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The Organizational Barriers, Facilitators and Strategies related to the implementation of the Baby Friendly Hospital Initiative (BFHI): A study in selected Palestinian hospitals.

Ayah Murtaja Husni Al Far

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The Organizational Barriers, Facilitators and Strategies related to the implementation of the Baby Friendly Hospital Initiative (BFHI): A study in selected Palestinian hospitals

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Declaration

I certify that this thesis submitted for the degree of Master is the result of my own research, except where otherwise acknowledged and that this thesis (or any part of the same) has not been submitted for a higher degree to any other institution.

Signed: Ayah Murtaja Husni Al Far

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The Organizational Barriers, Facilitators and Strategies related to the implementation of the Baby Friendly Hospital Initiative (BFHI)

Prepared by: Ayah Murtaja Husni Al Far
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Abstract

Background: The Baby-Friendly Hospital Initiative (BFHI) aims to promote and support breastfeeding. Globally, around 20,000 facilities have been designated Baby-Friendly. In Palestine, only 6 hospitals have the 'Baby Friendly' designation since 2010. Despite the increasing evidence for the positive impact of BFHI on breastfeeding and health outcomes, few studies have explored the barriers and facilitating factors influencing to the implementation of Baby-Friendly practices that can be used to enhance the implementation of this initiative in different healthcare settings.

Study aim and objectives: The aim of this study is to investigate the organizational factors that hindered or facilitated the implementation of the Baby-Friendly Hospital Initiative (BFHI) in two selected Palestinian governmental and private hospitals, to determine the strategies implemented by the participating hospitals to overcome these barriers and to identify points of convergence and divergence between the explored governmental and private hospitals.

Methods: Using an interpretive qualitative approach, A purposive sampling technique was used to conduct in-depth, semi-structured interviews with 15 clinical and non-clinical staff members from different professional groups and managerial positions. Data were analyzed using content comparative analysis method.

Results: One of the main organizational facilitators found in this study was the endorsement of a well-coordinated implementation strategy characterized by autocratic BFHI adoption and enforcement, strong administrative support, the presence of BFHI

or quality coordinator as well as the financial and technical support by external partners. The designing of mandatory breastfeeding education for all levels of relevant professional groups was found to be also necessary to improve breastfeeding knowledge, attitudes, and practices among staff responsible for the implementation of BFHI tasks. The most frequently reported organizational barriers to implementing the initiative were inadequate staffing especially in the governmental hospital limiting the staff ability to implement BFHI related tasks and provide breastfeeding support. Another commonly reported challenge was hospital structures or routines that interfere with maternal-infant attachment and breastfeeding practices and lack of comprehensive auditing and monitoring tools in both hospitals.

Conclusion: findings have indicated that the success of BFHI is achieved by addressing the integrated sociopolitical, organizational and individual factors. The organizational barriers and facilitating factors determined by this study provides a comprehensive model tailored to the Palestinian context which can be adopted to utilize the most effective strategies for a sustainable implementation of the BFHI in different health facilities and consequently the attainment of 'Baby Friendly' designation.

المعيقات وعوامل التسهيل المؤثرة على تطبيق المبادرة العالمية للمستشفيات صديقة الطفل في بعض المستشفيات الحكومية والخاصة في فلسطين

اعداد الطالبة: ايه مرتجى حسني الفار

اشراف: د. معتصم حمدان

ملخص:

خلفية الدراسة:

تم إطلاق المبادرة العالمية للمستشفيات صديقة الطفل في عام 1991 لحماية ودعم وتشجيع الرضاعة الطبيعية في المستشفيات و المراكز الصحية في الرعاية الصحية حيث يتم تطبيق معايير معينة تتوزع على 3 مجالات رئيسية هي: الخطوات العشرة لإنجاح الرضاعة الطبيعية، المدونة الدولية لتسويق بدائل حليب الام، والرعاية صديقة الامومة. ويوجد اليوم أكثر من 20,000 مركز صحي ومستشفى معترف بها على انها مستشفيات صديقة للطفل حول العالم.

تم اعتماد المبادرة العالمية للمستشفيات صديقة الطفل كمبادرة وطنية في فلسطين عام 2010 وتم اناطة تنفيذها الى دائرة التغذية في وزارة الصحة. تم منح لقب مستشفى صديق الطفل لستة مستشفيات فقط في فلسطين حتى الان، لذا يمكن استخدام نتائج هذه الدراسة لتطوير الاستراتيجات المتبعة لتنفيذ المبادرة المستشفيات الأخرى للحصول عل على لقب صديق الطفل.

أهداف الدراسة:

هدفت هذه الدراسة لتحديد المعيقات وعوامل التسهيل المؤثرة على تطبيق المبادرة العالمية للمستشفيات صديقة الطفل في بعض المستشفيات الفلسطينية، ومعرفة الاستراتيجيات التي تم تسخيرها لمواجهة هذه المعيقات، بالإضافة لتحديد أوجه الاختلاف والتوافق أثناء تنفيذ المبادرة بين المستشفيات الحكومية والخاصة التي تمت دراستها.

منهجية الدراسة:

استخدمت عينة مقصودة من عاملين سريريين وغير سريريين من مختلف الفئات والمناصب الإدارية في مستشفى حكومي وخاص في الضفة الغربية لإجراء ١٥ مقابلة شبه منظمة. وقد تم

تحليل البيانات باستخدام أسلوب التحليل المقارن للمحتوى لتحقيق اهداف هذه الدراسة النوعية التفسيرية.

نتائج الدراسة الرئيسية:

أظهرت نتائج الدراسة وجود عدد من العوامل التي سهلت عملية الحصول على اللقب منها التزام إدارة المستشفيات من خلال تسخير الموارد البشرية من منسق الجودة ولجنة الرضاعة الطبيعية والعاملين في مختلف الأقسام ذات العلاقة بالإضافة لوجود الدعم التقني والمادي من دائرة التغذية واليونسف ومنظمة الصحة العالمية لضمان تنفيذ المبادرة. تصميم برامج اجبارية لتدريب مقدمي خدمات الرعاية الصحية وإكسابهم المهارات اللازمة لتنفيذ معايير المبادرة وتزويد الحوامل بالمعلومات اللازمة حول الرضاعة الطبيعية ومساعدة الأمهات على القيام بممارسات الرضاعة الطبيعية والبقاء سوية على مدار الساعة " المساكنة" بالإضافة لصد أي محاولات من شركات بدائل الحليب لترويج منتجاتها للأمهات والعاملين في المستشفيات.

كما أشار المشاركين في الدراسة لعدد من المعيقات منها عدم كفاية عدد الموظفين مقارنة بضغط العمل في هذه الأقسام والذي يحد من قدرتهم على تنفيذ المهام ذات الصلة بالمبادرة بالإضافة لمعيقات متعلقة بالبنية التحتية والسياسات والاجراءات المتبعة في هذه المستشفيات التي تعيق بعض الممارسات مثل المساكنة المستمرة والارضاع عند الطلب وتنفيذ معايير الرعاية صديقة الامومة في المستشفى الحكومي. بالإضافة لعدم وجود برنامج لجمع المعلومات وتحليلها لمراقبة مدى الالتزام بمعايير المبادرة بعد الحصول على اللقب في كلا المستشفيين الذي قد يهدد استمرارية المبادرة في هذه المستشفيات.

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List of Abbreviations

BF	Breastfeeding
BFHI	Baby Friendly Hospital Initiative
BMS	Breast Milk Substitutes
MCH	Mother and Child Health clinics
MoH	Ministry of Health
NYU	New York University
UK	United Kingdom
NICU	Neonatal Intensive Care Units
PCBS	Palestinian Central Bureau of Statistics
PHC	Primary Health Care
UNICEF	United Nations Children's Fund
WHO	World Health Organization

Chapter One

Background and Significance

1.1 Background

Breast milk is the optimal food for infants as it provides all nutrients required for a healthy growth and development in the first six months. And so, experts highly recommend that newborns must initiate breastfeeding within one hour of birth to benefit from Colostrum, the perfect food for newborns, and be exclusively breastfed for the first six months. "Exclusive breastfeeding" indicates that the infant receives only breast milk. No other liquids or solids are given – not even water – with the exception of oral rehydration solution, or drops/syrups of vitamins, minerals or medicines. After six months of age, it's recommended to integrate breastfeeding with age-appropriate, nutritionally adequate and safe complementary foods (WHO, 2014; United Nations Children's Fund, 2014).

There is consensus in literature that emphasizes the short and long terms of health benefits of breastfeeding, particularly exclusive, for both the mother and infant. For example, it has been estimated that "an additional 1.5 million lives of children under the age of five would be saved every year if all newborn infants were exclusively breastfed for the first six months of their lives"(WHO, 2010). Several studies also estimated that optimal breastfeeding practices have associations with a substantial

proportional decrease of hospital admissions due to diarrhea and gestational conditions as well as allergies and lower respiratory tract infections, without any negative effects on growth (Horta & Victora, 2013) (United States Breastfeeding Committee, 2002).

Along with the previous short-term effects of breastfeeding, a systemic reviews and meta-analysis were conducted to investigate the long-term consequences of breastfeeding since type of milk fed in care at birth and care at birth period is one of the main exposures influencing the development of adult health outcomes and non-communicable diseases(NCDs). It was found out that breastfeeding is associated with slightly enhanced performance on tests of cognitive development, a lower incidence of obesity during childhood and adolescence, as well as with a decreased blood pressure and serum cholesterol levels in adulthood (Horta & Victora, 2013).

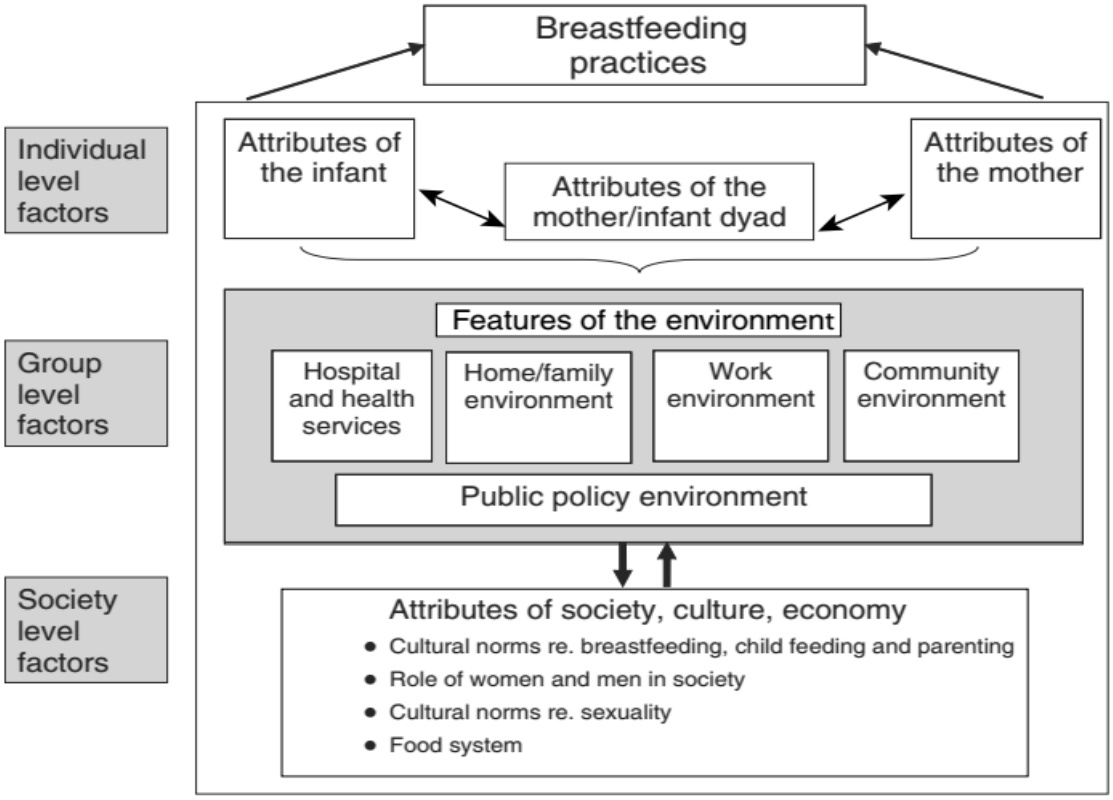
Moreover, breastfeeding had different benefits on mothers such as the earlier return to the pre-pregnancy weight among breastfeeding mothers during the 6 months following delivery as well as decreased risk of breast and ovarian cancer in the premenopausal period, and of osteoporosis in the postmenopausal period (Horta & Victora, 2013) (United States Breastfeeding Committee, 2002).

Evidence has shown that breastfeeding does not improve the health of children and mothers only but it is associated with significant economic and environmental benefits resulting from decreasing the direct costs (such as formula costs and health care services) and the indirect costs (such as paid-time and wages lost by parents attending to an ill child). In addition, Breastfeeding doesn’t require any production, packaging and storing that may negatively influence the environment (United States Breastfeeding Committee, 2002 ; Weimer, 2001).

Despite of these benefits, a wide-range of surveys demonstrated that there are a huge numbers of mothers who stop breastfeeding in early months after birth, and most do not

breastfeed exclusively for the recommended six months. UNICEF reported on the levels of recommended feeding practices that "Globally, only 45 per cent of newborns are put to the breast within the first hour of birth, and roughly the same proportion of infants less than 6 months of age are exclusively breastfed. Progress to improve exclusive breastfeeding has stagnated over the past 15 years. Five out of the seven regions (with trend data have current rates around 30 per cent, and all of them have improved very little, if at all, in more than a decade" (UNICEF global databases, 2016). And so, the planning and implementation of public health interventions to promote longer and more exclusive breastfeeding practices requires a comprehensive assessment and understanding of the influential factors that affect breastfeeding practices among mothers as illustrated in the following framework by Hector et al. (Hector et al, 2005)

Figure 1.1: Framework of Factors Affecting Breastfeeding Practices



According to this framework, healthcare services including mother's experience in

clinics and hospitals represent a significant determinant in the initiation and continuation of the breastfeeding encouraging the development of the Baby Friendly Hospital Initiative (BFHI) by the United Nations Children's Fund (UNICEF) and the World Health Organization (WHO) in 1991 as a strategic global approach to support, protect, and promote optimal breastfeeding in health care environments as an integral component of national child health policies. By the year 2009, over 20,000 hospitals in 156 countries had adopted BFHI and performed exclusive breastfeeding practices in the hospital setting (Hector et al, 2005; WHO& UNICEF, 2009).

In fact, Philipp and his associates (2001) described this initiative as "one of the greatest international health initiatives ever, uniting clinicians, researchers, and advocates around a simple set of guidelines, with the unique purpose of creating healthier human beings from day one".

1.2 Study Problem

In general, breastfeeding can be considered as a common practice among Palestinian mothers associated with cultural, social and traditional norms as indicated by the Palestinian Family Health Survey in 2010 reporting that 96% were ever-breastfed 62 % of last-born babies in the two years preceding the survey in State of Palestine were breastfed for the first time within one hour of birth, while 88% of newborns started breastfeeding within one day of birth and around 24% received prelacteal - liquids or foods other than breast milk prior to the establishment of regular breastfeeding – which deprives newborns from the important nutrients and immunity provided by colostrum.

This survey also shows that there is no significant difference between the breastfeeding indicators according to the place of delivery as the Number of last-born babies in the two years preceding the survey and were born in a public sector (governmental) health facility is 2675; 96.0% of them were ever breastfed, 61.7% of them were breastfed

within one hour of birth, 88.3% were breastfed within one day of birth and 24.4% received a prelacteal feed. While the breastfeeding percentage of the 1411 babies born in a private sector health facility were 96.7%, 60.4%, 88.8 and 24.7% respectively (Palestinian Central Bureau of Statistics:PCBS, 2013).

However, only 29% of children aged less than six months are exclusively breastfed, a lower level comparing to the global percentage of 43% and 35% in Middle East and North Africa (PCBS, 2013; UNICEF, 2016).

Therefore, as a response to the low rate of exclusive breastfeeding, delay of breastfeeding initiation and inadequate duration of breastfeeding combined with the prevailing negative consequences, multi-sectorial efforts were collaborated to promote the exclusive and prolonged breastfeeding trends among Palestinians; starting from adopting Maternal and Child Nutrition Protocols since 2005 that includes a main section addressing breastfeeding (Ministry Of Health, 2005).

And so, the WHO/UNICEF Baby-Friendly Hospital Initiative (BFHI) was adopted in Palestine in 2010. At the moment, approximately 26 health facilities are currently implementing this initiative and 6 of them were designated as 'Baby-Friendly' hospitals.

The Nutrition Department at the Palestinian Ministry of Health (MoH) in collaboration with other relevant parties such as the UNICEF and National Breastfeeding Committee are attempting to provide these health facilities with all the support required to attain and sustain the 'Baby Friendly' designation.

On the other hand, there is lack of any published or unpublished studies documenting the experiences of Palestinian hospitals during the implementation of BFHI indicating a critical knowledge gap concerning the possible facilitators and barriers that may

influence the journey of these hospitals towards the international 'Baby Friendly' designation.

1.3 Justification of the study

The results of the proposed study regarding the organizational barriers and facilitators of implementation and strategies used to overcome challenges might help the Palestinian ministry of health and other relevant stakeholders by formulating a solid evidence-base for rationale decision and policy making as well as making the suitable strategic process and structural adjustments for a smooth effective and efficient implementation of the initiative in Palestinian health facilities and consequently attaining this international designation and adopting global evidence-based family-centered practices to provide quality maternal and child welfare services at the Palestinian maternity settings and consequently improve the feeding practices of newborns, infants and young children.

1.4 Aim of the study

The aim of this study is to determine the organizational the factors that hindered or facilitated the implementation of the Baby-Friendly Hospital Initiative (BFHI) in two selected Palestinian governmental and private hospitals.

1.5 Specific objectives

1. To determine the organizational facilitators experienced while implementing the Baby-Friendly Hospital Initiative (BFHI) in the participating hospitals.
2. To investigate the organizational barriers and challenges experienced while implementing the Baby-Friendly Hospital Initiative (BFHI) in the participating hospitals.

3. To identify points of convergence and/or divergence between the explored cases (governmental and private hospitals).

1.6 Limitation of the study

The limitation of this study is that the selection of the maternity facilities is not representative of the general other settings in West Bank. Therefore, the results should not be treated as nationally representative.

1.7 Thesis chapters

The thesis will consist of six chapters. In chapter one, we present study problem statement, study justification, aim and objectives. Chapter two presents the literature review of previous studies that are related to research topic. While in chapter three, the theoretical and conceptual frame work for the study will be discussed. In chapter four, methods and design, setting of the study, sampling and sample size, data collection, data analysis and ethical consideration are presented. While in chapter five, study results will be presented and demonstrated. While in chapter six, the study findings are discussed and compared to the reviewed literature are presented, in addition, study conclusion and recommendations are presented.

Chapter Two

Literature Review

2.1 Introduction

This chapter will present the literature related to the framework of BFHI, the BFHI global criteria for The Ten Steps to Successful Breastfeeding and the International Code of Marketing of breast milk substitutes as well as the organizational Factors influencing Baby-Friendly Hospital Initiative (BFHI).

2.2 Framework of BFHI

During the time of launching the Baby-Friendly Hospital Initiative, there were very few countries that had dedicated authorities or committees to oversee and regulate infant feeding standards. However, after nearly 15 years of work in support of optimal infant and young child feeding, 156 countries have, at one time or another assessed hospitals and designated at least one facility "Baby-friendly." (World Health Organization & UNICEF, 2009).

Even though the BFHI has measurable and proven positive consequences, it is clear that only comprehensive, multi-sector, multi-level efforts to protect, promote and support optimal infant and young child feeding, including legislative protection, social promotion, health practitioners and health system support via BFHI and additional approaches, can hope to achieve and sustain the behaviors and practices necessary to

enable every mother and family to give every child the best start in life (Aryeetey & Antwi, 2013).

The 'Baby Friendly' designation imposes maternity settings, such as maternity units, pediatric hospitals and community health facilities to have a written evidence-based breastfeeding policies and staff training programs as well as to empower their maternity clients – pregnant women and mothers- by all the relevant information and the needed support (World Health Organization & UNICEF, 2009; Saadeh, 2012).

Worldwide assessment experiences showed that this "Baby Friendly" designation is a quality tool enabling health authorities to monitor and evaluate the efforts supporting improved breastfeeding practices within their facilities in both developed and developing countries (Semenic et al, 2012; World Health Organization & UNICEF, 2009).

These settings are designated as "Baby Friendly" according to this initiative if the external assessment indicated their adherence to a minimum set of optimal evidence-based global criteria related to breastfeeding known as 'Ten steps' to successful breastfeeding' – also referred as the 'Ten Steps' – to increase the percentage of mothers practicing exclusive breastfeeding for the first six months of their baby's life as well as the International Code of Marketing of breast milk substitutes referred to as 'The Code' that regulates the process of appropriate marketing by companies that produce and market infant feeding products encouraging mothers to introduce milk formulas and even to stop breastfeeding sooner (WHO & UNICEF, 2009; Saadeh, 2012).

BFHI provides additional global criteria for two optional 'mother-friendly care' and 'HIV and infant feeding' domains. Relevant decision-makers in each country determine whether to adopt criteria on HIV and infant feeding, depending on the prevalence of HIV among women using the maternity facilities. While 'mother-friendly care' is

concerned in applying labour and birthing practices such as encouraging mothers to have companions to provide support, minimizing invasive procedures unless medically necessary, encouraging women to move about and assume positions of their choice during labour, etc. and are informed concerning the importance of delayed cord cutting, immediate skin-to-skin continued for at least 60 minutes, and no prelacteal feeds (World Health Organization & UNICEF, 2009).

2.3 Global Criteria for BFHI (the Ten Steps and the Code)

2.3.1 The Ten Steps to Successful Breastfeeding (Ten Steps)

Step 1: Have a written breastfeeding policy and is routinely communicated to all health care staff.

Step 2: Train all health care staff in skills necessary to implement this policy.

Step 3: Inform all pregnant women about the benefits and management of breastfeeding.

Step 4: Help mothers initiate breastfeeding within half an hour of birth.

Step 5: Show mothers how to breastfeed, and how to maintain lactation even if they should be separated from their infants.

Step 6: Give newborn infants no food or drink other than breast milk, unless medically indicated.

Step 7: Practice rooming-in- allowing mothers and infants to remain together- 24 hours a day.

Step 8: Encourage breastfeeding on demand.

Step 9: Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.

Step10: Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

2.3.2 The International Code of Marketing of breast milk substitutes (the Code)

The role of administrators and staff in upholding the Code:

- Free or low-cost supplies of breast-milk substitutes should not be accepted in health care facilities.
- Breast-milk substitutes should be purchased by the health care facility in the same way as other foods and medicines, for at least wholesale price.
- Promotional material for infant foods or drinks other than breast milk should not be permitted in the facility.
- Pregnant women should not receive materials that promote artificial feeding.
- Feeding with breast-milk substitutes should be demonstrated by health workers only, and only to pregnant women, mothers, or family members who need to use them.
- Breast-milk substitutes in the health facility should be kept out of the sight of pregnant women and mothers.
- The health facility should not allow sample gift packs with breast-milk substitutes or related supplies that interfere with breastfeeding to be distributed to pregnant women or mothers.
- Financial or material inducements to promote products within the scope of the Code should not be accepted by health workers or their families.
- Manufacturers and distributors of products within the scope of the Code should disclose to the institution any contributions made to health workers such as fellowships, study tours, research grants, conferences, or the like. Similar disclosures should be made by the recipient.

2.4 Organizational Factors influencing Baby-Friendly Hospital Initiative (BFHI)

Evidence has emphasized the relationship between BFHI and increased rates of breastfeeding initiation, exclusivity, and duration at both the hospital and population levels across different cultural contexts. Nevertheless, the level of BFHI adoption is varied across communities, UNICEF records in 2006 demonstrated that that the percentage of Baby-Friendly maternity care facilities in each country ranged from 0% (46 countries) to 97% (Sweden). The BFHI implementation revealed inconsistencies

across world regions, from a high of 50% of facilities in East Asia and the Pacific having achieved Baby-Friendly status, to a low of only 6% of facilities among the industrialized countries (Saadeh, 2012; Semenic, 2012). Theses inconsistencies were attributed to influencing factors hindering or facilitating the implementation process. In this study, the main focus is the factors related to the facility i.e. the organizational-level factors:

2.4.1 Leadership of BFHI program

The most frequent organizational facilitators mentioned in the reviewed articles related to this factor included a participatory, decentralized leadership approach, and a coordinated implementation strategy by motivated BFI committees/taskforce and strong managerial support to engage multidisciplinary partners and staff from all levels towards achieving the shared vision (BFHI standards) (Hahn, 2005; Walsh et al, 2011; Edwards et al, 2011; Garcia et al, 2011).

In a qualitative study published in 2015, 36 individual semi-structured interviews were conducted with different health professionals (midwives, nurses, physicians, quality manager) and a 'thematic' data analysis was utilized to investigate the perceptions of health professionals regarding the selection, installation as well as the facilitating and hindering factors to the BFHI implementation in three Austrian maternity units.

The participants accentuated the role of 'change agents' – few individuals in the maternity units – in promoting the BFHI and advocating top-management to make an organizational decision to adopt the BFHI and become a certified 'Baby-Friendly Hospital'. Most participants also agreed that the support by managers of all professional groups facilitated the BFHI implementation as they played a role in convincing other colleagues to adhere to certain standards. A nurse indicated an example for the support from the manager of the unit that "He has to stand behind us.

Especially in case some physicians oppose the program, he's needed to reprimand these physicians". (Wieczorek et al, 2015)

The organizational barriers to the implementation of this initiative included the lack of managerial support and not considering the BFI as a priority, absence of designated BFI coordinator or leader as well as an autocratic, top-down leadership approach in the organization (Rogers, 2003; Walsh, 2011).

It was demonstrated that managers often utilize top-down strategies in which they take the sole lead in pre-planning and imposing new standards or changes in health-care practices regardless of the possible staff disagreement and dissatisfaction which may lead to staff resistance to change. Conversely, a bottom-up strategy represents an interactive participatory approach that involves different levels of professional groups will boost staff commitment implementing a culturally-tailored policy change corresponding to the local conditions (Kotneh et al, 2008; Thomson et al., 2012).

2.4.2 Organizational Culture/ Philosophy of Care

According to Parmelli et al (2011), the organizational culture refers to the various aspects – such as beliefs, values, norms of behavior, routines, traditions, and sense-making – shared among people within the same organization. Moreover, there is an increasing evidence discussing the importance of change in organizational culture to improve healthcare performance. This was also reflected on the BFI initiative as stated in one article that "Successful achievement of the BFI award necessitates change in policies, procedures and practices. This requires a substantial change in organizational culture as culture determines what is legitimate and acceptable in a team or organization". (Thomson et al., 2012)

In a survey conducted in UK, there was a general agreement among clinical governance

managers that local cultures could result in substantial barriers to the enhancement of healthcare quality. Some of the 'very important' culture attributes influencing the quality of delivered healthcare, listed by 80% and 95% of respondents, include: patient centeredness, quality-focus, senior management commitment, safety awareness, and team working (Konteh et al., 2008).

Some of the factors related to the organizational culture facilitating BFHI include establishment of a breastfeeding-friendly culture, the motivations for pursuing the Baby-Friendly designation involves adoption of an evidence-based practices for optimal family-centered care and utilizing the designation to attract intellectual clients (Nyqvist & Kylberg, 2008; Oldham, 2011; Thomson & Dykes, 2011).

While the organizational culture related barriers include the active-treatment/patient-safety care philosophy, lack of patient-centered care and collaboration/teamwork between perinatal units, the attempts of private hospitals to fulfill patients' desires incompatible with BFHI standards (e.g., rooming-out at night) (Reddin et al, 2007; Nyqvist & Kylberg, 2008).

2.4.3 Human/Financial Resources

Financial and Personnel related factors were frequently mentioned in several articles as both clinical and administrative staff members on different levels had significant roles to the success of the initiative as the managers and administrative staff members influenced the adoption of this initiative and the dedication of different resources required for implementation (money, time and staff), while clinical staff members in relevant units were responsible for the actual implementation of the BFHI standards. Thus, some of the identified facilitators include the financial support or funding, low turnover rates and stability of workforce, the knowledge and experience of staff members regarding breastfeeding- promotion practices, and the presence of lactation

consultants (Merewood & Philipp, 2001; Moore et al 2007; Taylor et al, 2011; Benoit & Semenic, 2014)**.**

The reported barriers include the lack of financial resources for the implementation or sustainability of the initiative as well as the inadequate number of workforce (high turnover rate and staff shortages) hindering staff's ability to support breastfeeding or participating in BFHI training (Abul-Fadl et al, 2014) (Thomson& Dykes, 2011; Schmied et al, 2011; Taylor et al, 2011)**.**

According to an article describing the experiences of Chicago hospitals, the financial incentives offered by external bodies 'Healthy Places' have stimulated hospitals' commitment to pursue the Baby-friendly Designation. Another significant facilitator was the involvement of all hospital staff on different levels as the engagement of supportive administrations fostered the dedication of resources (staff, funds and time) to achieve the activities of such projects more quickly while the involvement of physician champions - from different obstetric, pediatric and neonatology specialties – in planning and implementing the initiative was necessary to facilitate the accessibility to hospitals and the success of breastfeeding promotion in the hospital (Schoenfelder et al, 2013).

Benoit and Semenic (2014) utilized a qualitative content analysis approach to investigate the barriers and facilitators to the implementation of BFHI in neonatal in two university-affiliated level-III neonatal intensive care unit (NICU) in Canada. purposive sampling technique was used to conduct 10 in-depth, semi-structured interviews with 10 medical and nursing managers, nurse educators, lactation consultants, and neonatal nurse practitioners.

Some of the facilitators valued by the participants included the presence of breastfeeding promoters identified as 'champions' of Baby- Friendly practices in the

NICU, as lactation consultants and educators to provide technical support and teaching for both mothers and other staff members along with the inter-professional collaboration and supportive role of physicians to successful implementation of BFHI in the NICU due to their influential role with family members and other health care professionals. However, Participants heavily pointed out to the inadequate staffing levels to fulfill the increased time-consuming workload to support mothers in breastfeeding practices as the bottle-feeding was faster and more convenient for staff before BFHI adoption.

Participants also mentioned another personnel-related barrier that is the resistance of some staff members to implement Baby-Friendly practices due to lack of knowledge and skills related to breastfeeding (pumping, manual expression of milk, supporting breastfeeding, etc…) as they were used to refer these cases to lactation consultants. This was particularly noticed among senior staff even with long experiences in NICU, while new staff members seemed to have greater awareness of the concept of breastfeeding in NICU (Benoit and Semenic ,2014).

2.4.4 Breastfeeding Training

The availability of mandatory and flexible breastfeeding education for all levels of maternity care staff (including managers and physicians) also was identified in numerous articles as an essential element for improving breastfeeding knowledge, attitudes, and practices among staff that helped pave the way for adoption of the other Ten Steps.

Designing training programs different levels of staff members was one of the significant priorities of facilities towards the 'Baby Friendly' designation since improving breastfeeding knowledge, attitudes, and practices among staff – especially clinical – is mandatory to fulfill Step 2 and essential to facilitate compliance with the

other Ten Steps and the Code.

The key factors to a successful staff training include the assessment of staff educational needs, designing mandatory tailored training education programs targeting all levels of relevant professional groups (clinical and administrators), and utilization of innovative approaches for training. Several articles have reported hindering factors such as the lack of participation among non-nursing staff members, lack of strategies to ensure staff commitment such as unpaid education time and mandatory participation (Hahn, 2005; Reddin et al, 2007; Bartick et al, 2010).

Hannon and her associates (1999) described the multidisciplinary approach implemented by the teaching hospital of the University of Illinois at Chicago College of Medicine toward establishing a 'Baby Friendly environment'. The hospital faced some challenges including the inability to maintain a constant full-time lactation team to provide breastfeeding support for inpatient and outpatient mothers and the difficulty to ensure the provision of updated information concerning breastfeeding in a standardized uniformed manner among staff. Thus, a comprehensive breastfeeding education model was taught for midwives and nurses in the college of nursing and continued at working sites using mandatory breastfeeding courses, on-job staff-to-staff mentoring and nursing conferences that included lectures and hands-on workshops. Even though these conferences were very successful for nursing practitioners, a few number of the physicians or dietitians attended. And so, the departments of Family Medicine, Obstetrics/Gynecology, and Pediatrics at the Medical school integrated breastfeeding education into both school curricula and residency programs which encouraged residents to practice this knowledge while dealing with pregnant and postpartum mothers. The following breastfeeding conferences were attended by nurses as well as huge number of physicians, and Obstetrics/Gynecology residents.

The Massachusetts Breastfeeding Coalition formulated a collaborative of maternity facilities wishing to pursue Baby-Friendly designation where members exchange ideas for best practices and generate recommendations to overcome barriers and facilitate the BFHI implementation. Some of these recommendations are related to designing effective training programs to empower nurses and staff with the knowledge and skills needed for handling common breastfeeding problems and letting lactation consultants to handle more difficult cases by encouraging colleague mentoring and on-shift training strategies as well as using scripts, role playing, and triage algorithms to prepare staff for handling difficult conditions instead of using formula, provision of accessible training videos and online quizzes to increase flexible training hours without overloading staff and banding with other facilities to host guest speakers or plan training events as a low-cost training tool (Bartick et al, 2010).

2.4.5 Infrastructure and Routines

Semenic et al (2012) suggested in the integrative review that many articles in both developed and developing countries emphasized the difficulty in fulfilling some BFHI practices such as sufficient skin-to-skin contact, early initiation of breastfeeding after delivery, rooming in, feeding on demand and milk expression due to hospital's infrastructure and policies causing the separation of mother and newborns during critical times for bonding and breastfeeding.

The Academy of Pediatrics (AAP) and BFHI recommend an immediate skin-to-skin mother–newborn contact after birth and remaining for at least 60 minutes as during this period, newborns are usually alert and able to grasp mother's breast without external assistance. In fact, studies have shown that there is a significant correlation between the length of early skin-to-skin and likelihood of exclusive breastfeeding during postpartum period in hospital. It was also found out that it helped in facilitating the

ability of newborns to adjust to extra-uterine life, regulation of body's temperature, preservation of energy, respiration and other health benefits. Nevertheless, it was found out that sufficient skin-to-skin contact is commonly interrupted due to several hospital postpartum practices following cesarean deliveries or to conduct newborn care assessment and procedures (Bramson et al., 2010).

Another major challenge to numerous hospitals was ensuring 24-hour rooming in due to space, privacy and routine procedures constraints. For example, NYU Langone Medical Center in New York had only 4 private mother-baby rooms. And so, mothers tended to send their newborns to the nursery to avoid disturbing their roommates or to rest especially at night. Hospital's routine procedures required to bring babies to the nursery for admission, examinations and procedures such as temperature stabilization. (Goodman & DiFrisco, 2012).

Neonatal Intensive Care Units(NICU) in Canada experienced parent/infant separation in neonatal units for mother/infant-related medical reasons hindering the implementation of some breastfeeding and BFHI-related practices such as immediate initiation of lactation after delivery, inability to breastfeed directly from breast due to absence of mothers on scheduled feeding times, using breastmilk substitutes due to lack of accessibility to electronic breast pumps, inadequate of stored breastmilk as well as lack of physical space to enable skin-to-skin contact and 24-hour rooming in (Benoit and Semenic ,2014).

Several articles also indicated that open 24-hour visitation and early discharge hospital policies limited time for breastfeeding counseling and support (Thomson et al., 2012; Bartick et al, 2010).

Some of the strategies implemented to encourage included the display of posters in patient rooms and distribution of handouts illustrating the benefits of mother/baby

attachment and breastfeeding practices, attempting to minimize separation time by bypassing nurseries for admission and performance of routine procedures at bedside if the newborn was stable, and increasing accessibility to equipped breastfeeding or pumping corners. Another facilitating factor was the renaming of the nursery to 'Newborn Observation Area" in one hospital to reflect its medical-related purposes and avoid its use as a warm nurturing environment or eliminating nurseries from obstetrical units (Goodman & DiFrisco, 2012; Merewood &Philipp, 2001).

2.4.6 Hospital reliance on formula company products

Bettinelli and her associates (2012) emphasized the necessity to control the intervention of formula and complementary feeding industries in order to promote and protect breastfeeding. Therefore, the ministries of health in several countries adopted the standards of the international code of marketing of breast milk substitutes 'the Code'. However, adherence to the articles of the code were greatly challenged by the aggressive marketing and constant violations of formula companies interfering with mothers' decisions to breastfeed and urge health practitioners to prescribe their breast milk substitutes.

Some of the barriers discussed in the literature include hospital's reliance on free or funded products, lack of financial resources or criteria to purchase formula, distribution of commercial discharge bags and influenced staff attitudes by formula companies as a result of strong relationship with companies' representatives, sponsored trips and conventions, free samples and gifts (Merewood & Philipp, 2001; Batrick et al, 2010).

A descriptive study in Egypt aimed to identify the barriers to BFHI, targeted 23 private and public hospitals and interviewed 69 staff members from administration, pediatrics, neonatal and obstetric units as well as 45 mothers in the delivery ward. The impact of formula companies was found to be one of the major challenges to BFHI as implied by

the findings of the study concerning the adherence to the articles of code stating that "47.8% of hospitals had a policy for prohibiting advertisements of any breast milk substitute related product (BMS), only 34.7% prohibited the promotion of infant milk formula (IMF) and 39.1% accepted gifts and medical samples, and 47.8% of staff members in these hospitals were exposed to sponsoring by IMF companies" (Abul-Fadl et al, 2014).

On the other hand, some of the approaches adopted by hospitals in different countries that facilitated the obedience with 'the Code' included the termination of hospital conditional agreements implying the acceptance of funded formula or gifts and developing a clear self-purchase protocol, prohibiting the distribution of formula or gifts and contact with parents/family members or staff, assigning a committee to monitor any violations from these companies or staff (Merewood & Philipp, 2001; Batrick et al, 2010).

2.4.7 Audit and Feedback Mechanisms

One of the key factors to ensure the proper implementation and sustainability of BFHI is the adoption of a quality management approach that entails continuous utilization of resources to collect and analyze data for the determination of baseline practices, monitoring and improving organizational change and progress, self-auditing the compliance to standards after designation (Edwards et al, 2011; Garcia-De-Leon-Gonzalez, 2011; Raghu, 2001). Moreover, the time-framed 'Baby Friendly' designation and periodic re-assessment have been described as a motivator for hospitals to maintain a continuous self-auditing approaches on hospitals' BFHI related practices to ensure the sustainability of designation (Rogers, 2003).

In Austrian maternity hospitals for example, one of the fundamental activities performed to facilitate the implementation process of the initiative and handle

individuals' attitudes was the continuous self-assessment and the extra monitoring and documentation approach where they exceeded the BFHI-required breastfeeding statistics, to report the other relevant information such as skin-to-skin contact after cesarean section or reasons for the provision of formula feeding. Thus, enabling these units to measure their progress and recognize some prevailing problems (Wieczorek et al, 2015).

The urban center of the University of Illinois at Chicago College of Medicine also utilized several documented tools to monitor breastfeeding practices and experiences among mothers and newborns. Such tools included newborn feeding record and an adapted questionnaire form to assess lactation experience for any problems. Nevertheless, the institution reported a challenge concerning the lack of tools to collect outcome data and document the effectiveness of BFHI related organizational changes (Hannon et al, 1999).

Chapter Three

Study Conceptual Framework

3.1 Introduction

This chapter entails an overview of the integrated sociopolitical, organizational, and individual Factors influencing Baby-Friendly Hospital Initiative (BFHI) and the conceptual model used in this study.

3.2 Factors influencing Baby-Friendly Hospital Initiative (BFHI):

An integrative review in 2012 utilized Cooper's five stages of integrative research review published in 1989 to identify and generate information about the barriers, facilitators and recommendations associated with the adoption and implementation of the Baby-Friendly Initiative across a wide diversity of health care facilities and sociocultural contexts. This review included 45 articles representing experimental and non-experimental studies (e.g., qualitative studies, narrative case study reports) and data from both theoretical and empirical literature published between the periods of 1995 and 2011 in 16 countries all over the world. The number of reviewed studies according to countries was as follows: USA (12), Australia (7), UK (5), China (3), South Africa (3) India (3) Sweden (2), Canada (1), Russia (1) New Zealand (1), Brazil (1), Spain (1), Nigeria (1), Turkey (1) and UAE (1).

The influencing factors (barriers and facilitators) were classified into three integrated levels: sociopolitical, organizational, and individual, respectively.

The sociopolitical factors included factors related to the support of health policies or governmental bodies for breastfeeding and the initiative, integration of pre-, intra-, and postnatal health services (such as between hospitals and community-based breastfeeding support facilities), sociocultural norms associated with feeding practices, the power of infant formula industry, legislations influencing breastfeeding, socioeconomic differences and pre -service training of health care professionals.

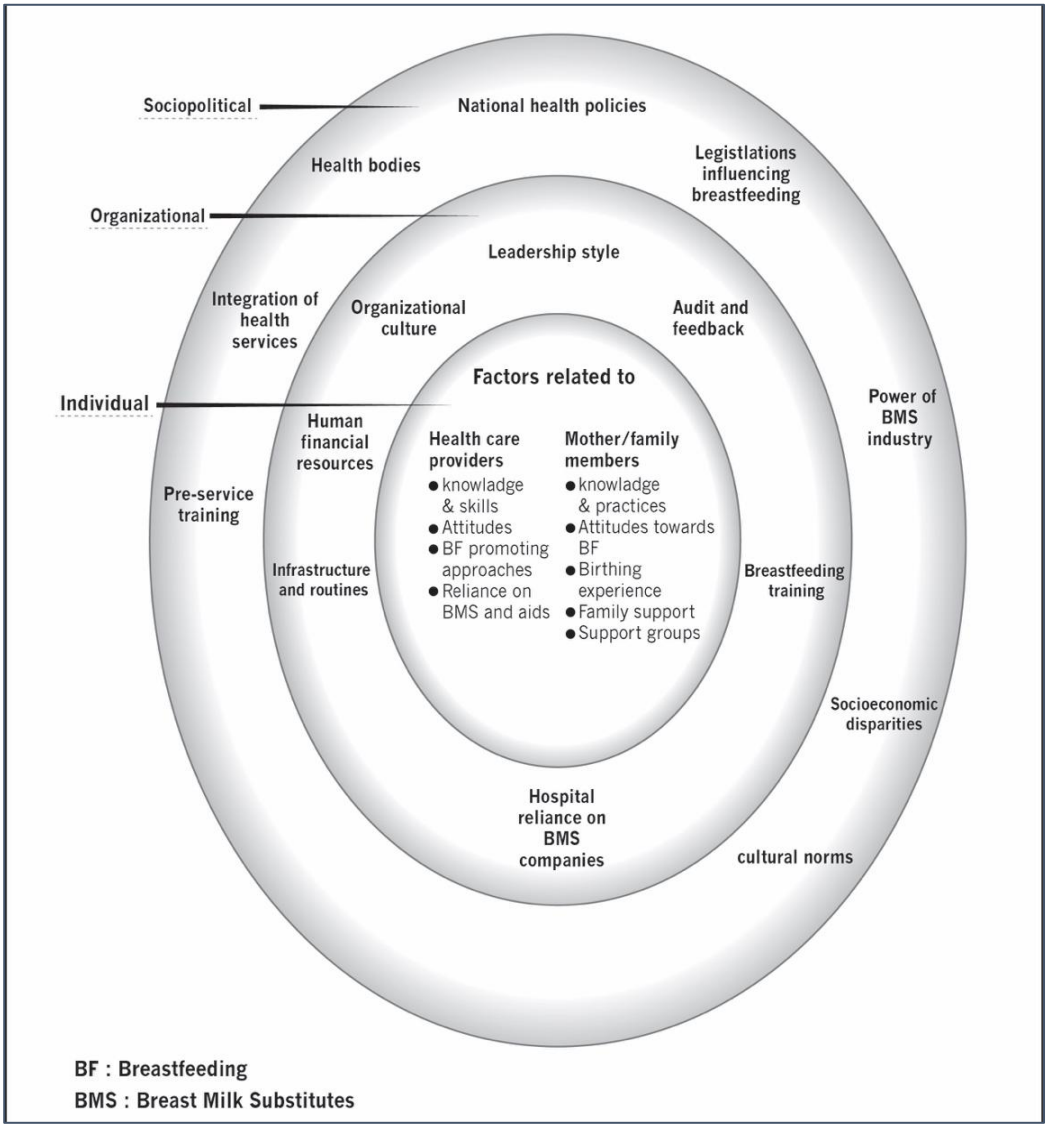
The Organizational-level factors entailed the majority of influencing factors mentioned in the reviewed articles. These factors are related to the leadership approach of the adoption and implementation of the initiative, the philosophy of care and organizational structure, availability and utilization of human and financial resources, the availability of audit and feedback mechanisms, the presence of breastfeeding policies and training for health professionals, as well as hospital's structure and routines impacting some initiative-associated practices.

The final individual-level factors associated with health care providers included breastfeeding-related knowledge and skills, staff attitudes toward the initiative, breastfeeding promoting-approaches, reliance on Breast Milk Substitutes (BMS) and breastfeeding aids (pumps, pacifiers, bottles, etc…). while the individual-level factors related to mother/family members addressed their knowledge on breastfeeding and the initiative, mothers' conceptions and practices concerning breastfeeding, mothers' birthing experiences as well as the availability of family support and/or support groups (Semenic et al, 2012).

3.3 Study conceptual framework

A conceptual framework was developed according to the literature review and study objectives. The following conceptual framework illustrates the integrative relationships of factors influencing the implementation of BFHI.

Figure 3.1: **A conceptual Framework for the sociopolitical, organizational, individual factors influencing the implementation of BFHI***



*Source: developed from *Barriers, Facilitators, and Recommendations Related to Implementing the Baby-Friendly Initiative (BFI): An Integrative Review*, by S.Semenic, J. Childerhose, J. Lauzière & D. Groleau, 2012.

Chapter Four

Study Methodology

4.1 Introduction

In this chapter, a detailed description and justification of the adopted research methodology will be outlined. First, the research design will be thoroughly explained with succeeding sections presenting methods and design, setting of the study, sampling and sample size, data collection, data analysis and ethical considerations, respectively.

4.2 Methods & Design

To achieve the objectives of the current work, an interpretive qualitative approach was adopted. Despite the existence of some criticism leveled at qualitative methods, Al-Busaidi (2008) argues that these methods remain one of the most commonly utilized and accepted approaches in the context of health-related research. Considering the nature and purpose of this exploratory study that does not aim for generalization, the inductive orientation embedded within the adopted paradigm facilitated a thorough exploration of the factors, i.e., the facilitators and barriers, which may have influence on the implementation of the Baby-Friendly Hospital Initiative (BFHI). This approach also enabled the researcher to investigate the strategies, if any, used by the explored organizations to overcome the identified barriers. Moreover, it facilitated the

comparison of the BFHI implementation processes of both the governmental and the private hospitals that participated in the study.

4.3 Setting of the Study

This study was conducted in two hospitals in the West Bank; one is governmental and the other is a private hospital.

Please refer to table 4.1 demonstrating the general characteristics of the participating hospitals.

Table 4.1: Characteristics of the participating hospitals

	Hospital 1	**Hospital 2**
General Information		
Type	Governmental - General	Private - General
Number of Beds	**239**	**35**
Total number of staff members	500	100
Number of staff members involved in BFHI	195	28
BFHI experience		
BFHI adopted domains	Ten Steps & The Code	Ten Steps, The Code & Mother-Friendly Care
Medical services and units involved in BFHI	All except antenatal: (labour & delivery, maternity, pediatrics, NICU, nutrition, quality, pharmacy, security and cleaning)	All except NICU and quality improvement department: (antenatal, labour & delivery, maternity, pediatrics, nutrition, pharmacy, security and cleaning)
Period from BFHI adoption till designation (months)	27	33
Estimated financial costs	External Support	External Support

4.4 Sampling & Sample Size

In this study, qualitative data was collected from a sample of 15 participants

representing clinical and non-clinical staff members working in the hospitals under study. The size of the sample was determined based on the suggestions of previous scholars who conducted similar studies in the field (Wieczorek et al, 2015; Benoit & Semenic ,2014). As shown in table 4.2, the participants came from different clinical and non-clinical professional groups and managerial positions in order to gain more diversified and comprehensive insights on the BFHI.

Participants were recruited through employing purposive sampling technique which, according to Richie and Lewis (2009) and Sekaran and Bougie (2009), involves obtaining information from a particular target group of participants considered to be best-positioned to provide data.

Following the recommendation of Ellsberg and Heise (2005), individual cases were identified using snowball sampling technique where available participants assisted in recruiting others. In this regard, with the help of some of the participants, this technique facilitated the establishment of a trust-based relationship with their suggested acquaintances in a relatively short period of time.

4.5 Data Collection

Qualitative data was collected using semi-structured interviews that were conducted in the offices of participants. The collection of data took place in the period between (May – August, 2016). Interviews lasted for approximately 30-40 minutes. During the interviews, the researcher used several probing techniques to ensure the conservations flow properly and to guarantee the attainment of all the required details related to the organizational barriers and facilitating factors.

The following example illustrates the probing questions used in the interviewing process to investigate the third key factor ‘human resources’, which included a sub-factor focusing on staff attitudes towards the BFHI and commitment.

‘Could you describe the attitudes of staff members concerning the BFHI adoption and implementation at the hospital?’

‘Do you think that this attitude influenced the commitment of staff members during the implementation process?’

‘So, would you consider it as a barrier or a facilitating factor?’ *(If the participant considered the factor answer as a barrier, the following question would be:* ‘What did the hospital do to overcome this barrier?’

Data was collected using two distinct instruments; the first represented a ‘Hospital Data Sheet’ to identify hospitals’ characteristics (see Annex 1). It was developed through adjusting Part 1 of the UNICEF/WHO BFHI External Assessment tool: Key Staff Discussion, Hospital Data Sheet, Review, and Observations according to study’s objectives. One sheet was completed by each participating hospital where it covered two sections. The second instrument/ tool represented a semi-structured interview guideline that was developed using the UNICEF/WHO BFHI External Assessment Tool (EAT), related questions and findings in the literature and the researcher’s experience (see Annex 2). Since EAT is not available for general distribution and is restricted to the members of National Breastfeeding or BFHI Steering Committees and/or certified National BFHI assessors, the researcher was required to receive a comprehensive relevant training and pass a national examination to become a certified national assessor of the BFHI program.

Both instruments were validated by four experts, professionals specialized in the specific area of investigation. Afterwards, a pilot-testing of the instruments was conducted on four participants working in one of the non-investigated hospitals that implemented the considered initiative (BFHI). Consequently, minor adjustments were

made with the purpose of making the tool more comprehensive and easier to understand.

4.6 Data Analysis

The data analysis process consisted of a series of fundamental steps as follows:

1. The researcher listened actively to the all recorded interviews several times.
2. All recorded interviews were transcribed verbatim in full.
3. Collected data was organized into a previously structured matrix incorporating the key factors and sub-factors (facilitators and barriers) identified in the literature which formed the basis of conducting interview questions (please refer to annex 3 and 4 for a full review of the matrix for each hospital). The matrix also included participants' responses regarding the strategies employed by the respective hospitals to overcome the barriers.
4. The first stage of the coding process commenced with classifying the factors into either barriers or facilitators depending on the perspectives of participants.
5. The second stage of the coding process involved accounting for the justification provided by the participants for their classification of factors into barriers of facilitators.
6. Appling the 'constant comparative method' suggested by Fram (2013), the researcher reviewed the data included in each final matrix again and again. This step was primarily concerned with identifying the barriers and facilitators experienced by each hospital.
7. In the context of the previously mentioned method (constant comparative method), the researcher identified points of convergence and/or divergence between the explored cases (governmental and private hospitals).

4.7 Ethical Consideration

All of the study participants were provided with an informative overview of the study encompassing its aim, objectives and methodology. The voluntary nature of their participation was also emphasized as the researcher indicated that they are free to leave the study whenever they want. Their consent to participate in the study was explicitly obtained. For the purpose of confidentiality, the names of the participating hospitals and the participants were substituted by letters (Sekaran &Bougie, 2009).

Chapter Five

The results

5.1 Introduction:

This chapter will demonstrate the results of the study including the profile of study participants, the organizational factors that facilitated the journey towards 'Baby friendly' designation, barriers that hindered the adherence to BFHI standards and the strategies exploited by the hospitals under study to overcome these barriers.

Findings were classified into seven main factors; leadership, philosophy of care at the hospital, human resources, breastfeeding staff training, hospital reliance on formula company products, infrastructure and routines as well as self-appraisal and feedback mechanisms.

5.2 Profile of study participants:

The following table 5.1 demonstrates the characteristics of interviewees participated in this study.

Table 5.1: Profile of study participants

	Domain	Hospital 1		Hospital 2		All	
		No.	%	No.	%	No.	%
1	**Participants**						
	Number of Participants	7	46.67	8	53.33	**15**	100.00
2	**Unit**						
	Gynecology & Obstetrics	1	6.67	0	0.00	**1**	6.67
	Post-Partum	1	6.67	1	6.67	**2**	13.33
	Neonatal Intensive Care Unit (NICU)	1	6.67	1	6.67	**2**	13.33
	Pediatrics	2	13.33	2	13.33	**4**	26.67
	Pediatric Surgery	2	13.33	0	0.00	**2**	13.33
	Maternity	0	0.00	1	6.67	**1**	6.67
	Delivery	0	0.00	1	6.67	**1**	6.67
	labour	0	0.00	1	6.67	**1**	6.67
	Human Resource	0	0.00	1	6.67	**1**	6.67
3	**Gender**						
	Male	1	6.67	3	20.00	**4**	26.67
	Female	6	40.00	5	33.33	**11**	73.33
4	**Position**						
	Head of Unit	2	13.33	0	0.00	**2**	13.33
	Head Nurse	2	13.33	1	6.67	**3**	20.00
	Nurse	1	6.67	2	13.33	**3**	20.00
	Doctor	1	6.67	1	6.67	**2**	13.33
	Matron	0	0.00	1	6.67	**1**	6.67
	Midwife	0	0.00	1	6.67	**1**	6.67
	Administrative Officer	0	0.00	1	6.67	**1**	6.67
	Head of Unit & Medical Director	1	6.67	0	0.00	**1**	6.67
	Head of Unit & Member of Directing Board	0	0.00	1	6.67	**1**	6.67
5	**Type**						
	Administrative	0	0.00	1	6.67	**1**	6.67
	Clinical	2	13.33	4	26.67	**6**	40.00
	Administrative & Clinical	5	33.33	3	20.00	**8**	53.33
6	**Speciality / Clinical**						
	nurses	2	13.33	4	26.67	**6**	40.00
	midwives	2	13.33	1	6.67	**3**	20.00
	NICU nurse	1	6.67	0	0.00	**1**	6.67
	physicians	1	6.67	0	0.00	**1**	6.67
	Pediatricians	1	6.67	1	6.67	**2**	13.33
	Obstetricians	0	0.00	1	6.67	**1**	6.67
7	**Experience (years)**						
	(0-5)	3	20.00	4	26.67	**7**	46.67
	(6-10)	1	6.67	1	6.67	**2**	13.33
	(11-15)	0	0.00	1	6.67	**1**	6.67
	(16-20)	1	6.67	2	13.33	**3**	20.00
	>20	2	13.33	0	0.00	**2**	13.33
8	**Role**						
	Decision maker	1	6.67	3	20.00	**4**	26.67
	Facilitator	0	0.00	3	20.00	**3**	20.00
	Trainer	2	13.33	1	6.67	**3**	20.00
	Member of breastfeeding/BFHI committee	5	33.33	2	13.33	**7**	46.67
	Care provider	6	40.00	6	40.00	**12**	80.00

5.3 First factor: Leadership

1- Leadership style in Decision-making

Facilitator:

The ministry of health proposed the initiative to senior managers in both hospitals who made the adoption decision without involving inferior staff levels and discuss their potential concerns regarding the implementation of BFHI. However, there was a consensus among participants that this centralized BFHI adoption by top-management in both the governmental and private hospitals eliminated the potential hindrance of some staff for personal interests thus leading to a smoother and effective implementation process. For example, a midwife in the governmental hospital stated that: “after the announcement of the hospital’s director that we have joined this initiative; the breastfeeding committee was formulated and the implementation started promptly to attain designation. I think if this initiative was not offered by the director, implementation would not be as quick and as effective as this.”

2- **Coordinated BFHI implementation strategy:**

2.1 Presence of a BFHI facilitator/quality coordinator

2.2Formulation of a BFHI committee

Participants seemed to include the role of BFHI committee while answering the question regarding the BFHI facilitator/quality coordinator. Hence, the answers to both questions are presented below.

Facilitator:

All participants in both hospitals reported that the presence of quality coordinator and a breastfeeding committee at the hospital were significant facilitating factors as they played a critical role in planning, directing, monitoring and following-up the implementation of the initiative. For example, a participant stated that "the quality coordinator and breastfeeding committee have a comprehensive understanding of BFHI standards and implementing procedures (technical back up), responsibility for organizing and distributing tasks among staff as well as monitoring the implementation process".

3- Continuous support by external partners

Facilitator:

There was a general consensus that the financial and technical support by external partners such as (UNICEF and Ministry of Health – Nutrition department) was a significant facilitating factor for the BFHI adoption and implementation. This support included establishment of equipped breastfeeding corners/rooms (TVs, breastfeeding chairs, breast pumps, refrigerators, etc….); provision of technical support and guidance for the breastfeeding committee during implementation and appraisal processes as well as provision of standardized printed BFHI posters and leaflets of hospital's policy and breastfeeding practices.

It is worth mentioning that the private hospital emphasized their willingness to dedicate the financial resources to adopt and implement the initiative regardless of the external support while some participants at the governmental hospital stated that it would be difficult to adopt this initiative without the support of the MoH and UNICEF due to hospital's scarce financial resources.

5.4 Second Factor: Philosophy of care at the hospital

1- Relationships and collaboration between perinatal units and services

Facilitator:

Most participants felt that a participatory implementation approach consisting of continuous collaboration and communication between different relevant perinatal units and services (both antenatal and postnatal services) is a significant influencing factor to fulfill the standards of the initiative.

The majority of participants in both hospitals noted that there was substantial collaboration across the relevant units to attain the 'baby-friendly' designation. While a small proportion of participants mentioned that the insufficient understanding of the integrative roles of staff (especially non-clinical) in different units hindered the collaboration across these units and consequently challenged the implementation of the initiative.

A participant from the neonate unit in the governmental hospital mentioned an example of collaboration across hospital units; discharged mothers were permitted to sleep in maternity unit in order to breastfeed newborns in the neonate unit as scheduled after using BMS in some cases in which discharged mothers miss the breastfeeding schedules especially at night.

A participant in the private hospital accentuated that the provision of antenatal care in the hospital supported the efficient implementation of BFHI in postnatal care (empowering mothers with breastfeeding knowledge and practices reduced the breastfeeding counseling burden on staff in postnatal care).

Barrier:

A participant in the governmental hospital stated that the prenatal care by mother and child health clinics (MCH) did not include adequate breastfeeding promotion and breastfeeding practices teaching, which hindered the BFHI implementation in the hospital such as rejection of some breastfeeding practices especially among first-time mothers that could be associated with insufficient skills and postpartum anxiety

Implemented strategies:

- Holding constant meetings for all relevant (clinical and non-clinical) staff during implementation assisted in clarifying the communication channels across the different care/service provision units and different facilities (MCH clinics and hospital).
- Baby-Friendly Initiative was adopted by MCH clinics to empower pregnant women with the knowledge and breastfeeding practices.

2- **Hospital's philosophy of care concerning mother and child services**

Facilitator:

All participants in the private hospital agreed that hospital's philosophy of care and policies already encouraged breastfeeding, and the BFHI outlined a comprehensive framework for hospital's services and procedures to encourage breastfeeding.

According to a participant in the private hospital: "hospital's maternity care already had several practices to support and ensure breastfeeding before discharge to promote the health of mother and baby"

Barrier:

All participants who responded to this factor noted that the expansion of hospital's philosophy care from ensuring a safe delivery towards promoting the health of mother and newborns by encouraging breastfeeding has resulted in a substantial increased workload and same number of staff.

One participant from the governmental hospital stated that "the shift in philosophy of care resulted in a substantial increased workload (15 deliveries in one shift)".

Implemented strategies:

- Training programs to conduct BFHI-relevant tasks efficiently (minimal time and efforts).
- Self-adaptation with changes and workload.
- Breastfeeding counseling starts in delivery room and completes in post-partum unit.
- Group breastfeeding counseling sessions.

3- **The level of engaging the patient in making informed non-life threatening decisions together with the care provider** (e.g. delivery positioning, feeding patterns, etc…)

Barrier:

five of seven participants in the private hospital and 4 of 7 in the governmental hospital reported this factor as a barrier since mothers had the choice especially in deliveries and feeding patterns (several mothers – mostly working or first-time mother – chose formula feeding and cesarean deliveries) before BFHI.

The five other participants in both hospitals felt that this factor was not influential as the mothers in the private hospital tend to embrace the advice of health professionals or they choose the healthiest decision for their babies, or because care providers in the governmental hospital are responsible for all medical decisions.

Implemented strategy:

Mother counseling and support by health professionals and support groups – usually relatives – (before and after birth) to encourage making healthier delivery and feeding choices.

"Only one case per week now refuses to breastfeed after counseling at the private hospital" according to a participant.

4- **Compatibility between BFHI standards and patients' preferences** (e.g. rooming-out at night, rejection of immediate skin-to-skin contact or milk expression)

Facilitator:

Rooming in is obligatory in both hospitals. a pediatrician in the governmental hospital said that "we do not have a nursery at the hospital, each mother keeps her baby besides her in baby's bed in the same room".

Barrier:

nine of thirteen participants in both hospitals reported that some mothers - especially first-time mothers – hindered the BFHI implementation by refusing to conduct several practices such as immediate skin-to-skin contact or milk expression associated with lack of skills and knowledge as well as exhaustion after labour and delivery mixed with anxiety and stress emotions.

The remaining 4 participants thought that this factor was influential as there was little resistance among mothers (most mothers they worked with already experienced previous or multiple deliveries or tend to follow the medical advice)

Implemented strategy:

The private hospital offered prenatal counseling in out-patient clinics to prepare mother for the upcoming experience and emphasizing the benefit of some practices (skin-to-skin contact, immediate breastfeeding, and rooming in) integrated with postnatal

mother support from health professionals and support group to implement some practices while in the governmental hospital, only postnatal counseling was implemented.

5.5 Third factor: Human resources

1- Top-management commitment and support for BFHI

In both governmental and private hospitals, participants noted that the top management was committed to the implementation of BFHI and they generally felt that this was an important facilitator for the implementation process.

2- Workforce stability at both the clinical and the management levels

This factor focused on workforce stability in terms of turnover rate and staff shortages before and after the implementation of the initiative as was the impact on staff workload.

Facilitators:

The private hospital appeared to be characterized by more stable workforce and more manageable workload (120-130 deliveries/month) in general. This contributed to effective and sustainable implementation of the initiative.

Barriers:

Staff at the governmental hospital noted that, even before the BFHI adoption, they faced heavier workload and a general shortage in staff as compared to private hospitals. Some participants at the private reported an increase in individual workload levels after the adoption of the initiative. As one participant stated that “after the initiative, some tasks consumed longer time for individual breastfeeding teaching and mother support creating a challenge especially when the ward is full”.

Implemented strategy:

The private hospital responded to the relative increase in workload by recruiting additional staff to reduce the burden. However, in the governmental hospital, this was not a possibility, so the staff either developed individual coping mechanisms or sought the help of volunteers and utilized written educational materials to enhance the manageability of the implementation process.

3- **Workforce qualifications and knowledge**

Facilitators:

Most staff at the private hospital indicated that the basic knowledge on the importance of breastfeeding and breastfeeding skills acquired from both educational and professional experiences formulated a constructive foundation for developing advanced skills and practices to promote and support breastfeeding through intensive training and consequently resulting in effective BFHI implementation.

Barriers:

The majority of participants at the governmental hospital reported that the unstructured theoretical knowledge and basic skills on breastfeeding practices hindered the implementation of the initiative.

Several participants at both the governmental and private hospital specified that the absence of a specialized lactation consultant to handle some critical cases obstructed the breastfeeding and BFHI implementation.

Implemented strategy:

Intensive staff training that included (lectures, on-job-training, distribution of handouts) to develop and standardize breastfeeding promotion and support practices.

4-Staff attitudes towards the BFHI and commitment

Facilitators:

The majority of participants in the private hospital emphasized the importance of positive attitudes on the success of the initiative. Positivity was generated by caregivers' recognition of its positive implications on the hospital and community as well as the personal commitment and devotion among senior managers/care providers which motivated the rest of staff members. A single participant at the governmental hospital expressed an enthusiastic attitude towards the initiative on personal level related to its positive impact on both mothers and babies.

Barriers:

A large proportion of staff in the governmental hospital and a minor proportion at the private hospital had negative attitudes towards the initiative expressed by anxiety, distress, and frustration emotions associated with increased workload and staff shortage. These negative attitudes lead to lack of devotion and resistance to conduct some BFHI tasks.

For example, a participant commented that "we at the neonate unit experienced anxiety after BFHI adoption and were concerned about the potential increase in workload associated with BFHI. Increase in workload included contacting mothers for breastfeeding or breast milk expression, storage of expressed milk, preparation of formulas for some medical conditions as we were used to give babies ready-to-feed formulas".

On the other hand, four participants (from both hospitals) considered this point as not influential factor justified by the fact that the application of the initiative was an obligatory decision by managers in both hospitals and several BFHI related tasks were already part of hospital's care practices in the private hospital.

Implemented strategies:

- Autocratic decision by hospital's administration enforcing staff adherence to BFHI standards.
- Provision of technical support to integrate the new BFHI related tasks without overburdening employees.
- Constant managerial involvement and emphasis on the impact of the initiative on the health of mother and baby as well as the hospital.
- Recruitment of additional staff members.

5.6 Fourth factor: Breastfeeding staff training

1- Planning and designing of breastfeeding training programs for different professional groups associated with BFHI (clinical and non-clinical) compatible with training needs.

Facilitator:

A total of 13 out of the 15 participants in both hospitals implied that the BFHI training had fulfilled the knowledge and skills needed for the effective implementation of the initiative. The national committee for breastfeeding assisted the breastfeeding committee at the hospital in planning and designing customized training programs for different professional groups at the hospital. Then, the members of hospital's committee were responsible for training the rest of staff proportional to their level of involvement and role in implementing the initiative (20-hour training for clinical staff, general orientation for relevant non-clinical staff with indirect association with the initiative).

For example, a participant – head of post-delivery unit in the governmental unit – mentioned that the training helped them to learn how to encourage and support breastfeeding - the core of implementing the initiative - while addressing the postpartum health complications.

There were opposing opinions between obstetricians in the different hospitals; the obstetrician in the governmental hospital did not consider the breastfeeding as an influential factor for the implementation of the initiative as she stated that "general information about the BFHI was provided as the implementation of standards is the responsibility of nurses and midwives" while the obstetrician at the private hospital considered the training as a facilitating factor as he commented: "doctors were oriented to the BFHI in general as the implementation of standards is the responsibility of nurses and midwives mainly , the focus of our training was to encourage breastfeeding, restrict the prescription of BMS for medical conditions only, and regulate doctors' relationships with formula companies".

2- Use of innovative strategies to ensure staff's presence and commitment (paid education time, mandatory training, handouts, e-learning, interactive training, videos, demonstrations, on-job-training, etc...).

As shown in table 5.1, participants in the governmental hospitals indicated that 'paid education time' was the most effective strategy to ensure staff's presence and commitment whereas their counterparts in the private hospital mentioned the 'interactive discussion and lectures' as the most effective.

Table 5.2: strategies to ensure staff's presence and commitment in training

	Governmental	Private
Paid education time	6	3
Mandatory	3	4
Handouts	1	4
Interactive discussion and lectures	1	5
On-job-training	2	3
Training location	1	1
Training of trainers (National committee for breastfeeding trained members of hospital's breastfeeding committee)		1

3- Sustainability of orientation and/or training programs concerning the promotion and support of breastfeeding for new staff members in relevant units

There were two opposing views at the governmental hospital on the classification of this factor. Three participants (head staff of different units) considered that the on-job-training approach is an effective training strategy for new staff members and one considered that "new staff members appeared to have the knowledge on breastfeeding from their educational backgrounds (colleges) needed to the sustainability of the initiative"

Barrier:

While the other participants (care providers and a medical director) commented that the application of the on-job- training strategies by head staff or quality coordinator to ensure the ongoing implementation of the initiative was ineffective as "several new staff members (especially residents, physicians) were not trained or oriented on BFHI standards" according to participant in the governmental hospital – care provider/decision maker in BFHI – mentioned that the on-job-training, which is the responsibility of the quality coordinator, is not enough as inadequate knowledge among new staff may hinder the implementation of the initiative and consequently compromising the 'baby friendly' designation in the future.

Implemented strategy:

Periodic follow up with quality coordinator to ensure the implementation of continuous intensive trainings for new staff.

It is worth to mention that only one participant at the private hospital stated that he was unaware of any modification protocols after designation and the rest agreed that the integration of BFHI standards and associated tasks were into hospital's orientation

program combined with on-job-training approach have ensured the sustainability of implementing the BFHI among new staff members. It is worth to mention that few interns/staff members were recruited after designation and these interns seemed to already have knowledge on breastfeeding from their educational backgrounds and professional experiences from other hospitals implementing BFHI.

5.7 Fifth factor: Hospital reliance on formula company products

1- Formulation of a committee to ensure compliance with the Code standards and monitor Code violations at the hospital

Facilitator:

All participants have agreed that the breastfeeding committee at the hospital have ensured the adherence to the 'code' standards and controlled for any violations.

2- Setting criteria for calculation of fair market breast milk substitutes (BMS) prices and purchases for medical reasons.

According to all participants in the private hospital, hospital's management has ensured the adherence to the 'code' BFHI standards and prevented any possible violation by enforcing policies prohibit the purchase of Breast Milk Substitutes (BMS) even for medical conditions and physician's prescribed formula for medical conditions are purchased by family members from outside the hospital. On the other hand, four participants in the governmental hospital classified the governmental BMS purchasing and supplying system for public hospitals through central warehouses as facilitator for the compliance with BFHI standards. However, few participants considered this system as a barrier since the BMS provided by the central warehouse do not always fulfill the newborns' medical/nutritional needs.

Implemented strategy:

Unsuitable BMS lead family members to purchase a different formula based on physician's prescription in the governmental hospital.

3- Hospital's policies and procedures regarding donations of free or subsidized (funded) supplies of breast-milk substitutes (BMS) by infant formula companies and ability to self-purchase of BMS for medical reasons.

Facilitator:

All participants noted that even before the BFHI adoption, the policies at the private hospital forbade any support from formula companies regarding BMS free donation or funding hospital's upgrading projects. This has facilitated the adherence to BFHI standards concerning the relationship with formula companies.

One administrative officer mentioned that: "the formula companies used to constantly offer funded supplies of BMS and upgrading projects however, hospital's values forbid the acceptance of any support/donation from formula companies that might compromise the best medical advice for mother/baby - hospital's slogan is "patients first"".

Barrier:

At the governmental hospital, Formula companies had fully supported the free supply of different types of formulas according to hospital's formula specifications (ready-to-feed, several types of formula for different medical conditions, etc…) as well as funding hospital's refurbishing projects and provision of equipment. This formulated a major barrier for hospital's management to fulfill the BFHI standards concerned with formula companies.

Implemented strategy:

In order to overcome this barrier, the hospital enforced new policies that prohibit free or funded BMS and that the supply of basic formula is through central governmental warehouse. In addition, the participation of the initiative included provision of equipment and staff training for breast milk collection and storage and BMS preparation in neonate unit instead of using ready-to-feed formulas donated by formula companies.

However, the basic formula provided by the central warehouse does not always meet all the different medical needs leading parents and family members to purchase prescribed BMS.

Two participants also stated that after the implementation of BFHI in the hospital, there is no need for BMS as mothers were encouraged to breastfeed.

4- Hospital's policies and procedures concerning the contact of formula companies with mothers/family members and distribution of mother gifts and free samples

Facilitator:

The private hospital's policies forbid any contact of formula companies with mothers/family members even before the BFHI adoption; this has facilitated the encouragement of breastfeeding without the interference of formula companies according to most participants.

Barrier:

All participants at the governmental hospital classified this factor as a barrier as most formula companies insisted on approaching mothers and family members to encourage the use of BMS before and at the beginning of the BFHI adoption and implementation. They also constantly distributed free gifts to newborns and offered free or discounted supplies of BMS for some families (humanitarian cases) as part of companies' social

responsibility. Some hospital's staff members (midwives and nurses) used to give mothers and relatives the numbers of formula companies for free or at reduced-price of BMS supply or gifts.

Only one participant at the private hospital indicated that “despite the fact that the policies forbidding the contact of formula companies with mothers existed before the initiative, there were several violations from staff members”.

Implemented strategy:

After BFHI adoption, the private hospital utilized a strict policy enforcement approaches and imposed zero-tolerance policies for any violations.

The governmental hospital's new policies against contact of formula companies were generalized among all clinical and non-clinical staff (e.g. clinical staff members were prohibited from providing mothers any contacting information with these companies, and security banned the entrance of representatives from these companies to enter the hospital).

5- Presence of advertisements and promotional materials throughout the healthcare advertising of breast-milk substitutes and other products to the public contradicting with BFHI standards and visibility of breastfeeding or infant feeding written policy and posters

Barrier:

The majority of participants in both hospitals considered the presence of advertisements and promotional material encouraging the use of BMS hindered the promotion of breastfeeding among mothers.

The rest of participants (4) considered this factor as influential since such promotional materials were removed after adopting BFHI standards

Implemented strategy:

The breastfeeding committees in both hospitals removed all posters from infant formula companies and put the BFHI relevant posters encouraging breastfeeding (hospital's policy, breastfeeding and infant feeding, etc…).

6- Staff attitudes influenced by formula companies through sponsored trips and conventions, free samples, gifts, etc…

Facilitator:

Most participants in the private hospital indicated that hospital's policies prohibited any collaboration with formula companies and hospital's senior management (especially doctors) negative attitude/resistance toward formula companies set an example for all staff to comply with BFHI standards regardless of their personal attitudes

Barrier:

There was a general consensus in the governmental hospital that this factor was a major barrier for the initiative as most of the staff had negative attitudes towards implementing this area in particular since they had strong affiliations with formula companies (result of free trips to staff, samples, gifts, personal supply of BMS, etc….).

Whereas in the private hospital, only two participants classified this factor as a barrier since there were only few cases of policy violation among some staff members who promoted BMS due to personal affiliations with formula companies.

Implemented strategy:

Obligatory policy-enforcement forbidding staff members from BMS promotion and imposing disciplinary actions for non-compliance (verbal or written warning, suspension, or dismissal).

5.8 Sixth factor: Infrastructure and Routines

1- Infrastructure and routines influencing hospital's inclusion of mother-friendly care optional domain (e.g. Presence of male companions in delivery room, etc…)

Facilitator:

Hospital's infrastructure (separated delivery rooms), protocols and low number of daily deliveries at the private hospital facilitated the compliance to standards of the domain such as presence of (male or female) companions in delivery room for support, mothers' liberty of movement and food/beverage during labour and delivery as well as avoiding invasive procedures (episiotomy) if not medically indicated.

Barrier:

All participants agreed that the structure of delivery room in the governmental hospital (multiple occupancy separated by curtains) inhibits the implementation of domain's standards as the presence of companions might compromise the quality of care due to crowdedness, invade the privacy of other mothers and/or violate some socio-religious beliefs. Moreover, the high number of simultaneous deliveries does not facilitate mothers' movement and consumption of foods and beverage during labor and forces clinical staff (obstetrician and midwives) to do some invasive procedures without medical life-threatening indications (episiotomy especially for first-time mothers).

Implemented strategy:

The mother-friendly care domain was not selected at the governmental hospital.

2- Infrastructure properties influencing breastfeeding and milk expression practices (e.g. accessibility to breastfeeding corners, pumps and pumping room)

Barrier:

Both hospitals did not have breastfeeding/pumping corners; it seems that breastfeeding mainly occurred for hospitalized mothers in their beds (multiple occupancy

postpartum/maternity rooms are separated by curtains). According to participants' responses, some mothers were not comfortable to breastfeed/express milk in their beds and some discharged mothers experienced difficulties in finding a place to breastfeed their inpatient newborns.

In addition, a head nurse in the neonate unit at the governmental hospital said that "we had to use BMS (if there was no stored expressed milk) after BFHI adoption in some cases in which discharged mothers missed the scheduled times to breastfeed their inpatient newborns because they could not stay at the hospital."

Implemented strategy:

The external partners of the initiative supported the establishment of accessible breastfeeding/pumping rooms in both hospitals equipped with breastfeeding chairs and pumps to facilitate the breastfeeding practices for all mothers including discharged and sometimes, mothers from outside the hospital.

A breastfeeding corner was also set in the neonate unit at the governmental hospital for breastfeeding as well as milk expression and storage. In addition, the unit collaborated with maternity (labor and delivery) unit to facilitate the accommodation of some discharged mothers and ensure the accessibility to these rooms at night to breastfeed their newborns in neonate care.

3- Availability of physical space, routine medical procedures or post-cesarean recovery influencing initiation of breastfeeding and sufficient skin-to-skin contact within minutes of birth, remaining for 60 minutes or longer

Facilitator:

A total of 5 out of the 6 participants in the private hospital classified the physical space (separated delivery room) and hospital's routines as a facilitating factor to immediate breastfeeding and private skin-to-skin contact. Skin-to-skin contact duration in delivery

room varies depending on type of delivery (around 15 minutes in vaginal delivery cases and 20-30 in cesareans) and the rest 30 minutes of skin-to-skin contact is completed in the maternity unit.

The obstetrician at the hospital mentioned an example for an after-birth routine as he said “I try as much as possible to ask midwives to put the newborn on mother's chest after cutting the umbilical cord for skin-to-skin contact and breastfeeding initiation”.

Barrier:

All participants – who are aware of hospital’s structure and routines – at the governmental hospital has indicated that the number of beds in delivery room – only three – is not proportionate with the large number of daily/simultaneous deliveries. This has hindered the complete adherence of the skin-to-skin contact duration (60 minutes). For example, the head of postpartum unit said that “skin-to-skin contact in postpartum care depends on mother's medical condition (if stable for around 15 minutes”.

only one midwife in the labour unit in the private hospital indicated that there were some difficulties in ensuring a sufficient skin-to-skin contact duration (60 minutes) if the ward was crowded; the period is for around 5-10 minutes in delivery room and 30 minutes in maternity room.

Implemented strategy:

The participants at the governmental hospital said that the long term solution is to expand the ward (increasing number of beds) but temporarily, a special bed is assigned to ensure longer skin-to-skin contact duration. However, it is worth mentioning that current skin-to-skin contact duration even on the assigned bed is still insufficient (maximum for 15 minutes) due to the huge workload.

4- Physical space and hospital routines influencing 24-hour rooming-in

Facilitator:

The majority (13 out of 14) of participants in both hospitals agreed the hospitals' policies and absence of nurseries in the hospitals have facilitated the adherence to the 24-hour rooming-in BFHI standard which includes ensuring mothers and infants to remain together.

Barrier:

The head nurse at the neonate unit said that there is "no space for mother companionship in neonate unit" obstructing the compliance to 24-hour rooming-in.

Implemented strategy:

No strategies were implemented to overcome this barrier as the collaboration between neonate and maternity (labor and delivery) units to facilitate the accommodation of some discharged mothers at night is to only ensure breastfeeding as scheduled but does not facilitating all-time rooming in.

5- Visiting-hours policies influencing mothers' privacy needed for skin-to-skin contact after C-sections, milk expression, breastfeeding and time needed for breastfeeding learning

There were opposing visiting-hours policies in the participating hospitals; the governmental hospital has a scheduled visiting hours between 11 a.m.-2 p.m. and 4 -7 p.m. while the private hospital has an open-visitation policy. This has resulted in contrasting categorizing of this factor.

Facilitator:

The majority of participants in the private hospital agreed that scheduled visitation hours ensure mothers' privacy for breastfeeding, milk expression and learning.

Barrier:

Most participants in private hospital justified their classification of the 'open-visiting hour policy' and presence of several people as a barrier for several reasons such as invading mothers' privacy needed for completing skin-to-skin-contact, breastfeeding and milk expression, staff had difficulties in providing the technical breastfeeding support. For instance, a midwife in the private hospital said that "the presence of people – due to open visiting hours – obstructed completion of skin-to-skin contact in their beds after delivery".

Only two participants at the governmental hospital stated that there were some occasions in which visitors did not abide by hospital visitation hours hindering the breastfeeding counseling and several mothers have complained that they could not breastfeed or express milk due to presence of visitors.

Implemented strategies:

- Asking visitors to step out of the room to give the mother the privacy needed for skin-to-skin contact and feeding practices.
- Involving some visitors as supporters in teaching mothers breastfeeding practices.

6- Hospital discharge routines influencing time for teaching breastfeeding practices and assisting mothers in breastfeeding initiation and positioning, milk expression, feeding on demand and communication with supporting groups

Both hospitals have same discharge policy that implies 2 – 3 days after cesarean delivery and 6 – 24 hours after vaginal delivery. However, it seemed that the actual discharge routine in the governmental hospital is after only 6 hours for stable vaginal deliveries while the private hospital mostly discharge mother after 24 hours. The

discharge routines integrated with other factors have influenced the categorization of this factor across the hospitals.

Facilitator:

The majority of participants in the private reported that the discharge routines are enough for supporting mothers in breastfeeding and no mother is discharged before making sure that she mastered the feeding practices. They also commented that the discharge routine is adequate because most mothers receive counseling on feeding practices during pregnancy in antenatal clinics to be prepared for the upcoming experience and continues after discharge when visiting the hospital for follow up in the outpatient clinics (obstetrics and pediatrics).

Barrier:

There was a general agreement among participants in the governmental hospital that discharge after 6 hours is insufficient time to deal with both mothers' anxiety motions and lack of breastfeeding knowledge and skills as mothers – especially first-time – are not prepared to this experience in antenatal clinics (mother and child care clinics)

One participant – matron / BFHI coordinator – in the private hospital mentioned that "some mothers ask for discharge after only 6 hours which is not always enough for learning feeding practices and the antenatal clinics get crowded sometimes (limited time for breastfeeding counseling especially first-time mothers)".

Implemented strategies:

- No discharge before making sure that mother handled the basic breastfeeding and milk expression practices.
- Providing the contact information of specialized staff in both hospitals in cases of facing any difficulty in breastfeeding after discharge.
- Provision of educational handouts.

7- Breastfeeding environments in neonatal units (Skin to skin in NICU, rooming in, feeding on demand and milk expression)

The neonate unit is only present in the governmental hospital. It is worth to mention that some of the challenges faced in the neonatal unit before and during the implementation of the initiative were previously mentioned while discussing other factors.

Barriers:

The head nurse of the neonate unit in the governmental hospital mentioned several barriers during the implementation process of the initiative that included an increase in workload to contact mothers for breastfeeding or breast milk expression at scheduled times, teach mothers on feeding practices and store expressed milk. They were also accustomed to use ready-to-feed formulas donated by formula companies, after adoption of the initiative they did not know how to prepare BMS / formula for medical conditions or in cases in which mothers miss the appointments to breastfeed their inpatient newborns especially at night.

Implemented strategies:

- Discharged mothers were permitted to sleep in maternity unit in order to breastfeed newborns in the neonate unit at night.
- Establishment of equipped breastfeeding room for milk expression and storage (breastfeeding chair, pumps, refrigerator) with educational handouts and breastfeeding promotional materials.
- Collaboration with maternity (labor and delivery) unit to facilitate the accommodation of some discharged mothers to ensure the breastfeeding of inpatient newborn at night.

- Staff training and technical support on how to integrate BFHI related tasks without overwhelming their workload and conduct tasks for breast milk collection and storage and BMS preparation.

5.9 Seventh Factor: Self-appraisal and feedback mechanisms

1- Follow up and monitoring approach to change

This includes utilizing resources to collect data to measure baseline practices to decide the BFHI adoption and implementation, assessment of BFHI impacts, self-reassessment and monitoring of post-designation compliance to standards of BFHI.

Barrier:

The majority of participants in both hospitals noted that the informal simple auditing and monitoring of the implementation process after designation by periodic top-down follow up in which the medical director follows up with quality coordinator and heads of units who follow up with staff in their units.

A caregiver/BFHI decision maker in the private hospital stated that: “before the adoption of the initiative, senior management (doctors) at the hospital discussed the BFHI standards and current practices which represented a baseline data for the adoption and implementation. Then gradually, BFHI standards became part of hospital's system and routines. after designation, informal monitoring by getting feedback from BFHI coordinator and breastfeeding committee and mothers during morning rounds”. Nevertheless, this participant classified the current informal auditing tool as a barrier after mentioning that he started to notice the lack of commitment among few nurses in some aspects particularly the breastfeeding teaching maternity units.

2- Integration of a record-keeping system within the existing information gathering system

Barrier:

Most participants indicated that there are no specific forms to collect BFHI related data after designation in both hospitals. Few reported that the medical files of newborns or nursing records have some notes on the breastfeeding patterns. According to one nurse in the governmental hospital, "we at the beginning of our shift read nursing records of the newborns and check if the baby was breastfed or not".

3-Regular BFHI assessment post designation

The 'Baby Friendly' designation is not permanent implying that hospitals must fulfill BFHI standards when the periodic external reassessment is conducted to maintain the designation. Nevertheless, the majority of participants did not know about the post-designation assessment and noted that it is an important factor to ensure the sustainability of BFHI.

For example, a member of the breastfeeding committee in the private hospital said that: "the hospital has to do an annual self-assessment to ensure the continuous implementation of the initiative, but I think that having a periodic external assessment will boost the commitment of both management and staff to keep the designation".

Chapter Six

Discussion and Conclusion

6.1 Introduction

In this chapter, the key findings of the study will be summarized, interpreted and compared to the findings of other studies worldwide as well as study conclusions and recommendations.

6.2 Discussion

This qualitative study is distinctive because it is, to the best of our knowledge, the first endeavor that utilizes key influencing factors and sub-factors identified in the existing literature in investigating organizational facilitators and barriers to the BFHI implementation process towards 'Baby Friendly' designation in selected Palestinian governmental and private hospitals. Therefore, one of the hoped-for contributions of the current work is to set the stage for further research in the context of essential areas namely, strategic and operational planning, rational decision-making and utilization of effective strategies in an effort to enhance BFHI implementation in the Palestinian health sector and facilities.

In addition to the adoption of multi-disciplinary collaborative implementation approaches and the presence of breastfeeding committees, the findings of this study have uncovered BFHI facilitators that are consistent with the leadership facilitators

mentioned in the available body of literature describing the experiences of different facilities in Austria, Spain and Qatar towards the Baby friendly designation (Wieczorek et al, 2015; Edwards et al, 2011; Garcia et al, 2011). Conversely, contrary to the findings of several previous studies in UK and Australia (Rogers, 2003; Walsh, 2011), there seemed to be general agreement that the autocratic, top-down decision-making approach serves as a chief facilitator to the BFHI adoption and implementation processes in studied hospitals.

This divergence could be explained by the different sociocultural contexts across nations influencing decision-making approaches and leadership practices given the fact that the majority of countries mentioned in the literature tend to advocate a participative leadership style involving all staff in the selection and adoption of organizational changes, which may increase staffs' commitment and contribute, in effect, to more effective implementation (Sagie A. and Aycan Z.,2003; Kotneh et al, 2008; Thomson et al., 2012).

The relationships between perinatal services (especially antenatal clinics in the same facility) have facilitated the BFHI implementation in the private hospital unlike the governmental hospital as several staff members suffered from maternal resistance to some BFHI practices due to insufficient knowledge and skills related to inadequate mother breastfeeding promotion and teaching in different prenatal primary health care (PHC). Consequently, this initiative was adopted by some governmental MCH clinics.

Compatibility between the literature in different countries like UK and Sweden and this study was also found in considering the establishment of an organizational culture that exceeds hospital's role of active treatment (barrier) and advocates a family-centered health promotion philosophy of care (facilitator) as a significant influential factor to BFHI in varied health facilities (Konteh et al., 2008; Nyqvist & Kylberg,2008;

Thomson, 2013). Although the attempts of private hospitals, particularly in fulfilling clientele preferences if incompatible with BFHI standards, has been noted in extant literature as a barrier (Walsh, 2011), both studied hospitals – mostly private ones – have been found to be committed to convince mothers in breastfeeding and BFHI practices and mothers' resistance to some BFHI practices was mostly associated with individual barriers (misconceptions, lack of skills, anxiety, etc...).

The influencing factors related to financial and human resource reported by participants in this study matched those in the reviewed studies (Taylor et al, 2011; Semenic et al, 2012). All participants reported the external financial support and commitment of top management to utilize resources (time and staff) facilitated the implementation of BFH in both hospitals. Nevertheless, the justification for why management was committed varied across hospital types; for instance, in the governmental hospital, participants stated that top management was committed to the implementation of the initiative due to an autocratic decision of MoH enforcing the application of the initiative. However, some of the participants in the private hospital noted that the hospital's management was committed due to personal convictions stemming from their experiences in healthcare provision.

The stable workforce and manageable workload at the private hospital have contributed to effective and sustainable implementation of the initiative opposing to the hindering conditions in governmental hospital where the expansion of the care philosophy in the governmental hospital has burdened several health professionals – mainly nurses and midwives – with additional BFHI tasks to their heavy routine workload resulting in negative attitudes and staff 's resistance to the initiative at first. It is worth noting, that this divergence is more likely to be related to hospital's capacity and not to the type as the governmental hospital has around 240 beds while the private hospital has only 35.

Additionally, it has been noticed in both hospitals that the absence of specialized lactation consultants to handle some critical cases obstructed the breastfeeding and BFHI implementation while in Canada, the presence and role of these consultants was imperative to provide technical support and teaching for both mothers and other staff members facilitating the BFHI implementation in these facilities (Benoit and Semenic, 2014).

Around 47% of participants in both hospitals had less than 5 years of experience, but they both had staff members with long experience. And so, there was no difference between the qualifications and backgrounds on breastfeeding among staff. However, there was a significant divergence in terms of their perceptions towards their basic knowledge and skills relevant to breastfeeding; as the majority of participants at the governmental hospital reported that the unstructured theoretical knowledge and basic skills on breastfeeding practices hindered the implementation of the initiative while several participants at the private hospital indicated that the basic knowledge on the importance of breastfeeding and breastfeeding skills acquired from both educational and professional experiences formulated a constructive foundation for developing advanced skills and practices to promote and support breastfeeding through intensive training and consequently resulting in effective BFHI implementation.

Another difference identified between the perspectives of some doctors in the hospitals is worth mentioning; as the doctor at the governmental hospital stated that “there is no need for in-depth knowledge as a doctor /mother counseling on breastfeeding is part of the job responsibilities of nurses and midwives”, while the doctor at the private hospital mentioned that “even though the intensive BFHI training mainly targeted nurses and midwives since the mother counseling on breastfeeding is part of their job responsibilities, obstetricians and doctors must have in-depth knowledge and skills on

breastfeeding practices as they represent a trusted source of information for mothers".

The key factors to a successful staff training, according to the reviewed studies, include the assessment of staff educational needs, designing mandatory tailored training education programs targeting all levels of relevant professional groups (clinical and administrators), and utilization of innovative approaches for training. In Palestine, the national committee for breastfeeding and Nutrition Department of MoH assisted the breastfeeding committees at the hospitals in planning and designing customized training programs for different professional groups at the hospital. Then, the members of hospital's committee were responsible for training the rest of staff proportional to their level of involvement and role in implementing the initiative (20-hour training for clinical staff, general orientation for relevant non-clinical staff with indirect association with the initiative). Representatives of both hospitals have implied that the BFHI training fulfilled the knowledge and skills needed for the effective implementation of the initiative.

Several studies have reported hindering factors such as the lack of participation among non-nursing staff members, lack of strategies to ensure staff commitment such as unpaid education time and mandatory participation (Hahn, 2005; Reddin et al, 2007; Bartick et al, 2010). Participants in the governmental hospitals pointed out that 'paid education time, mandatory and on-job-training' were the most effective strategies to ensure staff's presence and commitment whereas their counterparts in the private hospital mentioned the 'interactive discussion and lectures, mandatory training, handouts' as the most effective ones.

However, it seemed that there was a lack of comprehensive training and orientation programs in the studied hospitals for new staff with brief or no breastfeeding and BFHI knowledge may hinder the implementation of the initiative and consequently

compromising the 'baby friendly' designation in the future. Conversely, a breastfeeding education and training approach has been implemented in hospital in Chicago since the 90s represents an effective model to ensure a sustainable uniformed breastfeeding teaching and support among different professional groups; this multi-disciplinary approach entailed the integrated breastfeeding education into both curricula and residency programs of Medical school departments of Family Medicine, Obstetrics/Gynecology, and Pediatrics as well as Nursing and Midwifery, on the hospital level strategies included mandatory breastfeeding courses for staff, on-job staff-to-staff mentoring and nursing conferences that included lectures and hands-on workshops (Hannon et al, 1999).

Semenic and associates (2012) stated that many studies in both developed and developing countries noted some barriers related to hospital's infrastructures and routines such as the lack of physical space in delivery and maternity room and performance of newborn admission, postpartum examination and routine procedures in nurseries creating difficulties in fulfilling some BFHI standards for immediate and continuous mother/newborn attachment and breast feeding practices such as breastmilk expression. While the reported facilitators included the presence of pumping/breastfeeding rooms and eliminating nurseries or focusing its medical function as "Newborn Observation Area".

Since the studied hospitals do not have nurseries in maternity units, 24-hour rooming in has been already one of hospital's policies before the BFHI but analysis revealed some common barriers such as the availability of multiple occupancy delivery and maternity rooms rushing compromising some practices like adequate skin-to-skin contact duration. This barrier is much prevailing in the governmental hospital where they have to rush mothers from delivery rooms due to the large number of daily/simultaneous

deliveries disproportionate with the available beds contradicting to the private hospital as such barriers occasionally occur in cases of crowdedness because of multiple urgent deliveries.

Similar to literature, the establishment of equipped breastfeeding/ pumping corners in different locations including NICU have assisted inpatient and discharged mothers to express milk or breastfeed in any time (Benoit and Semenic ,2014).

Reviewed articles have shown that open visitation hours and early hospital discharge were considered as barriers since they reduce time for breastfeeding teaching and support (Thomson et al., 2012; Bartick et al, 2010). The private hospital in this study have 'open-visiting hour policy' causing most participants to classify it as a barrier counterpart to the governmental hospital which have a scheduled visitation policy facilitating skin-to-skin-contact, breastfeeding and milk expression, staff had difficulties in providing the technical breastfeeding support. However, the common discharge procedures in the governmental hospital is only after 6 hours to handle the persistent crowdedness in the facility comparing to the minimum 24-hour hospitalization stay in the private hospital (fewer number of deliveries). This early discharge might challenge likelihood of breastfeeding initiation and continuation given the fact that only 62 % of newborns in Palestine started breastfeeding within one hour of birth while 88% of newborns started breastfeeding within one day of birth (PCBS,2013).

Analysis have also revealed that NICU environments across developed and developing countries such as Canada, Australia and Palestine share mutual contextual obstacles as the parent/infant separation in these units for mother/infant-related medical routines and lack of physical space hindering the implementation of some breastfeeding and BFHI-related practices such as to enable skin-to-skin contact, immediate initiation of lactation

after delivery, 24-hour rooming in and inability to breastfeed directly from breast resulting in the use of breastmilk substitutes due to absence of mothers on scheduled feeding time, lack of accessibility to electronic breast pumps and inadequate of stored expressed breastmilk.

The study findings were consistent with the reviewed articles in USA, Italy and Egypt in considering the strength of infant formula companies as one of the significant exogenous determinants impacting the implementation of BFHI on an organizational level (Batrick et al, 2010; Bettinelli and her associates, 2012; Abul-Fadl et al, 2014).

Analysis also showed that the hospital's management efforts and commitment are vital to face the aggressive marketing and influencing strategies of these companies by ending any contracts with these companies, prohibit their contact and influence on both family members and health professionals, setting criteria for the purchase and use of formula in the hospital as well as constant monitoring for any violations.

This experience was more challenging for the governmental hospital due to strong relationship between the staff and representatives of these companies as well as the substantial reliance on these companies to provide free BMS products or fund projects for upgrading hospital facilities and equipment. Participants have also pointed out to another barrier that have emerged after the adoption of BFHI which is that the formula provided through governmental central warehouses does not always fulfill the medical and nutritional needs of newborns.

On the other hand, adherence to the code was an easier process for the private hospital as most managers and key health professionals have strong attitudes towards breastfeeding and established several policies to limit the impact of formula companies even before the BFHI adoption.

Contrary to what is recommended by the literature, the findings of this study indicated the insufficient use of comprehensive auditing and monitoring reports or approaches in the studied hospitals after the designation. Many studies suggested numerous auditing strategies to ensure the sustainable adherence to BFHI standards. Some of these approaches included the utilization of resource and integration of records to collect and analyze data to determine baseline practices, monitor progress and enforce tailored strategies to improve organizational change. Another significant approach is the performance of continuous reassessment activities to ensure the compliance to standards after designation (Edwards et al, 2011; Garcia-De-Leon-Gonzalez, 2011) & (Raghu, 2001).

Additionally, the lack of knowledge among staff members regarding the time-framed 'Baby Friendly' designation and periodic re-assessment compromise the sustainability of BFHI in both hospitals. In fact, studies in Australia and United Kingdom have demonstrated that the risk of losing the designation formulated a motivator for health facilities to use a continuous self-auditing approaches on hospitals' BFHI related practices to ensure the constant adherence to the initiative (Rogers, 2003; Wieczorek et al, 2015).

6.3 Conclusions

The adoption and implementing of WHO/UNICEF BFHI is imperative to ensure the provision of global evidence-based care for mothers and newborns in healthcare facilities that encourage breastfeeding. This initiative has been associated with increasing rates of breastfeeding and better long-term health outcomes for newborns, mothers and families in the hospitals implemented the initiative.

This study focused on the organizational factors and strategies influencing the implementation of BFHI in selected Palestinian governmental and private hospitals. However, findings have indicated that the success of this multidisciplinary complex initiative is achieved by addressing the integrated sociopolitical, organizational and individual factors as expected according to the developed conceptual framework in chapter three. For example, the study revealed that the sociocultural contexts influence the organizational culture and the leadership styles in the hospitals. Additionally, individual attitudes among mothers and staff members have influenced the compliance to BFHI standards.

In conclusion, the organizational barriers and facilitating factors determined by this study provides a comprehensive model tailored to the Palestinian context which can be adopted to utilize effective strategies for a sustainable implementation of the BFHI in different health facilities and consequently the attainment of 'Baby Friendly' designation.

Findings also suggest that some barriers might occur when BFHI is put into practice despite previous preparation. BFHI resembles a great challenge for health professionals' work routines especially in governmental big institutions that require changing organizational structures combined with continuous monitoring and support activities.

6.4 Recommendations

6.4.1. Recommendations for health facilities implementing BFHI

This study targeted clinical and non-clinical staff members from different professions and managerial levels to identify the organizational factors and strategies influencing the initiative. However, it is important to explore the perceptions and attitudes of staff members and mothers towards breastfeeding and BFHI and consequently utilize effective tailored strategies, training programs, and organizational changes which address their perceptions. This will result in boosting their motivation towards and reduce the influencing pressure from formula companies.

Another recommendation is to strengthen the relationships between perinatal units or facilities especially prenatal (private clinics or MCH centers) in which the prolonged contact with mother during pregnancy can assist in breastfeeding promotion and teaching. Moreover, it is important to deeply involve obstetricians, pediatricians, physicians and residents in the initiative as they have influencing capabilities on mothers' conceptions and attitudes.

It is very important to design continuous education programs for staff after designation and intensive orientation and training on BFHI for new staff. This would empower nurses and staff with the knowledge and skills needed for handling common breastfeeding problems and integrating BFHI related tasks without overwhelming their workload. Bartick et al (2010) suggested effective training strategies by encouraging colleague mentoring and on-shift training strategies as well as using scripts, role playing, and triage algorithms to prepare staff for handling difficult conditions instead of using formula, provision of accessible training videos and online quizzes to increase flexible training hours without overloading staff or banding with other facilities to host guest speakers or plan training events as a low-cost training tool.

Making adjustments in hospitals' infrastructure and routines are also recommended by adopting scheduled visitation policies and making structural changes in NICU and maternity units to facilitate mother/newborn continuous attachment and breastfeeding practices as well as to adopt mother-friendly care BFHI domain.

Finally, it is highly recommended to establish continuous monitoring and auditing quality approach to tackle any variance in the compliance of standards of the BFHI before and after designation as the current unofficial undocumented monitoring procedures compromise the long term sustainability of the initiative in the hospitals.

6.4.2 Recommendations for further research:

The research that has been undertaken for this study has highlighted several knowledge gaps and areas for further investigation. Some of these gaps were addressed by this study but there are also numerous areas for additional development of the used instrument and expansion of work undertaken in this study. One important area for further research is the thorough investigation of the different sociopolitical, organizational and individual determinants influencing the success of Baby Friendly Initiative in in the Palestinian context. Another research opportunity is to study the short and long-term impacts of BFHI on breastfeeding statistics and health indicators in Palestinian health facilities or to compare these indicators between different 'Baby-Friendly' designated and non-designated settings.

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Annex (1): Hospital Data Sheet

Hospital Data Sheet[1]

General information on hospital:

Name of Hospital: _____ Address: _____

Name and title of hospital director:

Type of hospital:
- □ Governmental hospital
- □ Private hospital
- □ NGO hospital
- □ UNRWA hospital
- □ General hospital
- □ Maternity hospital
- □ Teaching hospital
- □ Other:_____

Total number of hospital beds: _____ Total number of hospital employees: _____

Information on Baby-Friendly Hospital Initiative (BFHI) in the hospital

Please identify the WHO/UNICEF BFHI domains adopted at the hospital:

- ☐ Ten steps to successful breastfeeding – also referred as the 'Ten Steps'. (Obligatory).
- ☐ National Regulation/The International Code of Marketing of breast milk substitutes referred to as 'The Code'. (Obligatory).
- ☐ Mother-friendly care (optional).
- ☐ HIV and infant feeding (not adopted by Palestinian Ministry of Health).

How long did it take to become a certified baby-friendly hospital? _____ Month(s)

Date of adoption of BFHI in the hospital: _____

Date of implementing process of BFHI in the hospital: _____

Period for completing self-appraisal in the hospital: _____

Date of first External Assessment: _____

Date of achieving the Baby-friendly certification: _____

Estimated financial costs of implementing BFHI in the hospital: _____

Other notes: _____

Please identify hospital's medical services involved in the implementation process of BFHI. (e.g antenatal services, labour and delivery services, maternity and related services, NICU, non-clinical staff):

_____

[1] The data sheet was developed by adjusting Part I of the UNICEF/WHO BFHI External Assessment Tool: Key Staff Discussion, Hospital **Data Sheet**, Review, and Observations (not available for general distribution) according to study's objectives.

Please determine the number of the following staff involved in the implementation process of the BFHI:

Nurses	☐ ___	Physicians	☐ ___
Midwives	☐ ___	Pediatricians	☐ ___
SCBU/NICU medical staff	☐ ___	Obstetricians	☐ ___
Dietitians/ Nutritionists	☐ ___	Other (specify): _____	☐ ___
Lactation consultants / Infant feeding counselors	☐ ___	_____	☐ ___

Is there a quality and/or BFHI coordinator at the hospital? ☐ Yes ☐ No
Are there breastfeeding and/or infant feeding committee in the hospital? ☐ Yes ☐ No
If yes, please describe: _____
_____

Data sources:
Please explain sources for the above data:
_____

_____

Date filled in: _____ by: _____

Annex (2): Interview guideline

Interview guideline[2]

Date:

Name of Hospital: _____ Name of ward/unit: _____

Interview number: _____

Gender: ☐ Male ☐ Female

What is your position at the hospital? _____

☐ Administrative (specify :_____)

☐ Clinical: Provide mother/baby care (select):

☐ Nurses	☐ Physicians
☐ Midwives	☐ Pediatricians
☐ SCBU/NICU nurses	☐ Obstetricians
☐ Dietitians/ Nutritionists	☐ Infant feeding counselors
☐ Lactation consultants	☐ Other (specify): _____

How long have you been in this position: _____ year(s)

Please select your role in the implementation process of the BFHI in the hospital? (You can choose more than one)

☐ Decision-maker	☐ Member of breastfeeding/BFHI committee
☐ Facilitator	☐ Care provider
☐ Trainer	☐ Other (specify)::_____

Why do you think BFHI was adopted in this hospital? *(Organization's attitudes towards the BFHI designation and standards)* (You can choose more than one)

[2] The semi-structured interview guideline was developed using the UNICEF/WHO BFHI External Assessment Tool (not available for general distribution), related questions and findings in the literature and the researcher's experience.

☐ BFHI-certification is a marketing tool to gain more publicity and attract mothers (quality indicator used to fulfill parents' expectations of high-quality service delivery on maternity units at the hospital).

☐ Enhancement of existing services and working procedures by adopting global evidence-based family-centered practices of care to optimize and promote breastfeeding.

☐ A formal decision or recommendation by top-level management (ministry of health/hospital's top management) to pursue BFHI-certification.

☐ Other (specify): _____

_____

Could you determine if the following organizational factors/characteristics represented organizational barriers or facilitating factors while implementing the BFHI achieving the 'Baby-Friendly' designation in your hospital?

	Factor	Barrier	Strategies conducted to overcome barriers	Facilitator	Other remarks
1)	**Leadership**				
	leadership style in Decision-making *(autocratic top-down or participatory decentralized management)*				
	Coordinated BFHI implementation strategy:				
	- Presence of a BFHI facilitator/quality coordinator				
	- Formulation of a BFHI committee				
	- Relationships and collaboration between perinatal units and services *(antenatal services , postnatal services: labour and maternity, neonatal, and pediatric services)*to achieve the shared goals				
	Continuous support (financial and technical) by external partners *(ask for examples)*				
2)	**Philosophy of care at the hospital**				
	Hospital's philosophy of care concerning mother and child services *(hospital's services aim to ensure a safe delivery or promoting the health of mother and newborns by encouraging breastfeeding)*				
	The level of engaging the patient in making informed non-life threatening decisions together with the care provider *(e.g. delivery positioning, feeding patterns, etc…)*				

	Compatibility between BFHI standards and patients' preferences *(e.g. rooming-out at night, rejection of immediate skin-to-skin contact or milk expression)*				
3)	**Human/financial resources**				
	Top-management commitment and support for BFHI *(e.g. personnel, logistics, time, etc…)*				
	Financial support for the costs of BFHI implementation and sustainability				
	Workforce stability at both clinical and management levels *(Turnover rate, shortages, workload)*				
	Workforce qualifications and knowledge *(e.g knowledge concerning breast feeding and practices, presence of lactation and breastfeeding consultants in perinatal units)*				
	Staff attitudes towards the BFHI and commitment				
4)	**Breastfeeding staff training**				
	Utilization of reliable and valid tools to staff education and training needs				
	Planning and designing of breastfeeding training programs for different professional groups associated with BFHI (clinical and non-clinical)				
	Use of innovative strategies to ensure staff's presence and commitment *(paid education time, mandatory training, handouts, e-learning,*				

	interactive training, videos, demonstrations, on-job-training, etc...)				
	Sustainability of orientation and/or training programs concerning the promotion and support of breastfeeding for new staff members in relevant units				
5)	**Hospital Reliance on formula company products**				
	Formulation of a committee to ensure compliance with the Code standards and monitor Code violations at the hospital				
	Setting criteria for calculation of fair market breast milk substitutes (BMS) prices and purchases for medical reasons *(Governmental purchasing systems, sales voucher, etc…)*				
	Hospital's policies and procedures regarding donations of free or subsidized supplies of breast-milk substitutes by infant formula companies and ability to self-purchase of BMS for medical reasons				
	Hospital's policies and procedures concerning the contact of formula companies with mothers/family members and distribution of mother gifts and free samples				
	Presence of ads and promotional materials throughout the healthcare advertising of breast-milk substitutes and other products to the public contradicting with BFHI standards and visibility of breastfeeding or infant feeding written policy and posters				
	Staff attitudes influenced by formula companies through sponsored trips				

	and conventions, free samples, gifts, etc…				
6)	**Infrastructure and routines**				
	Infrastructure and routines influencing hospital's inclusion of mother-friendly care optional domain *(e.g. Presence of male companions in delivery room, etc…)*				
	Infrastructure properties influencing breastfeeding and milk expression practices *(e.g. accessibility to breastfeeding corners, pumps and pumping room)*				
	availability of physical space, routine medical procedures or post-cesarean recovery influencing initiation of breastfeeding and sufficient skin-to-skin contact within minutes of birth, remaining for 60 minutes or longer				
	Physical space and hospital routines influencing 24-hour rooming-in allowing mothers and infants to remain together				
	Visiting-hours policies influencing mothers' privacy needed for skin-to-skin contact after C-sections, milk expression, breastfeeding and time needed for breastfeeding learning				
	Hospital discharge routines and visiting hours influencing time for teaching breastfeeding practices and assisting mothers in breastfeeding initiation and positioning, milk expression, feeding on demand (hunger signs) and communication with supporting groups				

	Breastfeeding environments in neonatal units *(Skin to skin in NICU, rooming in, feeding on demand and milk expression)*				
	Self-appraisal and Feedback mechanisms				
	Follow up and monitoring approach to change *(resources to collect data for determining baseline practices, Assessment of BFHI impacts, self-reassessment and monitoring of post-designation compliance to standards of BFHI)*				
	Integration of a record-keeping System within the existing information gathering system				
	Regular BFHI assessment post designation *(Annual self-assessment/ external assessment every 4 years to maintain the designation)*				

Would you like to add any other factors that encouraged or hindered the implementation of BFHI and achieving the 'Baby-Friendly' designation?

Annex (3): data matrix for hospital 1

#	Factor	Barrier	Strategies conducted to overcome barriers	Facilitator	Other remarks
1	**Leadership**				
1.1	leadership style in Decision-making				
1				1	effective implementation
2				1	smoother implementation
3				1	commitment in implementing the program
4				1	/
5				1	/
6				1	commitment in implementation
7				1	
8					
1.2	Coordinated BFHI implementation strategy:				
1.2.1	Presence of a BFHI facilitator/quality coordinator				
1				1	Critical role in planning, direction, monitoring and following up the implementation
2				1	/
3				1	especially in handling formula companies
4				1	facilitating and organizing the implementation process in all relevant units

5				1	effective implementation and follow up
6				1	constant follow up and monitoring
7				1	/
8					
1.2.2	Formulation of a BFHI committee				
1				1	collaborating with quality coordinator in planning, direction, monitoring and following up the implementation
2				1	providing training and support
3				1	
4				1	in collaboration with quality coordinator
5				1	/
6				1	coordinating the implementation process among different units
7				1	provision of technical support and needed materials (such as handouts)
8					
1.2.3	Relationships and collaboration between perinatal units and services to achieve the shared goals				

1				1	/
2		0	training programs and meetings for all staff in relevant units to accentuate and explain the roles and communication channels among units and different facilities (MCH clinics and hospital) / Baby-Friendly Initiative was adopted by MCH clinics to empower pregnant women with the knowledge and breastfeeding practices		The collaboration between the hospital and MCH (mother and child health clinics) which is responsible for prenatal care was limited to the referral of pregnant women for delivery - the prenatal care did not include adequate breastfeeding promotion and teaching breastfeeding practices challenging the BFHI implementation at the hospital such as rejection of some breastfeeding practices especially among first-time mothers that could be associated with insufficient skills and postpartum anxiety
3				1	complementary roles for implementation clarified by constant meetings for all relevant (clinical and non-clinical) staff from different levels and units

4				1	substantial collaboration between units (example: allowing discharged mothers to sleep in maternity units to breastfeed infants in neonate)
5				1	collaborative implementing approach to attain the 'baby-friendly' designation
6		0	continuous meetings and trainings emphasizing the complementary relationships and roles across different units		insufficient understanding of the integrative roles of different units in implementing the initiative
7				1	/
8					
1.3	Continuous support by external partners				
1				1	the implementation would be difficult without the direction, guidance and support of ministry of health and UNICEF
2				1	/
3				1	financial support from UNICEF to establish breastfeeding rooms, chairs and refrigerator for milk storage

4				1	continuous visits by staff from Nutrition department-Ministry of health to provide the technical support/ without the support of ministry of health and UNICEF, it would be difficult to adopt this initiative due to insufficient resouces
5				1	provision of furniture and equipment needed to establish breastfeeding rooms and materials such as posters and leaflets that facilitate the implementation of BFHI
6				1	furnishing 2 breastfeeding rooms, provision of equipment and devices, and collaborating with administration
7				1	financial support by UNICEF (equipment and devices)
8					

2	**Philosophy of care at the hospital**				
2.1	Hospital's philosophy of care concerning mother and child services				
1		0			the shift in philosophy of care resulted in a substantial increased workload
2		0	breastfeeding counseling starts in the delivery room and completes in post-delivery unit		the shift in philosophy of care resulted in a substantial increased workload (15 deliveries in one shift)
3		0	self-adaptation with changes and workload		increased workload
4		0	group breastfeeding counseling sessions		increased workload
5		0	/		the shift resulted in a nominal increased workload
6		0	Training programs to conduct BFHI-relevant tasks efficiently (minimal time and efforts)		the shift involved more workload and tasks to encourage breastfeeding and same number of staff
7					N/A
8					
2.2	The level of engaging the patient in making informed non-life threatening decisions together with the care provider				
1		0	Breastfeeding encouragement, counseling and support to mothers		Before BFHI , mother had the choice in non-life threatening decisions especially in feeding patterns (Formula feeding was abundant especially

					among working mothers)
2		0	Breastfeeding counseling		/
3		0			few number of mothers refused breastfeeding
4		0	Breastfeeding counseling and persuasion (especially first-time mothers)		especially among mothers with misconceptions about breastfeeding
5					not influential
6					not influential/ (care provider make the decisions)
7					not influential/ (care provider - especially doctors - make the medical decisions)
8					
2.3	Compatibility between BFHI standards and patients' preferences				
1		0	Breastfeeding encouragement, counseling and support to mothers (especially first-time mothers)		rooming-in is obligatory by the hospital but there were some challenges regarding some practices as rejection of immediate skin-to-skin contact, breastfeeding initiation or milk expression due to lack of knowledge especially among first-time mothers (lack of prenatal breastfeeding counseling in

					MCH)
2		0	Breastfeeding counseling		
3		0	approaching mother and her support group (relatives) to help her in some practices		lack of knowledge and skills among mothers concerning breastfeeding practices (e.g. milk expression) - mothers should be prepared in prenatal clinics
4		0	mother support and counseling		rejection of some breastfeeding practices especially among first-time mothers that could be associated with insufficient skills and postpartum anxiety
5					not influential
6		0			the staff didn't encourage such practices/ lack of mothers experience (no prenatal preparation)
7					not influential / mothers tend to follow medical advice
8					
3	**Human/financial resources**				
3.1	Top-management commitment and support for BFHI				
1				1	Dedicating the required time and logistics for training staff and program

					implementation
2				1	
3				1	
4				1	
5				1	
6				1	
7				1	
8					
3.2	Financial support for the costs of BFHI implementation and sustainability				
1					N/A
2					external financial support
3					no financial support for sustainability
4					external financial support for implementation and relatively small financial requirement for sustainability
5					N/A
6					N/A
7					N/A
8					
3.3	Workforce stability at both clinical and management levels				

1		0	staff asked to recruit an additional employee for breastfeeding counseling (not recruited) / self-coping with the additional workload		as a governmental hospital, we suffered from heavier workload compared to private hospitals even before the BFHI, the initiative resulted in additional tasks faced by workforce shortage
2		0	demanding to increase the number of staff in the department (not recruited)		increased workload from the beginning of BFHI implementation till the present time
3					not influential // staff are used to workload
4		0	assigning trained volunteers (guides) for breastfeeding counseling (reducing the burden on staff)		there was a shortage in staff to handle the increased workload by BFHI
5		0	no additional staff were recruited / adaptation by working overtime		increased workload to focus on BFHI implementation
6		0	use of written education material/ volunteers for breastfeeding counseling		increase in workload faced yet staff shortage
7					not influential // BFHI relevant tasks are part of the job responsibilities
8					
3.4	Workforce qualifications and knowledge				

1		0	staff education and training		fair knowledge on BF practices/ absence of lactation specialist
2		0	staff intensive education and on job training		basic theoretical knowledge and lack of skills concerning BF practices
3		0	training - use of handouts as a reference		basic information on Breastfeeding/ some cases sought the help of external breastfeeding consultant
4		0	Intensive training (lectures and on-job-training)		poor knowledge and skills (especially among staff with 2-years diploma)
5		0	staff training and education to standardize breastfeeding practices		unstructured breastfeeding knowledge and practices
6		0	staff-oriented training compatible with staff's level of involvement in BFHI		broad spectrum of breastfeeding knowledge and skills among staff
7					No need for in-depth knowledge as a physician /mother counseling on breastfeeding is part of the job responsibilities of nurses and midwives
8					
3.5	Staff attitudes towards the BFHI and commitment				

1		0	hospital's administration emphasized the role of staff in achieving the 'Baby-Friendly' designation and its positive implication on the staff, hospital, mothers and babies		increased workload and staff shortage lead to staff frustration and lack of devotion to BFHI
2		0	highlighting the positive impact of the BFHI on the hospital and community/ obligatory commitment to the standards/ staff motivation and support		negative attitudes at the beginning of BFHI adoption resulted in refusing to conduct some BFHI tasks
3		0	technical support on how to collect and store expressed breast milk		We at the neonate unit experienced anxiety and were concerned about the potential increase in workload associated with BFHI. Increase in workload included contacting mothers for breastfeeding or breast milk expression, storage of expressed milk, preparation of formulas for some medical conditions as we were used to give babies ready-to-feed formulas
4					not influential (mandatory commitment to BFHI by hospital's administration)

5					not influential / BFHI related tasks became part of hospital's obligatory practices and protocols regardless of our attitude
6		0	Autocratic decision by hospital's administration enforcing staff adherence to BFHI standards		staff resistance to BFHI implementation due to the increased workload
7				1	I was enthusiastic about the the initiative on personal level as it has positive impact on both mothers and babies.
8					
4	**Breastfeeding staff training**				
4.1	Planning and designing of breastfeeding training programs for different professional groups associated with BFHI (clinical and non-clinical) compatible with training needs				
1				1	all clinical staff had a 20-hour training on infant feeding (breastfeeding and lactation practices), procedures to fulfill BFHI standards while non-clinical staff had a brief orientation on BFHI standards according to their role and level of involvement to pursue the 'Baby-Friendly'

					designation
2				1	training helped us to learn how to encourage and support breastfeeding - the core of implementing the initiative - while addressing the postpartum health complications
3				1	the training addressed a major concern regarding the collection and storage of breast milk
4				1	encouraging and supporting mothers to breastfeed newborns in the unit
5				1	The national committee for breastfeeding was responsible for training the members of breastfeeding committee at the hospital and provision of the training materials and handouts. After that, hospital's committee was responsible for training the rest of staff according to the level of BFHI involvement

6				1	Intensive training for clinical staff (mainly nurses and midwives) / brief orientation for the rest of staff (during hospital's general meetings)
7					not influential / General information about the BFHI was provided as the implementation of standards is the responsibility of nurses and midwives
8					
4.2	Use of innovative strategies to ensure staff's presence and commitment				
1				1	lecturing, on-job-training, paid education time
2				1	mandatory training, paid education time
3					paid education time
4				1	paid education time, training location outside the hospital (meals, socializing, new environment)
5				1	mandatory training, paid education time, handouts, on-job-training
6				1	paid education time
7				1	mandatory lecture at the hospital during hospital

					meeting
8					
4.3	Sustainability of orientation and/or training programs concerning the promotion and support of breastfeeding for new staff members in relevant units				
1					not influential/ new staff members appeared to have the knowledge on breastfeeding from their educational backgrounds(colleges) needed to the sustainability of the initiative
2				1	through BFHI-related posters and handouts + on-job-training
3				1	on-job-training
4				1	on-job-training
5		0	periodic follow up with quality coordinator		on-job-training is not enough as inadequate knowledge among new staff may hinder the implementation of the initiative and consequently compromising the 'baby friendly' designation in the future / the quality coordinator must implement continuous intensive trainings for new staff

6		0	/		head nurse is responsible for on-job-training / many new employees seemed to have brief information on the breastfeeding
7		0	/		several new staff members (especially residents, physicians) were not trained or oriented on BFHI standards
8					
5	**Hospital Reliance on formula company products**				
5.1	Formulation of a committee to ensure compliance with the Code standards and monitor Code violations at the hospital1				
1				1	Breastfeeding committee
2				1	
3				1	
4				1	
5				1	
6				1	
7				1	
8					
5.2	Setting criteria for calculation of fair market breast milk substitutes (BMS) prices and purchases for medical reasons				
1				1	Governmental Purchasing system and provision through central warehouses

2				1	Governmental Purchasing system through central warehouses - in some medical cases, BMS are provided from neonate based on a physician's prescription
3		0	unsuitable BMS lead family members to purchase a different formula based on physician's order		A single basic type of formula is provided by the governmental central warehouse / several cases of unsuitable formula
4				1	Governmental purchasing system through central warehouses
5				1	Governmental purchasing and supplying system for public hospitals through central warehouses
6		0	parents purchase physician's prescribed formula		sometimes, the BMS provided by the central warehouse do not fulfill the medical and nutritional needs of newborns
7					N/A, as far to doctor's knowledge, it's forbidden to prescribe or encourage any type of formula in Gyna & obstetrics ward
8					

5.3	Hospital’s policies and procedures regarding donations of free or subsidized (funded) supplies of breast-milk substitutes (BMS) by infant formula companies and ability to self-purchase of BMS for medical reasons				
1		0	after BFHI- there is no need for BMS at the obstetrics unit		before BFHI - free/funded BMS were supplied to the hospital by infant formula companies //
2		0	hospital's commitment to implement the new policies compatible with BFHI standards		only at the beginning of BFHI implementation
3		0	hospital's new policies forbid free or funded BMS/ supply of a basic formula through central governmental warehouse that does not meet all the different medical needs/ provision of equipment and staff training for breast milk and BMS collection and storage		before BFHI - unconditional BMS supply by formula companies according to hospital’s formula specifications (ready-to-feed, several types of formula for different medical conditions) // one type of BMS that requires collection and storage techniques
4		0	BMS are provided by central warehouse// formulas for specific medical conditions are purchased by family members		after BFHI implementation, free BMS supply by infant company was forbidden / the problem is that there is only one type of formula provided - in some cases family members have to purchase different

					prescribed formula
5		0	hospital's commitment to comply with BFHI standards / forbidding any support from formula companies regarding BMS provision and hospital's upgrading		formula companies had fully supported the free supply of different types of formulas as well as provision of hospital's needed equipment
6		0	supply of a basic formula through central governmental warehouse that does not meet all the different medical needs// specific formulas are purchased by family members		donation of different formulas for several medical conditions / funding hospital's upgrading projects and equipment
7		0	after BFHI- there is no need for BMS - only breastfeeding		
8					
5.4	Hospital’s policies and procedures concerning the contact of formula companies with mothers/family members and distribution of mother gifts and free samples				
1		0	determination of the hospital's administration to resist the formula companies		The insistence of formula companies on contacting with mothers and family members
2		0	the breastfeeding committee at the hospital faced the formula companies and insisted to implement the new policies		formula companies refused to accept the new policies and tried to approach mothers especially at the beginning

3		0	the hospital banned any contact with mother or relatives		formula companies were used to contact mothers, give free gifts and BMS supplies for newborns
4		0	constant hospital resistance against formula companies		formula companies were used to contact mothers, distribute free gifts and BMS supplies
5		0	hospital's new policies against contact of formula companies were generalized among all clinical and non-clinical staff (e.g. clinical staff were prohibited from providing mothers any contacting information with these companies, and security banned the entrance of representatives from these companies to enter the hospital)		before BFHI implementation, some hospital's staff (midwives and nurses) gave mothers and relatives the numbers of formula companies for free or at reduced-price of BMS supply or gifts
6		0	the insistence of breastfeeding committee to implement the new policies and combat these companies from approaching mothers		companies constantly distributed free gifts to newborns and free or discounted supplies of BMS for some families (humanitarian cases) as part of companies' social responsibility

7		0	after BFHI implementation, all staff were banned from providing such information		nurses and midwives were used to providing mothers the contacting numbers of company representatives
8					
5.5	Presence of ads and promotional materials throughout the healthcare advertising of breast-milk substitutes and other products to the public contradicting with BFHI standards and visibility of breastfeeding or infant feeding written policy and posters				
1		0	Removal of BMS posters and brochures contradicting with BFHI or breastfeeding promotional materials		
2		0	the breastfeeding committee at the hospital removed all posters from infant formula companies		
3					Not influential // all the promotional materials were removed after adopting BFHI standards
4					Not influential // all posters encouraging formula feeding were removed after putting the BFHI relevant posters (hospital's policy, breastfeeding and infant feeding, etc…)

5		0	after BFHI implementation, the hospital removed all promotional materials contradicting with breastfeeding		
6		0	the breastfeeding committee ordered to remove all the posters encouraging the use of BMS feeding		
7		0	all brochures and posters from formula companies were removed after BFHI adoption		
8		0			
5.6	Staff attitudes influenced by formula companies through sponsored trips and conventions, free samples, gifts, etc…				
1		0	hospital's high commitment to resist the intervention of formula companies set an example for all staff to comply with BFHI standards as well		formula companies developed strong social relationships with staff through gifts, free samples, free trips
2		0	"zero tolerance policy" for collaboration with formula companies		constant free lunches, gifts, formula supply for personal use, etc…
3		0	all staff were obliged to adhere to the BFHI standards / any violation in this area had negative consequences (warning letters, etc..)		most of staff had strong relationships with representatives from formula companies. In addition to the sponsored trips, samples, etc..

4		0	at first, all of workers had to follow the new policies regardless of their attitudes until it became gradually part of the working system		This was a huge challenge for most of staff at the department; as they considered several employees at the formula companies friends
5		0	Top-down decision enforcement approach and disciplinary measures for non-compliance (verbal or written warning, suspension, or dismissal)		the staff had negative attitudes towards implementing this area in particular as they had strong affiliations with formula companies (result of free trips to staff, samples, gifts, etc. …)
6		0	obligatory policy-enforcement and disciplinary actions		staff resistance to change especially at the beginning
7		0	all staff were obliged to adhere to the BFHI standards		It was a major barrier for BFHI implementation as most staff had personal relationships with formula companies (free trips, personal supply of BMS)
8					
6	**Infrastructure and routines**				
6.1	Infrastructure and routines influencing hospital's inclusion of mother-friendly care optional domain				

1		0	/		the multiple occupancy delivery room and high number of simultaneous deliveries hinder the compliance of some domain standards as the presence of companion during labor and delivery/ doing some invasive procedures without medical indications (episiotomy especially for first-time mothers)
2		0	/		the current structure of labor and delivery room (multiple beds) might invade other mothers' privacy while giving birth if companions were allowed in delivery room
3					NA/ most domain standards involve determinants associated with the labor and delivery structure and routines (works in neonate)
4		0	/		crowded multi-bed delivery room does not allow the presence of companions or the movement of mothers and food/drink consumption during labor

5		0	/		the structure of delivery room inhibits the implementation of domain's standards as the presence of companions might risk other mothers' privacy and interfere with some socio-religious determinants (if male) // high number of deliveries at the same time does not facilitate the liberty of mothers during labor and forces clinical staff (obstetrician and midwives) to do some invasive procedures especially for first-time deliveries
6		0	/		can not be implemented (multi-bed room separated by curtains)
7		0	/		might compromise the service delivery and quality if companions were allowed due to the great number of beds at the delivery room
8					
6.2	Infrastructure properties influencing breastfeeding and milk expression practices				
1		0	establishment of multiple equipped breastfeeding rooms		there were no breastfeeding rooms or pumps before the initiative

2		0	equipped breastfeeding rooms with breastfeeding chair and breast pumps		breastfeeding and milk expression while staying in postpartum beds and no pumps for milk expression
3		0	establishment of equipped breastfeeding corner in the neonate unit for breastfeeding and milk expression/storage // collaboration with maternity (labor and delivery) unit to facilitate the accommodation of some discharged mothers to ensure the breastfeeding of newborns in neonate care		after BFHI, we had to use BMS (if there was no stored expressed milk) in some cases in which discharged mothers missed the scheduled times to breastfeed their inpatient newborns because they could not stay at the hospital
4		0			breastfeeding and milk expression in beds (separated by curtains for privacy) / difficulty for discharged mothers
5		0	the project partners supported the provision of breastfeeding beds		some mothers were not comfortbale in breastfeeding/ expressing milk in their beds
6		0	establishment of equipped breastfeeding corners		there were no breastfeeding corners
7		0	establishment of equipped breastfeeding corners		
8					

6.3	availability of physical space, routine medical procedures or post-cesarean recovery influencing initiation of breastfeeding and sufficient skin-to-skin contact within minutes of birth, remaining for 60 minutes or longer				
1		0	the long term solution is to expand the ward (increasing number of beds) // Temporarily, a special bed is set for longer skin-to-skin contact duration (15-60 minutes)		physical space barriers + multiple simultaneous deliveries (only 3 beds delivery room)
2		0			skin-to-skin contact in postpartum care depends on mother's medical condition (if stable for around 15 minutes)
3					NA
4					NA
5		0	assigning one bed for skin-to-skin contact after delivery		insufficient skin-to-skin contact duration (number of beds is not proportionate with the number of deliveries)
6					NA/
7		0	/		huge workload / insufficient skin-to-skin contact (maximum for 15 minutes) even on the assigned bed for skin-to-skin
8					
6.4	Physical space and hospital routines influencing 24-hour rooming-in allowing mothers and infants to remain together				

1				1	no nursery
2				1	no nursery
3		0	collaboration with maternity (labor and delivery) unit to facilitate the accommodation of some discharged mothers at night to ensure breastfeeding as scheduled but not all-time rooming in		no space for mother companionship in neonate unit
4				1	no nursery
5				1	no nursery
6				1	no nursery
7				1	no nursery
8					
6.5	Visiting-hours policies influencing mothers' privacy needed for skin-to-skin contact after C-sections, milk expression, breastfeeding and time needed for breastfeeding learning				
1				1	scheduled visiting hours facilitate milk expression, breastfeeding and learning
2				1	(11 a.m.-2 p.m.) / (4-7p.m.) gives the mothers' privacy for breastfeeding/milk expression
3					Not influential

4		0	asking visitors to step out of the room to give the mother the privacy needed for feeding practices		visitors sometimes don't abide by hospital visitation hourss / complaints of several mothers that they could not breastfeed or express milk
5				1	scheduled visitation hours ensure mothers' privacy for breastfeeding/milk expression/ learning
6		0	involving some visitors as supporters in teaching mothers breastfeeding practices		visitors sometimes don't abide by hospital visitation hour obstructing the provision of technical support
7				1	scheduled visitation hours gives mothers' the privacy needed for breastfeeding/milk expression/ learning
8					
6.6	Hospital discharge routines influencing time for teaching breastfeeding practices and assisting mothers in breastfeeding initiation and positioning, milk expression, feeding on demand (hunger signs) and communication with supporting groups				
1		0	provision of educational handouts/ contacting the hospital in emergencies		normal vaginal delivery (6-24 hours)/ cesarean delivery (2 days) // 6 hours is not always sufficient for learning breastfeeding and milk expression practices

2		0	extra focus on first-time mothers // no discharge before making sure that the mother has breastfed her newborn correctly		normal vaginal delivery (24 hours) but most mothers leave after 6 hours/ cesarean delivery (2-3 days)// lack of breastfeeding knowledge and skills from antenatal clinics especially first-time mothers
3		0	focusing on main breastfeeding practices		insufficient time to deal with both mothers' anxiety motions and lack of breastfeeding knowledge and skills (mothers are not prepared to this experience from antenatal clinics)
4					Not influential
5		0	discharge after making sure that mothers handled the breastfeeding and milk expression practices		lack of breastfeeding knowledge and skills from antenatal clinics
6		0	contacting the hospital/MCH in cases of emergency		insufficient time (mothers are not prepared to this experience from antenatal clinics)
7		0	focusing on main breastfeeding practices		6 hours are not enough for teaching mothers (especially first-time mothers) breastfeeding practices (lack of skills and knowledge from antenatal care)

8					
6.7	Breastfeeding environments in neonatal units				
1					NA
2					NA
3		0	establishment of equipped breastfeeding room for milk expression and storage// collaboration with maternity (labor and delivery) unit to facilitate the accommodation of some discharged mothers to ensure the breastfeeding of inpatient newborn // in some uncontrolled cases - use of BMS		no place for the accommodation of discharged mothers influencing rooming in and feeding on demand which might lead to the use of BMS (if there was no stored expressed milk)
4					NA
5					NA
6					NA
7					NA
8					
7	**Self-appraisal and Feedback mechanisms**				
7.1	Follow up and monitoring approach to change				
1					undocumented monitoring approaches after designation (e.g. on-job monitoring)

2		0			continuous (top-down) follow up (medical director follow up with quality coordinator and heads of units who follow up with staff in their units)
3		0			periodic on-job follow up
4					BFHI standards became part of hospital's procedures and routines
5					periodic monitoring through quality coordinator and unit heads/ BFHI standards became part of hospital's system, procedures and routines
6		0			on-job follow up by head nurse
7		0			there is no specific monitoring tools after designation
8					
7.2	Integration of a record-keeping System within the existing information gathering system				
1				1	the nursing-record has some notes on breastfeeding
2				1	notes in nursing records
3				1	notes on feeding pattern in patient's (new born) medical file

4					NA/ Not aware of any integration of BFHI relevant records
5					BFHI relevant documents were kept during the implementation / after designation, undocumented self-appraisal
6					no record keeping
7					NA/ Not aware of any integration of BFHI relevant records
8					
7.3	Regular BFHI assessment post designation				
1				1	/ did not know but hypothetically (yes)
2				1	/ did not know but hypothetically (yes)
3				1	/ did not know but hypothetically (yes)
4				1	/ did not know but hypothetically (yes)
5				1	external re-assessment to maintain designation
6				1	/ did not know but hypothetically (yes)
7				1	/ did not know but hypothetically (yes)
8					

Annex (4): data matrix for hospital 2

#	Factor	Barrier	Strategies conducted to overcome barriers	Facilitator	Other remarks
1	**Leadership**				
1.1	leadership style in Decision-making				
1				1	staff commitment to policies and BFHI standards
2				1	effective BFHI implementation
3				1	/
4				1	/
5				1	top-down BFHI adoption resulted in a faster and smoother implementation process
6				1	autocratic decision making eliminated the potential hindrance of some staff for personal interests thus leading to a smoother implementation
7				1	Some top level managers were also involved in the care provision process (pediatricians and obstetricians) resulting in a better commitment to decisions
8				1	Even though it was a top-management decision, there was a collaborative implementation approach among staff from all levels
1.2	Coordinated BFHI implementation strategy:				
1.2.1	Presence of a BFHI facilitator/quality coordinator				
1				1	responsible for following up and monitoring staff compliance to BFHI standards
2				1	the continuous presence of BFHI coordinator and members of breastfeeding committee in the

					relevant BFHI units facilitated the daily direction and assurance of proper implementation
3				1	continuous technical support and training to implement BFHI standards properly
4				1	they were the source of information and support during the implementation
5				1	the quality coordinator and breastfeeding committee have a comprehensive understanding of BFHI standards and implementing procedures (technical back up), responsibility for organizing and distributing tasks among staff as well as monitoring the implementation
6				1	the project coordinator and breast feeding committee were responsible for the logistic, administrative and technical support(training) to staff during the implementation process
7				1	/
8				1	handling challenges facing staff during implementation, organizing and conducting awareness campaigns targeting mothers as well as provision of needed materials (such as handouts and breastfeeding leaflets)
1.2.2	Formulation of a BFHI committee				
1				1	/
2				1	/
3				1	/
4				1	in collaboration with quality coordinator
5				1	/

6				1	the project coordinator and breast feeding committee were responsible coordinating the implementation process among different units; each member of committee (also unit head) was responsible for distributing BFHI tasks in the unit among employees as well as supervising and monitoring the implementation and compliance to standards
7				1	/
8				1	collaborating with quality coordinator in planning, direction, monitoring and following up the implementation
1.2.3	Relationships and collaboration between perinatal units and services				
1		0	continuous meetings and trainings explaining the tasks of each unit		lack of knowledge among staff concerning the integrative roles of different units in implementing the initiative
2		0	BFHI orientation for non-clinical staff		mainly among non-clinical units/staff (security, registration clerks, administrative assistants, etc…) especially males
3				1	there was a strong collaboration between prenatal and postnatal units before BFHI adoption, the training highlighted the role of each unit in implementing BFHI standards
4				1	the teamwork among staff in different units towards achieving the BFHI goals was a great facilitating factor
5				1	collaborative implementing approach

6				1	staff rotation (especially nurses and midwives) within different units facilitated the understanding the different BFHI roles of different perinatal units
7				1	job rotation and training programs for staff in relevant units demonstrated the communication channels among units to achieve the initiative goals
8				1	the provision of antenatal care in the hospital supported the efficient implementation of BFHI in postnatal care (empowering mothers with breastfeeding knowledge and practices reduced the breastfeeding counseling burden on staff in postnatal care)
1.3	Continuous support (financial and technical) by external partners				
1				1	provision of the needed furniture and equipment (TVs, breastfeeding chairs, breast pumps, refrigerators, etc….) - technical support and guidance during implementation and appraisal // the hospital is committed to adopt BFHI regardless of external support
2				1	establishment of breastfeeding rooms and role in staff training
3				1	support to prepare breastfeeding rooms with equipment (chairs and pumps) - staff training and technical support- provision of printed BFHI posters and leaflets demonstrating hospital's policy and breastfeeding practices
4				1	provision of materials such as BFHI and breastfeeding posters and leaflets that support the implementation of BFHI

5				1	unaware of any external support
6				1	financial and technical support by UNICEF (equipment and devices)
7				1	Nutrition Department at Ministry of Health/ UNICEF had a role in establishment of equipped breastfeeding rooms and provision of technical support and training for breastfeeding committee // the hospital is committed to adopt BFHI with or without external support
8				1	provision of printed BFHI posters and leaflets of hospital's policy and breastfeeding practices/ establishment of breastfeeding rooms
2	**Philosophy of care at the hospital**				
2.1	Hospital's philosophy of care concerning mother and child services				
1				1	hospital's services had encouraged breastfeeding since the establishment. The BFHI standards represented a comprehensive framework for all units to promote breastfeeding
2				1	hospital's philosophy of care aims to provide a safe perinatal care which already includes breastfeeding promotion practices
3				1	Encouraging breastfeeding was informally included in hospital's care policies
4				1	hospital's maternity care already had several practices to support and ensure breastfeeding before discharge to promote the health of mother and baby
5				1	the philosophy of care already aims at ensuring safe delivery and promoting the health of both baby and mother, thus compatible with the standards of the BFHI

6				1	Several employees stated that the standards of the initiative has been implemented in the hospital before BFHI adoption
7				1	hospital's services had already encouraged breastfeeding since the establishment. The BFHI standards formulated a defined framework for all units and services
8				1	Encouraging breastfeeding is part of perinatal care for healthy mother and child
2.2	The level of engaging the patient in making informed non-life threatening decisions together with the care provider				
1		0	mother counseling and support by obstetricians, pediatricians and other staff (before and after birth) to encourage making healthier delivery and feeding choices		Before BFHI , mother had the choice especially in deliveries and feeding patterns (several mothers chose formula feeding and cesarean deliveries)
2		0	some - small proportion of - mothers still refuse breastfeeding after counseling and providing all the information about the benefits of breastfeeding		mothers have the choice to in making some decisions (eating during labour, labour position and activity, feeding patterns)

3					Not influential/ even though mothers have the choice, they tend to accept the advice of health professionals
4		0	individual counseling and support to encourage the proper delivery and breastfeeding suitable for the case		especially among mothers with misconceptions about breastfeeding and delivery
5		0	staff promotion practices usually convince mothers to breastfeed (only one case per week refuse to breastfeed after counseling)		mothers tend to make decisions mainly concerning feeding patterns (several used to choose formula feeding)
6					N/A (administrative position - unaware of such medical details)
7		0	breastfeeding counseling by health professionals and support groups (mainly relatives)		small proportion of mothers refuse breastfeeding
8					not influential/ mothers tend to make the healthiest decision for their babies
2.3	Compatibility between BFHI standards and patients' preferences				

1		0	skin-to-skin contact encouragement and support to mothers , prenatal counseling and preparation for some practices (using pumps for milk expression)		rooming-in is obligatory by the hospital but there were some challenges regarding some practices as rejection of immediate skin-to-skin contact, breastfeeding initiation or milk expression (even in using pumps)
2		0	perinatal counseling and support to prepare mother for the upcoming experience and emphasizing the benefit of some practices (skin-to-skin contact, immediate breastfeeding, and rooming in)		some first-time mothers reject some practices due to insufficient skills and postpartum anxiety and stress
3					not substantially influential (especially among mothers experienced previous or multiple deliveries)
4		0	mother support and counseling		small proportion of first-time mothers refuse some practices (especially skin-to-skin contact and milk expression)

5		0	letting the mother to take some rest until she calms down, then they try to encourage her after a while (sometimes it's too late)		some mothers tend to refuse skin to skin contact or immediate breastfeeding due to exhaustion after labour and delivery mixed with anxiety emotions
6					N/A (administrative position - unaware of such medical details)
7		0	prenatal mother counseling and follow up after delivery		/
8					nominal incidence (mothers tend to follow medical advice)
3	**Human/financial resources**				
3.1	Top-management commitment and support for BFHI *(e.g. personnel, logistics, time, etc…)*				
1				1	top-management were also key care providers (pediatricians, obstetricians, etc…) dedicating the required time and logistics for training staff and program implementation
2				1	
3				1	
4				1	
5				1	key care givers are also senior managers (they were the initiators to such initiative)
6				1	
7				1	
8					

3.2	Financial support for the costs of BFHI implementation and sustainability				
1					N/A
2					external financial support
3					no financial support for sustainability
4					external financial support for implementation and relatively small financial requirement for sustainability
5					N/A
6					N/A
7					N/A
8					
3.3	Workforce stability at both clinical and management levels *(Turnover rate, shortages, workload)*				
1				1	the hospital is characterized by very low turnover rate at the hospital and considerable workload after BFHI implementation (limited number of deliveries per day)
2				1	stable workforce, considerable number of deliveries (120-130 per month)- facilitated the implementation of initiative
3					not influential on workload // several standards were adopted before the BFHI implementation
4		0	recruitment of an additional nurse in the morning shift (higher risk of crowdedness at the maternity ward)		The hospital implemented many BFHI standards. However, after the initiative, some tasks consumed longer time for individual breastfeeding teaching and mother support creating a challenge especially when the ward is full

5		0	recruitment of an additional nurse in the morning shift (4 instead of 3)	1	stable workforce sustained the implementation of BFHI after designation // increased workload to focus on BFHI implementation some cases require extra time and effort for breastfeeding promotion and support (especially first-time mothers and mothers with misconceptions)
6		0	recruitment of additional staff		Some employees complained about the increased workload
7		0	staff recruitment in pediatric and maternity wards	1	very low turnover rate (some staff have been in the hospital for over than a decade) which ensured the implementation of BFHI until now / however, BFHI implementation increased workload
8					not influential // BFHI relevant tasks are part of the job responsibilities
3.4	Workforce qualifications and knowledge				
1		0	staff education and training / some mothers or family relatives contact external breastfeeding consultant in cases of lactation difficulties		relatively influential/ absence of lactation or breastfeeding consultant// basic theoretical knowledge and lack of skills concerning BF practices
2				1	staff already had basic information on the importance of breastfeeding but the BFHI training focused on updating practices and skills to promote and support breastfeeding
3				1	"I have developed knowledge and skills concerning breastfeeding during 5 years of working experience at the hospital" the BFHI

					training facilitated the standardization of breastfeeding support practices at the ward
4		0	Intensive training (lectures and on-job-training)		There is no specialized lactation consultant at the hospital // most staff had basic skills and knowledge concerning breastfeeding practices. And so, an external lactation specialist was consulted for several cases of breastfeeding difficulties
5				1	The knowledge and skills on breastfeeding were attained from my educational and professional experiences. However, these skills were unstructured, the BFHI training came to develop and organize these skills in a unified framework
6				1	Most staff have good educational qualifications and long working experience in the hospital which facilitated the implementation of BFHI
7				1	The fundamental knowledge and skills relevant to breastfeeding practices possessed by the majority of staff provided a constructive basis making the BFHI training more effective.
8					even though the intensive BFHI training mainly targeted nurses and midwives since the mother counseling on breastfeeding is part of their job responsibilities, Obstetricians and doctors must have in-depth knowledge and skills on breastfeeding practices as they represent a trusted source of information for mothers
3.5	Staff attitudes towards the BFHI and commitment				
1					not influential / the staff were already used to the workload as several BFHI related tasks were already part of hospital's obligatory practices and protocols

2				1	the majority of staff were motivated to implement the initiative as they recognized its positive impact on the hospital and community
3				1	Even though the adherence to BFHI standards was obligatory but top management commitment and involvement inspired the positive attitudes among the rest of staff
4		0	obligatory commitment to the standards/ constant managerial emphasis on the impact of the health professionals on the health of mother and baby		conflicting (positive and negative) attitudes among staff toward the initiative at the beginning (some experienced anxiety and distress regarding the potential increased workload)
5		0	trying to provide technical support to integrate the new BFHI related tasks without overburdening employees/ recruitment of staff		there were some negative attitudes at the beginning of implementation (complains about the increased tasks)
6					not influential / Autocratic decision by hospital's administration enforcing staff adherence to BFHI standards

7				1	positive attitudes (top management commitment to the initiative motivated staff involvement and the staff were already used to the workload as several BFHI related tasks were already part of hospital's obligatory practices and protocols)
8				1	the initiative and its positive impact on both mother and baby motivated me as a caregiver to comply with its standards
4	**Breastfeeding staff training**				
4.1	Planning and designing of breastfeeding training programs for different professional groups associated with BFHI (clinical and non-clinical) compatible with training needs				
1				1	all the relevant (clinical and administrative) staff had a training proportional to their role in the initiative (clinical staff had an intensive training on standards and practices, while non-clinical had a general orientation to BFHI
2				1	the National Committee for Breastfeeding was mainly responsible for designing the BFHI training content according to the needs of the hospital, Training members of breastfeeding committee at the hospital who trained the rest of staff on how to protect and support breastfeeding
3				1	an intensive training program on BFHI standards and infant feeding (breastfeeding and lactation practices) to encourage and assist mothers to breastfeed
4				1	The head nurse of post-delivery was responsible for training the staff on procedures to support breastfeeding while providing postpartum care

5				1	comprehensive training on BFHI practices in labour ward supporting mothers in skin-to-skin contact, breastfeeding initiation, etc… \
6					not influential/ as an administrative employee, I had a brief orientation on BFHI (during hospital's general meetings)
7				1	the national committee for Breastfeeding assisted the breastfeeding committee at the hospital in planing and designing customized training programs for different professional groups at the hospital. then, the members of hospital's committee were responsible for training the rest of staff according to their role in implementing the initiative (20-hour training for clinical staff, general orientation for relevant non-clinical staff with indirect role)
8				1	doctors were oriented to the BFHI in general as the implementation of standards is the responsibility of nurses and midwives mainly , the focus of our training was to encourage breastfeeding, restrict the prescription of BMS for medical conditions only, and regulate doctors' relationships with formula companies
4.2	Use of innovative strategies to ensure staff's presence and commitment *(paid education time, mandatory training, handouts, e-learning, interactive training, videos, demonstrations, on-job-training, etc...)*				
1				1	mandatory training, handouts, lecturing, on-job-training
2				1	mandatory training, handouts, interactive lectures, on-job-training, training outside the hospital
3				1	mandatory training, handouts, interactive lectures, on-job-training
4				1	mandatory training, handouts, interactive

					lectures, on-job-training, training location outside the hospital (meals, socializing, new environment)
5				1	interactive training, handouts
6				1	mandatory training , paid training time
7				1	Training of trainers (National committee for breastfeeding trained members of hospital's breastfeeding committee), mandatory, paid education time, interactive training, handouts, on job training
8				1	interactive discussions during hospital's mandatory general meetings
4.3	Sustainability of orientation and/or training programs concerning the promotion and support of breastfeeding for new staff members in relevant units				
1				1	BFHI standards and related tasks is integrated to hospital's orientation program for new staff+ on-job training
2				1	interns already have knowledge on breastfeeding from their educational backgrounds and professional experiences from other hospitals implementing BFHI/ through BFHI-related posters and handouts + on-job-training
3				1	BFHI integration to hospital's orientation program
4				1	the orientation program includes BFHI +on-job-training
5				1	new staff/interns are trained BFHI related tasks during orientation
6				1	head staff are responsible for on-job-training and orientation

7			/	1	BFHI is part of hospital's orientation program for new staff+ on-job training (few staff were recruited after baby-friendly designation, low turnover rate)
8					unaware of any modification in orientation protocol after designation
5	**Hospital Reliance on formula company products**				
5.1	Formulation of a committee to ensure compliance with the Code standards and monitor Code violations at the hospital				
1				1	Breastfeeding committee
2				1	
3				1	
4				1	
5				1	
6				1	
7				1	
8				1	
5.2	Setting criteria for calculation of fair market breast milk substitutes (BMS) prices and purchases for medical reasons *(Governmental purchasing systems, sales voucher, etc…)*				
1				1	policies prohibit hospital's purchase of BMS even for medical conditions / physician's prescribed formula for medical conditions are purchased by family members from outside the hospital
2				1	
3				1	ensured the adherence to the 'code' BFHI standards
4				1	
5				1	
6				1	

7				1	prevented any possible violation
8				1	
5.3	Hospital’s policies and procedures regarding donations of free or subsidized (funded) supplies of breast-milk substitutes (BMS) by infant formula companies and ability to self-purchase of BMS for medical reasons				
1				1	hospital's policies forbid any support from formula companies regarding BMS free donation or funding hospital's upgrading projects even before the BFHI implementation
2				1	
3				1	
4				1	
5				1	
6			hospital's values forbid the acceptance of any support/donation from formula companies that might compromise the best medical advice for mother/baby - hospital's slogan is "patients first"	1	the formula companies used to constantly offer funded supplies of BMS and upgrading projects
7				1	
8				1	
5.4	Hospital’s policies and procedures concerning the contact of formula companies with mothers/family members and distribution of mother gifts and free samples				
1				1	hospital's policies forbid any contact of formula companies with mothers/family members even before the BFHI adoption

2				1	
3				1	
4				1	
5				1	
6				1	
7		0	after BFHI adoption, utilizing of strict policy enforcement approaches and imposing zero-tolerance policies for any violation		despite the fact that the policies forbidding the contact of formula companies with mothers existed before the initiative, there were several violations from staff members
8				1	
5.5	Presence of ads and promotional materials throughout the healthcare advertising of breast-milk substitutes and other products to the public contradicting with BFHI standards and visibility of breastfeeding or infant feeding written policy and posters				
1		0	the breastfeeding committee at the hospital removed all posters from infant formula companies		
2		0	all the promotional materials were removed after adopting BFHI standards		

3		0	Removal of BMS posters and brochures contradicting with BFHI or breastfeeding promotional materials		
4					Not influential // all posters encouraging formula feeding were removed after putting the BFHI relevant posters (hospital's policy, breastfeeding and infant feeding, etc…)
5					Not influential // the breastfeeding committee ordered to remove all the posters encouraging the use of BMS feeding
6		0	all the posters encouraging the use of BMS feeding were removed by the breastfeeding committee		
7		0	all brochures and posters from formula companies were removed after BFHI adoption		
8					Not influential
5.6	Staff attitudes influenced by formula companies through sponsored trips and conventions, free samples, gifts, etc…				
1				1	hospital's management (especially doctors) negative attitude toward formula companies set an example for all staff to comply with BFHI standards despite their personal attitudes

2				1	staff members were already used to hospital's management opposing attitudes toward formula companies
3				1	even though some staff members had strong relationships with formula companies, hospital's policies prohibited any collaboration/ no tolerance policies for any violations
4		0	once the BFHI was adopted, these workers were obliged to stop BMS promotion and disciplinary measures were imposed for non-compliance (verbal or written warning, suspension, or dismissal)		very few clinical workers used to encourage mothers on using BMS due to personal relationships with representatives from formula companies , gifts, personal supply of BMS or any other compensation
5					not influential/ staff members were already compatible with hospital's attitudes toward formula companies
6		0	all staff were compelled to adhere to the BFHI standards/ disciplinary measures for violations		few cases of policy violation among some staff members (promoted BMS related to personal affiliations with formula companies)
7				1	all staff were forced to comply with BFHI standards regardless of their personal perspectives

8				1	senior management resistance to formula companies forced the rest of staff members to adhere to BFHI standards
6	**Infrastructure and routines**				
6.1	Infrastructure and routines influencing hospital's inclusion of mother-friendly care optional domain				
1				1	even before the BFHI implementation, hospital's infrastructure and routines facilitated the possibility of allowing companions (males or females) to support mothers during labour and birth as well as the movement of mothers and food/drink consumption during labor
2				1	several procedures to fulfill the domain's standards were implemented before the BFHI adoption
3				1	most standards and procedures were already conducted
4				1	hospital routines included the presence of companions during labour and delivery for emotional support
5				1	single delivery rooms permitted the companionship (husbands or fathers)/ the limited number of deliveries per day comparing to private hospitals facilitated mothers' movement and food consumption as well as avoiding the invasive procedures if not necessary
6				1	hospital's infrastructure (seperated delivery rooms), protocoles and low number of daily deliveries facilitated the adherance to standards of the domain such as companionship and liberty to move/eat during labour and delivery as well as avoiding invasive procedures

7				1	the materinty unit was initially constructed since 1990s to facilitate several standards of the domain (companionship, etc..)
8				1	the hospital's infrastructure and routines attempt to optimize the comfort of mother during labour and delivery (presence of companions for support, vaginal delivery wiithout invasive procedured if not medically indicated,etc …)
6.2	Infrastructure properties influencing breastfeeding and milk expression practices				
1		0	the external partners of the inittiative supportive the establishment of equipped breastfeeding corners		the hospital didn't have any breastfeeding/pumping rooms before the initiative
2		0	external support for breastfeeding rooms and breast pumps		the hospital didn't have any breastfeeding/pumping rooms before the initiative
3		0	establishment of equipped breastfeeding corner to be used for all mothers including discharged and mothers from outside the hospital		

4		0	external support to establish breastfeeding room for all mothers (hospitalized, discharged, some mothers from outside the hospital)		breastfeeding occurs for hospitalized mothers in their beds (beds in multiple occupancy maternity rooms are seperated by curtains for privacy)
5		0	establishment of equipped breastfeeding corners		discharged mothers experienced difficulties in breastfeeding their inpatient newborns
6		0	external support for breastfeeding rooms and breast pumps		
7		0	the external partners supported the establishment of breastfeeding corners equipped with breastfeeding chairs and pumps		
8		0	establishment of equipped breastfeeding corners		mothers used to breastfeed in their beds at the hospitals (seperated by curtains)
6.3	availability of physical space, routine medical procedures or post-cesarean recovery influencing initiation of breastfeeding and sufficient skin-to-skin contact within minutes of birth, remaining for 60 minutes or longer				

1				1	few number of daily deliveries and separate delivery rooms facilitated the sufficient skin-to-skin contact (30 minutes in delivery room / 30 minutes in maternity bed)
2				1	hospital's infrastructure (seperated delivery room) and low number of daily deliveries facilitated immidiate breastfeeding and private skin-to-skin contact
3				1	skin-to-skin contact in delivery room depends on type of delivery (around 15 minutes in vaginal delivery cases and 20-30 in cesearean)
4					works in postpartum delivery / not familiar with the procedures in delivery room
5		0	in these cases , the period is for around 5-10 minutes in delivery room and 30 minutes in maternity room		difficulty in ensuring a sufficient skin-to-skin contact duration (60 minutes) if the ward was crowded
6					not aware of such medical details
7				1	skin-to-skin contact (approximately 30 minutes in delivery room) and breastfeeding initiation within the first 30 minutes
8				1	I try as much as possible to ask midwives to put the newborn on mother's chest after cutting the umbilical cord for skin-to-skin contact and breastfeeding initiation
6.4	Physical space and hospital routines influencing 24-hour rooming-in				
1				1	no nursery
2				1	no nursery
3				1	no nursery

4				1	no nursery
5				1	no nursery
6					unaware of medical details
7				1	no nursery
8				1	no nursery
6.5	Visiting-hours policies influencing mothers' privacy needed for skin-to-skin contact after C-sections, milk expression, breastfeeding and time needed for breastfeeding learning				
1		0	asking visitors to step out of the room for breastfeeding and learning/ or sometimes involving some visitors as supporters in teaching mothers breastfeeding practices		It was difficult to provide technical breastfeeding support for mothers in the presence of many visitors
2		0	asking visitors to step out of the room to give the mother the privacy needed for feeding practices		no scheduled visiting hours might obstruct mothers' privacy for breastfeeding/milk expression

3		0	asking visitors to step out of the room to give the mother the privacy needed for feeding practices		several mothers have complained that they could not breastfeed or express milk due to presence of visitors
4		0	asking visitors to step out of the room to give the mother the privacy needed for feeding practices		invading mother's privacy for completing skin-to-skin-contact, breastfeeding and milk expression
5		0	asking visitors to step out of the room to give the mother the privacy needed for feeding practices		presence of people (open visitng hours) obstructed completion of skin-to-skin contact in their beds after delivery
6					unaware of the implications of such policies
7		0			open visiting hours and presence of several people at the same time hindered milk expression, breastfeeding and learning
8					Not influential/ usually few number of visitors
6.6	Hospital discharge routines influencing time for teaching breastfeeding practices and assisting mothers in breastfeeding initiation and positioning, milk expression, feeding on demand (hunger signs) and communication with supporting groups				

1		0	feeding practices education continues in outpatient clinics after discharge / contacting the hospital in emergencies		normal vaginal delivery (6-24 hours)/ cesarean delivery (2 days) //but some mothers ask for discharge after only 6 hours which is not always enough for learning feeding practices and the antenatal clinics get crowded sometimes (limited time for breastfeeding counseling especially first-time mothers)
2				1	cesarean delivery (2 days)/ normal vaginal delivery (24 hours) // no discharge before making sure that the mother has breastfed her newborn correctly
3				1	breastfeeding counseling lasts after discharge as the mother visits the hospital several times to follow up in the outpatient clinics (pediatrics and obstetrics)
4				1	cesarean delivery (2 days)/ discharge for normal vaginal delivery is usually after 24 hours / few mothers ask for discharge after only 6-8 hour butno discharge before making sure that the mother has breastfed

					her newborn correctly // asking to contact the hospital in case of any difficulties
5				1	cesarean delivery (2 days) // hospital's discharge routines for vaginal delivery is after 24 hours to make sure that mothers handled the breastfeeding and milk expression practices // and in case of any difficulties after discharge mothers are asked to contact the hospital
6				1	cesarean delivery (2 days)/ normal vaginal delivery (6-24 hours)// there has been no complaints so far regarding the discharge policies

7				1	most mothers receive counseling in antenatal clinics to be prepared for the upcoming experience in terms of knowledge and skills - hospital's discharge routines is usually after 24 hours (no mother is dischaged bedore making sure that she mastered the feeding practices) - breastfeeding support and counseling continues after discharge when visiting the outpatient clinics (obstetricts and pediatrics)
8				1	24-hour discharge routine for normal delivery is usually enough for breastfeeding support as counseling on feeding practices starts in antenatal clinics during pregnancy, continues in labour and maternity units and then breastfeeding is followed up in outpatient clinics after discharge
6.7	Breastfeeding environments in neonatal units				
1					no neonate unit in hospital
2					NA
3					NA

4					NA
5					NA
6					NA
7					NA
8					
7	**Self-appraisal and Feedback mechanisms**				
7.1	Follow up and monitoring approach to change				
1		0			continuous (top-down) follow up (medical director follow up with quality coordinator and breastfeeding committee (heads of units) who follow up with staff in their units)
2		0			informal on-job monitoring approach after designation
3		0			periodic on-job follow up
4		0			informal tools to monitor compliance to standards that includes follow up by heads of units and doctors ask mothers on feeding practices during morning rounds
5		0			periodic monitoring by management through BFHI coordinator and unit heads/

6					Unaware of such tools but BFHI standards became part of hospital's procedures and routines
7		0			before the adoption of the initiative, senior management (doctors) at the hospital discussed the BFHI standards and current practices which represented a baseline data for the adoption and implementation. Then gradually, BFHI standards became part of hospital's system and routines. after designation, informal monitoring by getting feedback from BFHI coordinator and breastfeeding committee and mothers during morning rounds
8					getting feedback from staff(nurses) and mothers during morning rounds
7.2	Integration of a record-keeping System within the existing information gathering system				
1				1	the medical file of each newborn has some notes on feeding patterns (time and duration of breastfeeding)
2				1	notes in the medical file

3				1	nursing notes on feeding pattern in patient's (new born) medical file
4				1	the medical file of new born has sections on breastfeeding (if the baby was breasstfed between shift)
5					
6					NA/ Not aware of any integration of BFHI relevant records
7					no special forms were designed / integrated after designation
8					NA/ Not aware of any integration of BFHI relevant records
7.3	Regular BFHI assessment post designation				
1				1	the hospital has to do an annual self-assessment to ensure the continuous implementation of the initiative, but I think that having a periodic external assessment will boost the commitment of both management and staff to keep the designation
2				1	/ did not know but hypothetically (yes)
3				1	/ did not know but hypothetically (yes)
4				1	/ did not know but hypothetically (yes)

5					1	external reassessment to maintain designation
6					1	they are planning to condunt an annual self-appraisal
7					1	/ did not know but hypothetically (yes)
8						