0!
5. Negative consequence (Disadvantages):What are the *disadvantages* of using a latrine every time you need to defecate *(toilet)*?						
Need for water for flushing or cleaning all the time	4	12	-15%	*0.033*		NonDoers are 3.2 more likely to give this response than Doers
Plenty of insects/flies in the surroundings	8	0	16%	*0.002*	Doers are 11.8 times more likely to give this response than Non Doers	
Need to walk long distance to the shared latrines	7	0	14%	*0.005*	Doers are 11.5 times more likely to give this response than Non Doers	
7. Perceived Social Norms: Who are the people *who approve* of you using a latrine every time you need to defecate *(toilet)*?						
My children	1	10	-18%	*0.005*		NonDoers are 10.4 more likely to give this response than Doers
9. Perceived Access: How *difficult is it* to for you to access a latrine every time you need to defecate *(toilet)*?						
very difficult	0	10	-20%	*0.001*		#DIV/0!
10. Perceived Cues for Action/ Reminders: How *difficult is it to remember* to use a latrine every time you need to defecate *(toilet)*?						
not difficult at all	43	36	17%	*0.030*	Doers are 2.7 times more likely to give this response than Non Doers	
11. Perceived Susceptibility: How *likely* is it that your child could suffer from a diarrhea disease in the next few days?						
somewhat likely	13	26	-24%	*0.010*		NonDoers are 2.6 more likely to give this response than Doers
not likely at all	29	13	34%	*0.001*	Doers are 3.6 times more likely to give this response than Non Doers	
15. Policy: Are there any community *laws or rules* in place that you know of that make it more likely that you will use a latrine every time you need to defecate *(toilet)*?						
No	36	48	-21%	*0.005*		NonDoers are 4.2 more likely to give this response than Doers

The non-doers were 6 times more likely to say that availability of the latrines would make it easier for them to use. They also mentioned that closeness of the latrine to their house would make it easy for them to use it every time they needed to use it. The doers on the other hand were 11.3 times more likely to indicate that having knowledge on the importance of latrine use and the fact that the latrines offered them a sense of safety made it easy for them to use the latrines. The doers were 4.5 times more likely to mention reduction of flies and diseases as the positive consequence of use of latrines. This perception needs to be increased to ensure that the non-doers see this as something to motivate

them embrace this behaviour. The non-doers were 3.2 times more likely to cite the need for water for flushing and the regular cleaning as the negative consequence of using the latrines, which possibly made them prefer going to the bush. The doers felt that the children were not likely to suffer from diarrhoea possibly due to their hygiene practices while the non-doers were 2.6 times more likely to say that they were somewhat likely. This reflects that there is some understanding on the link between latrine use and the incidence of diarrhoea, which could be reinforced to influence more non-doers to embrace use of latrines.

5.3 Grand Bassa

Barrier Analysis Tabulation Sheet						
Caregivers of children under 5 years use latrines every time they need to defecate						
Total Doers	47	Grand Bassa				
Total NonDoers	47					
Determinants	Doers: +Exp.	Non-doers: +Exp.	Diff.	p-value	Relative Risk Ratio: Doers are…..	Relative Risk Ratio: Non-Doers are….
1. Perceived Self- Efficacy : With your *present knowledge, resources, and skills*, do you think that you could use a latrine every time you need to defecate *(toilet)*?						
Yes	46	38	17%	*0.008*	Doers are 9.7 times more likely to give this response than Non Doers	
2. Perceived Self- Efficacy : What *makes it easy* for you to use a latrine every time you need to defecate *(toilet)*						
Availability of water	22	11	23%	*0.015*	Doers are 2.5 times more likely to give this response than Non Doers	
If its provided/donated to me	0	7	-15%	*0.006*		#DIV/0!
3. Perceived Self- Efficacy : What *makes it difficult* for you to use a latrine every time you need to defecate *(toilet)*?						
Unavailability of water to flush/clean	16	5	23%	*0.006*	Doers are 3.5 times more likely to give this response than Non Doers	
Toilet is unavailable	0	15	-32%	*0.000*		#DIV/0!
4. Positive consequences (Advantages): What are the *advantages/ benefits* of using a latrine every time you need to defecate *(toilet)?*						
No bad odour in the environment/surrounding	7	17	-21%	*0.016*		NonDoers are 2.9 more likely to give this response than Doers
9. Perceived Access: How *difficult is it* to for you to access a latrine every time you need to defecate *(toilet)*?						
very difficult	0	22	-47%	*0.000*		#DIV/0!
not difficult at all	34	11	49%	*0.000*	Doers are 6.6 times more likely to give this response than Non Doers	
10. Perceived Cues for Action/ Reminders: How *difficult is it to remember* to use a latrine every time you need to defecate *(toilet)*?						
not difficult at all	43	35	17%	*0.026*	Doers are 3.4 times more likely to give this response than Non Doers	
11. Perceived Susceptibility: How *likely* is it that your child could suffer from a diarrhoea disease in the next few days?						
very likely	1	12	-23%	*0.001*		NonDoers are 13.9 more likely to give this response than Doers

not likely at all	31	12	40%	*0.000*	Doers are 4.6 times more likely to give this response than Non Doers	
13. Perceived Action Efficacy: How *likely* is it that your child would suffer from diarrhoea if you did not use a latrine every time you need to defecate *(toilet)*						
very likely	41	32	19%	*0.023*	Doers are 2.9 times more likely to give this response than Non Doers	
somewhat likely	4	14	-21%	*0.008*		NonDoers are 4.1 more likely to give this response than Doers
14. Divine will: Do you think that *God approves* of you using a latrine every time you need to defecate *(toilet)*?						
Yes	34	42	-17%	*0.032*		NonDoers are 2.7 more likely to give this response than Doers
No	11	3	17%	*0.020*	Doers are 3.5 times more likely to give this response than Non Doers	

Doers were 9.7 times more likely to indicate that they had enough knowledge skills and resources to use a latrine while the non-doers had limited knowledge and resources on this. Efforts to equip them with this are thus necessary to support them embrace this behaviour. The doers were also 2.5 times more likely to mention that the availability of water made it easy for them to use a latrine. When asked about what made it difficult, the doers were 3.5 time more likely to point out that unavailability of water, made it difficult for the them to use a latrine every time they needed to. This shows that indeed water is a key factor to the use of latrine that would need to be taken into account in the promotion of CLTS. The non-doers were 2.9 times more likely to say that one of the benefits of using a latrine was that it led to a clean environment unlike the case with open defecation; reinforcing this perception would ensure that more non-doers adopt this behaviour. The doers were 3.4 times more likely to indicate that accessing the latrines was not difficult at all while a significant number of non-doers indicated that it was very difficult.

6. Water Storage

6.1 Rivercess

Barrier Analysis Tabulation Sheet						
Caregivers of children under 5 years store drinking water in a clean, covered narrow mouth container						
Total Doers	49	Rivercess				
Total NonDoers	48					
Determinants	Doers: +Exp. (A)	Non-doers: +Exp	Diff.	p-value	Relative Risk Ratio: Doers are…..	Relative Risk Ratio: Non-Doers are….
2. Perceived Self- Efficacy : What *makes it easy* for you to store drinking water in a clean, covered narrow mouth container						
Having knowledge about water safety	31	9	45%	*0.000*	Doers are 5.7 times more likely to give this response than Non Doers	
Availability of soap to clean gallon	8	2	12%	*0.049*	Doers are 3.4 times more likely to give this response than Non Doers	

Water source being close to home	20	9	22%	*0.015*	Doers are 2.6 times more likely to give this response than Non Doers	
3. Perceived Self- Efficacy: What *makes it difficult* for you to store drinking water in a clean, covered narrow mouth container?						
If container is unavailable	16	27	-24%	*0.016*		NonDoers are 2.4 more likely to give this response than Doers
Its time consuming-queuing at the hand pump for water	14	2	24%	*0.001*	Doers are 5.7 times more likely to give this response than Non Doers	
Long distance to the water source-prefer large volume buckets	13	5	16%	*0.036*	Doers are 2.6 times more likely to give this response than Non Doers	
Problems with pump-locked, unavailable, on-functional, dry	20	11	18%	*0.047*	Doers are 2.1 times more likely to give this response than Non Doers	
4. Positive consequences (Advantages): What are the *advantages/ benefits* of storing drinking water in a clean, covered narrow mouth container						
Prevents diarrhoea/keeps children healthy	31	40	-20%	*0.022*		NonDoers are 2.5 more likely to give this response than Doers
Avoids water contamination/ensures safe clean water	18	9	18%	*0.040*	Doers are 2.2 times more likely to give this response than Non Doers	
Keeps family free from diseases	8	1	14%	*0.017*	Doers are 5.4 times more likely to give this response than Non Doers	
5. Negative consequences (Disadvantages): What are the *disadvantages* of storing drinking water in a clean, covered narrow mouth container?						
Time consuming	13	5	16%	*0.036*	Doers are 2.6 times more likely to give this response than Non Doers	
7. Perceived Social Norms: Who are the *people who approve* of you storing drinking water in a clean, covered narrow mouth container?						
Parents/mother-father in-law	21	31	-22%	*0.026*		NonDoers are 2.2 more likely to give this response than Doers
9. Perceived Access: How *difficult* is it to *access or get* a covered narrow mouth container to store drinking water.						
very difficult	9	24	-32%	*0.001*		NonDoers are 3.9 more likely to give this response than Doers
not difficult at all	20	8	24%	*0.008*	Doers are 2.9 times more likely to give this response than Non Doers	
11. Perceived Susceptibility: How *likely* is it that your child could suffer from a diarrhoea disease in the next few days						
very likely	0	11	-23%	*0.000*		#DIV/0!
not likely at all	37	20	34%	*0.001*	Doers are 3.8 times more likely to give this response than Non Doers	

The doers were 5.7 times more likely to say that having the knowledge about water safety made it easier to practice the behaviour and mentioned that the closeness of the water source made it easier for them to re-fill the gallon as and when needed. The non-doers were 2.4 times more likely to cite the unavailability of the narrow mouth container as the barrier to appropriate water storage with the

doers indicating that for them the effort to store water in such a container was time consuming considering they could only use the hand pump where long queues were a normal occurrence. The non-functionality of the hand-pump and the long distance from home made it equally difficult for the doers to store water in a clean narrow mouth container. Both the doers and non-doers indicated some of the positive consequences including avoiding water contamination, preventing diarrhoea and keeping the family safe. These aspects could be incorporated into the water storage messaging. With respect to people who approve this practice, the doers were 2.2 times more likely to indicate that the parents including the in-laws would approve this practice hence an audience that could also be engaged in the messaging.

6.2 Montserrado

Barrier Analysis Tabulation Sheet						
Caregivers of children under 5 years store drinking water in a clean, covered, narrow mouth container.						
Total Doers	51	Montserrado				
Total NonDoers	49					
Determinants	Doers: +Exp. (A)	NonDoers: +Exp.	Diff.	p-value	Relative Risk Ratio: Doers are…..	Relative Risk Ratio: Non-Doers are….
2. What *makes it easy* for you to store drinking water in a clean, covered narrow mouth container						
proximity of pump	21	10	21%	*0.021*	Doers are 2.4 times more likely to give this response than Non Doers	
knowledge	19	1	35%	*0.000*	Doers are 10.1 times more likely to give this response than Non Doers	
money to buy container/ soap	7	20	-27%	*0.002*		NonDoers are 3.9 more likely to give this response than Doers
support from others in the community	5	0	10%	*0.031*	Doers are 11 times more likely to give this response than Non Doers	
4. What are the *advantages/ benefits* of storing drinking water in a clean, covered narrow mouth container						
healthy children	3	16	-27%	*0.001*		NonDoers are 6.8 more likely to give this response than Doers
7. Who are the *people who approve* of you storing drinking water in a clean, covered narrow mouth container?						
other relatives	26	16	18%	*0.049*	Doers are 2 times more likely to give this response than Non Doers	
10. How *difficult is it to remember* to store drinking water in a clean, covered narrow mouth container						
very difficult	1	6	-10%	*0.050*		NonDoers are 6.3 more likely to give this response than Doers
not difficult at all	36	24	22%	*0.022*	Doers are 2.3 times more likely to give this response than Non Doers	
11. How *likely* is it that your child could suffer from a diarrhoea disease in the next few days						
somewhat likely	14	25	-24%	*0.013*		NonDoers are 2.5 more likely to give this response than Doers

not likely at all	29	16	24%	*0.013*	Doers are 2.4 times more likely to give this response than Non Doers	
12. How *serious would it be* if your child would suffer from a diarrhoea disease?						
very serious	16	31	-32%	*0.001*		NonDoers are 3.3 more likely to give this response than Doers
not serious at all	19	7	23%	*0.008*	Doers are 3 times more likely to give this response than Non Doers	

The doers were 10.1 times more likely to mention that having knowledge around safe water storage made it easier for them to store water safely, the non-doers were 3.9 times more likely to say that for them having money to buy the container is what would make it easier. Equipping the non-doers with the relevant information about water storage as well as seeking ways to increase access to these storage containers would make the adoption of this behaviour easier among the non-doer. The non-doers were 6.3 times more likely to say that it was very difficult to remember to store water in the recommended container while the doers were 2.3 times more likely to indicate that it was not difficult at all. They could be useful in arraying this perception among the non-doers in efforts to motivate them. Doers were 3 times more likely to say that it would not be serious at all if their children suffered from diarrhoea possibly since they felt that they were not at-risk considering they were already practicing the behaviour. The non-doers on the other hand were 3.3 times more likely to indicate that it would be very serious. This shows that there is sound understanding between both groups that diarrhoea is a serious condition.

6.3 Grand Cape Mount

Barrier Analysis Tabulation Sheet						
Caregivers of children under 5 years store drinking water in a clean, covered, narrow mouth container.						
Total Doers	43				Grand Cape Mount	
Total NonDoers	51					
Determinants	Doers: +Exp. (A)	Non Doers: +Exp	Diff.	p-value	Relative Risk Ratio: Doers are…..	Relative Risk Ratio: Non-Doers are….
2. Self-Efficacy: What *makes it easy* for you to store drinking water in a clean, covered narrow mouth container						
money for container	0	12	-24%	*0.000*		#DIV/0!
3. Self-Efficacy: What *makes it difficult* for you to store drinking water in a clean, covered narrow mouth container?						
sick/tired	14	5	23%	*0.006*	Doers are 3.5 times more likely to give this response than Non Doers	
pump is dry/ broken	9	2	17%	*0.012*	Doers are 4.4 times more likely to give this response than Non Doers	
gallon is not available	7	19	-21%	*0.020*		NonDoers are 2.8 more likely to give this response than Doers
4.Perceived Positive Consequences: What are the *advantages/ benefits* of storing drinking water in a clean, covered narrow mouth container						
healthy family	16	9	20%	*0.028*	Doers are 2.4 times more likely to give this response than Non Doers	

6. Perceived Social Norms: Do most of the people that you know *approve* of you storing drinking water in a clean, covered narrow mouth container?						
possible	0	5	-10%	*0.043*		#DIV/0!
7. Perceived Social Norms: Who are the *people who approve* of you storing drinking water in a clean, covered narrow mouth container?						
local leader	4	0	9%	*0.040*	Doers are 10.9 times more likely to give this response than Non Doers	
9. Perceived Access: How *difficult* is it to *access or get* a covered narrow mouth container to store drinking water.						
not difficult at all	20	14	19%	*0.044*	Doers are 2.1 times more likely to give this response than Non Doers	
10. Perceived Cues for Action/Reminders: How *difficult is it to remember* to store drinking water in a clean, covered narrow mouth container						
somewhat difficult	11	23	-20%	*0.040*		NonDoers are 2.2 more likely to give this response than Doers
12. Perceived Severity: How *serious would it be* if your child would suffer from a diarrhoea disease?						
very serious	16	32	-26%	*0.012*		NonDoers are 2.6 more likely to give this response than Doers
somewhat serious	17	11	18%	*0.047*	Doers are 2.1 times more likely to give this response than Non Doers	

The non-doers were 2.8 times more likely to say that limited access to the gallon, the recommended storage container, made it difficult for them to store water safely. On the other hand, the doers were 2.1 times more likely to say that it was not difficult for them to access these containers. Comparing the perception between the two groups, it would be paramount to investigate indeed the ease of accessing these containers to support them embrace this behaviour. The doers were 10.9 times more likely to indicate that the local leaders approved the use of the narrow mouth container. This powerful resource can be used to motivate the non-doers to store their drinking water in a safe container. The doers were 2.1 times more likely to indicate that it would be somewhat serious if their children suffered from diarrhoea while non-doers were 2.6 times more likely to say that it would be very serious. This perception among the non-doers would need to be reinforced to ensure that this supports them to embrace this practice.

7. Conclusions and Recommendations

In Barrier analysis, the differences in responses between doers and non-doers are of interest when developing activities. The question is what barriers the non-doers face that doers were able to overcome. If both doers and non-doers experience the same barrier, then lowering this barrier is unlikely to turn a non-doer into a doer. Across the five (5) counties, there were few unique differences and as such the summary below cuts across the different areas that were found to be statistically significant for each behaviour.

7.1 Exclusive Breastfeeding

Conclusion

The main barriers non-doers experience when exclusively breastfeeding their children below six months included;

- Inadequate knowledge on EBF

- Difficulty in finding time for EBF
- Perceived poor maternal nutrition
- Perceived inadequate support available for the mothers to practice EBF.

The main enablers were that heath workers play an important role in encouraging mothers to practice EBF, other close relatives including aunties, uncles, brothers and sisters were perceived to be supportive.

Bridges to activities

1. Increase the knowledge that exclusive breastfeeding protects the child from common illness.
2. Increase the perception that mothers can still produce milk and practice EBF if they are hungry or do not eat enough food as their bodies will prioritise breastmilk production.
3. Increase the support that is available for mother to feed their children on breastmilk only for the first 6 months of life.
4. Increase the perception that spouses are supportive of mothers feeding their children on only breastmilk for the first 6 months of life.
5. Decrease the perception that it is difficult to find time to breastfeed exclusively and reinforce the fact that the time spent on EBF is worthwhile.

Recommendations

1. Scale up of IYCF programming through proven approaches for example the mother-to-mother support groups, already in place in some of the communities, and utilising them for behaviour change and avenues for continued messaging around topics for example the importance of breastfeeding and arraying some of the perceptions around maternal nutrition. These groups should follow a specific model so that they can equitably reach as many beneficiary household as possible, provide a structure for a community health information system, and provide improved monitoring of Mothers and households
2. Explore engaging health workers to provide messaging around exclusive breastfeeding both at the health facility during one on one counselling sessions or at the community level with mixed groups during routine household visits. The interaction of the health workers with the caregivers more so during ANC is a suitable avenue to ensure that majority of them take advantage of this opportunity to reinforce messages around exclusive breastfeeding.
3. Develop educational material and mass messaging for behaviour change highlighting specific messages around the key barriers for example quality of diets, quality of breastmilk, benefits of breastfeeding, and how to manage time for EBF among others.
4. Explore a stronger involvement of men in child feeding with a focus on what men can do to support their wives when exclusive breastfeeding possibly through the ''*We Are One''* sessions or establishment of father support groups. Consider developing specific messages targeting spouses who are evidently an important influencer.
5. Explore targeting of distant relatives and grandparents perceived as potential influencers. Develop specific messages for these groups that can be disseminated at different forums.
6. Provide talking points for service providers e.g. health workers and mother group facilitators to deliver accurate information during counselling or educational sessions.
7. Around the universal motivators, majority of both doers and non-doers when asked what they wanted most in life indicated providing education for the children, having money for other household needs and being able to build a house for their families. These could be used in the EBF messaging where the programs could promote EBF as the most cost-effective way to feed infants hence allowing the household to making savings that could otherwise be used in buying foods that are unsuitable for the infants and high medical bills as non-exclusively

breastfeeds infants are more likely to fall ill. The savings on household income could be used to meet these goals and desires. The desire for education can be linked around messaging that shows that EBF children are smarter, perform well in schools and are better placed to achieve their educational goals and leading a bright future after school. Some of the campaigns can reach out to successful people within the community who used to motivate the community around this behaviour.

7.2 Dietary Diversity

Conclusion

The significant determinants across the 3 counties are lack of money making it hard for households to provide diversified diets for the children, lack of support from spouses, the feeling that the households spent too much money in purchasing different food varieties and the fear of children being upset when certain foods are unavailable. Doers believe that their children are less susceptible to malnutrition.

Bridges to activities

1. Increase the ability of households to produce diverse foods for home consumption.
2. Increase the perception that spouses are supportive of mothers feeding their children foods from at least 4 of the 7 food groups.
3. Increase the perception that malnutrition is a serious condition that can be prevented through feeding children a diverse diet.
4. Decrease the perception that feeding children foods from at-least 4 of the 7 food groups is expensive.
5. Increase awareness that investing in diverse diets is saving costs in other areas for example health care/ medication.

Recommendations

1. Promote home gardening for home consumption and sale of surplus to enable families purchase other foods.
2. Increase the participation of men in childcare so that women have enough time to prepare and feed diverse meals to their children: organise group discussions with husbands to discuss the importance of feeding children foods from different food groups. Explore incorporating this in the gender transformation fora.
3. Communicate to members of Community Savings and Loans Association (CSLA) the importance to invest in dietary diversity especially for children and women.
4. Identify locally available nutritious foods that are in season and support the development of recipes to be promoted during participatory cooking sessions to the wider community.
5. Build the capacity of health workers including the community health assistants on child feeding including provision of accurate information on dietary diversity.
6. Develop Information, Education, Communication (IEC) materials on the messages mentioned above (recommendation 1 to 4).
7. Starting a business, providing education for children and having money to meet household needs were cited as what most doers and non-doers desired most in life. These desires could be tied to the messaging around dietary diversity linking diversity to better health and wellbeing for children and households at large with reduced expenditure on medication and health. The savings on medication would be used to meet these desires to send children to school, setting up a business that would increase household income among other desires.

7.3 Handwashing

Conclusion

Key determinants across the counties are knowledge around handwashing, the influence of health workers, doers' and non-doers' perception around susceptibility to diarrhoea, the cost of soap and the handwashing infrastructure and the ease in remembering to wash hands.

Bridges to activities

1. Increase the perception of non-doers that they have the knowledge, skills and materials to practice handwashing at the two critical times assessed.
2. Increase the ability of the health workers to reinforce the messages that handwashing with soap/ash at these critical times is important in preventing a myriad of diseases.
3. Increase the perception of non-doers that they can remember washing their hands with soap. Assist them with remembering through placing posters and other reminders at strategic points.
4. Increase awareness of non-doers that children are highly susceptible to diarrhoea and that diarrhoea is a very serious disease for children.
5. Increase the perception that ash is a suitable alternative to soap when the latter is unavailable.

Recommendations

1. Contextualize the hygiene education sessions to address the particular barrier identified for specific groups. Provide talking point to staff engaged in health education sessions.
2. Scale up the bamboo handwashing station across the different counties as an in-expensive alternative to the handwashing stations.
3. Develop messages for posters and stickers to remind people of washing hands with soap after latrine use and cleaning a baby's bottom. These could be placed on strategic locations for example on handwashing stations, kettles, toilet doors etc.
4. Review existing IEC materials and contextualize them to address the particular determinants identified.
5. Put emphasis on the faecal-oral transmission of germs during the hygiene education and counselling sessions so that non-doers understand which behaviours increase the risk of diarrhoea and the danger of diarrhoea for children.
6. Explore running of campaigns to promote the use of ash as an acceptable alternative to soap among the non-doers who were more likely to wash with water only in absence of soap.
7. Support the establishment of school health clubs where children can be used as an avenue to influence caregivers to adopt appropriate handwashing practices.
8. When asked of what things they wanted most in life, a significant proportion of both doers and non-doers cites desire to educate their children, stating a small business and having a long life. Considering the risk of diarrhoea among households that do not practice handwashing, this can be used in the messaging depicting that with handwashing, the children are less likely to contract diarrhoea hence being able to attend schools without interruption. With children less likely to fall ill, there is no expenditure on healthcare with the savings being available for the households to meet other desires for example starting a business. Equally, with good health, children and by extension the entire household are bound to enjoy a longer life free from such common diseases.

7.4 Use of Modern Family Planning

Conclusion

A key enabler for the use of modern contraceptive methods identified during this study is the proximity to the clinic. Barriers are the unavailability of health workers to administer, concerns on possible side effects and stock outs.

Bridges to activities

1. Increase (the perception that there is) access to contraceptives at the health facilities and ensure adequate stock of the different options at all times.
2. Increase the perception that it is not difficult to access contraceptives at the community level
3. Increase the proportion of health workers with adequate knowledge on family planning who can provide essential counselling to women seeking to take contraceptives.
4. Increase the perception that modern family planning is key to preventing unwanted pregnancies.
5. Increase the perception that women are able to provide adequate clothing and housing for their family if using a modern method of family planning.
6. Increase the perception that nobody disapproves the use of modern family planning methods.

Recommendations

1. Train health practitioners including the community health assistants on counselling mothers on the use of the various modern contraceptives.
2. Engage with the ministry of health to ensure enough human resource and adequate free of charge supply of the various contraceptives across all the health facilities.
3. Review existing SBCC materials on family planning; include messages on the benefit of having a small family. Explore linking the messaging to the universal motivators where majority of the respondents indicated education, having money and enjoying a long life to the fact that family planning allows for well-planned smaller families allowing the households to plan their resources to achieve their short and long-term goals. The messaging should emphasize that it is easier for household to meet all their basis and additional needs when they have smaller families. Explore engaging positive deviant (PD) women who can give practical experiences to motivate their peers.
4. Empower women for them to decide whether they use modern family planning methods or not.

7.5 Latrine Use

Conclusion

The main barriers identified are unavailability of water and latrines, distance to the shared latrines and lack of knowledge and skills. Privacy of latrines as opposed to the bush and sense of safety was perceived by the doers as a key positive enabler.

Bridges to activities

1. Increase the knowledge, skills and resources among the non-doers to enable them to use a latrine every time they need to defecate.
2. Increase the ability of both doers and non-doers to access water required to flush and clean the toilets by taking into account water availability during CLTS triggering.
3. Reinforce the fact that use of latrines does not necessary have to use a lot of water e.g. promote a design of latrines that use as little water as possible.
4. Decrease the perception that latrines are a breeding ground for insects by including messaging on cleanliness during the CLTS process.

5. Increase the proportion of community members who are aware of existing community and or public health laws around reduction of open defecation.

Recommendations

1. Continue community level awareness. Include not just the health benefits but also the social benefits of using latrines such as community respect, self-esteem, privacy and dignity.
2. Develop IEC materials for example posters that provide information around the barriers for examples that latrines do not necessarily use a lot of water, shared latrines are not more than five minute walk, prevention of insect infestation by placing lids of the toilet hole etc. These same issues can be discussed in formal group discussions.
3. Explore the feasibility of using the CSLA materials for construction of latrines.
4. Re-examine the issue of sustainability of CLTS in communities that have relapsed to open defecation. Regular monitoring and documentation in the ODF communities is essential.
5. Revise the messaging used in CLTS stressing on identified enablers including the fact that use of latrines provides a sense of comfort, safety and does not necessarily require a lot of water.
6. In community selection for CLTS, consider prioritising communities with adequate water supply.
7. Where they exist, explore using available community level legal structures to enforce existing community and or public health laws that encourage and support people to construct and use latrines. Where these laws are non-existent influence communities using the lessons learnt from communities where they exist.
8. Consider using local resources to build demonstration latrines in central locations and use them to reduce some of the perceptions for example that latrines use a lot of water, latrines being breeding ground for insect infestations etc. Use them as well to educate the population on how to keep them clean with minimal resources

7.6 Water Storage

Conclusion

The main barriers identified hindering the use of the narrow mouth container (gallon) for safe water storage include:

- The lack of knowledge around water safety
- Unavailability of the gallons and/ or the money to buy them though there is need to investigate this further considering that there was evidence of similar gallons used for other purposes for example storage of palm-wine, palm oil and gas
- Unavailability of soap to clean the containers
  Limited access to water with households indicating that they could only use water from the hand-pump for drinking. The pumps were said to be far away at times with long queues at the pump are long.

Bridges to activities

1. Increase the knowledge among non-doers on water storage emphasising on the advantages and the relationship with reduced incidence of water borne diseases.
2. Increase the perception that local leaders approve of storing water in a clean narrow mouth container.
3. Increase the ability of caregivers to remember to store water in a clean narrow mouth container by placing stickers at strategic location at the house.
4. Reinforce the perception that drinking water from gallons contributes to ensuring the health of the families.

Recommendations

1. Investigate further through focus group discussions with non-doers whether the cost of a gallon is really the main barrier as there was evidence of use of gallons for different products for example palm oil, palm wine. If ascertained consider a social marketing project that provides more access to these gallons to majority of households.
2. Through campaigns raise awareness on the importance of water safety. Develop IEC materials on some of the barriers and enablers for example the advantages of save water storage, investing in safe water storage saves on costs for medical treatment linking this to diarrhoea prevention. For posters, consider targeting strategic points for example at the hand pumps.
3. Involve local leaders and water management committees when sensitising community members on the importance of safe water storage. Discourage storing other products in the gallons.

A comprehensive list of more detailed suggestions for activities is included in the DBC framework in Annex 5.

Annex

Annex 1: Training Agenda

Training Agenda Feb 2020.docx

Annex 2: Training participant list

Enumerator List.xlsx

Annex 3: BA questionnaire

1. Exclusive breastfeeding for the

2. Minimum Dietary diversity 4+food grou

3. Handwashing with Soap during 2 critical

4. Modern Family Planning Use.docx

5. Latrine Use.docx

6. Water Storage.docx

Annex 4: Findings

1. Combined Exclusive Breastfeedin

2. Combined Dietary Diversity RC_Mont_G

3. Combined Handwashing RC_Mo

4. Combined Family Planning GCM_Sinoe_Use

5. Combined Latrine GCM_Sinoe_GB.x

6. Combined Water Storage RC_Mont_GC

Annex 5: Design for Behaviour Change Framework

1. Exclusive Breastfeeding: Mothers of children aged 0-6 month's feed them on breastmilk alone for the first 6 months

Behaviour	Priority Group	Significant determinants/ % difference between doers and non-doers	Bridges to activities	Activities
		Self-Efficacy:		
2. Mothers of children aged 0-6 month's feed them on breastmilk alone for the first 6 months	Mothers of children 6-12 months	1) Doers feel they have the knowledge, skills and resources to practice the behaviour (30% in Sinoe and 19% diff in GCM); non-doers feel they don't have the knowledge (23%) Sinoe 2) Doers are 2.6 (26% diff) times more likely to say support or encouragement by the health worker in GCM and 2.9times (22%difference) in Sinoe 3)Doers are 2.9 times more likely to say that being away from home make it difficult (Sinoe) 4) Non doers are 5.6 times more likely to say lack of time makes it more difficult in GCM 5) Non-doers are 5.6 times more likely (17%) to say lack of time in GCM 6) Non-doers in GB are 4 times more likely to indicate that unavailability of diverse diets makes it more difficult	Increase the knowledge, skills and resources of non-doers to feed their children on breastmilk alone for the first 6 months Increase the perception that health workers encouragement makes it easy for mothers to practice EBF Increase the perception that mothers can successfully breastfeed even when away from home Increase the perception that EBF is not time consuming and that time spent on EBF is worthwhile and saves time that could otherwise be spent on other areas for example seeking medical care Increase the ability of households to obtain diverse diets	Continue supporting nutrition education and counselling through the various forms including the mother-to-mother support groups. Engage with health workers who are seen as supportive to EBF, support adequate training for the heatlhworkers on IYCF to enable them offer quality counselling and messaging around breastfeeding Develop talking points for use by health workers and community health assistants for use during nutrition messaging. Messages to stress on some of the barriers for example maternal nutrition and the fact that even working mothers are able to breastfeed exclusively. Promote home gardening for the production of a variety of foods at the household level to support dietary diversity for lactating mothers Explore including a session on EBF in the "*we are one"* sessions
		Positive Consequence		
		1)Doers are more likely (22.7 times)to cite that the child will be healthy (33% diff) in GCM 2) Non-doers are 2.4 times more likely to say that the child will become clever/smart (23% diff) in Sinoe	Increase the perception that children who are exclusively breastfed are less likely to fall ill. Increase the perception that exclusive breastfeeding supports in brain development and making the children clever and performing well at school	Engage health workers, community health assistants and lead mothers of mother-to-mother support groups to support nutrition education and counselling sessions stressing on the advantages of EBF.
		Perceived social norms-Who approves		
		1) Doers are more likely to say that other relatives (Uncles, Aunties, Brothers, sister) approve of EBF 2.2 times in GCM and 2.2 times in Sinoe	Increase the perception that other relatives including aunties, uncles, brother and sisters are supportive of EBF	Develop specific messages for other influencing groups including the uncles, aunts, sisters and brothers. Use forum for example the *"we are one"* session which targets some of these influencers and sensitize them around infant and young child feeding particularly the importance of exclusive breastfeeding
		Perceived Access (Time)		

		In Sinoe 21%, GB 31% Doers are more likely to say that finding time to practice is not difficult while in GCM Non-doers are more likely to say that it's very difficult (15%)	Decrease the perception among the non-doers that it's very difficult to find time for EBF reinforcing the perception with the doers that it is not difficult at all	Invest in one on one counselling for mothers who have difficulties in breastfeeding addressing concerns such as time ensuring that mothers see the importance of EBF and create the time for it.
		Perceived Access (Support)		
		In Sinoe, doers perceive that it is not difficult at all (37% diff) to get the support their need while the non-doers cite that it is somewhat difficult (33%). In GCM, non-doers are 3.1 times more likely to say that it is very difficult. In GB doers are 2.3 times more likely to say that it's not difficult at all (23% diff)	Decrease the perception that its difficult for mothers to get the support they need to practice EBF.	Increase the ability of souses to support their wives practice EBF. Explore use of father to father support groups where men can have a clear understanding on the role they can play to support EBF *See under norms on other relatives who can influence EBF*
		Perceived Action Efficacy (How likely)		
		In Sinoe doers are 2.8 times more likely to say that EBF protects the child from malnutrition ND more likely to say somewhat (20% diff) while in GCM, non-doers are 3.7 times more likely to say somewhat likely.	Reinforce on the perception that children are less likely to become malnourished if exclusively breastfed.	Use the different fora; mother to mother support groups, father to father support groups, we are one sessions to sensitize community members on the contribution of EBF in reducing mortality and morbidity associated with malnutrition. Explore including topics on EBF on the we are one modules
		Universal Motivator		
		1. Childs education 2. Money 3. Starting a business 4. Building a house	1. Reinforce across all the different fora that EBF is the most cost-effective way to feed an infant considering that EBF is free and readily available. This enables families to make savings on food or any other substitutes and the savings can be used to meet other household needs for example send children to school, build a house or start small business that can complement household income. 2. Develop posters that show the link between EBF and saving money on other expenses and the result being more income at the household for other household needs. 3. During the EBF messaging and counselling, focus on the advantages of EBF as offering an infant a head start in life, better performance at schools considering EBF makes the child smart.	

1. Minimum Dietary Diversity: Mothers of children ages 6 – 23 months feed their children foods from at least four (4) of the 7 food groups each day?

Behaviour	**Priority Group**	**Significant determinants/ % difference between doers and non-doers**	**Bridges to activities**	**Activities**
2. Mothers of children ages 6 – 23 months feed their children foods from at least four (4) of the 7 food groups each day?	**Mothers of children 6-23 months**	Perceived Self Efficacy: What makes it easy		
		In RC, doers were 4.3 times more likely, than the non-doers, to say farming made it easy to feed their children on foods from at least 4 food groups. The non-doers were 2.3 times more likely to say having money In Montserrado, the non-doers were 6.2 times more likely to say farming would make it easy while and 3 times more likely to say having money	Increase the ability of non-doers to produce foods at home through home gardening	Continue supporting households produce a variety of foods through home gardening where is already on course and invest in the same in areas that have not yet started. This will reduce the cost for households having to buy often expensive foods from the market that they can produce at home

		Perceived Self Efficacy: What makes it difficult		
		In RC, doers were 2. Times more likely to say lack of financial support from spouses makes it difficult similar to the non-doers in GCM (18% diff) In Montserrado, doers were 4.8 times more likely to say unavailability of foods made it difficult. The non-doers were more likely to state that lack of family support (23% diff) made it difficult.	Increase the ability of households to produce diverse foods through home gardening Increase the ability of spouses to support their partners in feeding their children on foods from at least 4 food groups either through production or purchase	*Home gardening: See under what makes it easy above* Explore male engagement avenues to promote their role around child feeding including either through production(farming) or offering financial support to their spouses to purchase foods unavailable form the farms.
		Perceived Negative Consequences/ Disadvantages		
		In RC the doers perceive that (17% diff…2.3 times more likely) feeding children foods from at-least 4 of the 7 food groups leads to spending too much money on these foods. There were also 2.8 times more likely to say that this is time consuming In Montserrado, doers were 13.9 times more likely to say that they feared child would be upset if these foods once introduced were unavailable	Decrease the perception that feeding children on a variety of foods is time consuming and leads to high expenditure on foods. Decrease the perception that children would be upset at times when these foods were unavailable	Support participatory cooking sessions with the mother-to-mother support groups using locally available foods eliminating the need for purchasing expensive foods mothers would find difficult buying Prioritise messaging on the benefits of dietary diversity on the health and well-being of the child that make them healthy and hence less time spent in hospitals for medication, as they are less likely to fall ill. Explore campaigns that strive to portray that time spent and investment in feeing children on a diverse diet is worthwhile
		Perceived Social Norms : Who are the people that approve		
		In RC, the doers were 3.2 times more likely to say that husband/boyfriend approve of dietary diversity. The non-doers in RC (3.2%) and GB (3.3 times) were more likely to mention close friends would approve feeding children on a diverse diet containing foods from at least 4 of the 7 food groups	Increase the perception that husbands/boyfriends approve feeding children on diverse diets from at least 4 of the 7 food groups	Consider establishment of father to father support groups and identify supportive men from the groups to be the leaders and use them to motivate fellow men within the community to support their spouses.
		Perceived Severity: How serious		
		In Montserrado, doers were more likely to say that malnutrition is not serious at all (21% diff) while in GCM doers were more likely to sat that it was somewhat serious (18%) while in RC, the doers were more likely to say that it is not serious at-all (23% diff)	Increase the perception that malnutrition is a serious condition	Continue nutrition education and sensitisation sessions across different fora with sessions on causes of malnutrition emphasising how dietary diversity can avert malnutrition. Stress on the increased nutrition needs once complementary feeding has been started.
		Universal Motivator		
		1. Education 2. Money 3. Business 4. Long life	During the mother to mother support groups, father support groups, we are one sessions and any other fora discussing nutrition issues, stress the fact that children who are fed on diverse diets are healthier, less likely to fall sick. There are hence minimal expenditure of medications with the huge savings potentially used in meeting other family need like child education, starting up a business and having surplus money for other needs. Consider engaging any positive deviant mothers who are a testimony to better health for children who are fed on diverse diets who can be useful in motivating their peers.	

3. Handwashing: Caregivers of children under 5 years wash their hands with Soap/ash and water before handling food and after attending to a child who has defecated.

Behaviour	Priority Group	Significant determinants/ % difference between doers and non-doers	Bridges to Activities	Activities
Caregivers of children under 5 years wash their hands with Soap/ash and water before handling food and after attending to a child who has defecated.	Caregivers of children under 5 years	Perceived Self- Efficacy : With your present knowledge, resources, and skills		
		In GCM, doers were 12 times more likely to say that they have enough knowledge, skills and resources (19% diff) while the non-doers were 7.9 times more likely to say possibly (13% diff) In RC, doers were 6.4 times more likely to say Yes (19%) while the non-doers were 6.4 times more likely to say possibly (19%)	Increase the knowledge, skills and resources of non-doers to practice handwashing with soap/ash after attending to a child who has defecated and before handling food. Increase the perception among the non-doers that they have adequate knowledge skills and resources to practice handwashing	Continue doing health education in the various forms targeting parents of children under five years and other adult family members Develop promotional materials (messages, drama, posters, songs, flyers etc.) explaining/ showing how to wash hands with soap, at what critical times and why.
		Perceived Self- Efficacy : What makes it easy		
		In GCM doers are 2.6 times more likely to say that having knowledge (26% diff) make it easy. In RC, doers are similar more likely to say that having knowledge makes it easy In Montserrado, doers are more likely to point out availability of water and soap (21% diff)	Increase the knowledge, skills and resources of non-doers to practice handwashing with soap/ash after attending to a child who has defecated and before handling food. Increase the ability of non-doers to access soap and water to enable them wash their hands with soap/ash at these 2 critical times.	*See above (self-efficacy) on health education* Consider a campaign to promote the use of soap as a suitable alternative considering that this was found to be least used Explore support to scale up production of local soap to ensure that this is affordable to majority of households. Explore how this can be linked to on-going livelihood interventions.
		Perceived Self- Efficacy : What makes it difficult		
		In Montserrado, doers were 5.4 times more likely to cite the lack of handwashing facilities making it difficult to practice this behaviour (15% diff) as well as the cost of soap (15% diff) In RC the doers were more likely to say that they experienced no difficulty (16% diff) while the non-doers were 2.1 times more likely to sat the cost of soap made it difficult (20% diff)	Increase the ability of non-doers to access handwashing facilities Increase the perception that washing hands with soap/ash and water is not difficult at all	Continue promotion of the bamboo handwashing station that is easy to set up and uses locally available materials. Support training on proper handwashing during the setup of these stations. *For barrier on cost of soap see above under self: efficacy what makes it easy*
		Perceived Social Norms: Who are the people who approve		
		In Montserrado doers were 3 times more likely to indicate that health workers approved of handwashing at these 2 critical times (17% diff)	Increase the perception that health workers approve handwashing with ash/soap at these 2 critical times	Engage with the health workers to play a role in the health education sessions as they are seen as a powerful enabler to influence change and adoption of this behaviour. Health workers could be a useful tool to reinforce the severity of diarrhoea during the sessions. Structuring particular training for health workers and utilise them for health education and messaging activities. Consider equally engaging the community health assistants in areas that are not served by health facilities and thus lacking health workers.

		Perceived Susceptibility: How likely is it that your child could suffer from a diarrhoea		
		In GCM, doers were 4 times more likely to say not likely at all (37% diff) while the non-doers were 3.8 times more likely to say somewhat likely (34%diff). The same was found in RC where doers were 3.1 times more likely to say not likely at all (30% diff) and the non-doers somewhat likely 12.3 times (19% diff	Reinforce the perception that it is unlikely for children to contract diarrhoea when their caregiver practicing handwashing at the critical times. Increase the perception that inadequate handwashing by the caregivers increases the risk of diarrhoea among children under 5 years.	Support routine health education campaigns at both health facility and community level emphasizing on the relationship between handwashing and prevention of diarrhoea. Develop suitable IEC materials that show the relationship between handwashing and prevention of diarrhoea
		Perceived Cues for Action/ Reminders: How difficult is it to remember		
		In GCM doers were 3.5 times more likely to say that it was not difficult at all to remember (23% diff) while the non-doers were 3.5 times more likely to say that it was somewhat difficult (32% diff) In RC the doers were 3.6 times more likely to say that it was not difficult at all while the non-doers were 2.9 times more like to say that it was somewhat difficult (25% diff)	Increase the perception among the non-doers that it is easy to remember to wash hands with soap/ash and water at these 2 critical times.	Develop posters and position them at strategic points where caregivers will get a constant reminder. These could be outside the latrines, on the handwashing stations and any other relevant locations.
		Universal Motivator		
		1. Childs education 2. Starting a business 3. Good Health 4. Money 5. Long Life	Run campaigns that strongly portray children who have great health as a result of their caregivers washing their hands and can attest to the benefits that include less frequent incidences of diseases and caregivers hardly spend any money on medication. The savings from this are then important in supporting the households reach other household needs for example taking their children to school guaranteeing them a brighter future and having some surplus money to meet other needs like starting a small business that brings extra income to the household.	

4. Use of modern family planning: Women of child bearing age (15 to 49) who do not want to become pregnant use a modern contraceptive method ((Implants, hormonal ie pills, barrier ie condom, emergency contraception)

Behaviour	Priority Group	Significant determinants/ % difference between doers and non-doers	Bridges to activities	Activities
Women of child bearing age (15 to 49) who do not want to become pregnant use a modern contraceptive method ((Implants, hormonal ie pills, barrier ie condom, emergency contraception)	Women of Child Bearing Age	Perceived Self Efficacy: What makes it easier		
		In GCM doers were 6.8 times more likely to indicate that the availability of the commodities made it easy for them to use the modern FP methods (42% diff). There were also 3.5 times more likely to say that if the FP was provided free (31% diff) it would be easier for them. Doers in Sinoe and GB mentioned that the knowledge around FP (21ST diff and 20% diff) respectively made it easy for them. In GB the doers were also 12 times more likely to indicate that the ease to administer/take the commodities made it easy for them (17% diff)	Increase the ability of women of child bearing age to access FP commodities at the community level Increase knowledge around FP among the non-doers to enable them make an informed choice on what FP methods to adopt. Increase the knowledge and capacity of health workers to counsel women on different FP methods as well as administering the FP commodities available.	Advocacy with the Ministry of Health (MOH) to ensure adequate stocking of a variety f FP commodities. Advocacy with the MOH to explore feasibility o the FP commodities provided free of charge to ensure ease of access to majority of women Advocacy with the MOH to staff health facilities with heath workers to support counselling and administration of the FP commodities.
		Perceived Self Efficacy: What makes it difficult		

		In Sinoe, doers were 11.2 times more likely to cite the absence of health workers as what made it difficult for them t access the F commodities. In GCM, doers were 5 times more likely to say that they did not face any difficulty at all but were equally 5 times more likely to indicate concerns around stock outs as a significant barrier to the use of modern Fps The non-doers in GCM were 3.3 times more likely to cite unavailability of the FP (19%) and inadequate knowledge (20%) as what made it difficult. In GB, the non-doers were more likely to cite unavailability of the FP commodities as what made it difficult for them (22%)	Reinforce the perception that its not difficult to access FP commodities.	
		Positive Consequences (Advantages)		
		In GCM, doers were 8 times more likely to mention prevention of unwanted pregnancies (50% diff) as the advantages of modern FP. Similarly in Sinoe the doers were 8 times more likely to mention this 18% diff) In GB the doers were 2.1 times more likely to cite that modern FPs avoids unwanted pregnancies (20% diff) and 4.8 times more likely to cite that modern FP helps reduce family expenditure	Reinforce the advantages of modern FP among the non-doers including preventing unwanted pregnancies Increase the perception that modern FP helps to reduce on family expenditure	Include topics on family planning and more so around the benefits in the health education sessions. Consider having these talks during the ANC and PNC where women of childbearing age attend. Support capacity strengthening of health workers including the community health assistant and the trained traditional midwives. Include a module on family planning in the mother-to-mother support group-training curriculum.
		Perceived Social Norms: Who are the people that approve		
		In GCM doers were 2.6 times more likely to say that they themselves approved use of modern FP (25% diff) while in Sinoe the doers were 4.7 times more likely to say that mothers-in-law approved the use of modern FP (37%diff	Reinforce the perception that mothers-in-law approve the use of modern FP Increase the perception among the non-doers that they need not seek approval from anyone as a significant number of women approve it for themselves.	Identify WCBA who have embraced use of Modern FP and use them to motivate their peers. Link them to the health facilities where they can be trained to strengthen their capacity to offer support and counselling to their peers.
		Perceived Access : How difficult is it to get a modern contraceptive method		
		In Sinoe, the doers were 4.4 times likely to say that it is not difficult at all while the non-doers were 2.1 times more likely to say it is very difficult. In GB, doers were 2.2 times more likely to say that it is not difficult at all (19%)	Decrease the perception that getting modern FP is difficult	*See activities under self-efficacy above*
		Perceived Action Efficacy: How likely is it that you would be able to provide		
		In GCM doers were 2.2 times more likely to say that it was very likely (22% diff) similar to GB where the doers were 2.9 times more likely (25%). In GB the non-doers indicated that it was somewhat likely (31% diff)	Reinforce the perception that it is very likely to provide to household needs with modern family planning that allows for smaller families	Develop IEC materials that shows that households re better laced to provide for their small families. Link this with the universal motivators where majority of families desired to take their children to school, build a house, enjoy good health and have money to meet other needs. Use these materials to show WCBA that this can

				be achieved with smaller families where expenses are greatly reduced.
		Universal Motivator		
		1. Childs education 2. Money 3. House 4. Good Health	*See above under perceived action efficacy*	

5. Latrine Use: Caregivers of children under 5 years use latrines every time they need to defecate

Behaviour	Priority Group	Significant determinants/ % difference between doers and non-doers	Bridges to activities	Activities
		Perceived Self- Efficacy : With your present knowledge, resources, and skills		
Caregivers of children under 5 years use latrines every time they need to defecate	Caregivers of children under 5 years	In GCM doers were 14.8 times more likely to say that they had enough skills, knowledge and resources to enable them use a latrine every time (24% diff) in Grand Bassa the doers were 9.7 times more likely to give this response as well (17% diff)	Increase the perception among the non-doers that they have enough skills, resources and knowledge to use a latrine evrytime they need to defecate. Increase the knowledge about use of latrines among the non-doers	Continue health education messaging around use of latrines at all available for a.
		Perceived Self- Efficacy : What makes it easy		
		In Sinoe doers were 11.3 times more likely to cite having knowledge as what made it easy for them to use latrine. Doers were 11.5 times more likely to say that use of latrines offers a sense of privacy and sense of security. Non-doers were 6 times more likely to say that availability of latrine would make it easy for them to use it every time they needed to defecate. In GB, doers were 2.5 times more likely to cite availability of water as what made it easy for them to use a latrine (23% diff) similar to GCM (27% diff) In GCM doers were 6.9 times more likely to cite having own latrine	Increase the knowledge level among the non-doers on latrine use Reinforce the perception that latrines offers privacy and a sense of security. Increase the ability of non-doers to access a latrine through the CLTS approach	*On knowledge see above on self-efficacy* Scale up CLTS to trigger more community members to set up their own latrines. Prioritise CLTS in communities that do not have challenges with water access Undertake regular monitoring of CLTS after commissioning a community as ODF to ensure that there is continuity and the community do not relapse. Document lessons for any community that relapses and use them to inform the approach in subsequent triggering. In the CLTS triggering reinforce the perception that having own latrine gives a sense of security and privacy. Messaging during the CLTS process to not only focus on the health benefits of use of latrines but also the social benefits of using latrines for examples building one's self esteem, gaining respect from the community and being a source of pride at the community level
		Perceived Self- Efficacy : What makes it difficult		
		In GCM doers were 3.2 times more likely to cite unavailability of water as what makes it difficult (21% diff). Non-doers on the other hand were 2.4 times more likely to say unavailability of water (16%) and latrine being far (16%) as what would make it difficult for them to use a latrine. In GB doers were 3.5 times more likely to cite unavailability of water (23%) and unavailability of latrines (32% diff) as factors that would make it difficult.	Decrease the perception that use of latrines uses a lot of water	
		Negative Consequences/ Disadvantages		

		In GCM, the doers were 3.2 times likely to say that the negative consequence is that the latrines use a lot of water to clean and flush, water that is often unavailable. Non doers in Sinoe were 3.2 times more likely to say this as well (15% diff) In Sinoe, doers were 11.8 times more likely to say that latrines were a breeding ground for insects. The doers were also 11.5 times more likely to say that the negative consequence was having to walk long distance ND: Need for water to flush 15% 3.2 times more likely	Decrease the perception that use of latrines requires excessive use of water. Decrease the perception that latrines are a breeding ground for insects	Messaging around use of latrine to put emphasize that they need not use a lot of water. IEC messages to address both the health benefits and the social benefits that are equally more likely to motivate people to make efforts to build their own latrines.
		Perceived Access : How difficult is it to for you to access a latrine		
		In GCM, doers were 4.4 times more likely to say that it's not difficult at all to access a latrine while the non-doers were 12 times more likely to sat that it was very difficult. In Sinoe non-doers were more likely to say that it was very difficult In GB, the doers were 6.6 times more likely to say that it was not difficult at all to access a latrine while the non-doers were more likely to say that it was very difficult (47% diff)	Decrease the perception of the non-doers that it is very difficult to access a latrine	*See above on the recommendations for CLTS under self-efficacy*
		Perceived Susceptibility: How likely is it that your child could suffer		
		In GCM doers were 3.1 times more likely to say that it is not likely that the child could suffer from diarrhoea (31% diff) while the non-doers were 4.8 times more likely to say very likely (33% diff) In Sinoe doers were 3.6 times more likely to say not likely (34% diff) while the non-doers were 2.6 times more likely to say that it was somewhat likely (24%) for the child to get diarrhoea In Grand Bassa, doers were 4.6 times more likely to say that it was not likely that the child will get diarrhoea (40%). The non-doers, were 13.5 times more likely to say that it was very likely for the child to have diarrhoea (23%)	Increase the perception that it is very unlikely for the child to suffer from diarrhoea when the caregivers use latrines every time they needed to defecate.	During heath education sessions as well as opportunities during triggering put efforts to sensitize the communities on the link between prevalence of diseases and use of latrines. Consider developing IEC materials that pass these messages in simple language easy to understand for majority of the community for example use of pictorials.
		Perceived Severity: How serious would it be if…		
		In GCM, doers perceive that it would not be serious if their children suffered from diarrhoea (27% diff) while the non-doers were 3.5 times more likely to say that it would be very serious if their children suffered from diarrhoea	Reinforce the perception among the non-doers that diarrhoea is a serious condition.	Develop IEC materials that shows the relationship between latrine use, diarrhoea prevalence and mortality. Use health workers to reinforce the perception that diarrhoea is a serious disease.
		Universal Motivator		
		1. Money 2. Education 3. Business 4. Long-life	In campaigns promoting the use of latrines as well as during CLTS triggering, emphasis could be placed on the link between use of latrines and prevalence of diarrhoea and similar diseases. Relate this to the need for regular medication that leads to families utilising money they could otherwise spend on other necessities on health care. Illustrate how savings on health needs as a result can be put to better use and helping households meet	

		5. House	other household necessitates such as education for their children and starting up a small business among other desires highlighted by majority of the community.

6. Water Storage: Caregivers of children under 5 years store drinking water in a clean, covered, narrow mouth container.

Behaviour	Priority Group	Significant determinants/ % difference between doers and non-doers	Bridges to activities	Activities
Caregivers of children under 5 years store drinking water in a clean, covered, narrow mouth container.	Caregivers of children under 5 years	Perceived Self- Efficacy : What makes it easy for you to store drinking water		
		In RC doers were 5.7 times more likely to say that having knowledge around safe water storage makes it easy for them to store water safely (45%). Doers were also more likely to say that availability of water to clean the containers made it easy for them to store water safely In Mont, doers were 10.1 times more likely to state that having the knowledge around water safety made it easy for them to store water in a clean narrow mouth container (35%). The non-doer were 3.9 times more likely to say that availability of money to buy gallon would make it easy for them to store water in a clean narrow mouth container (27%). In GCM, doers were more likely to say that the availability of the gallon made it easy for them to store water in a safe container (24%)	Increase the perception that adequate knowledge on water storage makes it easy to store water safely Increase the ability of non-doers to have access to water source, gallon to allow them store water safely	Continue community sensitisation around water safety. Consider having poster and any other visual materials at the source of water and at home. Ascertain that unavailability of gallons wing to the costs limits households from using it to store water more so considering that these same containers are heavily used for storage of other items for example palm oil and gas. Consider ways of making the containers easily accessible either through commercially or though linking them to on-going interventions as NFIs. Consider influencing that returns from the VSLA where they exist can be prioritised in the purchase of the narrow mouth containers
		Perceived Self- Efficacy : What makes it difficult for you to store		
		In RC doers were more likely to say the following as making it difficult for them to store water in a gallon: • Time spent on the queue at the hand pump 24% 5.7 times more than….. • Long distance to the pump 16% 2.6 times more… • Functionality of the pump 18% 2.1 times more... The non-doers were 2.4 times more likely to say that unavailability of the container made it difficult (24% diff) In GCM, doers were 4.4 times more likely to cite functionality of the pump (17%) while the non-doers were 2.8 times more likely to mention unavailability of the container	Decrease the perception that water storage in a narrow mouth container is time consuming Increase the ability of non-doers to have access to a narrow mouth container to support them store water safely.	
		Perceived Social Norms: Who are the people who approve		
		In Montserrado, the doers were 2 times more likely to say that other relatives (sister, brothers, aunt, uncles) approved the use of narrow mouth containers (18%) In GCM, doers were 10.9 times more likely to say that local leaders approved the use of narrow mouth containers.	Increase the perception that other relatives including sisters, brothers, uncles and aunts approve the use of narrow mouth containers for water storage. Reinforce the perception that local leaders approve the use of narrow mouth containers for water storage.	Include other groups in messaging around water safety for example the distance relatives. Engage the local leaders to motivate the wider community on the use of the narrow mouth containers. Explore how they can be utilised in disseminating these messages during community gathering. Also, consider

				how the water management committees can be used to scale up the messaging to the wider community.
		Perceived Access : How difficult is it to access or get a covered narrow mouth container		
		In RC, doers were 2.9 times more likely to say that it was not difficult at all to access the narrow mouth container (24% diff) while the non-doers were 3.9 times more likely to say that it was very difficult (32% diff) In GCM, the non-doers were 2.1 times more likely to say that it was not difficult at all (19% diff)	Increase the perception that it is not difficult to obtain a narrow mouth container that enables safe water storage.	*See above under self-efficacy*
		Perceived Cues for Action/ Reminders		
		In Mont, doers were 6.3 times more likely to say that it was not difficult to remember to store water in a narrow mouth container (22% diff). The non-doers were 2.3 times more likely to say that it was very difficult (22% diff) In GCM, non-doers were more likely to say that it was somewhat difficult (20% diff)	Decrease the perception that it is difficult to remember to store water in a clean narrow mouth container.	Develop poster that illustrate safe water storage and give information n round the advantages and have them displayed in strategic location both at the community level for example at the water source (hand pump) and at home.
		Perceived Susceptibility: How likely is it that your child could suffer		
		In RC, the doers were 3.8 times more likely to say that it was unlikely that their children could suffer from diarrhoea (34%). In Montserrado, the doers were 2.4 times more likely to say that it was not likely that their children could suffer from diarrhoea (24% diff). The non-doers were 2.5 times more likely to say that it was somewhat likely that their children will suffer from diarrhoea (24%)	Increase the perception that it is unlikely that children could suffer from diarrhoea if they drank water from a clean narrow mouth container.	Develop IEC messages that stress the advantages of safe water storage linking this to prevention of incidence of diarrhoea.
		Perceived Severity: How serious would it be if your child would suffer		
		In Montserrado, non-doers were 3 times more likely to say that it would be very serious f their children suffered from diarrhoea (32% diff) In GCM, doers were more likely to say that it would not be very serious if their children suffered from diarrhoea (18% diff). The non-doers on the other hand were more likely to say that it would be very serious (26% diff) diarrhoea	Increase the perception that diarrhoea is a serious condition	Reinforce the relationship between water safety, diarrhoea and morbidity. The heath workers can be a useful asset to reinforce and stress the fact that diarrhoea is indeed a serious condition that is associated to high morbidity among children under 5 years
		Universal Motivators		
		1. Long Life 2. Education 3. Business 4. House	During the health messaging at the health facility, water points or any other fora illustrate the relationship between water safety and diarrhoea portraying that households that drinking safe water are less likely to suffer from diarrhoea hence spending less time and money on medication. The time and money saved can be used in other engagement that support the family to attain their other desire for example sending children to school, starting a business among others. Reinforce the fact that savings on health care can be useful in making it easier for the family to attain its other needs. With diseases eradicated, children are less likely to die at a young age and hence a long life for everyone in the community.	