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Social and Behaviour Change Communication Pre- & Post-test Comparative Analysis: Infant and Young Child Feeding (IYCF) Topic Module

Gender Transformative and Nutrition-sensitive Project (2019-2021)
in Chemba District, Sofala Province, Mozambique



World Food
Programme

January 2021

This project is generously funded by the Austrian Development Agency (ADA).



Country	Mozambique
Project Title	Reaching the furthest behind first: Gender Transformative and Nutrition-sensitive programming to increase food and nutrition security for women, adolescent girls, and children in Chemba district, Sofala province
Geographic area	Chemba District, Sofala Province
Sessions Conducted (6)	September – October 2020
Analysis Conducted	December 2020
Cooperating Partners	Government of Mozambique Pathfinder International
Analysis & Report Author	WFP Mozambique: Allyson Vertti

*Front cover photo caption: Infant resting in Mulima, Chemba District
Credit: Nilda Lima (2020)*

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Pre- & Post-test Comparative Analysis: Infant and Young Child Feeding (IYCF) Topic Module

Executive Summary

Social and Behaviour Change Communication (SBCC) is an evidence-based strategy to improve health and nutrition by increasing and improving knowledge, attitudes and practices. The Gender Transformative and Nutrition-sensitive project implements SBCC activities, in parallel to resilience and post-harvest loss interventions, with the aim of contributing to women's empowerment and stunting reduction among children in Sofala, Mozambique. The SBCC strategy uses three approaches to achieve this aim: community mobilization, interpersonal counselling and media. Activities under the three approaches are categorized into three main themes within the project: Nutrition, Gender, and Sexual and Reproductive Health.

The Nutrition theme is further subdivided into four topic modules: infant and young child feeding (IYCF), maternal nutrition, malaria prevention, and sanitation and hygiene. This report focuses on the interpersonal counselling approach of the IYCF topic module. These sessions targeted all 1,500 project households, specifically caregivers of children under 2 and their spouses.

When implementing SBCC activities particularly aimed at reducing or preventing stunting, it is essential to engage in robust monitoring as behavioural change is a slow process and may not significantly impact project outcomes when looking solely at end line indicators. Nevertheless, this does not mean project efforts are not making progress at the individual level. Closely tracking knowledge, attitudes and practices linked to reducing and preventing stunting can guide project implementers in better understanding willingness to change and actual change related to desired outcomes. To measure the project's influence on beneficiaries, the project conducted pre- and post-test surveys on a sample of 120 beneficiaries immediately before and after each interpersonal counselling topic module focusing questions on knowledge, intention, self-efficacy (confidence) and self-reported behaviour. Using a comparative analysis, this report presents the findings regarding the IYCF topic module.

The IYCF pre- and post-test questionnaire consisted of ten questions in five categories:

- recalling key IYCF messages
- first 1,000 days of life
- breastfeeding
- complementary feeding
- children's diet during illness

Findings show significant progress in regard to knowledge on IYCF, attitudes around breastfeeding, complementary feeding and the importance of the first 1,000 days of life. The one area that was lacking for both men and women caregivers was knowledge around a child's diet during illness, indicating the need for clearer messaging on this topic.



I. Background

The Gender Transformative and Nutrition-sensitive (GTNS) pilot project, titled *“Reaching the furthest behind first: Gender Transformative and Nutrition-sensitive programming to increase food and nutrition security for women, adolescent girls, and children in Chemba district, Sofala province”* is implemented by the World Food Programme (WFP) under the leadership of the Government of Mozambique, and in close coordination with Government and cooperating partners. The project receives multi-year funding from the Austrian Development Agency (ADA). The catchment area is limited to Mulima locality of the Mulima Administrative Post of Chemba District. The population of Chemba is 87,925 people (17,730 households), and the project aims to reach 7,500 people (1,500 households) using the criteria of at least 500 pregnant and lactating women (PLW), 500 adolescent girls, 750 children under 2 (CU2), and women living with obstetric fistula; an additional 20,000 people will be reached indirectly through Social and Behaviour Change Communication (SBCC) media activities.

The GTNS project directly supports the priorities of the Government of Mozambique and is fully aligned to WFP’s Country Strategic Plan 2017-2021. The aims of the project are to improve gender equity and women and adolescent girls’ empowerment; increase dietary diversity; and reduce stunting among girls and boys under 5 in the context of a changing climate. The project design is innovative and integrates multiple nutrition-specific and -sensitive interventions to address the determinants of malnutrition, with a focus on women’s empowerment. It combines:

- i) construction of gender- and nutrition-sensitive household and community assets (fuel efficient cooking stoves, water catchment systems, household gardens and afforestation);
- ii) trainings on post-harvest loss for smallholder women and men farmers (food conservation, transformation and storage) and linkages to improved products (hermetic storage); and
- iii) multi-level SBCC activities implemented at individual, household and community level¹

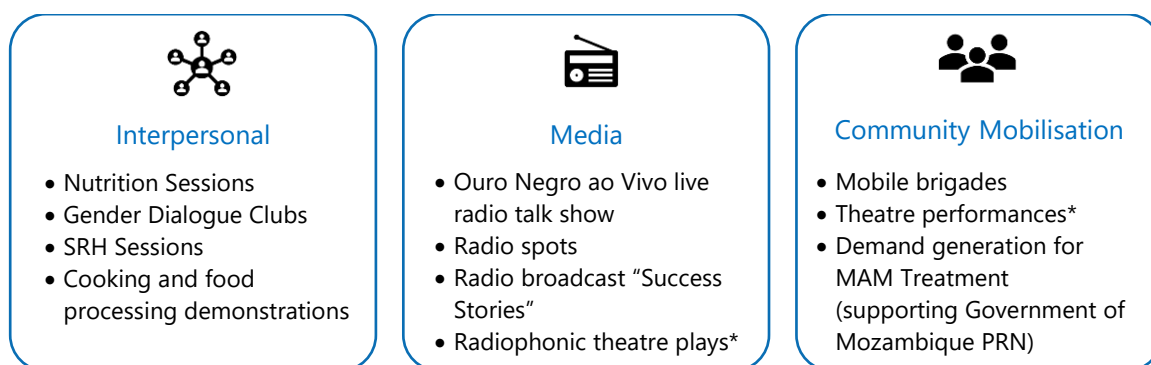
II. Social and Behaviour Change Communication

SBCC is a crucial evidence-based strategy to improve health and nutrition by increasing and improving knowledge, attitudes and practices. The GTNS project’s SBCC component is being implemented by WFP’s SBCC partners² through three approaches: interpersonal counselling, media (radio), and community mobilisation (see Figure 1). Combining dynamic approaches to engage men for gender equality and behaviour change with nutrition-sensitive

¹ In parallel to its SBCC activities, the GTNS project is also generating demand for acute malnutrition treatment, including community-level mid-upper arm circumference (MUAC) screening of PLW and children under 5 (CU5) and referrals of malnourished case by volunteer community health workers. If screening indicates malnourishment, PLW and CU5 are referred to their local health facility for further treatment. This activity is not included in the pre- & post-test questionnaire and results can be found in the SBCC routine monitoring.

² District Services of Health, Women and Social Action (SDSMAS), Pathfinder International and PCI Media

programming is expected to facilitate sustainable results at the household level, which can be cascaded to the wider community for replication.



*due to the COVID-19 pandemic theater performances have been adapted to a media modality

Figure 1: The three approaches of the GTNS Project SBCC strategy

The GTNS project categorizes SBCC into three main themes: Nutrition, Gender, and Sexual and Reproductive Health (SRH). The Nutrition theme is further subdivided into four topics: maternal nutrition, infant and young child feeding (IYCF), malaria prevention, and sanitation and hygiene (S&H). These four topics comprise the WFP standard SBCC package and target all 1,500 project households, focusing on caregivers of CU2 and their partners. Topic modules consist of six sessions, facilitated by community health worker pairs, and trained and supervised by field partners.³

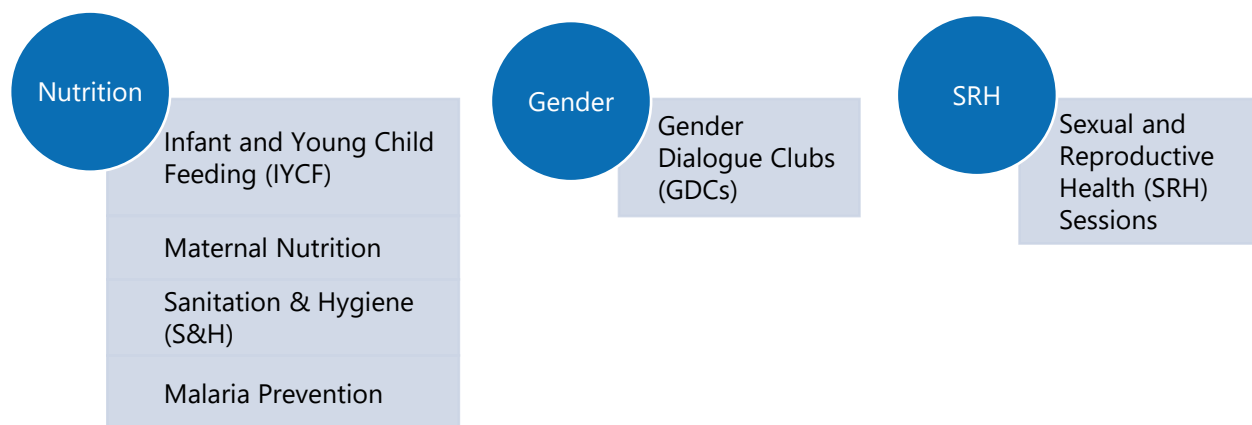


Figure 2: SBCC themes and topics of the GTNS Project

To evaluate the efficacy of SBCC activities, the GTNS project conducted pre- and post-testing to compare and analyse beneficiary knowledge, intention, confidence and self-reported behaviour. The pre- and post-test exercise focused on interpersonal counselling sessions, excluding cooking and food processing demonstrations.

III. Aim and Objective of Pre- and Post-testing

When implementing SBCC activities, particularly those aimed at reducing or preventing stunting, it is essential to engage in robust monitoring, as behavioural change is a slow

³ Gender Dialogue Clubs consist of complex and sensitive concepts and will therefore be mainly facilitated by implementing partner field staff with some community health worker support.

process and may not significantly impact project outcomes when looking solely at end line indicators. Unlike the baseline and end line evaluation that focuses on whether the programme worked, regular monitoring focuses on systematic tracking of activities to assess the effectiveness of implementation efforts. This analysis also serves as evidence for project impact.

The main aim of pre- and post-testing was to understand the influence of interpersonal counselling sessions on project beneficiary knowledge, attitudes and behavioural practices in each topic module. The objective was to use a comparative analysis to determine which concepts and messages within each theme are influencing a positive change among project beneficiaries.

IV. Methodology

Each topic within the Nutrition theme was carefully reviewed to identify key areas where the project seeks to positively change knowledge, attitudes and practices among men and women beneficiaries. This was used to develop indicators to measure behavioural change over the course of each topic module. The body of research from similar contexts and documentation from the project site shows that men are generally the main decision-makers in the household, and often influence the behaviour of other household members, it was imperative to separately consider assessing men and women when developing the indicators and questionnaires for each topic module. Therefore, the indicators target three groups: men and women caregivers together, women caregivers only and men caregivers only.

Social and behaviour change can be negatively influenced by external factors. To account for these externalities, at the individual level, behaviour change can be measured not only through behavioural outcomes but also through the desire or plan to change. This can be evaluated through psychosocial domains: knowledge, intention, self-efficacy, attitude, subjective norms and perceived behavioural control (see Table 1).

Table 1: Psychosocial domains for measuring behavioural change⁴

Domains	Descriptions (Adopted from NCI, 2005)	Domains	Descriptions (Adopted from NCI, 2005)
Knowledge	Facts, information, and skills necessary to perform a behaviour	Attitude	Perceived evaluation and / or enthusiasm toward the behaviour
Intention	Perceived likelihood of performing a behaviour	Subjective norm	Perception about whether key people approve or disapprove of the behaviour
Self-efficacy	Confidence in one's ability to take action and successfully carry out the behaviour	Perceived behavioural control	Belief that one has, and can successfully exercise, control over performing the behaviour

⁴ WFP. (2019, January). *Social and Behaviour Change Communication (SBCC) Guidance Manual for WFP Nutrition*. Chapter 8: Monitoring Phase [partially adapted]. Originally titled "Table 15. SBCC-related psychosocial indicators".



For the GTNS context, the appropriate psychosocial indicators for this pre-/post-testing exercise were knowledge, intention and confidence. Within the pre-post questionnaires, the psychosocial indicators mentioned below were combined with questions on self-reported behaviour to give a more holistic picture of the potential behaviour change impact pathway, as well as to shed light on behavioural outcomes.

For each indicator, objectives based on SMART criteria⁵ were developed to measure against the comparative analysis of the pre- and post-tests. The SMART objectives were agreed through discussion with the programme team based on context, expertise and secondary data sources. A matrix was created to consolidate this information per topic, to guide the M&E team in producing short questionnaires on WFP's corporate data collection tool (Open Data Kit – ODK) (see Annex 1 for IYCF topic matrix).

The questionnaire was used both during the pre-test and post-test to assess the change in results after a beneficiary completed the module (See Annex 2).⁶ The IYCF pre- and post-test focused on five main areas for desired behaviour change:

- recalling key IYCF messages
- first 1,000 days
- breastfeeding
- complementary feeding
- children's diet during illness

In total, there were ten indicators covering these areas that translate into ten questions on the questionnaire.

The interviews were conducted in the local language of Sena which required field staff to be confident with the questionnaire to easily translate between Portuguese and Sena. WFP trained the implementing partner, Pathfinder International, to conduct the data collection. The questions were pre-tested to ensure translation was accurate and questions were understood by community members.

For the IYCF topic, the target sample for both the pre- and post-test was 120 project beneficiaries (60 women and 60 men) across Mulima locality in Chemba District, Sofala. The sample size was calculated based on the feasibility to collect these results, taking into consideration the elements of limited resources and timing. The results are to provide indications as to how the response of the SBCC-indicators may be impacted by targeted community members before and after SBCC topic module sessions. The results inform the project's overall SBCC programming and field implementation. The methodology does not serve to inform other SBCC interventions and is specific for the GTNS project in Chemba.

⁵ Specific, Measurable, Achievable, Relevant, and Timebound

⁶ In the questionnaire, men and women were also asked a question that is related to the parallel cooking demonstration activity that occurs once in each topic module (question 5.1 in Annex 2). This data is analysed and reported separate from this comparative analysis report (see forthcoming GTNS Tableau dashboard).

The survey was conducted through individual interviews with men and women separately, using convenience sampling⁷ during community visits. Data was collected immediately before the first of six IYCF sessions for the pre-test (in September 2020) and after the sixth session for the post-test (in October 2020). The target sample is not necessarily the same individuals across pre- and post-testing as the methodology does not require tracking the same community members.

For the IYCF pre-test, 119 project beneficiaries (57 men and 62 women) were surveyed across 35 communities. For the post-test, 120 project beneficiaries (60 men and 60 women) were surveyed across 34 communities. Across the pre- and post-testing, 47 out of 49 communities⁸ were included in the exercise.

While not a completely accurate representation of the population, this analysis will provide insight into programme implementation within the catchment area.

V. Results

The pre- and post-test questionnaire consisted of ten questions (one question for only men caregivers, three questions for only women caregivers, and six questions for both men and women caregivers). Overall, all ten indicators were reached based on the SMART objectives developed for the IYCF topic (see Table 2). Four of the indicators already reached the SMART objective during the pre-test (1.2, 1.6, 1.7, and 1.10). One indicator (1.10), while reaching the SMART objective in both the pre-test and post-test, showed a marginal decrease with men caregivers – 1% decrease – and a marginal increase with women caregivers – 5% increase.

Table 2: Pre- and Post-test Results (in percentages)

#	Indicator Detail	SMART Objective	Pre-test Result (%)			Post-test Result (%)		
			Men	Women	Avg	Men	Women	Avg
1.1	Increased percentage of IYCF messages recalled by caregivers	After complete SBCC topic area is conducted [6 weeks], <u>75% of caregivers</u> partaking in SBCC sessions will be able to recall at least 3 key IYCF messages	30	42	36	85 (+55)	92 (+50)	88 (+52)

⁷ Convenience sampling method is selecting respondents who are easily accessible (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5606225/>). For IYCF pre- and post-test data collection, enumerators surveyed eligible, accessible beneficiaries who had consented to being interviewed.

⁸ Andrassone, Arnelo, Bangwe, Bhaumbha, Bucha, Candima, Cassume, Deve, Dzunga 1, Dzunga 2, Fernando, Francalino, Fumbe 1, Fumbe 2, Macendua, Mandue, Mapata, Mateus, Melo 1, Melo 2, Muandinhoza, Mulima-sede, Nhacagulagua 1, Nhacavunvu, Nhalunga, Nhamaliwa, Nhamazonde, Nhambhandha, Nhamingale, Nhancaca, Nhangue, Nhapwete, Nharugue, Nhasulu, Nhatsete, Nhakuiyoyo, Niquice, Ofece, Shonsua, Thenda, Tomucene 1, Tomucene 2, Tsera, Xavier, Zenguerere, Zomdane 1, Zomdane 2

1.2	Increased percentage women intending to exclusively breastfeed	After complete SBCC topic area is conducted [6 weeks], <u>33% of women</u> partaking in SBCC sessions intend to exclusively breastfeed with no water or other liquids until 6 months	-	34		-	92 (+58)	
1.3	Increased percentage of women are exclusively breastfeeding their baby until 6 months of age	After complete SBCC topic area is conducted [6 weeks], <u>33% of women</u> partaking in SBCC sessions are exclusively breastfeeding their baby who is 0-6 months	-	23	-	-	65 (+42)	-
1.4	Increased percentage women are confident they will breastfeed until child is 24 months	After complete SBCC topic area is conducted [6 weeks], <u>66% of women</u> partaking in the SBCC sessions are confident that they will breastfeed their child until 24 months of age	-	35	-	-	88 (+53)	-
1.5	Increased percentage men are confident they will encourage their wife to breastfeed until child is 24 months	After complete SBCC topic area is conducted [6 weeks], <u>66% of men</u> partaking in the SBCC sessions are confident they will encourage their wives to breastfeed their child until 24 months of age	35	-	-	82 (+47)	-	-
1.6	Increased percentage of caregivers have knowledge about the correct timing for early initiation of breastfeeding	After complete SBCC topic area is conducted [6 weeks], <u>66% of caregivers</u> partaking in the SBCC sessions will know the correct timing for early initiation of breastfeeding	88	92	90	100 (+12)	100 (+8)	100 (+10)
1.7	Increased percentage of caregivers will know to start introducing complementary foods when their child is 6 months of age	After complete SBCC topic area is conducted [6 weeks], <u>33% of caregivers</u> partaking in the SBCC sessions will know to start introducing complementary foods when their child is 6 months of age	51	60	55	82 (+31)	87 (+27)	84 (+29)

1.8	Increased percentage of caregivers know the correct age range of the first 1000 days	After complete SBCC topic area is conducted [6 weeks], <u>66% of caregivers</u> partaking in the SBCC sessions the correct age range of the first 1000 days	33	37	35	82 (+49)	83 (+47)	83 (+48)
1.9	Increased percentage of caregivers know the effects of the first 1000 days on a child's development	After complete SBCC topic area is conducted [6 weeks], <u>66% of caregivers</u> partaking in the SBCC sessions can recall at least 3 effects of the first 1000 days on a child's development	32	37	34	87 (+55)	85 (+48)	86 (+52)
1.10	Increased percentage of caregivers will know the importance of feeding practices for children with illnesses [malnutrition]	After complete SBCC topic area is conducted [6 weeks], <u>50% of caregivers</u> partaking in the SBCC sessions will know the importance of feeding practices for children with illnesses [malnutrition]	58	52	55	57 (-1)	57 (+5)	57 (+2)

Note: Values in the parentheses indicate the percentage point change, comparing values from the pre- and post-test results

The results will be presented in five categories: recalling key IYCF messages, first 1,000 days of life, breastfeeding, complementary feeding and children's diet during illness.

Recalling key IYCF messages

Both men and women caregivers were asked to recall key messages related to IYCF. According to the SMART objective, at least 75% of caregivers were to know at least three key messages in the post-test results. Findings indicate a majority of men and women caregivers increased their knowledge on IYCF messages between pre- and post-testing, from 36% to 88% (see Figure 3). Approximately 85% of men caregivers in the post-test were able to recall at least three key messages while only 30% were able to in the pre-test. Similarly, women caregivers also showed a significant increase in recall: 42% in the pre-test vs. 92% in the post-test.

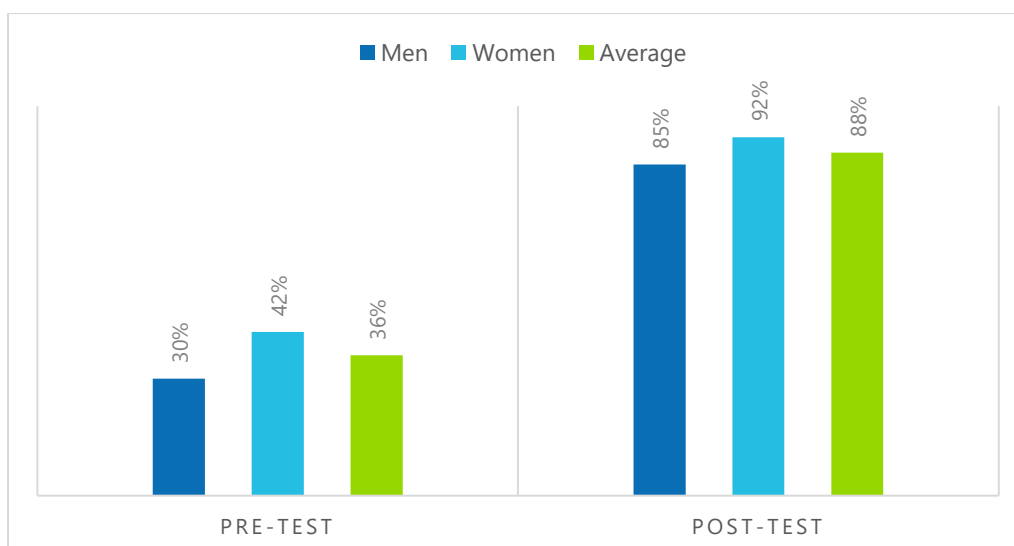


Figure 3: Percentage of men and women caregivers who knew at least three key IYCF messages

The top three key messages recalled in the pre-test were around early initiation of breastfeeding (57% of caregivers), breastfeeding for the first two years of a child’s life (40% of caregivers) and exclusive breastfeeding for the first six months (27% of caregivers). In the post-test, results showed that all messages were recalled more by beneficiaries surveyed, and the top three key messages recalled were when to exclusively breastfeed, healthy diet for children and the importance of colostrum. Recall of exclusive breastfeeding for the first six months increased to 74% of caregivers; knowing what is in a healthy diet for children was recalled by 71% of caregivers; and knowing consumption of colostrum protects babies was recalled by 70% of caregivers (see Annex 2 in question 4.1 for full list of key messages).

On the first 1,000 days of life

The period from conception to a child’s second birthday, is a critical “window of opportunity” for a child’s development.⁹ At the end of the IYCF topic module, more men and women caregivers could correctly identify the first 1,000 days period (from 35% to 83%), surpassing the SMART objective of at least 66% of caregivers. Among men, this increase was from 33% to 82%, and among women from 37% to 83% in the pre-test vs. post-test respectively (see Figure 4).

⁹ Retrieved from <https://thousanddays.org/wp-content/uploads/1000Days-Nutrition Brief Brain-Think Babies FINAL.pdf>

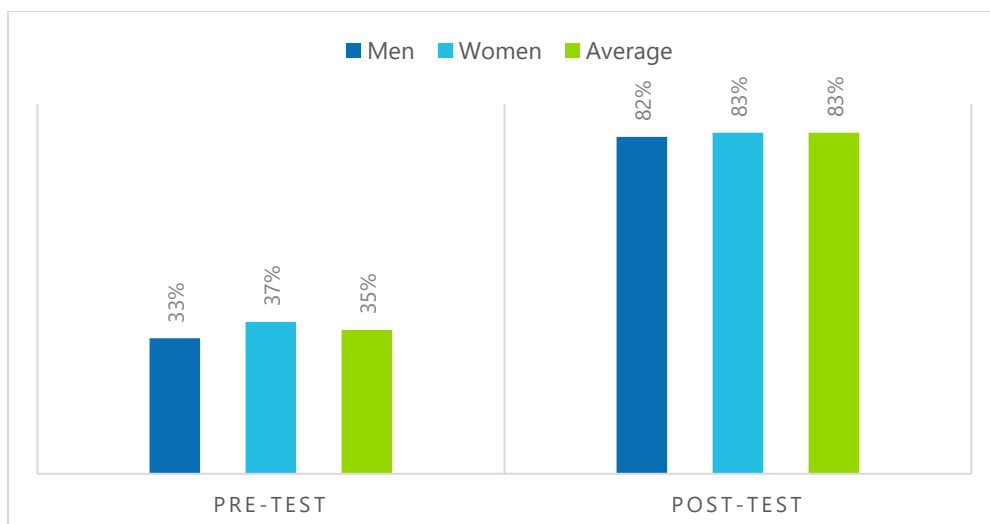


Figure 4: Percentage of men and women caregivers who knew the period of the first 1,000 days

Further, more men and women caregivers could recall in the post-test at least three benefits on a child's health and development when the family takes special care of mother and baby during the first 1,000 days. Men's recall increased from 32% to 87%, and women's recall increased from 37% to 85% (see Figure 5). This exceeded the SMART objective of at least 66% of caregivers by 20 percentage points.

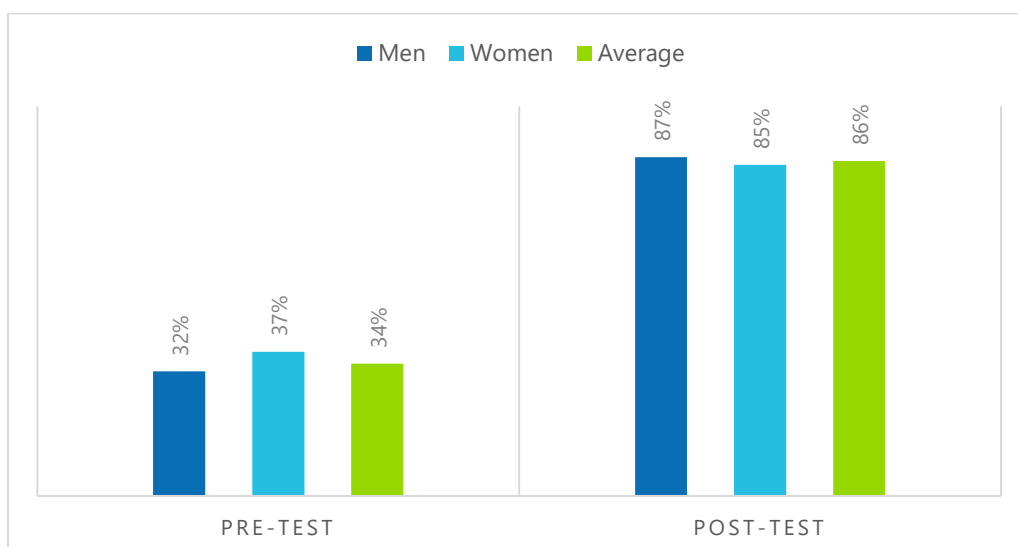


Figure 5: Percentage of men and women caregivers who recalled at least three benefits for a child's health and development when focusing on the first 1,000 days of life

The most common benefits recalled during pre-testing were that babies will be strong (74% of caregivers) and babies will have energy (77% of caregivers). In the post-test, the most common benefits recalled were that babies/children will be strong (77% of caregivers), babies/children will be productive (78% of caregivers), babies/children will have energy (74% of caregivers, a 3% decrease from pre-testing) and children will do well in school (69% of caregivers). Other responses were that babies will grow well and parents will be able to include children in family chores/tasks.

On breastfeeding

i. Early Initiation

Within the first hour of birth, it is essential to initiate skin-to-skin contact between mother and baby, and for the baby to start suckling to activate breastmilk production. Results from the pre-test show that a majority of men (88%) and women (92%) caregivers knew that babies should be breastfed between 30 minutes and one hour after birth when given a list of similar options. These values exceed the SMART objective of 66%. In the post-test, 100% of both men and women caregivers knew the correct response.

ii. Exclusive Breastfeeding

A previous question indicated that 74% of caregivers in the post-test knew that babies should be exclusively breastfed for the first six months (71% of men and 78% of women). To understand women’s perceptions more in-depth, women caregivers were asked about their attitudes towards, and practices on, exclusive breastfeeding.

Women caregivers’ intention to exclusively breastfeed, including avoiding giving their babies liquids like water and herbal tea (traditional medicines), increased from 34% in the pre-test to 92% in the post-test (see Figure 6). The pre-test results (34%) met the SMART objective of at least 33%, and post-test results exceeded this goal significantly.

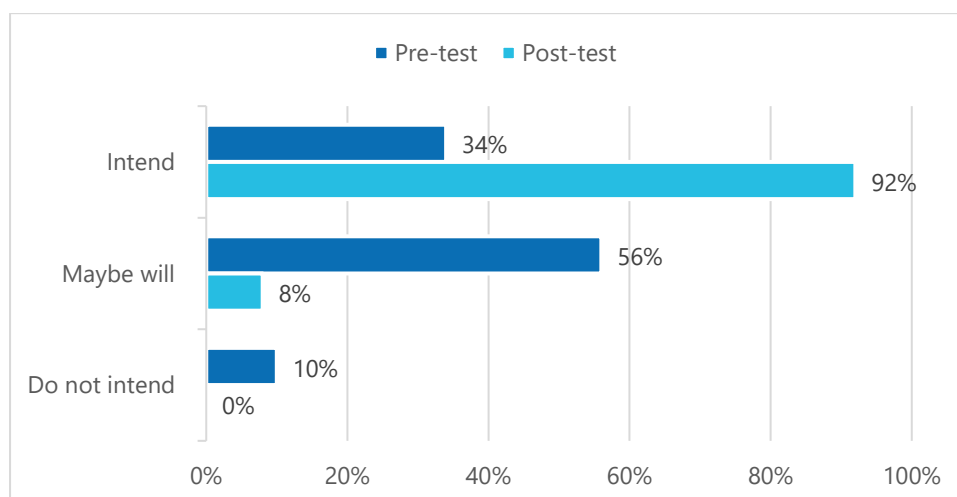
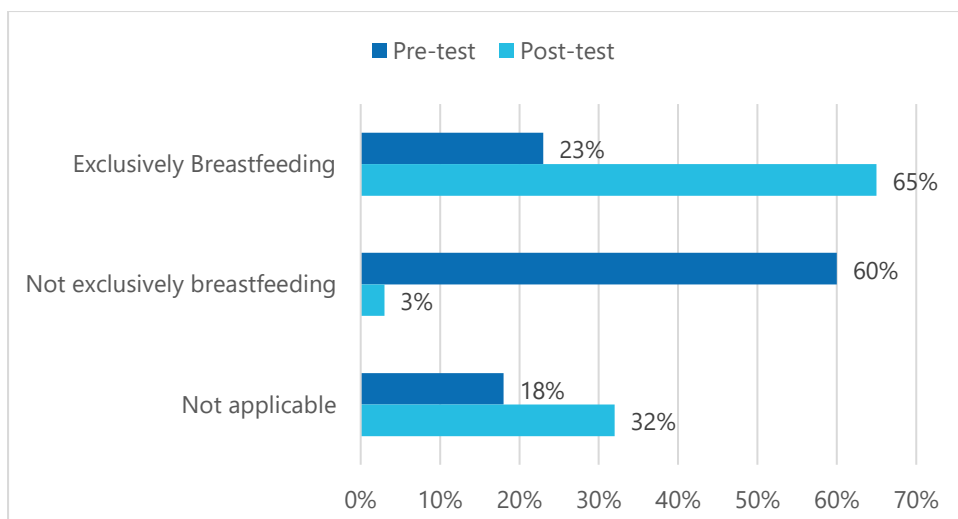


Figure 6: Percentage of women intending to exclusively breastfeed their babies

Women caregivers were also asked to self-report on their actual exclusive breastfeeding practices. Results showed an increase of 42 percentage points, from 23% in the pre-test to 65% in the post-test, surpassing the SMART objective of 33% (see Figure 7). It should be noted that women who did not have a baby between 0-6 months of age at the time of the pre- and post-test interviews were included in the “not applicable” category to ensure results were not skewed.



Note: The number of women who were eligible to self-report on exclusively breastfeeding in the pre-test was n=51 (versus n=62 in the total women sample) and in the post-test was n=41 (versus n=60 in the total women sample).

Figure 7: Percentage of women who are exclusively breastfeeding¹⁰

i. *Until 24 months of age*

Women were also asked about their confidence to breastfeed their children until they were at least 2 years of age. In the pre-test, 35% of women caregivers were confident that they would breastfeed their children until at least 2 years or older; this figure rose significantly to 88% in the post-test (see Figure 8). Additionally, women caregivers who were not confident decreased from 24% to only 2% in the post-test results (see Figure 8).

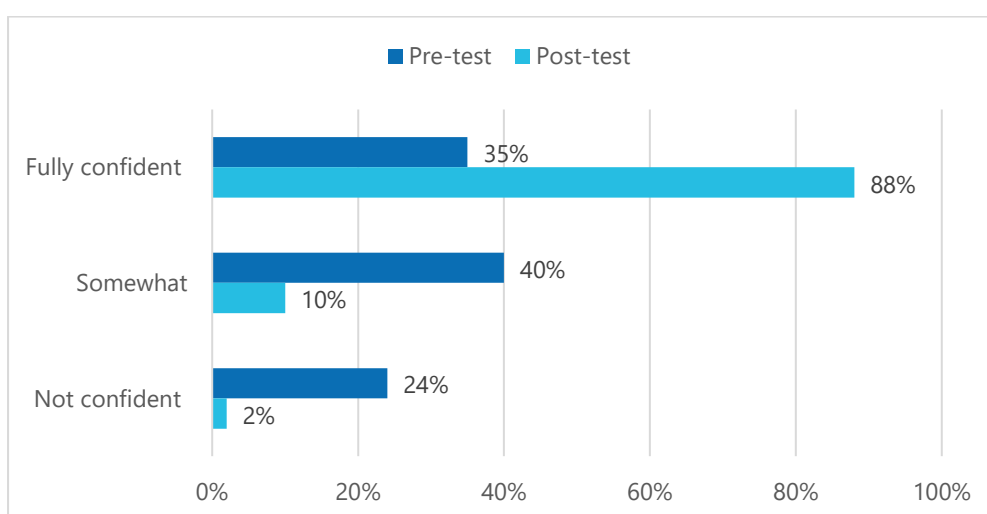


Figure 8: Percentage of women confident in breastfeeding their children until at least 2 years of age

Evidence shows that engaging men in breastfeeding can support mothers' decisions to exclusively breastfeed and breastfeed for longer.¹¹ Men caregivers who are confident to encourage their wives to breastfeed until children are at least 2 years old surpassed the

¹⁰ Pre-test results value over 100% when applying rounding rules; however, the total is equal to 100%.

¹¹ Sherriff, Nigel., Hall, Valerie., & Panton, Christina. (2013). Engaging and supporting fathers to promote breast feeding: A concept analysis. *Midwifery*, 30(6), 667-77. <https://doi.org/10.1016/j.midw.2013.07.014>

SMART objective of 66% in the post-test results. Only 35% of men reported confidence in the pre-test but this increased to 82% in the post-test (see Figure 9).

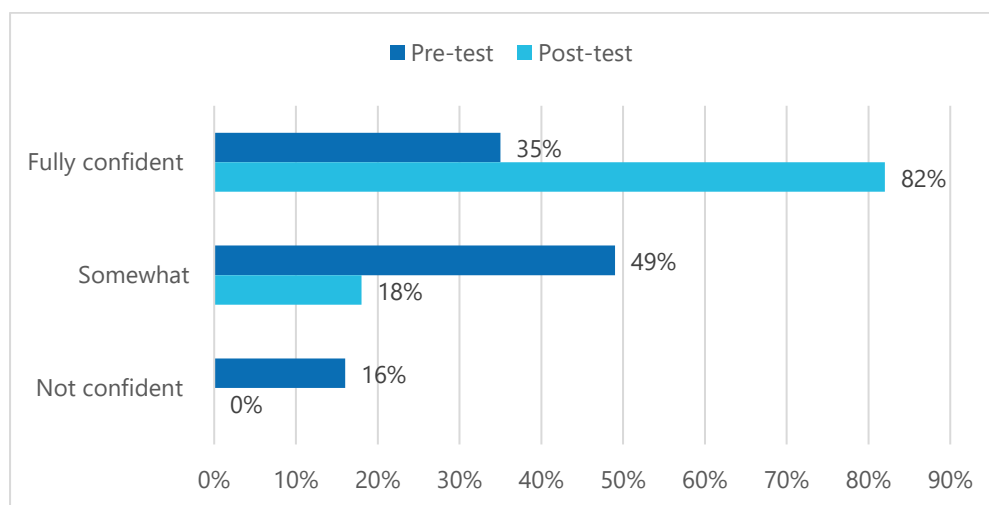


Figure 9: Percentage of men confident in encouraging wives to breastfeed their babies until 2 years of age

On complementary feeding

Upon reaching 6 months of age, breastmilk is not enough to sustain a baby nutritionally. Babies need to begin eating other foods to obtain all the nutrients they need to be strong and healthy. In the post-test, a majority of men and women caregivers could correctly identify 6 months of age (84% of caregivers), well exceeding the SMART objective of 33% of caregivers. When disaggregating by gender, men and women caregivers still surpassed the SMART objective for knowing when to introduce complementary foods both in the pre-test (51% of men and 60% of women) and in the post-test (82% of men and 87% of women) (see Figure 10).

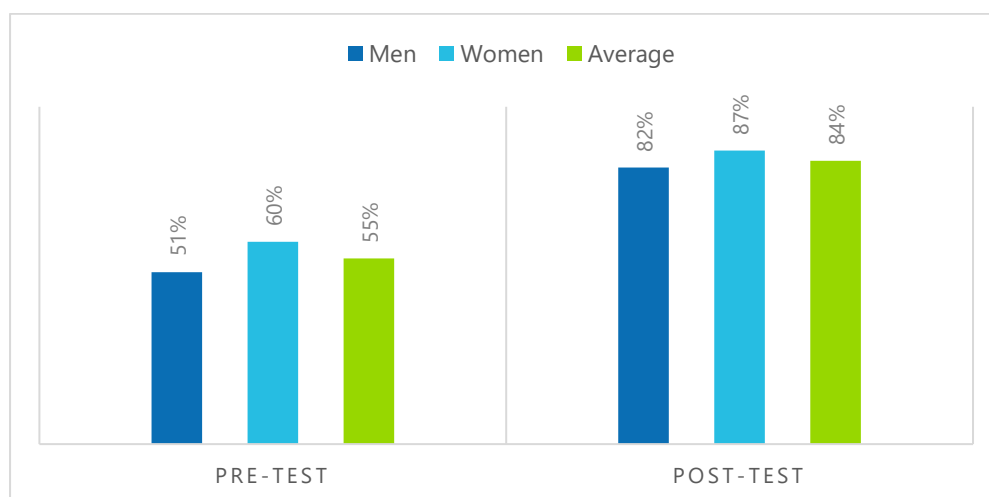


Figure 10: Percentage of caregivers who knew complementary feeding starts at 6 months of age

On diet during illness

Children need to eat differently when ill in order to help them heal better and faster. Some differences included eating more times a day (at least five times), drinking more fluids during

the day, and eating nutritious foods. While men and women caregivers reached the SMART objective of knowing that children should eat differently when ill in the pre-test (55% of men and women caregivers), the results did not increase significantly in the post-test. Women caregivers with such knowledge increased from 52% in the pre-test to 57% in the post-test results (see Figure 11). However, men caregivers showed a decrease of 1% when comparing the pre- and post-test results (58% and 57% respectively) (see Figure 11).

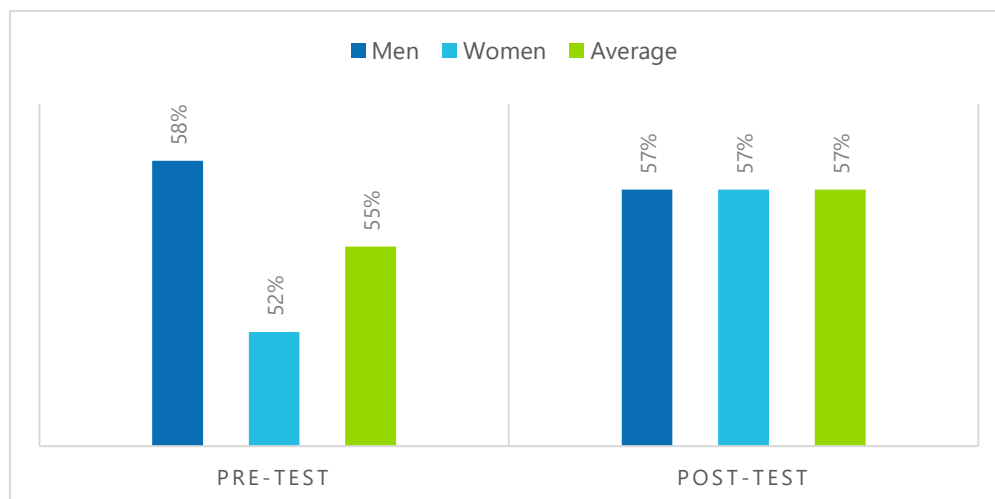


Figure 11: Percentage of caregivers who knew children should eat differently when ill

VI. Discussion

Overall, findings reveal positive change across most of the indicators regarding knowledge, attitudes and behavioural practices after caregivers completed the six-week IYCF topic module. Only one area (under knowledge) did not see significant change – beneficiaries knowing a child’s diet should be different when they are unwell. Another observation was that all of the SMART objectives were underestimated, as evidenced by results exceeding objectives. Four of the indicators reached the SMART objective in the pre-test (women intending to exclusively breastfeed; men and women knowing the correct time to initiate breastfeeding; men and women knowing when to start complementary feeding; and men and women knowing the importance of feeding ill children a different diet). Post-test results for the remaining six indicators surpassed the target by at least 10 percentage points or higher, with one indicator surpassing the SMART objective by 32 percentage points (women’s self-reported behaviour to exclusively breastfeed).

Half of the questionnaire was dedicated to knowledge, attitudes and practices around breastfeeding. Breastmilk is an important source of energy and nutrients for young children, and consumption of breastmilk reduces child mortality and malnutrition.¹² Caregivers showed an increase regarding knowledge and attitudes on breastfeeding (including exclusively, alongside complementary feeding, and early initiation of). In fact, both men and women have a strong sense of when to initiate breastfeeding seen by the high levels of knowledge in the pre-test increasing to 100% of caregivers in the post-test. Regarding the practice of exclusive

¹² WHO. (2020, August 24). *Infant and young child feeding*. who.int. Retrieved from <https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding>



breastfeeding, women caregivers also showed significant increase after completing the topic module.

The highest increase noted was women intending to exclusively breastfeed their babies 0-6 months of age, which rose by 58 percentage points. This is aligned with the 42 percentage point increase of women self-reporting they are exclusively breastfeeding their babies 0-6 months. From this, we can see how psychosocial indicators are interrelated and confirm each other; in this case, high intention around exclusive breastfeeding and results proving more women are actually practising it.

It should be noted that 65% of women reported exclusively breastfeeding in the post-test. Despite the impressive increase in percentage points, this figure may seem low. However, this figure is clarified by the fact that, at the same time, women reporting they are not exclusively breastfeeding decreased 57 percentage points to only 3%, and the remaining 32% are not applicable to this question as they do not have babies this age (see Figure 5).

The findings on breastfeeding are aligned with other evidence from the project target population, detailed in Knowledge, Attitudes and Practices (KAP) Study report, forthcoming 2021. This study showed that while health authorities in Chemba District strongly recommend breastfeeding, particularly exclusive breastfeeding, and that women know its importance, they claim there are many tasks that make breastfeeding challenging. The KAP Study also found that women worry that breastmilk is not enough for the baby and start to introduce other foods around 3 months. This reflects the pre-test result of only 55% of men and women caregivers knowing when to start complementary feeding. However, the increase of 29 percentage points could indicate that after just six IYCF sessions, knowledge was positively received.

In regard to the first 1,000 days of life, both men and women showed similar increases in knowing when this critical period is, and the effects the first 1,000 days of life have on a child's development. This is not aligned with the KAP Study, which found people struggled to identify the proper care and diet for child growth and development. This may similarly be attributed to the IYCF messages communicated during the six IYCF sessions on the first 1,000 days being well received by project beneficiaries. Despite this, it is interesting to note that there was not a significant increase in knowledge around what a child's diet should be when ill, as diet and care of both mother and baby are key pillars of the first 1,000 days messages. The KAP Study found that a significant majority of people know a child should eat differently when unwell. This misalignment may be because the question in the pre- and post-tests was unclearly defined, or that there was a different understanding of being "ill" when translated into local language. Suggestions for future questions of this sort include naming a few examples of illness after the question for better respondent comprehension. The results indicate that clearer messaging around a child's diet when ill is needed.

Overall, men's knowledge and positive attitudes increased more in the post-test results compared to women's, looking at indicators targeted at both men and women; however, women more often scored higher pre-test results. Women scored marginally higher on three indicators in the post-test (recalling IYCF messages, knowing when to introduce solids foods to babies, and knowing the correct time period for the first 1,000 days); men scored marginally higher on one indicator (knowing effects the first 1,000 days of life have on a child's development); and men and women scored equally in the post-test on one indicator (knowing



the correct timing to initiate breastfeeding). This analysis excludes the indicator on a child's diet when ill (which did not change from pre to post-test).

VII. Conclusion

The GTNS project is on track to imparting knowledge and positive attitudes, and to changing practices, related to IYCF. Findings have shown progress in the right direction, particularly in regard to knowledge around breastfeeding, complementary feeding and the importance of the first 1,000 days of life. The one area that was lacking for both men and women caregivers is knowledge around a child's diet during illness.

Routine monitoring of SBCC by assessing psychosocial and behavioural indicators, such as this pre-and post-test comparative analysis, provide information that can support field implementation by revealing necessary adaptations to better reach programme objectives, and to increase nutrition and health outcomes. In SBCC campaigns related to IYCF in the GTNS project in Chemba, the findings of the pre- and post-test analysis support needing greater efforts raising awareness of a child's diet during illness, as this indicator did not show any significant increase.

Acronyms



ADA	Austrian Development Agency
CU2	Children Under 2 (years)
CU5	Children Under 5 (years)
GDC	Gender Dialogue Club
GTNS	Gender Transformative and Nutrition-sensitive (project)
IYCF	Infant and Young Child Feeding
KAP	Knowledge, Attitude and Practices (Study)
MUAC	Mid-Upper Arm Circumference
ODK	Open Data Kit
PLW	Pregnant and Lactating Women
SBCC	Social and Behaviour Change Communication
SDSMAS	District Services of Health, Women & Social Action
SMART	Specific, Measurable, Achievable, Relevant and Timebound
SRH	Sexual and Reproductive Health
WFP	United Nations World Food Programme

Annex 1: IYCF Indicators and SMART Objectives

#	Indicator detail	SMART Objective	Respondent	Behavioural domain	Psychosocial indicators	Reference (template question)
1. Nutrition - Infant and Young Child Feeding (IYCF)						
1.1	Increased percentage of IYCF messages recalled by caregivers	After complete SBCC topic area is conducted [6 weeks], 75% of caregivers partaking in SBCC sessions, will be able to recall at least 3 key IYCF messages	WOMAN/MAN	IYCF (GENERAL)	KNOWLEDGE	4.1
1.2	Increased percentage women intending to exclusively breastfeed	After complete SBCC topic area is conducted [6 weeks], 33% of women partaking in SBCC sessions, intend to exclusively breastfeed with no water or other liquids until 6 months	WOMAN	EXCLUSIVE BREASTFEEDING	INTENTION	2.1
1.3	Increased percentage of women are exclusively breastfeeding their baby until 6 months of age	After complete SBCC topic area is conducted [6 weeks], 33% of women partaking in SBCC sessions, are exclusively breastfeeding their baby who is 0-6 months	WOMAN	EXCLUSIVE BREASTFEEDING	SELF-REPORTED BEHAVIOUR	2.2
1.4	Increased percentage women are confident they will breastfeed until child is 24 months	After complete SBCC topic area is conducted [6 weeks], 66% of women partaking in the SBCC sessions, are confident that they will breastfeed their child until 24 months of age	WOMAN	CONTINUATION OF BREASTFEEDING	CONFIDENCE	2.3
1.5	Increased percentage men are confident they will encourage their wife to breastfeed until child is 24 months	After complete SBCC topic area is conducted [6 weeks], 66% of men partaking in the SBCC sessions, are confident they will encourage their wives to breastfeed their child until 24 months of age	MAN	CONTINUATION OF BREASTFEEDING	CONFIDENCE	3.1
1.6	Increased percentage of caregivers have knowledge about the correct timing for early initiation of breastfeeding	After complete SBCC topic area is conducted [6 weeks], 66% of caregivers partaking in the SBCC sessions, will know the correct timing for early initiation of breastfeeding	WOMAN/MAN	EARLY INITIATION OF BREASTFEEDING	KNOWLEDGE	4.2

1.7	Increased percentage of caregivers will know to start introducing complementary foods when their child is 6 months of age	After complete SBCC topic area is conducted [6 weeks], 33% of caregivers partaking in the SBCC sessions, will know to start introducing complementary foods when their child is 6 months of age	WOMAN/MAN	COMPLEMENTARY FEEDING AT 6 MO	KNOWLEDGE	4.3
1.8	Increased percentage of caregivers know the correct age range of the first 1000 days	After complete SBCC topic area is conducted [6 weeks], 66% of caregivers partaking in the SBCC sessions, the correct age range of the first 1000 days	WOMAN/MAN	FIRST 1000 DAYS	KNOWLEDGE	4.4
1.9	Increased percentage of caregivers know the effects of the first 1000 days on a child's development	After complete SBCC topic area is conducted [6 weeks], 66% of caregivers partaking in the SBCC sessions, can recall at least 3 effects of the first 1000 days on a child's development	WOMAN/MAN	FIRST 1000 DAYS & DEVELOPMENT	KNOWLEDGE	4.5
1.10	Increased percentage of caregivers will know the importance of feeding practices for children with illnesses [malnutrition]	After complete SBCC topic area is conducted [6 weeks], 50% of caregivers partaking in the SBCC sessions, will know the importance of feeding practices for children with illnesses [malnutrition]	WOMAN/MAN	MALNUTRITION AND FEEDING PRACTICES	KNOWLEDGE	4.6

Annex 2: IYCF Questionnaire

	<p>SBCC Monitoring Questionnaire - Infant and Young Child Feeding (IYCF) To be filled in by: Beneficiaries - Interviewed by Pathfinder Staff Version 2 - August 2020</p>	<p>Moçambique GTNS Project</p> 
<p>Introduction</p>		
<p>Read introduction to beneficiary</p> <p>Hello, My name is _____. I work for the local organization Pathfinder, supporting the Ministry of Health and WFP. You have been selected by chance within the GTNS (Khaliro Adidi) project beneficiaries at this site for this interview. You will gain no material benefit from agreeing to conduct this interview. You will not receive any extra assistance than you would otherwise have received. The survey is voluntary and you can choose not to take part.</p> <p>The purpose of this interview is to obtain information about the health behaviours of community members. It helps us understand whether we are implementing our program properly and whether we are addressing the needs of the population we serve. The information that you give will be confidential. The information will be used to prepare reports, but all information will be confidentially and no names will be shared.</p> <p>This interview will only take about 20 minutes.</p> <p>Please provide the most accurate answer that you can to best inform and improve the program.</p> <p>If you agree, we will now start the questions.</p> <p>If respondent says 'Yes' – start the data collection. If respondent says 'No' – thank you for his/her time and end the interview.</p>		
<p>1. General information - INTERVIEWER TO FILL IN</p>		
<p>1.1 . Name of community [drop down list]: Andrassone, Arnelo, Bangwe, Bhaumbha, Bucha, Candima, Cassume, Castela, Deve, Dzunga 1, Dzunga 2, Fernando, Francalino, Fumbe 1, Fumbe 2, Macendua, Mandue, Mapata, Mateus, Melo 1, Melo 2, Muandinhoza, Mulima-sede, Nhacagulagua 1, Nhacagulagua 2, Nhacavunvu, Nhalunga, Nhamaliwa, Nhamazonde, Nhambhandha, Nhamingale, Nhancaca, Nhangue, Nhapwete, Nharugue, Nhasulu, Nhatsete, Nhakuiyoyo, Niquice, Ofece, Shonsua, Thenda, Tomucene 1, Tomucene 2, Tsera, Xavier, Zenguerere, Zomdane 1, Zomdane 2</p>		
<p>1.2. Beneficiary is a <input type="checkbox"/> Man (go to question 3) <input type="checkbox"/> Woman (go to question 2) [ALL RESPONDENTS SHOULD RESPOND TO QUESTION 4 + 5]</p>		<p>1.3. Date __ / __ / __ dd mm yyyy</p>
<p>2. Questions for women</p>		
<p>2.1</p>	<p>On a scale of 1 to 3 – with 1 being 'do not intend to', 2 'maybe will do so' and 3 being 'intend to' – to what extent do you intend to exclusively breastfeed with no water or other liquids [medicamento/tratamento tradiocional] until 6 months? You can only choose one option.</p>	<p>Read options to beneficiary</p> <p><input type="checkbox"/> 1 - Do not intend to <input type="checkbox"/> 2 - Maybe will <input type="checkbox"/> 3 - Do intend to</p>
<p>2.2</p>	<p>[If applicable] Are you feeding your baby 0-6 months old only breastmilk, not even water or tea [medicamento/tratamento tradiocional]? Yes or no?</p>	<p><input type="checkbox"/> 0 - Not applicable <input type="checkbox"/> 1 - Yes, I am exclusively breastfeeding <input type="checkbox"/> 2 - No, I am not exclusively breastfeeding</p>
<p>2.3</p>	<p>On a scale of 1 to 3 – with 1 being 'not confident', 2 'somewhat confident' and 3 being 'fully confident' – to what extent do you feel confident that you will breastfeed your child until they are 2 years old or older? You can only choose one option.</p>	<p>Read options to beneficiary</p> <p><input type="checkbox"/> 1 - Not confident <input type="checkbox"/> 2 - Somewhat confident <input type="checkbox"/> 3 - Fully confident</p>

3. Questions for men		
3.1	On a scale of 1 to 3 – with 1 being 'not confident', 2 'somewhat confident' and 3 being 'fully confident' – to what extent do you feel confident that you will encourage your wife to breastfeed your child until they are 2 years old or older? You can only choose one option.	<p>Read options to beneficiary</p> <input type="checkbox"/> 1 - Not confident <input type="checkbox"/> 2 - Somewhat confident <input type="checkbox"/> 3 - Fully confident
4. Questions for men & women		
4.1	Can you please recall key IYCF messages?	<p>Do not read options to beneficiary. Mark each option that the caregiver mentions.</p> <ul style="list-style-type: none"> ▪Breastfeeding should be initiated within the first hour after giving birth ▪The yellowish liquid for the first 3-5 days is colostrum and very important for the baby to drink. ▪Colostrum helps protect the baby from disease. ▪Exclusive breastfeeding is during the first 6 months, not even water or herbal tea can be given. ▪Breastfeeding your baby until 24 months is positive for their growth and health ▪Healthy diets include all four food groups: base (cereals and tubers), constructive (animal and plant protein like meat, fish and beans), protectives (fruits and vegetables), and energetic foods (oil, peanut butter). ▪Complementary feeding should be initiated at 6 months ▪Baby should be fed at least 5 times per day when sick ▪Mothers should breastfeed their babies on demand day and night ▪Use a separate bowl/plate for feeding the baby and do not share food with older siblings ▪Good nutrition during pregnancy and the child's first two years of life are essential for good health into adulthood. ▪Other; please specify_____
4.2	Based on what you learnt, how soon after giving birth should a baby be breastfed? You can only choose one option.	<p>Read options to beneficiary</p> <p>1 - No need to breastfeed 2 - Within 30 mins - 1 hour 3 - Within 5 hours 4 - Within 10 hours</p>
4.3	Based on what you learned, when should you start giving a baby solid foods, like porridge? You can only choose one option.	<p>Read options to beneficiary</p> <p>1 - At 3 months 2 - At 4 months 3 - At 6 months 4 - At 7 months</p>

4.4	Based on what you have learned, which is the most important period of a child's life to ensure whether they will be a well-grown, healthy, intelligent and productive adult? You can only choose one option.	Read options to beneficiary 1 - From pregnancy up to 2 years of a child's life 2 - From pregnancy up to 3 years of a child's life 3 - First 6 years of a child's life only 4 - First 9 years of a child's life only	
4.5	Can you please recall the benefits on a child's health and development when the family takes special care of mom and baby during pregnancy and the first two years of life?	Do not read options to beneficiary. Mark each option that the caregiver mentions. <ul style="list-style-type: none"> ▪Baby/child will be strong. ▪Baby/child will be healthy. ▪Baby/child will be productive. ▪Baby/child will have energy. ▪Baby/child will be intelligent. ▪Baby/child will be playful. ▪Baby/child will do well in school. ▪Baby/child will be able to grow into a healthy adult. ▪Baby/child will be able to get a job and make money. ▪Other; please specify_____ 	
4.6	Sick children need to eat differently than healthy children, such as eating at least 5 times per day, drinking more liquids and eating foods that are more nutritious. - True or False?	<input type="checkbox"/> 1 - True	<input type="checkbox"/> 2 - False
5. Cooking Demonstrations			
5.1	[If applicable] , did you try to make the recipe(s) from the cooking demonstration at your home anytime over the last 6 weeks?	<input type="checkbox"/> 0 - Not applicable <input type="checkbox"/> 1 - Yes, I tried to make the recipe(s) at home <input type="checkbox"/> 2 - No, I did not try to make the recipe(s) at home	
6. Do you have anything you want to ask about what we discussed now?			
Final remarks			
Read conclusion to beneficiary This was the last question and we are done now. Thank you once again for your generous time and for sharing your thoughts with us. We greatly appreciate your help and we hope this research will help us improve the health of the member in your community. If you have any specific questions, please do not hesitate to call our free hotline, Linha Verde, at 1458.			
7. Signatures and approvals by Pathfinder staff - NOT RELEVANT FOR MODA ONLY IF PAPER VERSION WILL BE USED			
Pathfinder field staff:		Pathfinder District MCH Officer:	
Signature:	Date:	Signature:	Date: