

Compliance with Baby Friendly Hospital Initiative (BFHI); A Case Study of the Sagnarigu Municipal Health Directorate of Northern Ghana

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Abstract

It has been estimated that the deaths of 823,000 children each year could be averted by increasing Breastfeeding has been established in literature as one of the practices. In fact, it has been established that nearly 900,000 infant deaths can be prevented globally through progressive breastfeeding. Imperatively, Baby-Friendly Hospital Initiative has been demonstrated in literature as one of the pathways through which breastfeeding can be initiated right after birth. Other studies have also demonstrated positive association between BFHI and exclusive breastfeeding. While the global narrative has been established, not much is known on compliance levels with healthcare facilities in Ghana. The study adopted mixed method research to investigate compliance with BFHI, using Sagnarigu Municipal Health Directorate of Northern Ghana as the case study. Data for the study were gathered through field survey and in-depth interview and analysed through descriptive statistics and thematic analysis. Findings showed higher compliance level to exclusive breastfeeding, on-demand feeding and breastfeeding education with each of them scoring above 90% compliance level. On the contrary, the qualitative findings demonstrate that none of the healthcare facilities demonstrated comprehensive understanding of the ten steps involved in BFHI. Thus, health workers were not adequately trained to fully implement the breastfeeding policy actions with BFHI. The study showed that, none of the sample healthcare facilities met the criteria for steps one and two of the BFHI. Key barriers that undermine compliance to BFHI included; lack of in-service training, inadequate national and regional support for the program and high-client to staff ratio.

Keywords: *Baby-Friendly Hospital, Child Health Breastfeeding, Newborns.*

Introduction

Breastfeeding has been cited in literature as one of the key practices that promote general wellbeing of newborn babies. Studies have concluded that breastfeeding generally promote the health and survival of newborn babies [1]. The WHO and several health stakeholders and research have recommended early initiation of breastfeeding within the golden hour which is

the first hour after birth [2]. This practice ensures that, newborn babies receive colostrum which is secreted immediately after birth [3]. Comparable to formula feeding, optimal breastfeeding promotes proper growth and development of children especially in the early stages of their lives. Studies have found that colostrum feeding improves the immunity of newborn babies by way of providing antibodies that protect them from diseases [2-4].

Moreover, colostrum feeding reduce risk of infection and ultimately preventing deaths in babies during the first month of their lives [5]. This underscores why initiation of breastfeeding is essential for promoting health and general wellbeing of babies.

Recent global reports suggest that implementation of exclusive breastfeeding only occurs among one-third of children 0-12months [6]. This implies that nearly 67% of infants are not able to exclusively breastfeed globally. The World Health Organisation reported that only 43% of infants are breastfed in the first hour after delivery [7, 8]. This implies that delayed initiation of breastfeed from the global perspective is higher [8]. Among the challenges that undermine optimal breastfeeding include unhealthy nursing mothers, inability of infants to such breast due to illnesses, accelerated promotion and sales of breast milk substitutes, cultural norms and practices, higher engagement of women in the active labour force and lack of support [7].

Baby-Friendly Hospital Initiative (BFHI)

The World Health Organisation in collaboration with UNICEF lunched the BFHI in 1991 as part of the global effort towards improving breastfeed practices with the ultimate aim of enhancing and promoting infant health outcomes [5]. The initiation of the BFHI was a swift response to the Innocenti Declaration which sought to protect, support and promote breastfeeding across various global healthcare facilities. Ultimately, the BFHI sought to remedy facility related factor or barriers that undermine initiation of breastfeeding in the early hours after delivery [5]. The BFHI also sought to remedy hospital related challenges that discouraged nursing mothers from practicing exclusive and optimal breastfeeding. Since 1991, more than 150 countries including Ghana have implemented the BFHI as part of their efforts towards improving maternal and infant health outcomes.

The BFHI incorporates and promote a multi-level framework which highlights various legislations and statutory requirements for maternity leave with the aim of enhancing breastfeeding rights of women particularly nursing mothers. The BFHI also stresses on legislative frameworks that enforces proper workplace practices that promote breastfeeding among career nursing mothers [7]. The BFHI further provides legislative frameworks that enforce the code for marketing breast milk substitutes. The marketing codes seek to limit the sale of breast milk substitutes while promoting and supporting optimal breastfeeding. There are also monitoring and reassessment within the BFHI which ensure high compliance to various steps and actions within the BFHI. Essentially, the BFHI has yielded some significant positive results in terms of increasing the practice of exclusive and optimal breast feeding. However, some countries are still lagging behind in terms of BFHI efforts. The sustainability of the BFHI therefore requires adoption and integration of breastfeeding discourse among health workers which can be facilitated by higher learning institutions. There have also been calls for expanding BFHI beyond neonatal, maternity and pediatric services [8-10]. Thus, some authors have recommended that, the scope and coverage of BFHI must include community health services which will contribute to continuity of care [10].

Adaptation of Hospital Self-Appraisal Framework to Assess BFHI

Appraisal is one of the key tools that is crucial in measuring progress and impact of BFHI. Since hospitals and healthcare facilities operate within different context, in terms of service scope, facilities, human resource and logistics capacities, policies, funding framework, among others, it becomes imperative that, context specific appraisal framework is developed to appraise the practice of BFHI which reflects ten key points of

successful breastfeeding. The appraisal framework must be developed and utilised by hospitals and healthcare facilities to evaluate how their current practices align with the ten steps. Moreover, the self-adopted appraisal tool will help health care facilities to measure whether their current practices align with international practices. Again, the self-adopted appraisal tool will help health care facilities to measure whether their current practices provide adequate support for HIV-positive women and their children. Furthermore, the adoption of context specific appraisal tool will enable healthcare facilities to determine whether their current BFHI practices are mother and infant friendly.

In order to attain or be accredited as BFHI facility, the WHO and UNICEF guidelines recommends that the facility must demonstrate at least 75% rate of exclusive breastfeeding [11]. Moreover, healthcare facilities must demonstrate high compliance level to international codes of marketing breast milk substitutes. The healthcare facility must also demonstrate progressive and sustained implementation of all the ten steps of successful breastfeeding as highlighted in the WHO and UNICEF guidelines [11]. The guideline clearly states that, for every healthcare facility that provide maternity services and healthcare for newborn babies, they must:

1. Have a well written policy that addresses breastfeeding practices. The policy must also be regularly communicated to health workers.
2. Routine in-service training must be organised for health workers in order for them to align with the requirements of the policy.
3. Create flexible and agile communication channels that inform pregnant women and nursing mothers about the benefits of breastfeeding.
4. Help mothers with difficulties to initiate breastmilk within the first hour of post-delivery.
5. Show and educate mother on how to breastfeed and maintain lactation even when their babies are separated from them.
6. Give newborn babies only breastmilk (no food or drink) except when medically required.
7. Practice rooming in which allows mothers and their babies to be together for 24 hours a day.
8. Ensure, encourage and promote breastfeeding on demand.
9. Give no artefacts such as pacifiers to infants who are breastfeeding.
10. Promote and facilitate the establishment of breastfeeding support groups. Facilities must also refer mothers to breastfeeding support groups after they have been discharged from the healthcare facility.

Studies have concluded that, effective and proper adherence to the ten-step successful breastfeeding plan provides some opportunity to both care givers and nursing mothers to become adequately aware and also learn new breastfeeding skills which translate into optimal breastfeeding and positive infant health outcomes [12, 13]. The World Health Organisation and UNICEF have a long-term goal of making sure that all healthcare facilities across the globe providing maternity care become certified [14]. In fact, at the end of 2011, a total of 21,000 healthcare facilities had been certified by the WHO as Baby-friendly representing nearly 25% of all maternity facilities across the globe [14]. Generally, the rate of certification of facilities from the global perspective has been slow (moving at an annual rate of 7%) over the last decade with most facilities in the sub-Saharan African region failing to meet the requirements [14].

Implementation of BFHI in Ghana

Implementation of BFHI in Ghana begun in 1995 as part of the Ministry of Health's policy actions towards align with WHO's

breastfeeding targets. Generally, BFHI was adopted in Ghana to protect and ensure exclusive and optimal breastfeeding. The BFHI has yielded positive results in the context of Ghana in terms of improved maternal and infant support during initiation of breastfeeding. Regardless of the positive narratives, challenges that undermine full compliance to the guidelines still remain particular in urban areas where most healthcare facilities are not able to meet demand in terms of staff to client ratio [15]. Ghana was able to designate nearly 330 maternity facilities as baby-friendly in line with the guidelines of WHO [15]. Recent studies have demonstrated that BFHI accredited facilities in Ghana are able to achieve nearly 80% exclusive breastfeeding rate. Ghana has been able to support the BFHI with legislations (example, Breastfeeding Promotion Regulation, LI 1667), policies that promote exclusive and optimal breastfeeding as well as regulations that control or moderate sales, marketing and usage of breast milk substitutes. Despite many facilities being designated as baby-friendly, studies have showed that nearly 42% of the designated facilities are not able to adhere to the ten-steps of successful breastfeeding plan recommended by the WHO. In fact, no maternity facility in Ghana has been able to achieve full compliance, underscoring the need to research into factors that undermine compliance.

Goal and Objectives

The study sought to:

1. Investigate the level of implementation of BFHI across selected maternity facility in Sagnarigu Municipality.
2. Examine the readiness of maternity facilities in Sagnarigu Municipality to adhere to compliance requirement of BFHI.

Materials and Methods

A mixed method research approach was used in the study. This approach was justifiably

appropriate since it allowed the study to generate holistic data by combining both quantitative and qualitative data collection and analysis approaches. Moreover, the chosen method allowed for cross-sectional survey design to be used where adequate households with children under-five years were involved in the study. Again, the chosen method enabled the study to adopt structured interviews and focused group discussions to gather in-depth data from various stakeholder groups including health workers, officials of Sagnarigu Municipal Health Directorate and community health officials.

Study Area

The study was conducted within the geographical confines of Sagnarigu Municipality based on proximity reasons and availability of maternity facilities. The Sagnarigu Municipality is one of the administrative local assemblies carved out of the Tamale Metropolis in 2012. The economy of the municipality is largely dominated by the agriculture sector which accounts for nearly 70% of the labour force. Reports from the recent housing and population census estimated the population of the municipality to be around 342,000 with males and females accounting for 49.8% and 50.2% respectively [16]. Sagnarigu municipality currently has two hospitals, 68 healthcare facilities and several other Community-Based Health Planning and Service Compound. Nearly 80% of healthcare facilities in the municipality provide maternity services making the selection of the municipality appropriate for the study.

Population and Sampling

The population of the study consisted of nursing mothers of children under five years, officials of the Municipal Health Directorate, nurses, midwives and community health officers. Sample size of the study (384) was determined through the Cochran's formula. The study adjusted the sample size by a margin of

10% to cater for incurrent reporting and non-response rate. A total of 384 mothers of children under 5 years were selected for the study.

Determination of the sample size is as followed:

$$n = \frac{z^2 p(1 - p)}{d^2}$$

where, n = estimated sample size

p = sample proportion (the proportion of the sample that is assumed be accessing health and nutrition services within the Sagnarigu Municipality = 60% or 0.6).

d = the probability that the desired sample size will not be representative of the study population (5%).

z = level of confidence that the chosen sample will be representative of the population (95%) which is 1.96.

Below is the sample size calculation:

$$n = \frac{1.96^2 \times 0.6(1 - 0.6)}{0.05^2}$$

$$n = \frac{3.8146 \times 0.6 \times 0.4}{0.0025}$$

$$n = \frac{0.9219}{0.0025}$$

$$n = 383.78$$

10% error = 38.3 therefore n

$$= 383.78 + 38.3$$

$$n = 422.$$

Sampling

The study adopted two sampling methods (stratified and systematic random sampling) to select participants for data collection. The strategies sampling technique was initially used to recruit respondents for the field survey by dividing the entire municipality into six strata. Nursing mothers with children under five years were selected from each of the strata. This was done to ensure representativeness of the findings. The study also used systematic random sampling as to select health workers, and community health offices from each of the strata. Lastly, purposive sampling was used to select informants for the interviews from the Municipal Health Directorate.

Data Collection

The study applied both survey questionnaire and qualitative enquiry tools (interviews and focus-group discussions) to gather data on the research issues. The survey questionnaires enabled the study to ascertain the extent to which BFHI is implemented as well as compliance level to the BFHI guidelines across sampled facilities. The interviews also helped the study to gather relevant insight and data on the readiness of healthcare facilities to implement and address various challenges undermining compliance level to BFHI guidelines. The data collection was implemented through Kobo collect.

Data Analysis

The study used the Epi info version 3.5.1 software to enter and prepare the quantitative data for analysis via STATA version 11.0. Descriptive statistics (mean, standard deviations, frequencies) depicted in tables and graphs were used to simplify the presentation of results for easier reflections and understanding. Thematic analysis was also used to present the qualitative data gathered through the interviews.

Data Management

Proper data management was implemented to ensure adequate internal consistency of the data. This included, sorting, cleaning and eliminating responses that had missing values exceeding 5%. Essentially, the Epi info software was used to validate the data which were gathered within the course of the data collection. This was done to ensure that the data had minimal errors.

Results and Discussions

Table 1 shows the socio-demographic information and profile of respondents.

Table 1. Socio-Demographic Profile of Respondents

Population sampled n = 422		
Feature	Freq	%
Age of mother/caregiver (Completed years only)		
16-20 years	19	4.50
21-25 years	90	21.32
26-30 years	121	28.67
31-35 years	90	21.33
36-40 years	67	15.88
41-50 years	23	5.45
41-55 years	12	2.84
Tribe/Ethnicity		
Dagomba	390	92.41
Kukomba	17	4.03
Fulani	2	0.47
Gonja	7	1.66
Akan	0	0
Ewe	0	0
Others	6	1.42
Occupation		
Trader/Vendor	223	81.98
Agricultural worker (e.g. Farmer)	49	18.02
Office worker (civil servant)	0	0
58.11966	134	58.12
2.991453	3	2.99
1.709402	2	1.71
35.04274	84	35.04
Others	5	2.13
Children Under Five		
Male	183	43.36
Female	239	56.64
Religion		
Christian	12	136
Muslim	471	7
Traditionalist	1	4
Other	0	82
Marital status		
Single	10	2.37
Married	398	94.31
Widowed	12	2.84
Co-habiting	0	0
Divorced	0	0
Separated	2	0.47
Educational status		

No-formal education	278	85.02
Basic	49	14.98
Household size		
1-5 persons	47	11.14
6-10 persons	162	38.39
11-15 persons	79	18.72
16-20 persons	72	17.06
26-30 persons	28	6.64
31-35 persons	17	3.93
36-40 persons	6	1.42
41-45 persons	11	2.60

Source: Field Survey (2025)

Table 1 demonstrates that 28.67% of the mothers with children under five years were clustered between 26 and 30 years. This implies that, most nursing mothers fall within the working class hence requires support to achieve optimal breastfeeding. The data also shows that 56.64% of the children under five years were girls while 43.36% were boys. In terms of religious affiliation of the participants, the data in Table 1 shows that more than 90% of the participants were Muslims which does not deviate from the dominant religion in the Northern regions which is Islam. The data further shows that 92% of the respondents were of Dagomba tribe which also does not deviate from the demographic profile of the municipality. Again, the data shows that 85% of the respondents had no formal education with less than 15% of them having basic education. This suggests a lower educational profile of the respondents. This may implicate the implementation of BFHI if healthcare facilities do not make conscious efforts to educate nursing mothers in the municipality. The household size of the respondents was averaging 20 persons/household with more than 60% of the respondents citing their respective household sizes to be between 10 and 30 persons.

Implementation of Baby Friendly Hospital Initiative

The illustrations in Figure 1 show six major indicators that reflects the status of

implementation of BFHI which is aimed at enhancing and promoting exclusive and optimal breastfeeding practices in the municipality. The figure also provides relevant insight into breastfeeding initiation timing, birth locations (maternity facilities), referral points for mother-to-mother support groups, education and healthcare support systems. It can be seen from the figure that 85.1% of birth occurred in healthcare facilities. This indicates that usage of skilled birth attendants is very high in the municipality. This also confirms that some efforts have been made by maternity facilities in the municipality in terms of BFHI since skilled birth delivery is very crucial for BFHI. This narrative is quite impressive since it is comparable to narrative in Kenya (82%) and Nigeria which is also reported at 75% by UNICEF. Notwithstanding this positive narrative, the study observed that a fraction (less than 15%) of the sampled mothered relied on traditional birth attendants which undermine BFHI. The persistence reliance on TBAs underscores the need for much education on skill birth delivery which is considered as a key pathway to promoting exclusive and optimal breastfeeding [17].

The summary of data in the figure further shows that nearly 75% of the mothers were able to begin breastfeeding in the first hour of their delivery. This is promising, because it topples the global narrative which is estimated at 45%. However, it leads to a substantial 24% of the mothers not able to initiate breastfeeding within the

first hour of post-delivery, this narrative therefore justifies the need for healthcare facilities to provide the support needed for such mothers. While topping the global narrative, the practice of BFHI still falls short of the ideal target (above 90%) advocated by BFHI guidelines. Similar studies in Ethiopia [17] also identify barriers such as cultural practices, maternal fatigue, and healthcare staff shortages impacting early initiation.

Approximately 71.7% report receiving healthcare support for breastfeeding, indicating that most mothers have access to professional guidance. Still, nearly a third do not, which can hinder breastfeeding success and highlight gaps in consistent support within healthcare facilities. A high percentage (96.7%) of mothers are informed about breastfeeding benefits, showing effective education efforts. This knowledge is foundational for encouraging breastfeeding but must be coupled with practical support to translate knowledge into

practice [20, 21]. With over 70% receiving healthcare support and over 90% being informed about breastfeeding benefits, this dataset reflects effective implementation of educational components. Research from Brazil [18] shows that when healthcare workers receive targeted BFHI training, breastfeeding rates and maternal satisfaction increase significantly.

Postnatal care (PNC) breastfeeding education coverage is also high (93.0%), reflecting well-structured follow-up systems. This continuity of care is essential to sustain breastfeeding practices beyond the initial hours after birth. The referral rate to breastfeeding support groups which in this case is the mother-to-mother support group is notably low (18.2%). Mother to Mother Support Groups can provide ongoing encouragement and problem-solving assistance, so this low referral rate represents a missed opportunity for reinforcing breastfeeding behavior in the community.

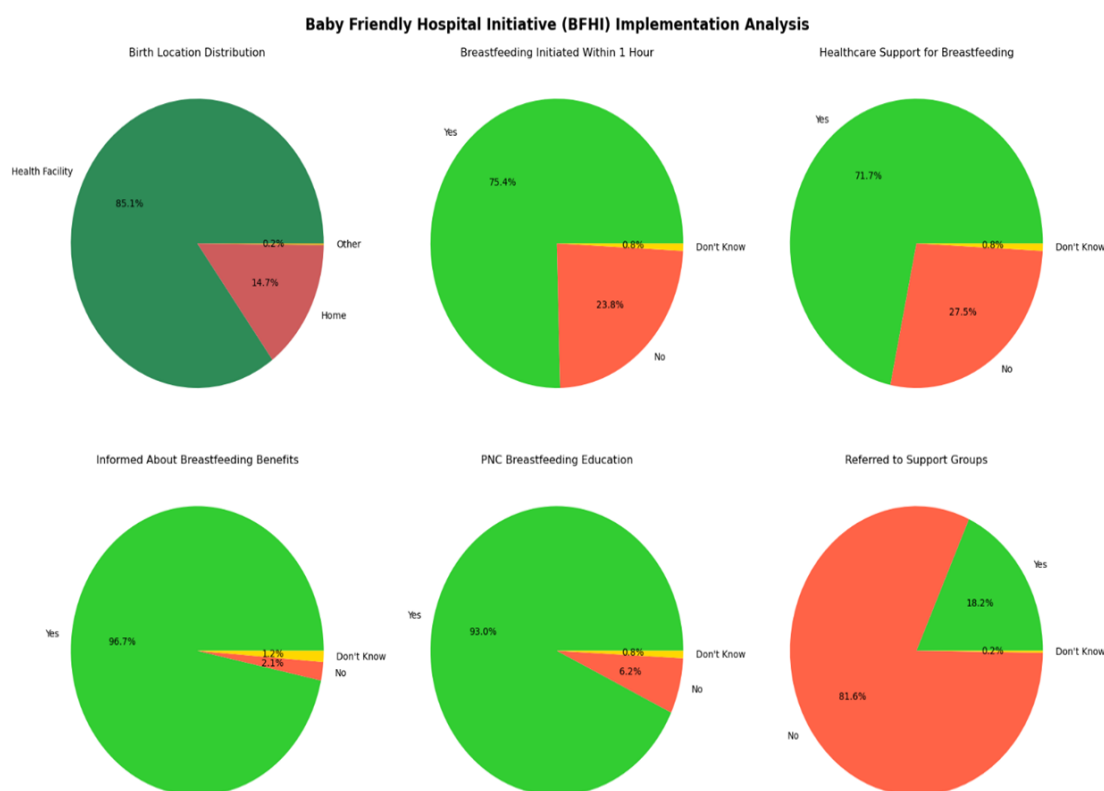


Figure 1. Adherence Chart for Implementation of Ten-Step BFHI

Source: (Field Survey, 2025)

Table 2. Descriptive Statistics on the Implementation Level of BFHI

	Birth location	Delivery professional	Delivery method	Breastfeeding support	Breastfeeding initiation	Informed benefits	PNC breastfeeding education	Advised on other foods	Breastfeed on demand	Artificial test and pacifier advice	Referral to support groups
Mean	1.151	1.950	1.161	1.125	1.291	1.045	1.079	1.010	1.017	1.370	1.820
Standard Error	0.017	0.086	0.026	0.021	0.021	0.014	0.005	0.006	0.023	0.001	0.018
Mode	1	1	1	1	1	1	1	1	1	1	2
Median	1	1	1	1	1	1	1	1	1	1	2
Standard Deviation	0.364	1.894	0.578	0.454	0.473	0.261	0.298	0.120	0.143	0.500	0.390
Sample Variance	0.132	3.588	0.334	0.207	0.223	0.068	0.089	0.014	0.020	0.250	0.152
Kurtosis	2.812	0.435	13.149	0.633	-0.074	40.034	17.113	184.879	102.905	-0.975	0.812
Skewness	2.086	1.536	3.722	1.396	1.156	6.223	4.039	12.995	9.617	0.739	-1.567
Range	2	5	3	2	2	2	2	2	2	2	2
Minimum	1	1	1	1	1	1	1	1	1	1	1
Maximum	3	6	4	3	3	3	3	3	3	3	3
Sum	557	944	562	607	625	506	522	489	492	663	881
Count	422	422	422	422	422	422	422	422	422	422	422
Largest (1)	3	6	4	3	3	3	3	3	3	3	3
Smallest (1)	1	1	1	1	1	1	1	1	1	1	1
Confidence Level (95%)	0.033	0.169	0.052	0.041	0.042	0.023	0.027	0.011	0.013	0.045	0.035

Source: Field Survey (2025)

The data in Table 2 demonstrates that most delivery and breastfeeding-related interventions are being implemented at a basic level. For instance, the mean scores for birth location (1.15), breastfeeding support (1.25), and breastfeeding initiation (1.29) indicate general adherence to recommended practices, though variation exists across indicators. Delivery by a professional had a higher Mean (1.95), reflecting stronger compliance in skilled birth attendance. Postnatal care breastfeeding education, advice on complementary foods, and

promotion of breastfeeding on demand scored lower means (around 1.01–1.08), suggesting that these aspects of BFHI are less consistently implemented. Standard deviations and ranges indicate moderate variability in practice, while skewness values suggest that most responses are clustered toward lower implementation levels. Overall, while core practices such as professional delivery and early breastfeeding initiation are reasonably implemented, supportive and educational components of BFHI require further strengthening.

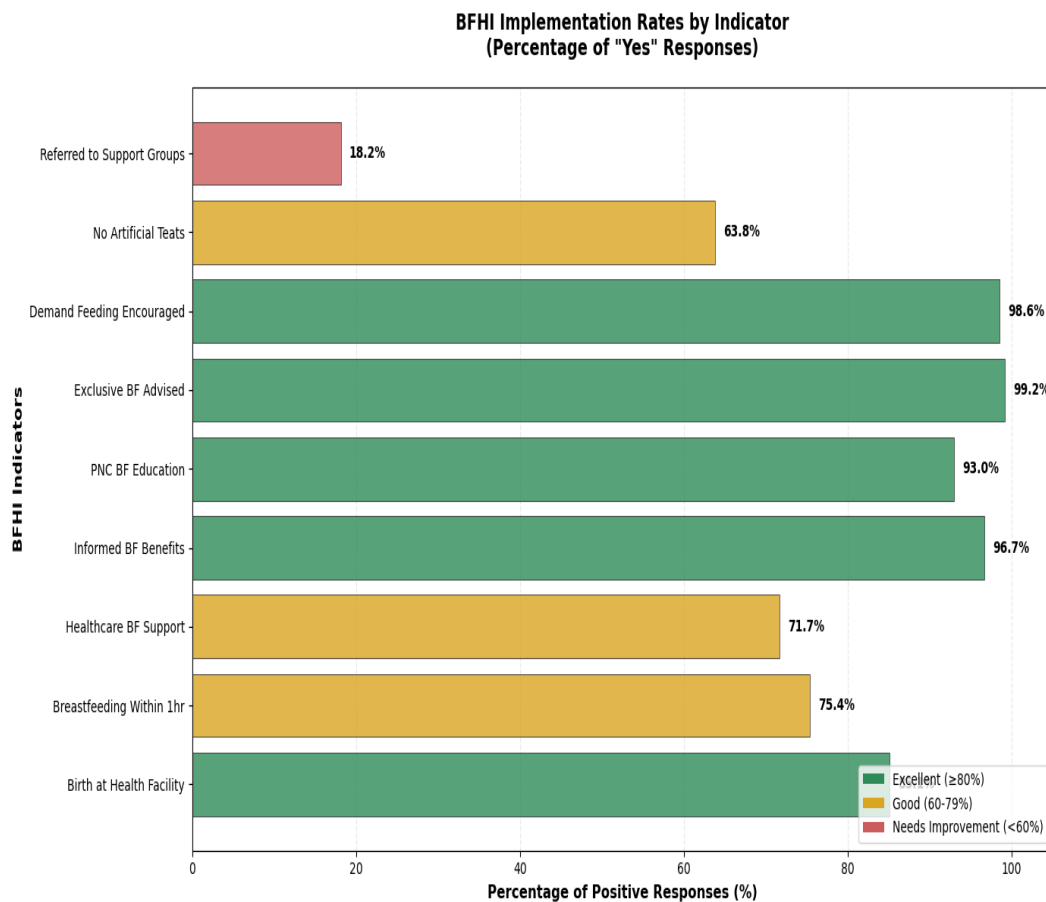


Figure 2. Implementation Rate of BFHI by Indicator

Source: Field Survey, 2025

Indicators of BFHI Implementation

In figure 2 as illustrated above as part of the results had notably the highest implementation rates observed for indicators such as “Exclusive BF Advised” (99.2%), “Demand Feeding Encouraged” (98.6%), “Informed BF Benefits” (96.7%), and “PNC BF Education” (93.0%).

These results suggest a strong commitment among health facilities to promote exclusive breastfeeding and provide breastfeeding education during the perinatal period. This finding is consistent with global trends where initial counseling and education components of the BFHI tend to have higher adherence [19].

Moderate performance was noted for “Breastfeeding Within 1hr” (75.4%), “Healthcare BF Support” (71.7%), and “No Artificial Teats” (63.8%), which indicates partial implementation of immediate postnatal care practices. Studies have shown that early initiation of breastfeeding, within one hour of birth, significantly improves neonatal outcomes; however, operational challenges such as staff shortages or institutional delivery protocols often hinder full compliance [21].

The most critical gap identified was in “Referral to Support Groups”, with only 18.2% of respondents reporting positive implementation. This low rate highlights a significant shortfall in post-discharge continuity of care, which is vital for sustained breastfeeding success. Similar deficiencies have been documented in low- and middle-income settings, where community linkages and postpartum support systems are either underdeveloped or poorly integrated into maternal health services [22].

Overall, while the graph reflects a commendable performance in several core BFHI components, it underscores the urgent need to enhance support structures beyond the health facility—especially in linking mothers to community-based breastfeeding support groups.

Qualitative Responses on BFHI Level of Implementation

In all six subdistrict interviews conducted, almost all key informants alluded that they were aware of BFHI, and attested that the subdistrict had a breastfeeding policy, but however did not display this on each health facility. This was confirmed through FGDs with Community Health Nurses who were based at each health center, confirming that they did not have any breastfeeding policy at their facility.

“Yes, I’m aware of it. What I know about this initiative is putting in place resources that supports the care of the baby and mother. The adherence depends on the

level of the facility but this policy is not being practiced here” KII Garizegu Subdistrict.

“Baby friendly initiative is all about promoting breastfeeding. We do not have a baby friendly hospital or facility” KII Choggu Subdistrict.

“I have heard of it. Education of mother on the importance of exclusive breastfeeding” KII Kamina subdistrict.

Nurses also mentioned that they have not been trained on the 10 steps of becoming an accredited BFHI, although a few of them had been to trainings, covering related topics. When KIIs questions were asked of BFHI 10 steps, varied answers were provided, without necessarily aligning to the WHO/UNICEF steps.

“We have heard of it. BFHI is about enforcing the 10 steps to successful breastfeeding. The facility does not have the policy implemented. The 10 steps include: early initiation of breastfeeding, educating mothers to avoid using pacifiers and teats, and training staff on IYCF” FGD Sagnarigu Community Health Nurses.

“As the name says it is about making the facility conducive for children There should be children-friendly pictures around the facility. There should be toys for children to play with and a television, there should be drugs” FGD Choggu Subdistrict Community Health Nurses.

Conclusion

The data above presents a significant proportion of health facilities adhering to the first section of becoming a baby friendly hospital. Exclusive breastfeeding, feeding on demand and breastfeeding education all exceeded 90%, which forms part of the objective of the BFHI. A similar study by Nii Aryeetey et al in 2010 for already accredited BFHI showed exclusive breastfeeding rate was 93.8%. On the contrary, the qualitative findings

demonstrated that none of the healthcare facilities sampled for the study was able to demonstrate good understanding of the ten-step framework for successful implementation of BFHI. Thus, the qualitative enquiry showed that, health workers lacked adequate training on the steps. Moreover, no proper communication channels on the policy elements of the BFHI were established across the healthcare facilities. Generally, the adherence rate of BFHI across the healthcare facilities was 42% which was a little below average. Inherently, none of the sampled facilities was able to meet criteria for steps one and two of the BFHI guidelines. Key barriers that undermined implementation of BFHI across the facilities included lack of regional and national support, inadequate training and orientation for newly recruited health workers, and high staff to client ratio.

Ethical Considerations and Approval

The study was conducted according to research ethical standards such as Good Clinical Practice, the Declaration of Helsinki as well as the applicable local laws and regulations of Ghana. Ethical clearance was granted and approved by the Ghana Health Service Ethics Review Committee on 18th March 2025 with approval number: GHS-ERC:017/11/24.

Consent (written) was obtained from parents/caregivers of potential study participants prior to their participation in the study. The Informed consent form was written in English. Information on the informed consent form (which includes study aims, objectives, procedures, duration, benefits

/risks) was read and explained to parents/caregivers who may not be able to read and write potential study participants. There was minimal risk or side effects to this study. The outcome of this study will improve maternal and health care services in Ghana.

Conflict of Interest

There was no conflict of interest in this study.

Funding for the Study

This study was self-sponsored.

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Data Availability

The datasets generated and/or analyzed during the current study are available from the corresponding author on reasonable request and with permission from the Ghana Health Service- Sagnerigu Health Directorate.

Author Contributions

- **Micah A. Olad:** Primary Researcher.
- **Frank Baiden:** Report Reviewer.
- **Sebit Mustafa:** Report Reviewer.
- **Rogers Kpankpari:** Data supervision.
- **Jeremiah Oladele:** Data supervision.

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