

BREASTFEEDING COUNSELLING MENTORSHIP PROGRAM FEASIBILITY: A MIXED-METHODS STUDY

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- **Senior Author:** Sascha Lamstein provided revisions to the data collection tools, review of analysis, summarizing analysis data, and revising the manuscript
- **Co-authors:** Each co-author contributed to various aspects of the study, including research review, stakeholder engagement, data collection, data analysis, interpretation, and preparation of the manuscript.

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ABSTRACT

Objectives: Determine the feasibility of implementing a facility-based breastfeeding counselling (BFC) mentorship program and its effect on mentee confidence and client perceptions of breastfeeding counselling.

Setting: Mbagathi County Referral Hospital in Nairobi, Kenya

Participants: Health facility management, health workers (21 mentees and seven mentors), 120 pregnant women in the third trimester who attended an antenatal care appointment at Mbagathi Hospital and reported receiving BFC during a visit in the 2 weeks prior, and 120 postpartum women in the postnatal care ward who delivered a full-term infant and reported receiving breastfeeding counselling.

Design: Mixed methods study incorporating online surveys, client exit interviews, key informant interviews, and focus group discussions. The 4-month intervention involved facility-wide orientations, selection and training of mentors, assigning mentees to mentors, and implementing mentorship activities.

Results: The program successfully maintained 90.5% mentee retention (19/21) over four months. At baseline, mentees demonstrated high knowledge (94% questions answered correctly) which was maintained at endline (92%). Mentees showed significant improvement in confidence counselling on breastfeeding and infant feeding (67% at baseline vs. 95% at endline, $p=0.014$). The percentage of ANC clients who felt BFC gave them more knowledge increased from 73% to 97% ($p<0.001$). Among PNC clients, those reporting friendly treatment increased from 89% to 100% ($p=0.007$), verbal mistreatment declined from 7% to 0% ($p=0.044$), and those feeling discriminated decreased from 11% to 2% ($p=0.03$). Key enablers included administrative support, structured mentorship tools, and peer learning communities. Implementation barriers included scheduling conflicts, staff shortages, and high patient volumes.

Conclusions: BFC mentorship was feasible in this setting and was associated with improved health worker confidence in BFC. The program can be successfully implemented with supportive facility leadership, well-matched mentors and mentees, and adaptable mentorship approaches.

Keywords: breastfeeding counselling, mentorship, feasibility, capacity strengthening

1. INTRODUCTION

Breastfeeding is critical for child survival. Promotion of early initiation and exclusive breastfeeding for 6 months with continued breastfeeding for up to 24 months is one of 10 interventions that, if implemented at 90% coverage, could reduce child mortality by 15%⁽¹⁾. Breastfeeding prevents major causes of newborn and child mortality and may reduce the risk of childhood obesity and type 2 diabetes later in life^(2,3,4,5,6,7). For mothers, breastfeeding protects against breast and ovarian carcinoma, and reduces the risk of type 2 diabetes⁽⁸⁾. Furthermore, breastfeeding is associated with improved performance in intelligence tests among children⁽⁹⁾; while not breastfeeding is associated with “economic losses of about \$302 billion annually”⁽¹⁰⁾. Early initiation has been shown to improve exclusive breastfeeding rates⁽⁴⁾. However, globally, less than half of all newborns are put to the breast within 1 hour of birth, and only two out of five infants under 6 months of age are exclusively breastfed⁽⁴⁾. In Kenya, 60% of children are put to the breast within 1 hour of birth and 60% of infants aged 0–5 months are exclusively breastfed⁽¹¹⁾. The prevalence of exclusive breastfeeding in Kenya has remained largely unchanged since 2014⁽¹¹⁾.

Breastfeeding education⁽¹²⁾, counselling, and support can improve breastfeeding practices^(13,14,15) it has been demonstrated that breastfeeding counselling (BFC) can result in a 90% increase in exclusive breastfeeding of infants aged 0–5 months. A 2015 meta-analysis found that counselling or education increased the rates of early initiation, exclusive breastfeeding, and continued breastfeeding, particularly in low- and middle-income countries⁽¹⁶⁾. In Kenya, 87% of children whose mothers received BFC during antenatal care (ANC) visits were exclusively breastfed for the first 2 days compared to 27% of children whose mothers did not receive BFC during ANC⁽¹¹⁾. While scaling BFC as part of routine ANC and postnatal care (PNC) could improve breastfeeding practices⁽¹⁷⁾, BFC is not well integrated into the health system in Kenya⁽¹⁸⁾.

Effective BFC requires skilled ANC and PNC providers. The 2018 WHO *Guideline: Counselling of Women to Improve Breastfeeding Practices* recommends all pregnant women and mothers with young children receive BFC at least six times from the antenatal period through age 2⁽¹⁹⁾. Step 2 of the Baby-Friendly Hospital Initiative (BFHI) Ten Steps focuses on ensuring staff have sufficient skills to support breastfeeding⁽⁷⁾. One way to build health worker competencies is through the *BFHI Training Course for Maternity Staff* (BFHI training)⁽²⁰⁾.

The Kenya Ministry of Health (MoH) prioritized capacity strengthening for quality maternal, infant, and young child nutrition service delivery⁽²¹⁾. Mentoring interventions, in addition to training, have been found effective in strengthening the capacity of health workers, and in improving the clinical management of infectious diseases among mothers, newborns, and children^(22,23,24). Mentoring interventions may also increase health workers' adherence to guidelines, standards, and protocols⁽²³⁾. Additionally, mentorship programs have been shown to strengthen health workers' confidence and ability to implement a range of practices⁽²⁵⁾.

In 2022, stakeholders in Kenya proposed the development of a facility-based mentorship program to strengthen health workers' BFC competencies. The Division of Nutrition and Dietetics of the Kenya MoH; the BFHI Task Force of the Maternal, Infant, and Young Child Nutrition technical working group; and USAID Advancing Nutrition developed *Implementation Guidance for a Facility-Based Breastfeeding Counselling Mentorship Program*⁽²⁶⁾, leveraging global guidance and tools, including the BFHI training⁽²⁰⁾ and the *Competency Verification Toolkit: Ensuring Competency of Direct Care Providers to Implement the BFHI*⁽²⁷⁾ to design the facility-based implementation guidance. The Implementation Guidance provides a structured framework for establishing a facility-based BFC mentorship program. It outlines specific roles and responsibilities for different stakeholders—from facility leadership to individual mentors and mentees—and provides adaptable tools such as mentee self assessment tool, mentor observation checklists, and mentor feedback forms. The *Competency Verification Toolkit* observation tools informed our verification approach for assessing knowledge and building health workers' BFC skills across 16 specific competencies necessary for implementing the Ten Steps to Successful Breastfeeding. Our study prioritized competencies in foundational skills; antenatal period, birth, and immediate postpartum; essential issues for breastfeeding mothers; and care at discharge. These resources were designed to be adaptable while maintaining fidelity to global BFHI standards, allowing for contextual implementation across different facility types and resource levels.

In 2023, the Kenya MoH and USAID Advancing Nutrition conducted this study to assess the feasibility of the breastfeeding counselling mentorship program in the ANC and PNC departments of Mbagathi County Referral Hospital (Mbagathi Hospital). This study aimed to identify factors that enabled and hindered the program's implementation and measure its impact on health workers' confidence and clients' perceptions of BFC.

2. METHODS

Study Description

Study Setting

The study was conducted in the ANC and PNC departments of Mbagathi Hospital, a level five public county referral hospital located in Kibra Sub-County, Nairobi, Kenya.

We selected this health facility in consultation with stakeholders for several reasons. First, the hospital has a high patient load; per day, it serves 75–80 pregnant women through the ANC clinic and has 25–30 live births⁽²⁸⁾. This large number of deliveries serves as an indicator of the high need for skilled BFC in the facility. Second, at the time, health facility staff had not been trained in the BFHI. This provided an opportunity for the study team to deliver the BFHI training pre-intervention as a prerequisite to the BFC mentorship program. Finally, Mbagathi Hospital has maternal and child health programs that complement the BFC mentorship program, including a kangaroo mother care unit, staff trained on emergency obstetric and newborn care, and continuous quality improvement teams.

The ANC and PNC departments were chosen as the focus of the study because of the importance of providing timely BFC during prenatal care and immediately after delivery. Additionally, it was important to ensure that our results will be useful in informing BFC implementation interventions within other public level five referral hospitals in Kenya.

Description of the Intervention

The intervention was a facility-based mentorship program carried out from March to September 2023 in accordance with the implementation guidance for a Facility-based BFC mentorship program⁽²⁶⁾. This implementation guidance serves as a bridge between the BFHI Training Course, and the BFHI Competency Verification Toolkit. It provides comprehensive background on breastfeeding counselling, program rationale, and a program management structure specifically designed for facility-based BFC mentorship, along with monitoring systems and adaptable tools for mentors and mentees.

For the study, we prioritized BFC competencies in foundational skills: communicating in a credible effective way; antenatal, birth, and immediate postpartum care; essential issues for breastfeeding mothers; and care at discharge.

Prior to program implementation, a comprehensive stakeholder sensitization process was conducted. This included meetings with the Chief Executive Officer, Hospital Management Team, Reproductive Health department heads, and Hospital administrator to secure institutional buy-in. The sensitization emphasized the program's alignment with national breastfeeding promotion policies and its potential benefits for maternal and child health care, which was crucial for gaining administrative support and facilitating integration into existing hospital workflows.

After a 4-day training for ANC and PNC department health workers on the BFHI, implementation began with establishing the mentorship program leadership structure at the facility. National BFHI training facilitators, the BFHI coordinator, and the mentorship coordinator selected mentors (see Study Participants section below). Mentors, the facility BFHI coordinator, and the facility mentorship coordinator participated in a 2-day *Core Concepts in Mentorship Training for the Breastfeeding Counselling Mentorship Program*⁽²⁹⁾ – an evidence-based curriculum grounded in adult learning principles that covers interpersonal communication, clinical teaching methodologies, and contextual mentoring specific to BFC through participatory exercises aligned with BFHI standards to prepare them to support and guide mentees effectively throughout the program.

Mentors supported mentees for 4 months. The mentoring involved demonstrations, mentor observations using competency assessment tools, and weekly meetings. Meetings were both formal and informal, individual and in small groups. Mentors used clinical teaching, side-by-side mentoring, and case presentations. Once per month, mentors, mentees, the BFHI coordinator, the mentorship coordinator, and BFHI training facilitators met to review monthly activities, discuss areas for improvement, and share experiences.

Study Design

The study used a mixed-methods approach. The study aimed to identify factors that enabled and hindered implementation of the facility-based BFC mentorship program through health worker surveys at baseline and endline and focus group discussions (FGDs) and key informant

interviews (KIIs) at endline. We used health worker surveys (at baseline and endline) to measure the effect of the mentorship program on mentees' confidence related to BFC. We used client exit interviews (at endline) to determine the perceptions of pregnant and postpartum women related to their BFC experience. While the program included competency assessments using standardized verification tools, this feasibility study focused primarily on self-reported confidence as a proximal indicator of program impact. Data from mentors' observations of counselling skills were collected but will be reported separately. This decision allowed us to prioritize implementation feasibility while maintaining a manageable assessment approach in the busy clinical setting.

Study Participants and Sampling Methods

The study involved health workers, pregnant women, and postpartum mothers in the ANC and PNC departments of Mbagathi Hospital, as well as health facility leadership. All doctors, nurses, nutritionists, clinical officers, and midwives (87 total) from the ANC and PNC departments at Mbagathi Hospital were considered for participation in the study. Of these, 80 health workers participated in the BFHI training, and from this group, seven mentors and 21 mentees were selected for the study. The selection of mentors and mentees (Supplementary material S4) was based on the criteria described in the implementation guidance⁽²⁶⁾, which includes designation as a doctor, nurse, nutritionist, clinical officer, or midwife and at least 2 years of experience in maternal and newborn care. All pregnant women exiting the ANC department and all postpartum women exiting the PNC department on data collection days were screen for eligibility for the study. Eligible ANC clients were in the third trimester (≥ 29 weeks gestation), had attended an ANC appointment, and reported receiving BFC from a health worker during a visit in the prior 2 weeks. For PNC clients, eligibility criteria included having delivered a full-term infant and reported receiving BFC from staff. Enumerators interviewed 62 ANC clients at baseline and 60 at endline, and 61 PNC clients at baseline and 60 at endline (see Sample Size Calculation below). Health facility leaders purposively selected for KIIs included members of the health facility management team, the BFHI facility implementation team, and the BFHI facility coordinator for Mbagathi Hospital.

Sample Size Calculation for Client Exit Interviews

The required sample size for client exit interviews was calculated based on an estimated 18 live births per day, resulting in approximately 252 live births over each 2-week data collection period—baseline and endline. To achieve a 90% confidence level with a 10% margin of error, a sample size of 52 per time point per unit/clinic was required. Accounting for a 10% nonresponse rate, the target sample size was adjusted to 60 per time point per unit/clinic.

The sample size (n) and margin of error (E) are given by:

$$n = \frac{N - x}{((N - 1)E^2) + x}$$

$$x = Z \left(\frac{c}{100} \right)^{2r(100-r)}$$

$$E = \left[\sqrt{(N - n)x} / n(N - 1) \right]$$

where N is the population size, r is the fraction of responses of interest, and $Z(c/100)$ is the critical value for the confidence level c . The Raosoft sample size calculator was utilized for these calculations.

Data Collection

Quantitative Data

Health workers completed two online multiple-choice surveys (Health worker post-training survey S5); in April 2023 at the start of the mentorship program (baseline) and in September 2023 after the mentorship program (endline).

Survey tools were developed based on the Competency Verification Toolkit⁽²⁷⁾.

Structured client exit interviews were administered by trained enumerators, either in person or by phone, immediately after determining eligibility and obtaining consent (Client Exit Interview Guide S6 and S7). We developed the interview guides in English, using questions in the most recent Service Provision Assessment tool, and had them translated into Kiswahili by a professional translator⁽¹¹⁾. Enumerators, fluent in both English and Kiswahili, asked clients how often certain actions occurred and how satisfied they were with the BFC services received.

Qualitative Data

Qualitative data were collected at endline through FGDs with mentors and mentees and KIIs with facility leadership. We conducted two FGDs with mentees (one with PNC mentees and one with ANC mentees) and another with mentors. FGDs included all mentors and mentees available (six out of seven and 14 out of 21, respectively). Trained research assistants facilitated FGDs and KIIs using semi-structured guides that explored perceptions of the mentorship program. FGDs and KIIs were conducted in English. With participants' consent, they were recorded and subsequently transcribed.

Study Measures

Health worker surveys included 21 knowledge questions, which we computed into an overall test score (number) and percentage of questions answered correctly. Thirty-two questions assessed confidence in their ability to provide quality BFC using a Likert scale (not at all = 0, slightly = 1, somewhat = 2, quite = 3, and extremely = 4), which we converted to a binary outcome of extremely confident or not. We computed percent of BFC skills in which the health workers felt extremely confident all the time, and also broken down as <50%, 50–79%, and 80–100% of the time.

Similarly, client exit interviews included 26 questions about health worker BFC practices during the ANC visit or postnatally using a Likert scale (no, never = 0; yes, some of the time = 1; yes, most of the time = 2; and yes, all of the time = 3).

Data Analysis

Quantitative Data

We used Stata v17 for management and analysis of quantitative data (StataCorp LP, College Station, TX). We calculated descriptive statistics, numbers, and percents for categorical variables and means, medians, and interquartile range (IQR) for continuous variables. We conducted bivariate analysis to compare measures across time points, reporting *p*-values from Pearson's chi-squared test for categorical variables and Wilcoxon rank sum test for continuous variables. For binary outcomes in the paired sample of health worker surveys, we used McNemar's chi-

square test to determine the statistical significance of differences in the proportions observed. We defined statistical significance of differences between time points as $p < 0.05$.

Qualitative Data

We analyzed and coded qualitative data collected during KIIs and FGDs. We developed a coding framework iteratively through deductive and inductive approaches. Using the framework, two people independently coded all the transcripts. They compared results and discussed differences and generated a results matrix in Excel. Due to the limited number of transcripts, we used a rapid matrix-based analysis. The inductive process included familiarization with data and development of broad codes and their definitions, as well as fine codes with illustrative quotes. All authors reviewed the coding framework and results matrix and helped identify themes. We refined themes through discussion and then interpreted and reported results.

3. RESULTS

Quantitative Findings from Health Worker Surveys

Characteristics of Health Workers at Baseline

All 21 mentees and 7 mentors completed the health worker survey at baseline and 19 mentees, and 7 mentors completed it at endline (Table 1). Most health workers were female (76% of mentees and 86% of mentors), and 71% worked in the PNC department. Most mentors and mentees were nurses (76% and 43%, respectively). Approximately half of mentees (53%) had 5 or more years of professional experience, 24% had 2–4 years, and 24% had less than 2 years. More than half of mentors (57%) had more than 10 years of experience. At baseline, all mentors and mentees reported having previously counseled clients on breastfeeding. Two mentees did not complete the endline survey. One had transferred to another facility midway through the program, and the other was out of the country during the endline data collection period. Their baseline data were excluded from the comparative analysis.

Knowledge and Confidence before and after Mentorship

Knowledge and confidence related to BFC were high at the start of the program. Knowledge was retained and confidence remained high throughout the program (Table 2). On average, mentees

answered 94% of questions correctly at baseline and 92% at endline. They were extremely confident in their ability to perform 72% of actions related to BFC competencies at baseline and 75% at endline. The percentage of mentees who felt extremely confident in their ability to conduct at least 50% of the BFC actions increased from 71% to 95%. In addition, the percentage of mentees who were extremely confident in their ability to counsel women on breastfeeding and infant feeding increased from 67% to 95%. We did not observe statistically significant changes in confidence to perform other actions related to BFC. We combined data from multiple sources aligned with the WHO/UNICEF Competency Verification Toolkit. Table 7 presents this synthesis, showing how mentees' knowledge (based on Annex E multiple-choice knowledge questions), self-reported confidence (aligned with 32 performance indicators from observations tools to verify competencies – Annex G), and client-reported experiences interconnect across key competency areas. While knowledge and overall confidence levels were high at baseline and remained stable, specific improvements were observed in counselling confidence particularly in mentees' ability to counsel women on breastfeeding and infant feeding, suggesting the mentorship program reinforced practical application of existing knowledge.

Experiences with and Perceptions of the Mentorship Program

After the program, all surveyed mentors and mentees said they would encourage others to join the program (Table 3). The majority (89%) of mentees indicated that the breastfeeding session observation job aid was the most helpful learning tool (Table 8 - Supplementary material S2).

Most mentees (63%) reported spending 4 or more hours per week with their mentor. Mentees felt strong listening skills (95%), counselling skills (89%), and knowledge of breastfeeding (84%) were important mentor qualifications, along with being supportive (89%) and respectful (79%) of mentees. Almost all mentees felt very respected by the mentors (95%).

Six of the seven mentors felt very prepared for the BFC mentorship program. All indicated the mentor training was helpful and they understood what was expected of them. All were satisfied with the support they received from health facility management—43% were very satisfied and 57% were somewhat satisfied. The mentorship activities took a fair amount of time—57% of mentors reported spending 3–4 hours per week per mentee. Mentors reported conducting an average of 8 formal observations per mentee throughout the program period, with most 63% mentees spending 3 or more hours per week with their mentor.

Quantitative Findings from Client Exit Interviews

Client Characteristics

We interviewed 122 ANC clients (62 at baseline, 60 at endline) and 121 PNC clients (61 at baseline, 60 at endline) (Table 4). Most demographic characteristics were similar across time points for both groups. The median age of ANC clients was approximately 28 years, with most being married or cohabitating. For PNC clients, the percentage who were married or cohabitating increased from baseline to endline (88.5% to 100%, $p=0.01$), and those with two or more previous births decreased (77% to 55%, $p=0.038$). Other characteristics showed no statistically significant differences between time points.

Experiences and Perceptions of BFC

Most clients interviewed reported being treated in a friendly manner by the health worker(s) providing BFC and support at baseline and endline (Table 5). Among ANC clients, there was no statistically significant change; however, among PNC clients, the percentage increased from 89% to 100% ($p=0.007$). Similarly, ANC and PNC clients reported feeling respected by the health workers providing BFC both before and after the program. ANC clients were more likely to have been addressed by name at endline (88%) than baseline (55%) ($p<0.001$).

At baseline, only 3% of PNC clients interviewed reported physical mistreatment by the health worker(s) providing BFC and support. None of the ANC or PNC clients reported physical mistreatment at endline. Among PNC clients, the percentage who reported verbal mistreatment declined (7% baseline; 0% endline, $p=0.04$) as did the percentage who felt discriminated against based on personal attributes (from 11% to 2%, $p=0.03$). More PNC clients indicated they had privacy during BFC at endline (70%) than at baseline (44%) ($p=0.004$). The percentage of PNC clients who reported health workers asking for consent before observing/helping with breastfeeding declined from 75% at baseline to 57% at endline ($p=0.029$). Both ANC and PNC clients indicated that BFC was useful, and the percentage of ANC clients who felt that BFC gave them more knowledge increased from 73% at baseline to 97% at endline ($p<0.001$).

Qualitative Findings from FGDs and KIIs

We identified several themes from the qualitative data collected through the FGDs and KIIs. Key informants indicated the mentorship program was integrated with existing implementation of national guidelines on quality obstetrics and perinatal care⁽³⁰⁾ at the hospital, routine reporting, continuous medical education, and continuous quality improvement. For example, strengthening monthly reporting on early initiation of breastfeeding by implementing skin-to-skin contact immediately after delivery aligns with mentorship program goals to improve the quality of BFC and breastfeeding outcomes and immediate care of the newborn, a key action in the national guidelines.

Mentors and mentees were interested in participating to increase their knowledge and practices related to breastfeeding and improve maternal and child health. Mentors and mentees felt that gaining confidence to counsel caregivers on breastfeeding was one of the main positive outcomes. Health workers also mentioned strengthening foundational counselling skills, such as listening to and learning from the client. They perceived improvements in breastfeeding practices as well as maternal and child health outcomes, and attributed them to the program.

“It has changed me. As I carry out my daily duties, I can assist a mother whose child is not breastfeeding well. The program has given me the ability to help such mothers, not only in the workplace but also outside my workplace. I can confidently implement the BFHI.” (ANC Mentees FGD, health worker [HW] 2)

Mentees felt that mentors were well-qualified and could influence health workers.

“[My mentor] was quite knowledgeable on what should be done. So whenever we faced some challenges, especially on the filling of the books and some scales, she could clarify how much is needed.” (PNC Mentees FGD, HW 5)

They thought it was strategic to select departmental heads to serve as mentors.

“Mentors were primarily chosen from among those who were already in charge of departments . . . this method was seen as strategic because it utilized existing hierarchies.” (ANC Mentees FGD, HW 1)

Mentees generally viewed the selection and matching process positively, particularly the strategic use of existing leadership structures, merit-based selection, and observations made during the trainings.

“I think the process was strategic because by starting with the departmental heads those who were interacting with ANC and PNC, it gives them the leeway to spearhead the process and number two, when it comes to selecting the mentees the people working under them, I think it went well it is like trickling down effect down the chain.” (ANC Mentees FGD, HW 2)

However, mentees noted that mentors’ other responsibilities made it hard to find time for mentoring and caused interruptions. Both mentors and mentees mentioned challenges scheduling meetings for debriefing, providing feedback, or discussing issues. They noted that this was particularly challenging when mentors and mentees worked in different departments or had different work schedules.

“A recurring issue was the lack of sufficient staff to handle the high volume of deliveries and have adequate time to provide breastfeeding counselling.” (ANC Mentees FGD, HW 2)

“My mentor is a nutritionist and I’m a nurse. The days that we’re supposed to meet, we find that we are in different shifts.” (PNC Mentees FGD, HW 7)

Mentors and mentees were able to overcome these challenges by creating WhatsApp groups. The WhatsApp group served as a platform for ongoing support between face-to-face mentorship sessions, especially when scheduling conflicts arose due to different work shifts or departments. Mentees particularly valued the ability to receive real-time advice on complex cases through shared photos and descriptions. As one mentee noted.

“For me I can say, it somehow went well. Despite the fact that we are different cadres, we were able to create a WhatsApp where we could do our meetings and communicate.” (PNC Mentees FGD, HW 6)

Mentees appreciated the range of approaches used by mentors. Mentors expressed appreciation for the job aids guiding them, particularly when observing BFC sessions. Both mentees and mentors commented on the supportive approach that mentors took to providing feedback to mentees.

“It was also helpful in that she would actually appreciate what you have done good, and later she would come up with what you could have done better. That encouraged us, gave us encouragement.” (PNC Mentees FGD, HW 4)

Finally, mentees noted that the mentorship program fostered relationships and teamwork across different cadres.

“Teamwork, especially among health workers, nutritionists, nurses, and the administration, has really helped in the implementation of the program because if it was one cadre doing everything, it would not be successful as it is now. Because most of the cadres, we are now working together well.” (PNC Mentees FGD, HW 1)

Factors That Enabled and Hindered Implementation

Several factors enabled implementation of the program (Table 6). First and importantly, we designed the program to be an integral part of health facility activities and implemented by staff. Second, health facility management had ownership of, support for, and commitment to the study intervention. Leadership support for proposed changes in service delivery practices has been shown to be critical for engaging staff at all levels⁽³³⁾. Third, conducting the BFHI training prior to the program helped to ensure that mentees had the foundational knowledge of BFC prior to the program. Fourth, mentors and mentees indicated they wanted to improve their knowledge and skills, women’s breastfeeding knowledge and practices, and, ultimately, maternal and child health outcomes. Wallen and colleagues showed that believing in the importance of new practices contributes to their use. Mentors and mentees perceived improvements and attributed them to the program, which seems to have motivated them to actively participate for the duration⁽³³⁾. Fifth, mentors and mentees noted that mentors were well matched with mentees with whom they had a good rapport, who worked in the same department, and/or were of the same cadre, thus ensuring compatibility, which is critical for successful implementation. Sixth, selecting trusted, well-respected, and influential individuals as mentors and matching them with mentees with similar work schedules facilitated implementation of the intervention and helped mentees be open to receiving feedback and suggestions for improvement. Seventh, mentors commented on the usefulness of the job aids, particularly the observation tools, which focused on specific competencies related to mentees’ actions and skills, and counselling checklists. Finally, mentors appreciated the program’s versatility. Choosing the mentorship approach(es) that worked best for them and their mentees (i.e., in-person group, one-on-one, peer-to-peer, or virtual meetings; demonstrations; observations; debriefs; teaching sessions; and discussions) empowered mentors.

Nonetheless, there were challenges due to heavy workloads and conflicting work schedules. The former may be less of an issue in lower-level facilities not receiving a high number of referrals. The latter was mostly an issue when mentors were paired with mentees from different cadres

4. DISCUSSION

Mentorship programs can improve the quality of maternal, neonatal, and child healthcare services, including in resource-limited settings^(22,23,24,31). Mentorship has also been found to influence mentee attitudes, interpersonal relations, and motivation^(25,32,33).

This feasibility study expands the evidence base by focusing on the feasibility of a mentorship program for BFC. We determined whether the mentorship program improved mentees' knowledge and confidence to provide quality counselling and determined whether the mentorship program improved pregnant and postpartum women's perceptions of BFC.

Mentees' Knowledge and Confidence Related to BFC

While mentees demonstrated high baseline knowledge (94% correct) and confidence, which limited the potential for significant improvements across all indicators, it is noteworthy that significant change was observed specifically in mentees' confidence in counselling women on breastfeeding and infant feeding (from 67% at baseline to 95% at endline, $p=0.014$). The lack of statistically significant changes in other knowledge and confidence indicators should be interpreted in the context of already high baseline scores and the small sample size ($N=21$ at baseline, $N=19$ at endline). Rather than suggesting the program had limited impact on knowledge^(34,35,36), these findings indicate that the mentorship approach may be most valuable for enhancing the capability to use a set of related knowledge, skills and behaviours to successfully provide breastfeeding counselling in a clinical setting.

Pregnant and Postpartum Women's Perceptions of BFC

Nearly all clients interviewed reported health workers treating them in a friendly manner and feeling respected before and after the mentorship program. They did not report feeling discriminated against or experiencing physical or verbal mistreatment. Notably, we observed a significant decline among PNC clients who felt verbally mistreated and discriminated against based on personal attributes. This improvement in client treatment aligns with the FGDs;

mentees indicated increased empathy for clients. Finally, ANC and PNC clients' perception of the usefulness of BFC increased over time.

A somewhat surprising finding was the decline in the percentage of PNC clients who reported health workers asking for consent before observing or helping with breastfeeding. This might have to do with (a) BFC becoming so integrated into services that health workers overlooked the need to ask each time and/or (b) enthusiasm to help women breastfeed might have led to health workers forgetting to ask for consent.

STUDY LIMITATIONS

The study was conducted at a single health facility, limiting generalizability to other levels of care. Without a comparison group and purposive/convenient sampling, changes in mentee confidence and client-reported counselling cannot be definitively attributed to the mentorship program. Our sample sizes were not large enough to detect moderate differences between baseline and endline. Exit interviews focused on satisfaction and measures of respective care rather than practices related to prioritized competencies. As a repeat cross-sectional design, there were some statistically significant differences between ANC and PNC client groups at baseline and endline. Overall, while suggestive, the lack of a comparison group limits definitive conclusions about the program's impact. A limitation of this feasibility study was the lack of data on breastfeeding outcomes such as initiation rates and exclusive breastfeeding rates at hospital discharge. Future evaluations of the facility-based BFC program should include these metrics to assess the ultimate impact on breastfeeding practices.

CONCLUSIONS

The BFC mentorship program was feasible when implemented as designed in a health facility with requisite capacity to adapt it based on its existing infrastructure and supportive leadership.

As a next step, we recommend a series of carefully designed pilot studies implemented in a variety of settings (urban, rural), socioeconomic environments, and health facility types (public and private facilities, primary and secondary care facilities). These pilot studies will guide the next phase of implementation and enhance already existing efforts by respective county health departments implementing BFHI to achieve Step 2. Additionally, further research should assess the impact of the mentorship program on breastfeeding practices among mothers in Kenya. This

approach will provide valuable insights into the scalability and adaptability of the mentorship program in different contexts and will ultimately contribute to improved BFC and breastfeeding outcomes.

Facility-based mentoring to strengthen BFC competencies is one potential approach for countries to achieve the second step of the BFHI Ten Steps. Based on study findings, implementation guidance⁽²⁶⁾ was revised to include: (1) updated BFHI competencies; (2) evidence of adaptability across facility levels; (3) enhanced mentor-mentee pairing and support mechanisms, including virtual options; and (4) simplified competency assessment tools linked to various service points. These evidence-informed refinements enhance the program's contextual adaptability whilst preserving fidelity to its foundational components, thus facilitating wider implementation across diverse healthcare settings.

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Table 1. Baseline Characteristics of Health Workers

Health worker characteristics	Mentees N=21 n (%)	Mentors N=7 n (%)
Gender		
Female	16 (76%)	6 (86%)
Male	5 (24%)	1 (14%)
Workplace unit		
ANC department	6 (29%)	2 (29%)
PNC department	15 (71%)	5 (71%)
Type of health worker		
Nurse/nurse midwife	16 (76%)	4 (57%)
Nutritionist	5 (24%)	3 (43%)
Duration of professional work experience (years)		
<2 years	5 (24%)	0 (0%)
2–5 years	5 (24%)	1 (14%)
5–10 years	9 (43%)	2 (29%)
>10 years	2 (10%)	4 (57%)

Table 2. Mentee knowledge and confidence for counselling pregnant and postpartum women on breastfeeding

Performance Indicators	Baseline	Endline	Difference	P-Value
	N=21	N=19		
Average percent of the knowledge questions that mentees answered correctly	94%	92%	-2%	0.401
Percent of mentees that answered at least 80% (26) of the knowledge questions correctly	21 (100%)	19 (100%)	0%	0.155
Average percent of the BFC actions that mentees felt extremely confident to perform	72%	75%	3%	0.609
Percent of mentees who felt extremely confident in their ability to perform at least 50% (16) of the BFC actions	15 (71%)	18 (95%)	24%	0.155
Health worker felt extremely confident in ability to:				
Use listening and learning skills	14 (67%)	10 (53%)	-14%	0.414
Use building confidence and giving support skills	16 (76%)	14 (74%)	-2%	0.99
Describe how healthcare practices affect initiation of breastfeeding	16 (76%)	13 (68%)	-8%	0.706
Assess a pregnant woman's knowledge about breastfeeding	15 (71%)	16 (84%)	13%	0.083
Explain the importance of skin-to-skin contact immediately after delivery	16 (76%)	17 (89%)	13%	0.180
Explain the importance of initiation of breastfeeding within 1 hour after delivery	16 (76%)	17 (89%)	13%	0.180
Explain the importance of exclusive breastfeeding for 6 months	16 (76%)	17 (89%)	13%	0.180
Explain the benefits of breastfeeding to the mother	14 (67%)	17 (89%)	22%	0.059

Performance Indicators	Baseline	Endline	Difference	P-Value
	N=21	N=19		
Explain the benefits of breastfeeding to the child	14 (67%)	15 (79%)	12%	0.257
Explain how breastfeeding works	15 (71%)	14 (74%)	3%	0.706
Counsel on breastfeeding and infant feeding	14 (67%)	18 (95%)	28%	0.014
Explain infant feeding patterns in the first 36 hours of life	16 (76%)	13 (68%)	-8%	0.706
List the signs and symptoms that indicate a newborn may not be getting enough milk	15 (71%)	15 (79%)	8%	0.480
Explain to a mother the signs of adequate transfer of milk in the first few days	15 (71%)	14 (74%)	3%	0.706
Explain to a mother the warning signs of infant undernourishment or dehydration	15 (71%)	13 (68%)	-3%	>0.99
Recognize breast refusal and help a mother to breastfeed	13 (62%)	13 (68%)	6%	0.739
List the different reasons why a newborn may cry often	16 (76%)	14 (74%)	-2%	>0.99
Explain the importance of continued breastfeeding for up to 2 years and beyond	16 (76%)	17 (89%)	13%	0.180
Explain responsive feeding and its implications for the frequency and duration of breastfeeding	15 (71%)	14 (74%)	3%	0.564
Assess a breastfeeding session using the Job Aid: Breastfeeding Session Observation	16 (76%)	12 (63%)	-13%	0.414
Help a mother to position her baby for breastfeeding using the four key points of positioning	17 (81%)	15 (79%)	-2%	>0.99
Explain the four key points of attachment for breastfeeding	16 (76%)	13 (68%)	-8%	0.706

Performance Indicators	Baseline	Endline	Difference	P-Value
	N=21	N=19		
Help a mother to attach her baby to the breast once they are well positioned	16 (76%)	17 (89%)	13%	0.180
Help a mother who has flat or inverted nipples	15 (71%)	15 (79%)	8%	0.480
Help a mother with engorged breasts	14 (67%)	12 (63%)	-4%	>0.99
Help a mother with sore or cracked nipples	15 (71%)	14 (74%)	3%	0.706
Help a mother with mastitis	15 (71%)	9 (47%)	-24%	0.206
Describe alternative methods of feeding	15 (71%)	13 (68%)	-3%	>0.99
Explain the steps of expressing breast milk by hand	16 (76%)	13 (68%)	-8%	0.739
Practice with a mother how to cup feed her baby safely	15 (71%)	15 (79%)	8%	0.480
Counsel a mother about her own health	16 (76%)	16 (84%)	8%	0.414
Implement the International Code of Marketing of Breast-Milk Substitutes in a health facility	13 (62%)	9 (47%)	-15%	0.366

Table 3. Mentors' and mentees' perceptions of the BFC mentorship program at endline

Perceptions of the BFC mentorship program	Mentees N=19 n (%)	Mentors N=7 n (%)
Mentors felt very prepared to fill role of mentor	N/A	6 (86%)
Mentors felt the mentorship training was very helpful	N/A	7 (100%)
Mentors understood what was expected of them as mentors	N/A	7 (100%)
Mentors felt very satisfied with support received from the facility for the mentorship program	N/A	3 (43%)
Mentors felt somewhat satisfied with support received from the facility for the mentorship program	N/A	4 (57%)
Average time mentors spent on the mentorship program per week		
1–4 hours/week	N/A	3 (43%)
5–8 hours/week	N/A	1 (14%)
> 8 hours/week	N/A	3 (43%)
Mentors felt this was too little time	N/A	4 (57%)
Average time mentees spent with mentor per week		
<3 hours/week	7 (37%)	N/A
≥3 hours/week	12 (63%)	N/A
Mentees' perceptions of most important qualifications of mentors		
Experience	9 (47%)	N/A
Strong listening skills	18 (95%)	N/A
Strong counselling skills	17 (89%)	N/A
Knowledge of breastfeeding	16 (84%)	N/A
Supportive of mentees	17 (89%)	N/A
Respectful of mentees	15 (79%)	N/A
Mentees felt very respected by mentors	18 (95%)	N/A
Mentees felt that they met their BFC mentorship goals very well	17 (89%)	N/A
Would encourage others to join the BFC mentorship program	19 (100%)	7 (100%)

Table 4. Demographic characteristics of ANC and PNC clients who received BFC at Mbagathi hospital

Socio economic demographics	ANC clients (pregnant women)			PNC clients (postpartum women)		
	Baseline (N=62)	Endline (N=60)	P-value	Baseline (N=61)	Endline (N=60)	P-value
Median age in years (IQR)	27.5 (24.0, 35.0)	28.5 (23.5, 32.5)	0.81	26.0 (23.0, 32.0)	24.5 (21.0, 31.5)	0.13
Marital status						
Married or living with a partner	55 (88.7%)	55 (93.2%)	0.388	54 (88.5%)	54 (100.0)	0.01
Single never married, divorced, or separated	7 (11.3%)	4 (6.8%)		7 (11.5%)	0 (0.0)	
Level of education						
None	0 (0%)	0 (0%)	0.146	1 (2%)	0 (0%)	0.173
Primary	15 (24%)	8 (13%)		12 (20%)	12 (20%)	
Post-primary/vocational	0 (0%)	0 (0%)		10 (16%)	6 (20%)	
Secondary/A-level	32 (52%)	28 (47%)		24 (39%)	35 (58%)	
College/university	15 (24%)	24 (40%)		14 (23%)	7 (12%)	
Had paid work in the last 12 months	34 (55%)	39 (65%)	0.25	38 (62%)	27 (45%)	0.056
Number of previous births						

Socio economic demographics	ANC clients (pregnant women)			PNC clients (postpartum women)		
	Baseline (N=62)	Endline (N=60)	P-value	Baseline (N=61)	Endline (N=60)	P-value
Median number of previous births (IQR)	2.0 (1.0, 3.0)	1.0 (1.0, 2.0)	0.071	2.0 (2.0, 3.0)	2.0 (1.0, 3.0)	0.02
None	8 (13%)	7 (12%)	0.112	N/A	N/A	0.038
1 birth	19 (31%)	29 (48%)		14 (23%)	27 (45%)	
2–6 births	35 (56%)	24 (39%)		47 (77%)	33 (55%)	
Number of ANC visits during this pregnancy						
Median number of ANC visits (IQR) ^{††}	5.0 (4.0, 6.0)	4.0 (3.0, 5.0)	0.033		5.0 (4.0, 6.0)	N/A
1–3 visits	9 (15%)	19 (32%)	0.081	N/A	9 (15%)	
4–7 visits	47 (77%)	38 (63%)		N/A	48 (80%)	
8–10 visits	5 (8%)	3 (5%)		N/A	3 (5%)	
Currently breastfeeding [†]				61 (100%)	60 (100%)	
†PNC clients only; ††All clients excluding PNC pre-intervention						
Notes: The median number of births for the postpartum women at baseline was 2.0 (IQR 2.0–3.0) while at endline it was 2.0 (IQR 1.0–3.0). The IQR range at endline of 1.0–3.0 suggests that 50% of women had between one and three births, showing a wider spread or greater variability in the number of births. This suggests that by the endline, there was a broader range of experiences regarding the number of births among the sampled population, with more women having fewer births (as low as one) compared to the baseline.						

Table 5. Pregnant and postpartum women's perceptions of BFC, n (%)

	ANC clients (pregnant women)			PNC clients (postpartum women)		
	Baseline (N=62)	Endline (N=60)	P value	Baseline (N=61)	Endline (N=60)	P value
Client reported that the following happened “most” and “all of the time” during her visit, while receiving BFC						
Client was addressed by name during BFC	34 (55%)	53 (88%)	<0.001	22 (36%)	29 (48%)	0.17
Client was asked how she was feeling by health worker (HW) who provided BFC	52 (84%)	54 (90%)	0.43	51 (84%)	53 (88%)	0.59
Client felt she could ask HW who provided BFC any questions	55 (89%)	53 (88%)	0.95	52 (85%)	56 (93%)	0.15
Client felt treated in a friendly manner by HW who provided BFC	62 (100%)	58 (97%)	0.15	54 (89%)	60 (100%)	0.007
Client felt HW who provided BFC paid attention when they needed help with breastfeeding	N/A	N/A		58 (95%)	58 (97%)	0.66
Client felt respected by HW who provided BFC	61 (98%)	59 (98%)		58 (95%)	60 (100%)	0.082

	ANC clients (pregnant women)			PNC clients (postpartum women)		
	Baseline (N=62)	Endline (N=60)	P value	Baseline (N=61)	Endline (N=60)	P value
Client was asked for consent before breastfeeding observation/help during BFC*	N/A	N/A		46 (75%)	34 (57%)	0.029
Client felt she could discuss problems with HW who provided BFC <i>without others not involved in care overhearing</i> (privacy)	N/A	N/A		27 (44%)	42 (70%)	0.004
Client felt BFC was helpful	59 (95%)	58 (97%)	0.56	61 (100%)	60 (100%)	N/A
Client felt BFC gave her knowledge about breastfeeding	45 (73%)	58 (97%)	<0.001	N/A	N/A	N/A
Client reported that the following “never” happened during her visit while receiving BFC						
Client felt discriminated based on personal attributes during BFC	1 (2%)	1 (2%)	0.98	7 (11%)	1 (2%)	0.03
Client felt physically mistreated during	0 (0%)	0 (0%)	N/A	2 (3%)	0 (0%)	0.16

	ANC clients (pregnant women)			PNC clients (postpartum women)		
	Baseline (N=62)	Endline (N=60)	P value	Baseline (N=61)	Endline (N=60)	P value
BFC						
Client felt verbally mistreated during BFC	3 (5%)	1 (2%)	0.33	4 (7%)	0 (0%)	0.044
Notes: We measured health worker practices during BFC, reported during client exit interviews using a Likert scale (no, never = 0; yes, some of the time = 1; yes, most of the time = 2; and yes, all of the time = 3) and converted into a binary outcome of either 1 = yes, all or most of time for positive statements, or 1 = any yes for negative statements to simplify and reduce the response categories presented here.						

Table 6. Enablers and barriers of the facility-based mentorship program for BFC

Enablers	Description
Merit-based selection	Facility-based mentors were chosen from senior experienced staff, leveraging existing authority and respect to facilitate effective mentorship.
Training for mentors	Mentors received training on core principles of mentorship before assuming their roles, equipping them with the necessary skills and knowledge.
Multidisciplinary engagement	The program encouraged collaboration among various cadres of healthcare professionals, enhancing support for BFC.
Integration with hospital programs	The mentorship was integrated into existing hospital programs, such as monthly continuing medical education sessions, quality improvement, and reporting activities for key national indicators.
Structured implementation	The facility-based mentoring processes was well-structured and adapted to fit within normal hospital client care activities.
Barriers	Description
Structural limitations	Initially, there were insufficient delivery beds, which hindered skin-to-skin contact and initiation of breastfeeding immediately after birth, and little privacy during BFC in the postnatal ward.
Staffing shortages	A lack of sufficient staff to handle the high volume of deliveries in the labour ward and subsequently provide adequate support for BFC was a recurring issue.
Training coverage for all department staff	Not all staff were selected for maternity course training, leading to inconsistencies in the care practices and BFC support provided to mothers.
Misinformation and poor community engagement	Mothers often started ANC in their last trimester, but some had their first contact during delivery at the facility. These mothers arrived with incorrect information about breastfeeding, requiring health workers to spend much more time counseling.
Scheduling conflicts	Organizing meetings was challenging due to scheduling conflicts for those whose mentors were only available during day shifts while they were scheduled for night shifts.
Lack of clarity in selection criteria for mentors	Some mentees were unclear about the criteria used for selecting mentors, leading to perceptions of bias, since most of mentors were experienced senior staff.
Over-reliance on hierarchical positions in departments as mentors	Using senior staff as mentors who had competing tasks and limited time might limit mentoring and learning opportunities.
Commitment and personal sacrifice	Participation in the program required a significant time commitment, often outside of regular working hours.

Table 7. Summary of change in performance indicators by data source

Performance indicator	Knowledge (mentee survey)	Confidence (mentee survey)	Reported practice (client exit interviews)
11. Demonstrate at least three aspects of listening and learning skills when talking with a mother.	Strong: 100% able to identify an open-ended question at baseline and endline.	Reinforcement needed: 67% were extremely confident in their ability to use listening and learning skills at baseline, only 53% at endline.	Strong: Most clients reported being asked how they were feeling, feeling they could ask questions, and being treated in a friendly manner. In addition, most PNC clients reported feeling that the health worker paid attention when they needed help with breastfeeding.
15. Engage in a conversation with a pregnant woman on three aspects of the importance of breastfeeding.	Strong: 100% know the risk of not breastfeeding a baby and the importance of breastfeeding for the mother at baseline and endline.	Strong: Increase in percentage of participants who were extremely confident in their ability to explain the importance of continued breastfeeding for up to 2 years (76% and 89%, respectively), the benefits of breastfeeding to the mother (67% and 89%, respectively), and the benefits of breastfeeding to the	Not asked, further investigation needed.

Performance indicator	Knowledge (mentee survey)	Confidence (mentee survey)	Reported practice (client exit interviews)
		child (67% and 79%, respectively).	
16. Assess at least three aspects of a pregnant woman's knowledge about breastfeeding in order to fill gaps and correct inaccuracies.	N/A	Strong: Increase in percentage of participants who are extremely confident in their ability to assess a pregnant woman's knowledge about breastfeeding (71% at baseline and 84% at endline).	Not asked, further investigation needed.
17. Engage in a conversation with a pregnant woman about at least four care practices a mother/infant dyad will experience at the birthing facility that will support breastfeeding.	Strong: Most know a reason for immediate and sustained mother-baby skin-to-skin contact after birth (100% and 95% at baseline and endline, respectively) and at least one factor that improves the mother's childbirth experience (100% at baseline and endline).	Strong: Improvements in the percentage of participants who were extremely confident in ability to explain the importance of skin-to-skin contact immediately after delivery from baseline to endline (76% and 89%, respectively) and to explain the importance of initiation of breastfeeding within 1 hour after delivery (76% and 89%, respectively).	Not asked, further investigation needed.

Performance indicator	Knowledge (mentee survey)	Confidence (mentee survey)	Reported practice (client exit interviews)
		Reinforcement needed: Decline in percentage of participants who were extremely confident in ability to describe how healthcare practices affect initiation of breastfeeding (76% at baseline, 68% at endline).	
25. Engage in a conversation with a mother including at least three reasons why suckling at the breast in the first hour is important, when the baby is ready.	Strong: Most know one reason that suckling at the breast within the first hour of birth is important at baseline and endline (81% and 95%, respectively).	Strong: Most participants are extremely confident in their ability to explain how breastfeeding works at baseline and endline (71% and 74%, respectively).	Not asked, further investigation needed.
27. Describe to a mother at least three pre-feeding behaviors babies show before actively sucking at the breast.	Strong: Most know behaviors a baby should demonstrate instinctually before latching at baseline and endline (90% and 95%, respectively).	Reinforcement and further investigation needed: Just over two-thirds of participants were extremely confident in their ability to explain responsive feeding and its implications for the	Not asked, further investigation needed.

Performance indicator	Knowledge (mentee survey)	Confidence (mentee survey)	Reported practice (client exit interviews)
		frequency and duration of breastfeeding (baby's hunger and satiety cues) (71% at baseline, 74% at endline).	
29. Engage in a conversation with a mother regarding at least three reasons why effective exclusive breastfeeding is important.	Strong: Most know the global recommendation for duration of exclusive breastfeeding at baseline and endline (95% and 100%, respectively) and the importance of exclusive breastfeeding (90% and 100%, respectively).	Strong: Increase in percentage of participants who were extremely confident in their ability to explain the importance of exclusive breastfeeding for 6 months at baseline and endline (76% and 89%, respectively).	Not asked, further investigation needed.
30. Engage in a conversation with a mother regarding two elements related to infant feeding patterns in the first 36 hours of life.	Strong: Most know what information to share with a mother about a newborn's typical feeding patterns in the first 36 hours of life at baseline and endline (100% and 95%, respectively).	Strong: Increase in percentage of participants who were extremely confident in their ability to counsel a pregnant woman about breastfeeding and infant feeding (67% at baseline, 95% at endline).	Not asked, further investigation needed.

Performance indicator	Knowledge (mentee survey)	Confidence (mentee survey)	Reported practice (client exit interviews)
		Needs reinforcement: Just over two-thirds were extremely confident in their ability to explain infant feeding patterns in the first 36 hours of life (76% at baseline, 68% at endline).	
31. Describe to a mother at least four signs of adequate transfer of milk in the first few days.	Strong: Most know a sign of adequate transfer of milk in the first few days at baseline and endline (90% and 84%, respectively).	Needs reinforcement: Three-quarters were extremely confident in their ability to list the signs and symptoms that indicate a newborn may not be getting enough milk (71% at baseline, 79% at endline) and explain the signs of adequate transfer of milk in the first few days (71% at baseline, 74% at endline).	Not asked, further investigation needed.
32. Evaluate a full breastfeeding session observing at least five points.	Strong: Most know an important aspect that is observed at the end of a full breastfeeding assessment at baseline	Needs reinforcement: Three-quarters were extremely confident in their ability to assess a breastfeeding session	Not asked, further investigation needed.

Performance indicator	Knowledge (mentee survey)	Confidence (mentee survey)	Reported practice (client exit interviews)
	and endline (90% and 89%, respectively) and two things that should be observed when assessing a full breastfeeding session (95% at baseline and endline).	using the appropriate job aid (76% at baseline, 63% at endline).	
62. Develop individualized discharge feeding plans with a mother that includes at least six points.	Strong: 100% know the most important issue to discuss with a mother before she leaves the hospital after giving birth and when a mother should bring her baby to a healthcare professional after discharge at baseline and endline.	Not asked, further investigation needed.	Not asked, further investigation needed.
63. Describe to a mother at least four warning signs of infant undernourishment or dehydration for a mother to contact a healthcare professional after	Reinforcement needed: Knowledge regarding warning signs of undernourishment or dehydration in the infant increased from 48% at baseline to 53% at endline.	Needs reinforcement: Three-quarters were extremely confident in their ability to explain the warning signs of infant undernourishment or dehydration (71% at baseline, 68% at	Not asked, further investigation needed.

Performance indicator	Knowledge (mentee survey)	Confidence (mentee survey)	Reported practice (client exit interviews)
discharge.		endline).	
64. Describe at least three warning maternal signs for a mother to contact a healthcare professional after discharge.	Not asked, further investigation needed.	Needs further investigation, but most were extremely confident in their ability to counsel a mother about her own health (76% at baseline, 84% at endline).	Not asked, further investigation needed.
Note: A successful mentorship program for BFC is assured through knowledge, as the percent of the 21 knowledge questions answered correctly at baseline and endline confirms. The confidence levels to perform the 32 skills (measured by the 32 performance indicators) at baseline and endline stayed the same, indicating that the mentees have acquired and maintained the required attitude to provide quality BFC. This was verified using standardized detailed observation tools as shown in this table.			