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Special theme: Expanded Integrated Baby Friendly Hospital Initiative Update in Egypt

Issued by Mother and Child Friendly Care Assication Aexandria, ***(Registration no. 2538-2010)***

The Journal is in line with the Mother & Child Friendly Care Association's mission to support the rights of children to be healthy, receive adequate nourishment and care and achieve optimum growth and development in accordance to the Convention of the Rights of the Child and the rights of their mothers at childbirth and while breastfeeding and their Families to a fulfilling parenthood experience.

This issue is dedicated to the memory of the Youth Uprise in The Tahrir Square (Freedom square) in the centre of Egypt of the 25th of January, 2011 and the inspirations it gave to every Egyptian.

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List of Abbreviations

ANC	Antenatal Care
APW	Ante-partum wards
BFHI	Baby Friendly Hospital Initiative
BF	Breastfeeding
C-S	Cesarean Section
Sp	Spinal anesthesia
DHS	Demographic Health Survey
EBM	Evidence Based Medicine
EBM	Expressed Breastmilk
EDHS	Egypt Demographic Health Survey
ELCA	Egyptian Lactation Consultant Association
FM	Family Member
GSIYCF	Global Strategy for Infant and Young Child Feeding
HCP	Healthy Children Project
HIV	Human Immune Deficiency Virus
ICMBMS	International Code of Marketing Breastmilk Substitutes
IEC	Information, Education and Communication
IMF	Infant Milk Formula
IYCF	Infant and Young Child Feeding
KMC	Kangaroo Mother Care
LBW	Low Birth Weight
M&B	Mother and Baby dyad
MCH	Maternal and Child Health
M&E	Monitoring and Evaluation
MF	Mother Friendly
Mo	Mother
M.S.	Maternity Staff
Mn	Mean
NICUs	Neonatal intensive care units
NS	Neonatal staff
NB	Newborn
NBF	Not breastfeeding
OPDs	Out Patient Departments
PHC	Primary Health Care
P. Staff	Pediatric Staff
PHC	Primary Health Care
Pp	Post partum
SIYCF	Strategy for Infant and Young Child Feeding
STS	Skin-to-Skin care
Suppl.	Supplements
T.O.	Top Officials
UNICEF	United Nations International Children Emergency Fund
WHA	World Health Assembly
wtd.	Weighted
WHO	World Health Organization
List of abbreviations of regions	
LE	Lower Egypt
UE	Upper Egypt
Eg	Egypt
Alx	Alexandria Governorate
At	Assuit governorate
Aw	Aswan Governorate
BH	Beheira Governorate
Cai	Cairo Governorate
DK	Dakahlia Governorate
DM	Dameitta Governorate
Is	Ismailia Governorate
Lx	Luxor Governorate
PS	Port Saed Governorate
Qn	Qena Governorate
Sg	Sohag Governorate

Preface: Impressions of Motherhood

Breastfeeding is an act of true motherhood, a touching and moving relationship that has inspired many an artist and poet to express the glory of the act. Analysis of breastfeeding ideology in different cultures reflects the inappropriate commercial strategies in Egypt that undermine the beauty and intimacy of breastfeeding:

Hoodfar in 1986 who was conducting a qualitative research in women's perspectives about breastfeeding quoted: 'the society does not consider breastfeeding beautiful – one of the youngest working mothers who had completed high school and considered herself modern pointed out that: women appear in so many films; they appear as daughters, wives, lovers, mothers, and even pregnant mothers. They hold children and they give birth, but had anyone ever seen a mother breastfeeding in a film?' The author responds negatively. This quotation reveals that these women's perceptions and values are heavily influenced by media, which is the main channel to the outsIde world as pointed out by Esterik (1992).

The question that is frequently asked is why is breastfeeding and motherhood in jeopardy? If women need support – what is the support they lack?

- *Supporting women begins with the information a girl receives as a child through her formal education, the media she is exposed to and the environment in which she lives. Abuse, lack of appropriate information and distorted images of motherhood are a major hindrance in developing the correct images of motherhood for the girl child.*
- *With marriage, this holy event that bonds a man and a woman 'to love and to cherish in sickness and in health' is portrayed by the media as 'choosing and using' rather than the concept of 'sharing and caring'. The bride is often reduced to a means of reproducing the male's family legacy. They are few choices given to a young bride as she decides on how to live her married life. She needs to be content that she was blessed by matrimony, and compromise, sacrifice and give herself up to this new life, rather than use it to nurture and expand her womanhood capacities beyond girlhood to flourish and grow with love and giving.*
- *With pregnancy, a woman goes through the phobia of disfigurement and helplessness. The community and media make her an undesirable, ugly image unworthy of love or empathy. What rights do pregnant women have in this so called 'modern' society? What public rights does she have? Yes, there is always a seat in public transport for an elderly or parking space for a handicapped, but never consideration for a pregnant woman or mother with a baby.*
- *Finally in the pains of labour a womn reaches out to seek support. Her hands clutching the sheets of the beds, rather than a warm hand of her partner who is denied to be with her, her eyes lift seeking support from heaven – si there no mercy , no human caring empathetic touch, word or look. No, they are all turned to the other end of the operating table, waiting to stick needles and blades and pushing those intervening thighs out of their way! Again she is denied her right to make her choice at birth and to share in this event. This is*

contradistinction to traditional births where the woman is supported to lead her birthing process with tender loving care.

- *The baby arrives, the woman is neglected, as her baby is ruthlessly taken away from her side, her eyes and denied her mere touch! She is not congratulated on her courage, but rather for her baby's arrival. The tone of the voice that announces the sex of the baby differentiates the boy from the girl even if the words were said in latin! 'It's a boy' comes with ecstasy, while it's a girl' comes in a low accepting tone. A gentle voice dammed by the noises of others, reminds then of the Quranic text that curses those who undermine a female newborn.*
- *The stab to her motherhood still goes deeper as she is drugged and reeled into a ward away from this newcomer who actually belongs beside her! She awakens to find herself in pain and exhaustion, ashamed to seek help, feeling more helpless, In her humiliation she refuses to face her baby. She resents her who has exposed her to such helplessness, 'take it way' she cries in torment, fatigue and despair.*
- *The right to empathetic words, a concerned touch or an encouraging look, continue to be neglected in every mother. Is it not possible for the doctor or the nurse to lift their eyes beyond the birth canal' to see a mother rather than a patient lying before them.*
- *Her rebellion simmers as she feels the warmth of her baby. They communicate feelings of love and build their own haven of love within the strong walls of the fortress of motherhood.*

This book is about reclaiming the rights of women to amore fulfilling child birthing experience. It is about the role of health service delivery systems in reconciling the reproductive roles of women in our society – to defeat the beliefs and traditions and modern malpractices that have undermined their rights to breastfeed their babies and to learn from the positive experiences of natures course in childbirth guided by evidence based medical practice.

Section I

A Review of The Baby Friendly Hospital Initiative

I.1. Insights into Baby Friendly Initiatives

Background

'Every woman who gives birth has the potential resource of breast milk for her child'. Through the Baby Friendly Hospital Initiative (BFHI), means have been found to empower women everywhere to make use of this resource, thus fulfilling their right to breastfeed. *'Few other interventions return such high dividends in health, self-reliance and child development, and almost none at such low cost*'.

At the same time, Baby-friendly practices also ensures that women who do not breastfeed receive support for the feeding options, based on the AFASS criteria, (acceptable, feasible, affordable, safe and sustainable) and are supported in early continuous contact that promotes good bonding. Human milk remains the first and prime safe option for feeding human.

The "Ten Steps to Successful Breastfeeding" are the foundation of the WHO/UNICEF Baby Friendly Hospital Initiative (BFHI). They summarize the maternity practices necessary to support breastfeeding. The BFHI was developed to promote implementation of the second operational target of the Innocenti Declaration:

*'Ensure that every facility providing maternity services fully practises all ten of the **Ten Steps to Successful Breastfeeding** set out in the joint WHO/UNICEF statement 'Protecting, promoting and supporting breastfeeding: the special role of maternity services' and aspects relevant to health facilities of the third operational target: Take action to give effect to the principles and aim of all Articles of the International Code of Marketing of Breastmilk Substitutes and subsequent relevant World Health Assembly [WHA] resolutions in their entirety.'*

The Innocenti Declaration was adopted by the Forty-fifth World Health Assembly in May 1992 as part of Resolution WHA 45.34.

The Global Strategy on Infant and Young Child Feeding has reaffirmed

the importance of maternity care practices in promoting, protecting and supporting breastfeeding as the foundation for optimal infant nutrition (WHO, 2003).

In 2005 the Innocenti Declaration was reaffirmed and by January 2007, the Baby-Friendly Hospital Initiative was encouraged to be revived according to the Expanded Integrated BFHI Update 2006, adopted by UNICEF and WHO. The BFHI provides a framework for addressing a major factor which has contributed to the erosion of breastfeeding - that is, maternity care practices that interfere with breastfeeding.

Until practices improve, attempts to promote breastfeeding outside the health service will be impeded. Although inappropriate maternity care cannot be held solely responsible for low exclusive breastfeeding rates, appropriate maternity care is a prerequisite for improving them as been shown by the PROBIT study (Kramer et al., 2001)**.**

Promotion of breastfeeding through health service delivery

In Egypt during the mid-decade goals of the 1990s, UNICEF had assisted the Ministry of Health & Population, Primary Health Care sector (MOH-PHC) in making about 122 hospitals serving mothers and babies throughout pregnancy and childbirth, 'Baby Friendly' by implementing the Ten Steps to Successful Breastfeeding and ending the distribution of free and low cost supplies of infant milk formula. In response to the need to revive the Baby Friendly status in these previously designated health facilities, along with encouraging the remaining health facilities in the country to become Baby Friendly, a baseline assessment of the Baby Friendly Hospital Initiative (BFHI) was conducted in some of the previously designated Baby Friendly heath facilities in 12 governorates in the country.

The study identified priority areas for improvement as follows:

- Out of the Ten Steps, those that need the most effort include Step 1 (policy), Step 2 (training) and Step 4 (early breastfeeding initiation through first hour skin-to-skin). The remaining steps need improvement and strengthening.

- Distribution of free and low cost supplies of infant milk formula is common, violating the principles of the International Code of Marketing of Breastmilk Substitutes 'the code'. Many of the areas in the code need corrective action especially orientation to the articles in the code and monitoring these articles to detect and report violations.

- Mother Friendly practices need vast improvements especially in relation to having a companion at birth, giving the woman her preference of pain relief and position of choice at labor and not taking her baby away from her immediately after delivery.

- More support is needed for breastfeeding by intercepting programs such as immunization and family planning programs.

- Interventions to increase community awareness through media campaigns and improve the knowledge and practices of mothers by targeting family members and friends through encouraging formation of networks of breastfeeding support groups at district and governorate level.

It is recommended that revival and expansion with the UNICEF/WHO newly updated, expanded and integrated BFHI update, should take the community approach in implementation of Baby friendly initiatives through small scale interventions using the WHO District Health System and UNICEF area-based development, to ensure continuity of care, in order to reinforce the warm chain of breastfeeding support. This should be supported by government authorities, based on the compelling needs for achieving the millennium development goals (MDGs) for reducing infant mortality, malnutrition and for women health care throughout the country and the region.

Promotion of breastfeeding at community level

Health facility policies that determine birth practices influence the success of breastfeeding initiation as well as continuity during the first six critical months after birth. Evidence based medical research shows that optimum practices influence health status, growth and development of

children and maternal health as well as the bonding relationship of the mother-baby dyad. Thereafter environmental factors set in and innate mechanisms of lactation are governed less by birth practices and more by family support network, traditional beliefs and practices. Psychosocial and personal factors including high self-esteem greatly influence continuity. For instance mother's own determination to continue to breastfeed can sometimes be an important factor in the duration of breastfeeding especially in cases such as mothers working outside of home, or when attempting relactation after discontinuation of breastfeeding due to sickness or separation from the baby.

Effective communication skills employed by health workers can improve mother's self-efficacy and are key in the management of breastfeeding difficulties. The extent to which health staff possess and use skills with mothers to overcome breastfeeding difficulties may be reflected in whether these mothers continue to breastfeed or not. Misconceptions, malpractices are in many cases the result of misinformation from the marketing campaigns of manufacturers and distributors of breastmilk substitute products including infant milk formula, baby foods, bottles and artificial teats. Finally, media plays an important role in influencing culture and changing behavior and beliefs and can be an effective positive force when used appropriately.

Chariyeva et al. (2008) proposed strategies to promote breastfeeding through health education in Upper Egypt; using the health behavioral theory they based their strategies on Egypt's current status of infant feeding practices. We also recommend adding the mother friendly component at birth as follows:

a. Provision of facility practices that support mother friendly

The Egypt demographic health survey conducted in 2005 and 2008 shows that more than half of the birth in rural Upper Egypt (UE) are carried out at home (58.6%). Three quarters of deliveries in Lower Egypt (LE) and one half of deliveries in UE are carried out in any public or private health facility. Reasons for not delivering in a health facility ranged from absence of poor quality of services in 8.1% to being not necessary in 62.5% and not customary in 21.5%. The average time spent in the facility

after birth is 0-5 hours in 40% of deliveries. Only 23% stay for at least 2 days (EDHS, 2005).

b. Provision of support for exclusive breastfeeding at birth

The Egypt demographic health survey conducted in 2005 and 2008 shows that more than half of newborns in both Upper Egypt (UE), and Lower Egypt (LE) are given something other than breastmilk (prelacteals) during the first three days of life before or with breastfeeding. The most common supplemental drinks are water and other non-milk drinks such as herbal drinks. At 2-3 months 41% of mothers are exclusively breastfeeding their babies and declining to 15.7% by 4 to 5 months of age.

b. Support of timely breastfeeding initiation

According to the Ten Steps to Successful Breastfeeding, it is recommended to initiate breastfeeding within a half-hour of birth through skin-to-skin contact between mother and baby. Only 37.5 % of children in the urban communities and 46.2% in rural Egypt initiate breastfeeding in the first hour. In UE 50.1% of babies in the rural and 40.7% in urban versus 36% in urban and 42% in rural LE are put to the breast within one hour of birth. The percentage of children who are breastfed within one day of birth is 79.2% and 85.9% in Lower and Upper Egypt respectively (DHS Egypt, 2005). The results are very similar in the EDHS for 2008. Skin-to-skin is not addressed by EDH surveys, but when done is only for a few minutes and not as stated by the BFHI Step 4: 'continuous uninterrupted up to first breast feed'(Abul-Fadl & Shawky, 2008).

c. Supporting exclusive breastfeeding for the first six months:

The mean duration of exclusive breastfeeding is 1.7 months and 1.9 months in UE and LE respectively which is much lower than the recommended six months. Percentage of exclusively breastfed children is much lower than percentage of ever breastfed children, and it decreases with the child's age. Thus, 65.6 % of children under two months, 41.3% of 2-3 months old children, and only 15.7% of 4-5 months old children are exclusively breastfed.

Mean duration of predominant breastfeeding, i.e. when children receive only non-milk liquids in addition to breast milk, is 4.9 months in Upper Egypt (4.0 in urban and 5.3 in rural areas) and 4.1 months in Lower Egypt (3.7 in urban and 4.2 in rural areas). Sickness of baby or mother, pain in the nipple and necessity to work are the most common reasons behind introduction of drinks or food before 6 months in LE and UE (Abul-Fadl & Shawky, 2008). Herbal tea is the most common supplement given to under six months babies (about 66%) followed by artificial milk (about 33%). About 64% of mothers in Lower Egypt and 43% of mothers in Upper Egypt think that their child needs food in the first six month (Abul-Fadl & Shawky, 2008).

Increasing the rates of breastfeeding initiation and duration of exclusive breastfeeding is a compelling public health goal by the Primary Health Sector in Egypt. Evidence suggests that formally structured, behaviorally oriented counseling and ongoing support by clinicians and other health care providers are associated with increased rates of breastfeeding initiation and continuation. Studies also suggest, however, that both obstetrician-gynecologists and pediatricians lack confidence in their skills to support breastfeeding, do not have adequate training in breastfeeding management, and are skeptical of the benefits of breastfeeding over formula feeding for infants.

The American Academy of Pediatrics and the American College of Obstetricians and Gynecologists recommend that clinicians counsel mothers about breastfeeding initiation and continuation and be knowledgeable about the basics of lactation and the role of supplementation. Health workers and community support groups are encouraged to support mothers to exclusively breastfeed from birth to six months through counseling and offering mothers information about the benefits of breastfeeding to herself and her baby and skills and practices needed to continue to breastfeed exclusively including the skills of positioning and attachment at breast, expression and storage of breast milk and practices on how to increase milk supply.

Expanded, Integrated approach to Baby Friendly Communities

In 2009, the BFHI has been updated to promote expansion and integration of BFHI in the community, to make Baby friendly primary health care centers, workplaces and expand to make provinces, districts and governorates Mother and Baby Friendly. This concept will promote the warm chain of breastfeeding support by strengthening the hospital and community breastfeeding promotion activities for achieving universal *Mother and Baby friendly* status in the country.

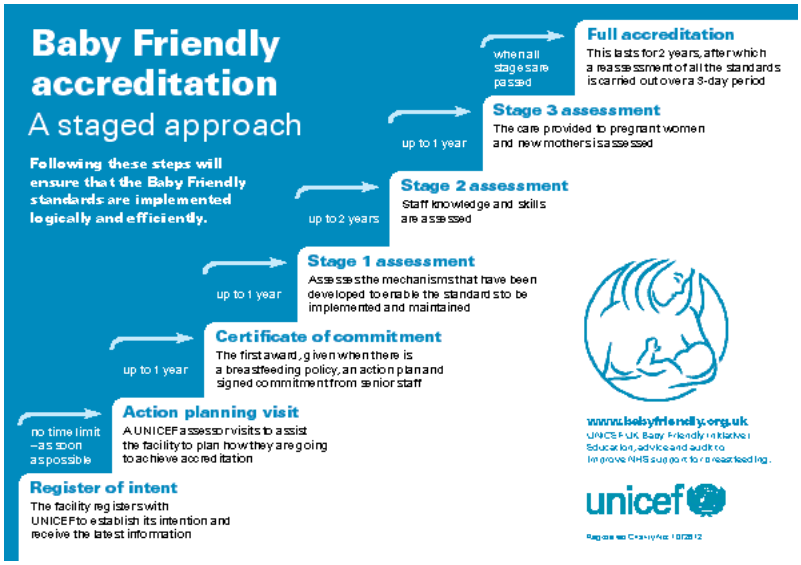
Staged approach to implementation of Baby Friendly Initiatives

Since the assessment process of all maternity health facilities to become designated as Baby friendly was tedious and costly, UNICEF-UK has proposed the 'staged approach' to making health facilities Baby Friendly as seen the following diagram. In this method, hospitals are assessed over three stages: *the first* for implementing 'step 1' and planning for training, infrastructure and policy changes, *the second* for implementation of training and monitoring systems (in which staff are interviewed by assessors) and *the third* is for implementation and change of practices (once the monitoring indicates hospital has achieved global criteria, assessor team are invited and mothers are interviewed).

Becoming designated as Mother Baby Friendly involves meeting all the requirements set by the Global criteria (see annex attachments). The designation process is conducted by an assessment team. Once the hospital or facility is ready, it invites the assessment team (from the designating body). It receives a certificate of commitment if it fulfills any stage and becomes designated and receives an award if meets all criteria until reassessed later on. A monitoring is installed by the hospital to document sustainability.

The Baby-friendly awards and plaques

- **Designation posters are available at UNICEF offices.**
- **Countries can use the Picasso Maternity Poster or a local image.**
- **Plaques should include both the designation date and date when reassessment is needed. Reassessment at least every 3 years is suggested.**



- **A ceremony is usually held to recognize all the hard work of hospitals designated.**
- **Hospitals should be encouraged to monitor themselves to sustain progress made.**
- **Reassessment is determined by the local authority responsible for promoting breastfeeding in the country.**

I. 2. Global Impact of BFHI on Breastfeeding

Between Steps 3 (that address antenatal care), step 4 (for intrapartum care) and step 10 (for postnatal care), the Baby friendly Hospital Initiative (BFHI) is a proven platform for achieving continuity of care. It is the warm chain maternity services set for a safer motherhood and childhood, regardless of demographics, annual number of births, acuity, provider mix or culture of the patient population.

The BFHI program is an organized accessible resource with a set of WHO/UNICEF tools, tailored to guide implementation, monitoring, assessment and reassessment of health facilities around the world providing health and medical care for breastfeeding mothers and their babies.

The Baby-Friendly Hospital Initiative revised set of training and assessment materials are freely available from the UNICEF and WHO web sites and include:

Section 1: Background and Implementation

Section 2: Course for hospital decision-makers

Section 3: "20 hour" course for maternity staff

Section 4: Hospital Self-Appraisal & Monitoring

Section 5: External Assessment & Reassessment (this is available only by request from local UNICEF office in the country).
http://www.unicef.org, http://www.who.org

I. 2.1. Worldwide Baby Friendly Experiences

Between the launching of the Baby-Friendly Hospital Initiative (BFHI) and the year 2009 around 30,000 facilities worldwide had been officially assessed and designated as "Baby-Friendly". This major achievement is contributing to increases in breastfeeding initiation and duration as well as decreases in morbidity and mortality in every region. This is the

world's first major initiative for breastfeeding to cut across all regional, linguistic, economic and political boundaries. It is estimated that over a million health workers have received in-service training through BFHI, using WHO/UNICEF materials available in all UN languages and many national languages.

The number of Baby Friendly hospitals is expected to rise sharply with the momentum initiated by UNICEF and WHO towards making all hospitals and maternity centers meet the Global Criteria for becoming designated as Baby friendly.

How is BFHI expected to impact global health?

Statistics from around the world indicate the positive outcomes associated with successful implementation of the Ten Steps to Successful Breastfeeding:

In the United States of America, breastfeeding initiation rates were compared at Boston Medical Center before 1995, during 1998, and after 1999; when Baby-friendly policies were in place. Maternal and infant demographics for all 3 years were comparable. The breastfeeding initiation rate increased from 58% in 1995 to 77.5% in 1998 to 86.5% in 1999. Infants exclusively breastfed increased from 5.5% in 1995 to 33.5% in 1999 (Phillip et al, 2001). There are currently 76 hospitals designated as Baby friendly in the USA, and roughly 3000 hospitals and birth centers are eligible for the award.

In China, after 2 years of BFHI implementation, exclusive breastfeeding rates have doubled in rural areas and increased from 10% to 47% in urban areas.

In Cuba, exclusive breastfeeding rates rose from 25% in 1990 to 72% in 1996, before and after BFHI implementation.

In the Belarus, the PROBIT study included 17,000 mother-infant pairs followed up over a 12 months' period form birth. They compared 15

Baby friendly supported hospitals with 16 hospitals that were not designated as Baby friendly. Exclusive breast-feeding rates, breastfeeding continuity rates and risk of gastrointestinal infections, as well as atopic eczema were significantly increased but not respiratory infections (Kramer et al., 2001).

In Switzerland, Merten et al. (2005) reported on breastfeeding practices among a sample of over 3000 women delivering in 145 Swiss hospitals. They found that exclusive breastfeeding and breastfeeding duration were significantly longer in women giving birth in hospitals that had a high degree of compliance with the *Ten Steps to Successful Breastfeeding*. They concluded that the overall increase in exclusive breastfeeding rates in Switzerland since 1994 is partially due to the increasing number of Baby friendly birth facilities in the country.

In Turkey, a comparative study conducted in a Baby friendly hospital in Turkey demonstrates a significant increase in breastfeeding duration into the second year of life after implementation of the BFHI by 1.5 times (Duyan et al., 2007). As such 205 Turkish hospitals have received the Baby friendly award. There are 816 hospitals in Turkey with maternity wards and 56% births are conducted in Baby friendly Hospitals. There is at least one Baby friendly Hospital in 62 out of Turkey's 81 provinces. Health centers, districts and provinces are being encouraged to become Baby friendly. Eight provinces are certified as being Baby friendly and a further ten will be certified this year. Turkey's Minister of Health is committed to increasing exclusive breastfeeding rates and certifying all hospitals as Baby friendly in 2004.

In the Middle East and North Africa (Mena) region, UNICEF reports that there are 489 Baby Friendly hospitals in Iran, 141 in Tunisia, 51 in Oman, 30 in Sudan and 29 in Syria, 16 in Morocco, 12 in UAE, 8 in Saudi Arabia, 6 in Bahrain, 4 in Jordan and 2 in Kuwait. No Baby

friendly Hospitals are reported in Yemen, Libya, Qatar Algeri and Djoubouti.

In Egypt, over 122 hospitals in the early 1990s were designated as Baby friendly. In the baseline survey the regression in practices over the past decade indicates a lack of mechanisms to sustain implementation given the high turn over rate of staff within the health facilities. The MOH in Egypt has taken action in 2003 to institute the BFHI as one of the criteria for the accreditation of hospitals by the Quality Assurance Department in the MOH. The revised updated tools of accreditation include this as a requirement for completion of the accreditation process.

In the Middle East, Egypt has made the most progress since 1990 in saving the lives of children under five, according to the eighth annual State of the World's Mothers Report issued by Save the Children, a United States-based global independent humanitarian organization. Egypt was one of leading countries in the region to adopt and implement the WHA resolution (54) for promoting exclusive breastfeeding for six months instead of 4-6 months in its primary health care system as a national policy. Egypt has also doubled its exclusive breastfeeding rate in a period of 5 years after the adoption of the control of subsidized IMF

BABY FRIENDLY AWARD

The Savings in cost and expenditure by BFHI

The health care system can benefit a great deal by implementing the Ten Steps by reducing staff time, medications and infant milk formula purchases. The latter alone costs the health care system in Egypt millions of foreign currency. The cost of feeding one baby by formula in an Egyptian setting averages the equivalent of the average income of a middle class family. It is calculated that if exclusive breastfeeding rates would rise from 17% to 50% this would save the country 140,000 US dollars of medical care due to extra visits for illness, medication and hospitalizations. In addition when extrapolated to the number of deliveries and use of unsubsidized infant milk formula and complementary goods it would save annually up to 500,000 dollars or L.E. 2.7 million, which is still an underestimate given the rising inflation rates over the past decade and pending economic recession.

In Manila, the Philippines, the Dr. Jose Fabella Memorial Hospital has been a maternity hospital for 75 years. It averages 90 deliveries a day. In 1986, the hospital introduced innovative policies and procedures that promote, protect, and support breastfeeding and has a rooming-in policy that has saved the hospital P6.5 million.

In England and Wales, it has been estimated that the National Health Service spends £35 million per year in treating gastroenteritis in bottle-fed infants. For each 1% increase in breastfeeding at 13 weeks, a savings of £500,000 in treatment of gastroenteritis would be achieved.

In India, national production of breast milk by all mothers in India for the children they were breastfeeding at the time of the estimate was about 3944 million liters over 2 years. If the breastmilk produced were replaced by tinned milk, it would cost 118 billion Rupees. If imported, the breast-milk substitutes would cost 4.7 million USD.

In the USA, comparative health care costs of treating breastfed and formula-fed babies in the first year of life in a health maintenance organization (HMO) showed that when comparing health statistics for 1000 never breastfed infants with 1000 infants exclusively breastfed for at least 3 months, the never breastfed infants had: 60 more lower respiratory tract illnesses, 580 more episodes of otitis media, and 1053 more episodes of gastrointestinal illnesses. In addition these babies had 2033 excess office visits, 212 excess hospitalizations and 609 excess prescriptions. These additional health care services cost the managed care system between $331 and $475 per never-breastfed infant during the first year of life (Ball and Wright, 1999).

Globally studies show that health facilities participating in BFHI programs can reap benefits; from savings to the health care systems and customer satisfaction by meeting the needs of mothers and babies.

Less than two decades have passed since the declaration of BFHI through the Innocenti Declaration in 1991, during which time an immense amount of evidence from research has shown the effectiveness of this intervention in improving health outcomes and health care systems around the world. Is it not time to change and to move from *facts* to *action*, towards a *Baby friendly* world?

"Baby friendly hospitals towards a baby friendly world",

James Grant

I. 2.2 Continued Education in Lactation Medicine

In Egypt implementation of the Ten Steps for BFHI designation is currently one of the of the quality standards for ***accreditation of hospitals*** providing maternity services. The Ministry of Health in Egypt is committed to make accreditation universal throughout its health care system. This is both an achievement and an opportunity for reclaiming the health and quality of life of our children. The time for change has come- let us do it now.

In Egypt, the Egyptian Lactation Consultant Association (ELCA) studied the effect of certification as International Board Certified Lactation Consultant (IBCLC) on the quality, efficiency and cost of health service provided. They compared two cohort groups of mother-baby pairs: one was exposed to non-IBCLC qualified clinicians and the second were exposed to health care providers qualified as IBCLCs. The study showed a significant reduction in the consumption of infant milk formula and increase in relactation rates with the groups exposed to IBCLC qualified clinicians. The workers recommend that IBCLC certification should be a criterion for clinicians working in pediatric outpatient clinics supporting breastfeeding mothers, especially those presenting with malnutrition or medical problems (ElTaweel et al, 2010). As a result ELCA has taken the lead to conduct intensive lactation management educational programs for physicians for almost one decade with the rising number of qualified IBCLCs from only two IBCLCs in 1999 to 240 in 2010.

However the introduction of a specialty termed 'Lactation Management" needs to be promoted to become accepted by other health professionals and integrated in medical care services as a specialty in health are systems.

The AICPD Professional Diploma in Lactation Medicine (MD-CLS):

The certificate program is provided by the Arab Institute for Continuing Professional Development (AICPD) of the Arab Union in Dar ElHekma in Egypt jointly with the Mother And Child Friendly Care Association.

The Diploma program aims at improving infant feeding practices by equipping medical professionals with the clinical skills guided by evidence based practice in lactation management and infant feeding for leadership in breastfeeding promotion and support practices and

programs in the region as a Medical Certified Lactation Specialist (MD-CLS).

The contents of this program have been derived from the updated text of the Commission on Accreditation of Allied Health Education Programs (CAAHEP), the International Lactation Consultant Association (ILCA), and the International Board of Lactation Consultant Examiners (IBLCE) for appropriate standards of quality for educational programs in Lactation and Breastfeeding to ensure that this training program reflects the most up-to date practice standards for professional in ***Lactation Medicine and Infant Feeding***.

Program aim and structure:

To provide candidates with sufficient knowledge, skills and attitudes, essential for leading and managing Lactation management and breastfeeding promotion programs in different types of healthcare organizations and services. The program is organized as three main courses:

A- Basic Sciences& Skills in Lactation Management:

Includes modules in Anatomy of Lactation in Mother and infant; Physiology of Human Lactation, Biochemistry and Immunology of Human milk; Psychology and Sociology of Lactation; Communication and Counseling; Documentation and Communication Skills; History Taking and Assessment Skills.

B- Clinical Lactation Management:

Includes modules Growth and Development; Infant Feeding and Malnutrition; Prenatal and Perinatal Breastfeeding Management; Problem-Solving Approach in LM; Newborn & Child Breastfeeding Challenges; Maternal Breastfeeding Challenges; Skills for Use of Techniques and Devices.

C- Leadership in Lactation Management:

Includes modules in Public Health; Epidemiology and Research; Research legislation; Policy and Programs; Professional Ethics & Responsibility in Practice; Leadership and Teaching; Management of Baby friendly health services and communities.

I.3. Scoring Models for Assessing Risk in Health Service Delivery

This scoring model is devised by the authors of this document in order to simplify reporting of the results given the multiplicity of providers and mothers interviewed and varying number of staff in each group in the original UNICEF/MOH BFHI survey. The criteria used to derive the score for each step measured was adapted from the UNICEF assessment guidelines for BFHI (UNICEF-WHO, 2006).

Purpose of the scoring model

The primary purpose of formal risk assessment of health programs is prevention and consequent reduction of pregnancy and childbirth morbidity and mortality through early identification and intervention (Wall, 1988) The purpose of the model in this study is to identify the steps at risk and criteria within each step that needs to be addressed. Also to identify the regions mostly at risk of poor practices as these will be reflected on the health indicators of this community.

Validation of the scoring model in use

Selection of criteria for a predictive model relate primarily to the characteristics and requirements of the BFHI assessment tool devised by UNICEF. In this study, the model was based on responses obtained from staff in maternity wards, pediatric and neonatal staff and staff in primary health care. These were balanced out with responses obtained from mothers i.e. for each step the number of responses given by mothers were adjusted so as to be equal to those obtained from staff. Since the criteria measured for staff involved processes and thereby exceeded those measured for mothers. Hence it was necessary to adjust the scores given to mother responses using weighted scores (Cambell et al, 1995, Fletcher, 1997, Feldman, 2007).

The validity of the scoring system used was assessed by extrapolating the mean scores obtained from responses from mothers and staff and

overall corrected score (using weighted score for mothers) with breastfeeding patterns of mothers in the relevant region from mothers with babies less than 24 months of age (de Oliveria et al., 2003, Rosenberg et al., 2008).

Conversion of the survey data into the scoring model used

In this report we have identified key criteria for each step and presented them in two collective tables: one for the staff responses and another for mother responses after transforming the percent distribution then calculating the mean percent and transforming it into a score. Criteria derived from mothers' responses were corrected through a factor only when they were ***less*** than those criteria derived from staff responses. In this conversion process the factor of correction= number of criteria measured by staff / number of criteria measured from mother responses. This factor was used to reconstruct mother score into a weighted score.

Table (3): The percent distribution substituted by the calculated score as follows:

Frequency distribution (Percent)	Score	Interpretation of score into gap and needs
0	0-1	Absent: Needs to be implemented
1-19	1-2	Broken (or damaged) process: needs Corrective action (fixing)
20-39	2 -3	Incomplete process: needs upgrading
40-59	3 -4	Inadequate process: needs improvement
60-79	4 -5	Adequate but needs strengthening
80-99	5	Adequate and needs continuous quality control measures*

A facility is labeled with a score of 'Excellence' if there it has demonstrated innovative interventions beyond BFHI expectations

The scores for each step are derived by calculating the mean percent score of the criteria assigned to each step. This allows comparison between governorates. The mean percent distribution is transformed into a score. This is done to simplify the digits used for comparison purposes.

Statistical analysis for validation of mean scores

The mean scores were statistically analyzed to compare the mean scores obtained from responses of maternity, pediatric and primary health care staff with those obtained from the mother responses using the paired t-test of significance. There was a significant difference between the responses of the former and the latter. Hence, weighting of the mother scores against staff scores by the equation mentioned above resulted in no significant difference between both set of score for each step (when applicable i.e. Steps 3-10 and scores for code compliance, complementary feeding and mother friendly) where at $P>0.05$. The mean set scores for Ten Steps for the 12 governorates where then extrapolated to the community breastfeeding practices.

Using scores to assess needs and develop plans

The next step is to use the scoring model in order to identify needs and develop recommendations for action for each of the Ten Steps developed by the facility. These actions should be integrated with mother friendly practices, code implementation and complementary feeding, monitoring infant feeding data and quality of medical care services. The following table is suggested as a prototype for quality teams working towards improvement of their process in their health facility:

Risk Criteria identified	**Causes for defects in process**	**Solutions**	**Needs**	**Recommended action (plan)**

The final step was to compile observations in a summary table in order to grade the level of performance of each governorate. Each level can be given a color and this can be used by the governorates in order to monitor their status by moving from one color to the other as they progress in their activity to make their hospitals and practices baby friendly.

The BFHI monitoring using colored stickers to reflect score attained, trends and designation status: This is suggested to be done as follows whenever colored stickers are available. Also a sign to indicate trends and designation status (committed or certified facility) can be useful to be added inside the color code as follows:

Level of performance	Suggested color code	To indicate Trend*	To indicate Designation status **:
Needs implementation (0)	White	* -ve or +ve	* 0 or ------
Corrective action (1)	Yellow		
Needs upgrading (2)	Orange		
Needs improvement (3)	Red		
Needs strengthening (4)	Black		
Quality measures (5)	Green		

*** (If down from previous add a -ve sign unto colored square. If Up from previous level add a +ve sign).**

**** Circle the site if received BFHI award or underline by Interrupted line if committed (visited by team and on the way to become Baby friendly.**

The colored stickers can also be placed on the banners of the hospitals, hospital policy display posters, badges of staff and others. Such ideas are derived from total quality management, so they can be developed and expanded further.

I.4. Criteria for Assessing Expanded Integrated BFHI Implementation

The criteria presented were adpated from the Updated BFHI Global Criteria for assessing maternity facilities and expanded and integrated to include criteria for pediatric and primary health care (PHC) providers' practices serving breastfeeding mothers and their babies. Criteria were derived for each of the Ten Steps, code compliance, mother friendly practices, support of exclusive breastfeeding and complementary feeding based on staff and mother responses as well as perceived quality of services by mother. The criteria do not cover HIV, since it is not a major concern in the country at present.

1. Status of the Ten Steps for BFHI.

Step 1: criteria assessed include:

Top officials report and confirm that:

- Health facility has a drafted policy.
- Health facility has a committee for supporting breastfeeding or BFHI.
- Committee includes representative of all the departments that serve mothers and children.
- Drafted policy for the hospital that promotes breastfeeding is available.
- Policy covers the Ten Steps to successful breastfeeding and to protect breastfeeding.
- Policy is available so that all health staff and mothers can see it and go back to it.
- There is a mechanism for disseminating this policy.

Maternity staff report that they:

- Received orientation about Ten Steps
- Are aware of the update about early initiation through first hour skin-to-skin (STS).

Pediatric and PHC staff report that they are:

- Aware and report to the Breastfeeding Committee in their facility.
- Made aware of the breastfeeding policy and the Ten Steps.

Step 2: criteria assessed include:

Maternity staff report that they:

- Received any training in LM over past 5 yrs.

Pediatric staff report that:

- Received training in LM in past 5 years.
- Received clinical training in Lactation.
- Received training in assisting with early breastfeeds.
- Received training in procedure of milk expression.
- Maternity staff knowledge about management of 5 breast conditions**.**

Step 3: criteria assessed include:

Maternity staff in antenatal care (ANC) report that:

- Inform mothers of benefits of breastfeeding.
- Inform mothers how to breastfeed after birth**.**

Pregnant women and mothers repot that they were:

- Informed by staff in the antenatal clinics (*or mother support groups linked to facility*) about: 1- Early initiation, 2- Importance of exclusive breastfeeding at birth, 3- Exclusive breastfeeding for **6** months, 4- Birthing practices that facilitate breastfeeding.
- Informed about benefits of first hour skin-to-skin (STS).

Step 4: criteria assessed include:

Maternity staff report that:

- Assist in First breastfeed within one hour of delivery.
- Encourage breastfeeding in the first hour after delivery in labour ward.
- Aware that the practice of one hour of STS can reduce the need for analgesia in postpartum.
- Assist skin-to-skin in delivery room until first breastfeed.
- Encourages STS in their own private practice outside this health facility.

- Encourage mothers with caesarean delivery (spinal) to hold baby STS to breastfeed.
- Explain to mothers before going to the labor room about the procedure of STS care.

Mothers report that they are:

- Encouraged by staff to breastfeed immediately after normal delivery or caesarean section.
- Assisted to skin-to-skin immediately after normal vaginal delivery (NVD).
- Assisted to hold her baby STS immediately after recovery in cesarean-section deliveries.

Step 5: criteria assessed include:

Maternity staff report that they:

- Show mothers how to position baby at their breast.
- Show mothers how to attach their baby to their breast.
- Teach mothers how to massage their breast and express their milk if their baby is unable yet to suckle.
- Observe that baby is breastfeeding correctly within the first 6 hours after birth.
- Assist mothers who have difficulties in breastfeeding
- Assist mothers with difficulties to express breast

Neonatal staff report that they:

- Instruct a family member who brings preterm to the unit to inform mother to begin expressing her milk within 6 hours of delivery.
- Instruct mother to express her milk 6-8 times a day.

Primary Health Care (PHC) staff report that they:

- Assess and observe a breastfeed to ensure correct positioning and attachment before or at 6 weeks' visit.

Mothers report that staff in the maternity ward and NICU:

- Guided her through a breastfeed before discharge to ensure adequate attachment and positioning.

Step 6: criteria assessed include:

Top Officials report that:

- Have a list of acceptable medical indications for feeding infant milk formula.

Maternity staff report that they:

- Encourage women after birth not to give any fluid or drink to the baby except her own breastmilk (unless medically indicated).

Pediatric and Neonatal staff report that they:

- Verify any medical indication by evidence-based medical practice.
- Do not prescribe infant milk formula (IMF) to breastfeeding mothers admitted with a sick baby (with no medical indication) during their stay or at discharge
- *Confirm that babies in the neonatal intensive care unit (NICU) are given only Breastmilk.*
- Help mothers with sick babies to increase their milk supply or/relactate near discharge.
- Educate mothers who are not breastfeeding due to acceptable medical reason on how to prepare safe formula (privately).
- Admit mothers who are not breastfeeding in a separate ward.

Mothers reportand confirm that maternity and NICU staff:

- Encouraged her to initiate breastfeeding the baby with no prelacteals or supplements given to babies.
- Discouraged and warned her not to offer prelacteals

Step 7: criteria assessed include:

Maternity staff report that they:

- Do not separate the newborn baby from the mother for more than one hour unless medically indicated.
- Do not allow family members to take newborn baby away from mothers.
- Do not allow newborn to be away from mother over night.
- Encourage the baby to remain in a cot near mother all day and night.

Neonatal staff report that they:

- Allow mothers to spend as much time during the day with their babies in the NICU.

- Encourage extended STS care or Kangaroo mother care (KMC) in the NICU.
- Explain to mother with baby in NICU the importance of holding baby STS.

Mothers report that staff in maternity and NICU wards:

- Did not take away her baby from her after delivery.
- Kept baby with her over 24 hours or allowed her to have access to her baby in NICU (24/7).
- Guided her if discharged before 24 hours to keep baby with her day and night

Step 8: criteria assessed include:

Maternity staff report that they:

- Encourage mothers to breastfeed as frequently as possible in the early days after delivery.
- Place no restrictions on the duration of the breastfeed at each breast.
- Instruct mothers to wake the baby to feed if baby sleeps for more than 3 hours.

Pediatric and PHC staff report that:

- Do not decrease or limit duration of BF of sick babies.
- Encourage the mother to feed her baby in response to feeding cues.
- Assist mothers with sick babies to increase their milk supply or/relactate near discharge.

Mothers report that staff in the maternity wards and NICU:

- Guided to baby's cues in early feeds.
- Instructed her not to restrict frequency or duration of a breastfeed.
- Instructed her not to restrict night feeding.
- Instructed her to increase the frequency during illness and increase duration of breastfeeding with sick or preterm baby and during convalescence from any sickness.

Step 9: criteria assessed include:

Maternity staff report that they:

- Prohibit breastfeeding mothers to offer the newborn any bottles with artificial teats or nipples.
- Prohibit mother to offer the newborn any pacifiers.
- Explain to mothers the hazards of these products.

Neonatal pediatric and PHC staff report that they:

- Inform mothers (and her family members) of the hazards of artificial teats or nipples.
- Caution mothers against giving their baby a bottles or pacifiers if she complains of problems with sleep at night.
- Caution mothers against giving their baby a bottles or pacifiers if she complains of 'milk not enough'.
- Caution mothers against giving their baby bottles or pacifiers if she complains of her baby refusing to breastfeed.
- Advise and show mother alternative ways of soothing her baby by increasing STS care .
- Feed expressed breast milk (EBM) by cup or spoon, syringe or dropper and not by the bottle.

Mothers report that maternity staff:

- Offered the baby bottles or pacifiers to her baby.
- Encouraged her during baby illness to express milk & give by spoon.

Step 10: criteria assessed include:

Maternity staff report that they:

- Inform mothers with babies at discharge where to go for follow-up.

Mothers report that staff

- At discharge mothers report they received instructions from hospital to exclusively breastfeed in the first six months and where to go for follow-up.

2- Mother Friendly Status.

Maternity staff report that they:

- Allow women to have companions of their choice to provide continuous physical and/or emotional support during labour and birth, if desired.
- Allow women to drink and eat light foods early in the first stage of labour, if desired.

- Encourage women to consider the use of non-drug methods of pain relief.
- Discourage analgesic or anesthetic drugs.
- Ask women of the personal preferences of pain relief methods.
- Encourage women to walk and move about during labour, if desired.
- Staff report that their colleagues encourage women to assume positions of their choice while giving birth.
- Explain any medical interventions needed to the mother beforehand.
- Encourage childbirth with least medical interventions.

Mothers report that the staff in the labor ward:

- Encouraged her to have spinal anesthesia with C-section.
- Explained procedures of labor to them prior delivery.
- Gave adequate local anesthesia for the episiotomies during vaginal delivery.
- Comforted herby standing close to her and holding her hand, guidng her how o breathe and when to push in labor.
- Kept baby with her immediately after delivery.

3- The International Code of Marketing of Breastmilk Substitutes (ICMBMS)

Top Officials (T.O.) report and confirm that they:

- Do not accept free or low cost infant milk formula (IMF) in the facility
- Prohibit accepting any free or low cost IMF in their health facility.
- Have a copy of the ICMBMS and relevant WHA resolutions including (GSIYCF).

Maternity staff report and confirm that they:

- Received orientation about ICMBMS and relevant WHA resolutions.

Pediatric and PHC staff report that they:

- Received orientation about the ICMBMS and relevant WHA resolutions.
- Prohibit any advertising or distribution of BMS to mothers.
- DO NOT accept gifts or invitations or free IMF from these companies.

Mothers report that they were NOT:

- Exposed to information about breastfeeding from an IMF company source.

4-Community-based Continued Breastfeeding Support.

Pediatric and PHC staff report that they:

- Encourage complementary feeding at **immediately** after 6 months.
- Encourage breastfeeding to continue for two years or more.

Mothers report that they are:

- Encouraged by staff during **growth monitoring sessions** to exclusively breastfeed during the first 6 months of the baby's life.
- Encouraged by staff during **immunization sessions** to exclusively breastfeed for 6 months**.**
- Informed by staff of hazards of bottle feeding during **immunization** and **family planning** sessions in facility (hospital or PHC).
- Guided during **family planning sessions** to exclusively breastfeed for the first 6 months of the baby's life.
- Guided during **family planning sessions** to increase the frequency of breastfeeds especially during the evening and night time.

4- Monitoring of Breastfeeding Practices

Top Officials report that they:

- Have a registration system in their facility.
- Support registration of infant feeding data.
- Communicate infant feeding data to higher authorities.
- Use this information to improve practices in the hospital or PHC facility..

Pediatric and PHC staff report that they:

- Register and monitor infant feeding practices regularly.
- Report data to Breastfeeding committee or higher authority.
- Encouraged by the system to do or share in research in infant feeding.

5- Quality of Care as perceived by mothers.

Mothers agree that the hospital services were satisfactory because:

- The perceived waiting time in out patient departments (OPDs) is acceptable.

- Examination by medical staff was gentle, with decency and not painful.
- Medications were affordable, accessible and timely.
- Investigations were affordable and accessible.
- Meals were timely, clean, enough and palatable.
- Toilets and Bathing facilities have running, clean, hot and cold water, are easy to access and use and are working.
- Transport inside hospital is timely and comfortable.
- The ward where she stayed was clean and utensils were hygienic.
- Fees were affordable.

Finally mother confirms that she intends to return to this same hospital **willingly.**

Section II

The Expanded Integrated Baby Friendly Hospital Initiative

II.1. Research Highlights on BFHI

Status of the Ten Steps of Baby Friendly Hospitals in Egypt

(Original report is available with UNICEF Egypt Cairo)

Summary

The purpose of the Egypt BFHI baseline survey was to assess the extent of compliance to the BFHI UNICEF Global criteria that covers breastfeeding support provided to mothers throughout pregnancy and childbirth. The survey was conducted in 12 governorates; 2 urban (Cairo and Alexandria), 5 in Lower Egypt (Behira, Dameitta, Dakhlia, Port Saed and Ismailia) and 5 in Upper Egypt (Aswan, Luxor, Qena, Sohag and Assiut).

The evaluation tools consisted of seven questionnaires and observation forms including: a hospital data sheet and an observation form, in addition to 5 interviews forms with each of the following: top officials; maternity staff; pediatric and PHC staff; mothers in maternity wards (babies 3 days to 6 weeks of age) and breastfeeding mothers with babies over 6 weeks of age attending outpatient departments and primary health care. A total of 70 health facilities were included: 41 maternity and/or pediatric health facilities and 29 health centers with a total number of 3412 health officials, maternity and pediatric staff and mothers.

The scoring system was used to facilitate comparison of the degree of implementation of the criteria measured for the Ten Steps. The interpretation of the scoring system in use reflects the degree of implementation as follows: 1= 0-19%, 2=20-39%, 3= 40-59%, 4= 60-79%, 5= 80-99%. So a score of 3 averages a scale of 40 to 59% degree of implementation. For adequate BFHI status a step should achieve a score of 5 i.e. achieve an 80% or more implementation rate. **The results were as follows:**

Step 1 (Policy): In LE, Alexandria scored highest at 4 followed by Cairo and Behira governorates at 3. The lowest scores were shown in Port-Saed

and Damietta HFs at 'one'. In UE, Assiut, Aswan and Sohag governorates' score is 3 while Qena and Luxor score '1'. In most of the hospitals the policy was not written and when informally present it does not cover the Ten Steps and there was no committee to monitor its implementation.

Step 2 (Training): In LE, Cairo scored highest at 4 followed by Alexandria and Ismailia governorates at 3, the lowest score was seen in Damietta (1). In UE, Aswan scored 3 but all the other UE governorates had scores of 2. There was a high need for training of maternity staff particularly in the clinical skills required for managing breastfeeding difficulties.

Step 3 (Education in antenatal care): This step scored a maximum of 4 in Cairo, Port-Saed and Dakhlia governorates. While a low score of 2 was shown in Damietta and Behira in LE and Qena in UE. Topics related to early initiation through first hour skin-to-skin contact and its benefits need to be included as well as educational material using audiovisuals.

Step 4 (direct, continuous and uninterrupted skin-to-skin up to first breastfeed): This step was not met in all facilities surveyed in the targetted governorates with the exception of Alexandria and Sohag (4) and Aswan and Luxor (3) where some skin-to-skin contact was reported to be practiced.

Step 5 (teaching mothers breastfeeding techniques): Scores are inadequate in all regions ranging from 3 to 4 in almost all governorates and a score of 2 in Qena and Port-Saed. Teaching the technique of milk expression and how to maintain milk supply when babies were kept in neonatal intensive care units (NICU) was shown to be a high need among staff.

Step 6 (no prelacteals or supplements at birth): The practice of supplementation at birth was highest in Qena in UE and Dakhlia in LE that scored only 2. All other governorates had a score of 3 with the exception of Alexandria, Behira and Sohag that scored 4 in this step. Service areas where supplementation was highest were the NICU and pediatric wards.

Step 7 (rooming-in): This step scored 4 in all governorates except in Cairo where it scored 3, reflecting the persistence of urban practices that

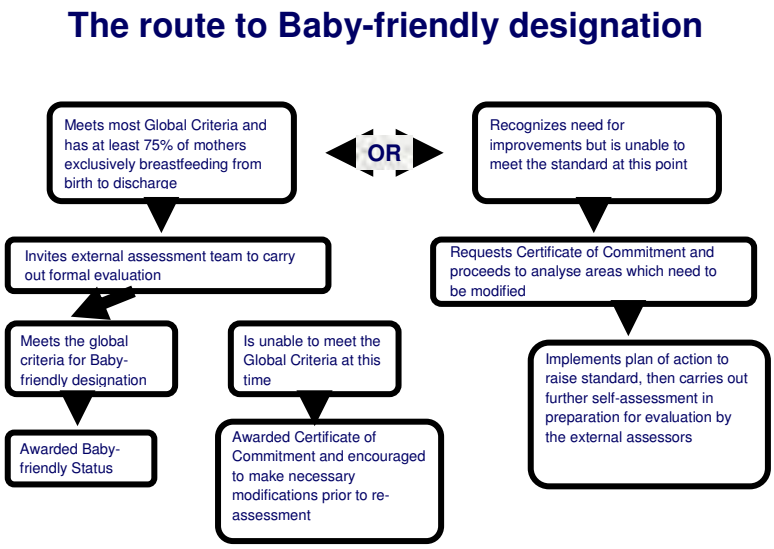
separate babies and mother. The main problem was related to separation that occurs when the baby is admitted to the NICU, as mothers were not allowed to be admitted or stay close to their babies due to regulations coming from higher authorities in the health care system.

Step 8 (on-demand feeding): This step scored 4 in Behira in LE and 2 in Qena and Port-Saed and 3 in the remaining 9 governorates.

Step 9 (prohibiting bottles and pacifiers): This step scored from 3 to 4 in all governorates except in Port-Saed where it scores 2 only. No educational material were directed to mothers about the hazards of their use or alternatives to using pacifiers (soothing babies by skin to skin to skin care) or bottles (cup feeding) were observed.

Step 10 (referral for continued support): This step scored least in Dakahlia and Qena (2) and also Port-Saed (3) and it scored 4 in the remaining governorates with the exception of Behira that scored a full score of 5 in this step.

It is concluded that the success stories in the governorates with health facilities that had high scores can be used to improve and change those in the health facilities in the governorates with lower scores.



II.2. Evidence Supporting the Ten Steps

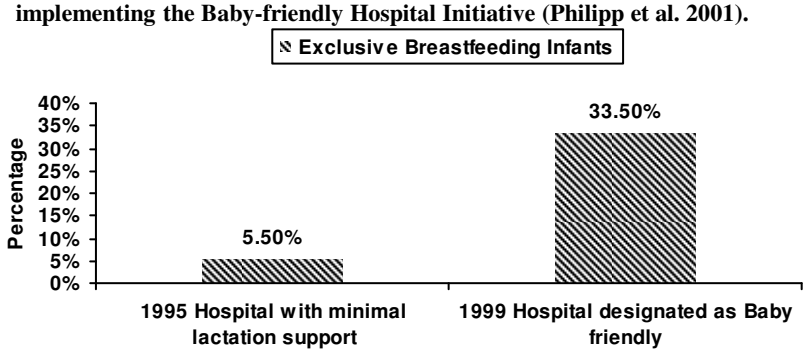
The Status of the Ten Steps for successful breastfeeding initiation in maternity medical facilities is based on the UNICEF/WHO Baby Friendly Hospital Initiative (BFHI) Update in 2006 and is presented in annex I in detail. The survey findings indicate that there is urgency for reviving BFHI at country level. The coming discussion highlights some of the gaps; that are interpreted as needs and facts for action that are based on evidence-based medical research.

STEP 1: 'Have a written breastfeeding policy that is routinely communicated to all health care staff'

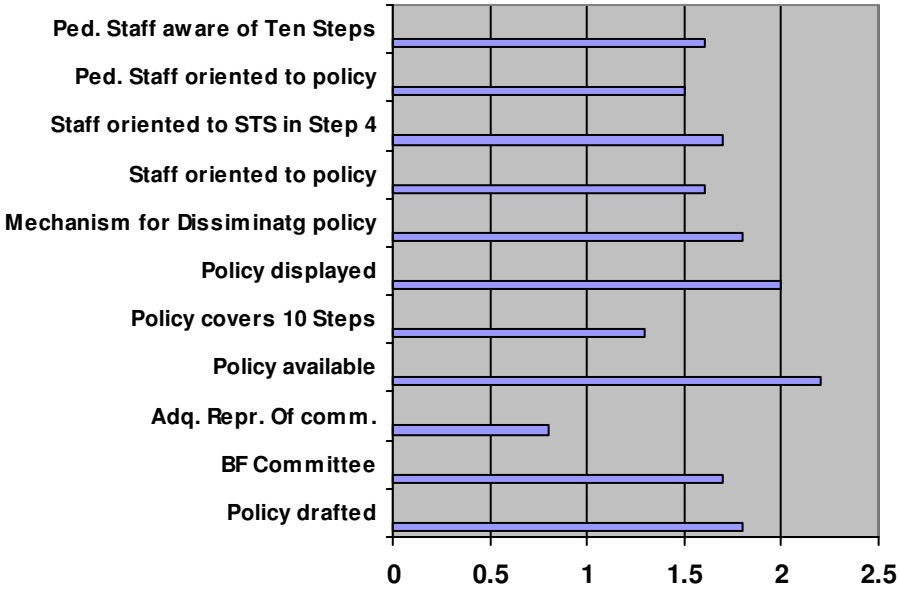
Evidence supporting Step 1:

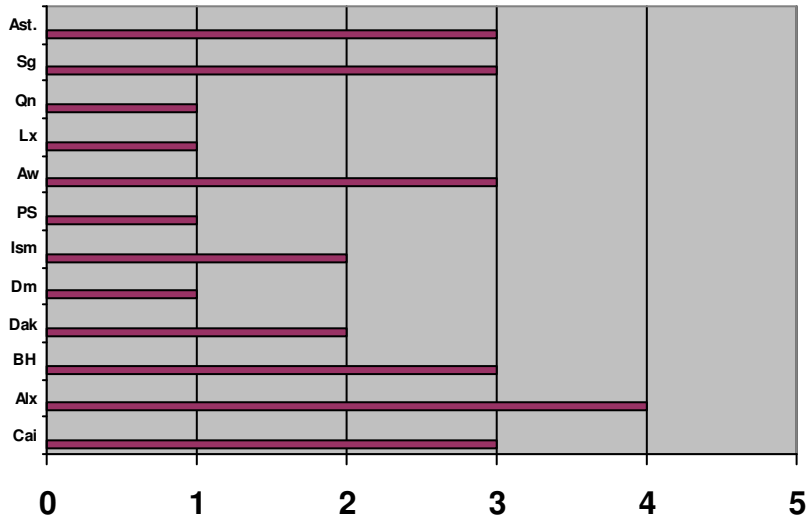
A written policy is a declaration by the health facility that it is committed to the mission, vision and goals of Baby friendly and that it hereby announces this to all its customer-mix including staff and clients. Many health facilities may have an informal or 'unwritten' policy, but this unfortunately does not allow 'good' practice to continue and is the cause for poor sustainability. Knowing the policy of an organization assists staff to communicate better with one another and with their clients and decreases the chances of malpractice and legal accusations.

Figure (1) Improved exclusive breast-milk feeds while in the birth hospital after implementing the Baby-friendly Hospital Initiative (Philipp et al. 2001).



Figures (2-A & B): A- Score achieved by each of the criteria measured as a requirement for meeting step 1. B- Mean risk score achieved for step 1 by each of the 12 governorates.





Suggested actions needed to attain 'Step 1'

1. Revival of the National Breastfeeding task force centrally and encourage the formation of subnational executive committees that are expected to lead the governorates into becoming baby friendly.
2. Revise and update of the *'National Breastfeeding Support Policy'* issued in 1992 and disseminating it throughout the country to all health care facilities to motivate them to form their own health facility policy based on the services provided.
3. Introduce infant feeding and mother friendly records in the hospital registration system and report the recorded data to the higher authorities for strengthening the decision making process for program improvements and sustainability.
4. Formulate and display hospital policy in a language that can be easily understood by support staff and mothers using illustrations and simple words.
5. Ensure that the policy covers all Ten Steps and the code and is updated periodically according to evidence-based-medical practice.
6. Orient all staff and mothers with the policy periodically and monitor its implementation using the UNICEF/WHO BFHI monitoring tool (2007).

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

Evidence supporting Step 2

Figure (3): Effect of breastfeeding training for hospital staff on exclusive breastfeeding rates at hospital discharge (Cattaneo and Buzzetti, 2001).

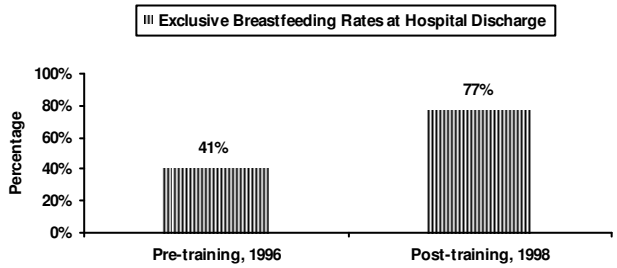


Figure (4) Mean risk score achieved by each of the criteria measured as a requirement for meeting Step 2.

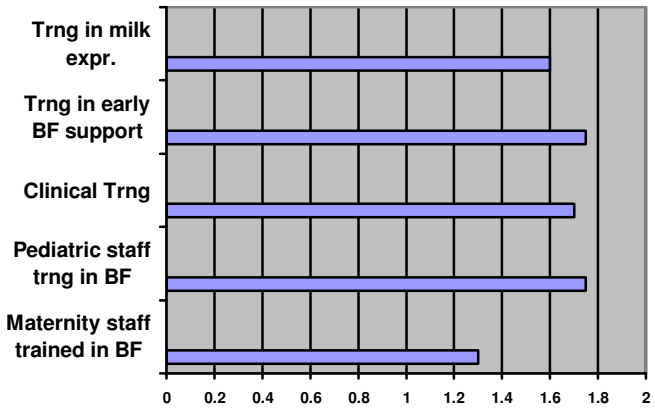
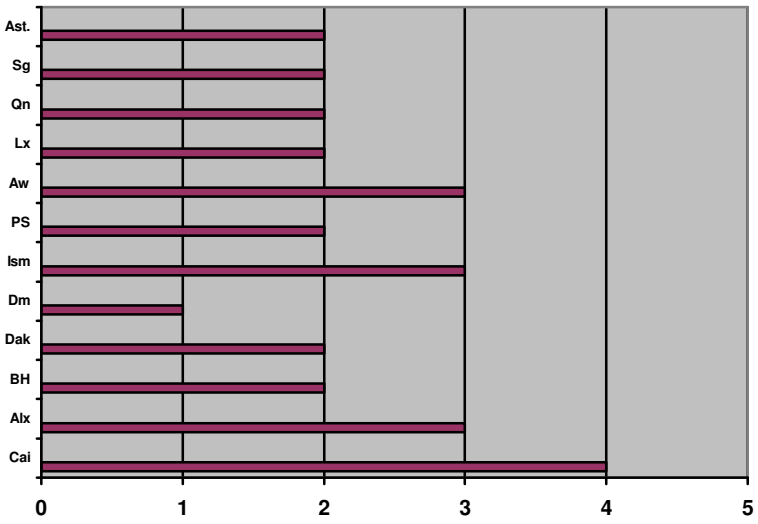


Figure (5) Score achieved for Step 2 by each of the 12 governorates.



☞ Suggested actions needed for instituting Step 2:

1. Make training in infant feeding counseling and lactation management accessible to all front line primary health care workers in 'service delivery'.
2. Institutionalize training in Baby Friendly and infant feeding component in medical and nursing faculty curricula.
3. Evaluate training courses of pre-service training and curricula of medical and nursing schools.
4. Strengthen service delivery in infant feeding by recognizing specialists in the field of infant feeding.
5. Ensure training of maternity staff covers the 'Ten Steps' and the code using the UNICEF/WHO 20-hour BFHI training as a standard, to be preceded by orientation using the UNICEF/WHO training for decision makers and reinforced by follow-up trainings and schedules for training new staff.
6. Improve and develop training methods by incorporating demonstrations, role plays, scenarios, check lists, practical and clinical sessions, audiovisuals and online teaching.

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

Evidence supporting Step 3

Does antenatal care influence postpartum health behaviour? Evidence from a community based cross-sectional study in South India (Nielsen et al., 1998):

Figure (6): The influence of antenatal care on infant feeding behaviour.

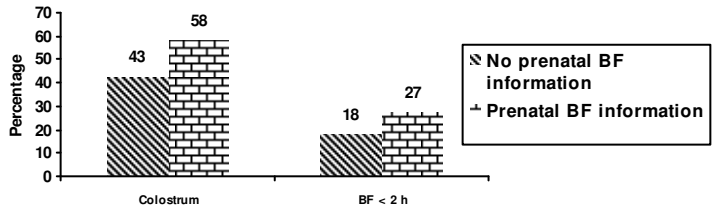


Figure (7): A meta-analysis of studies of antenatal education and its effects on breastfeeding (Guise et al. 2003):

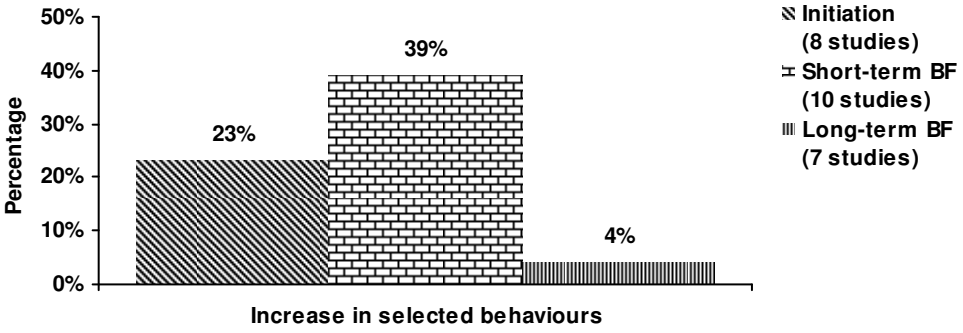


Figure (8): Mean risk score achieved by each of the criteria measured as a requirement for meeting Step 3.

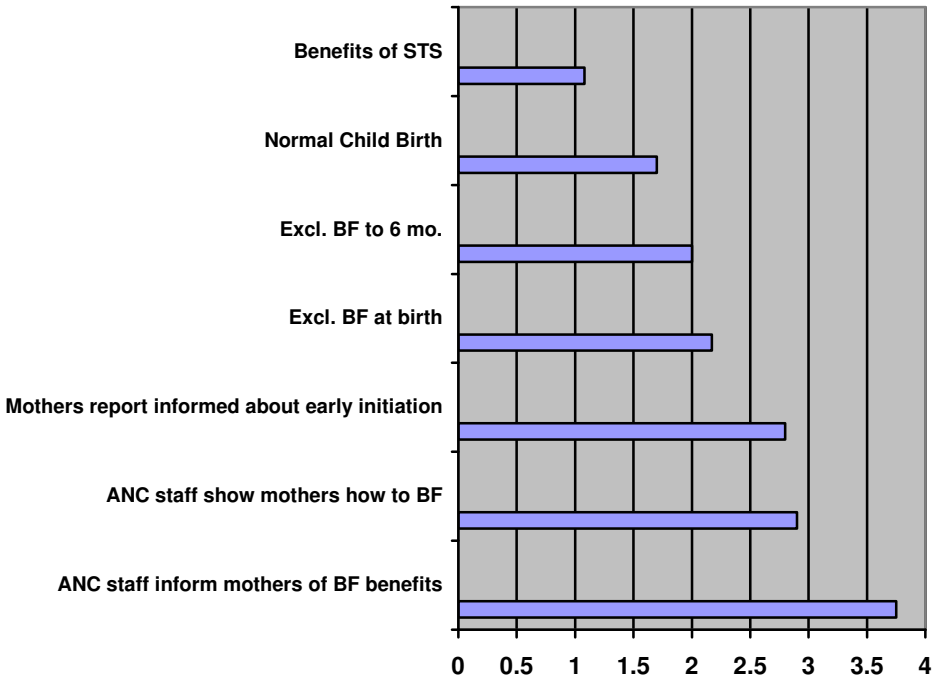
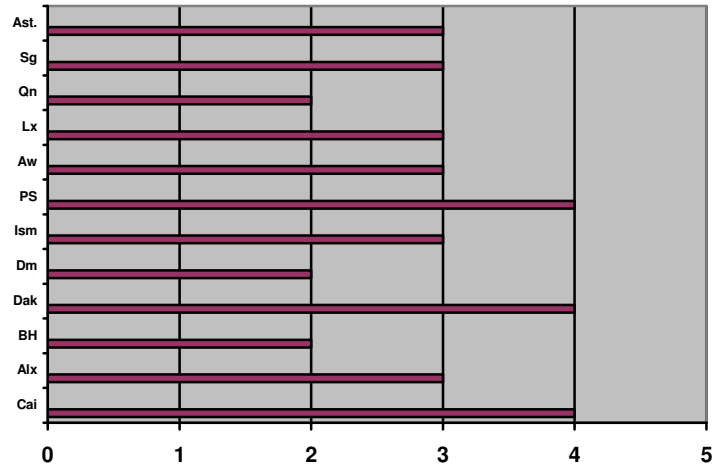


Figure (9): Score achieved for Step 3 by each of the 12 governorates



Suggested actions needed for Step 3

1. Design media campaign focusing on early initiation of breastfeeding through ***first hour uninterrupted skin-to-skin, early exclusive breastfeeding, hazards of unnecessary supplements*** and **nipples**, mother friendly practices, as well as timely adequate complementary feeding and continued breastfeeding.
2. Create a time-bound action plan for information education and communication (IEC) material, with an adequate budget line.
3. Train media personnel and monitor the use of IEC material to ensure that it is put into action and use after printing.
4. Disseminate messages through media using folkloric culturally acceptable material (video clips, T.V. spots, songs, soap operas, web sites, SMS messages...ect) to target pregnant women.
5. Make infant feeding counseling accessible to all women, during pregnancy and after childbirth through appointed trained health educators in infant feeding and *mobile hotlines*, and refer mothers at risk to specialists.
6. Integrate breastfeeding messages in primary and secondary school curricula.

STEP 4: Help mothers initiate breastfeeding during the first hour by uninterrupted continuous skin-to-skin contact.

Evidence supporting early initiation of breastfeeding:

Figure (10): Body temperatures after birth in infants kept either skin-to-skin with mother compared to those separated in a cot (Christenson et al., 1995).

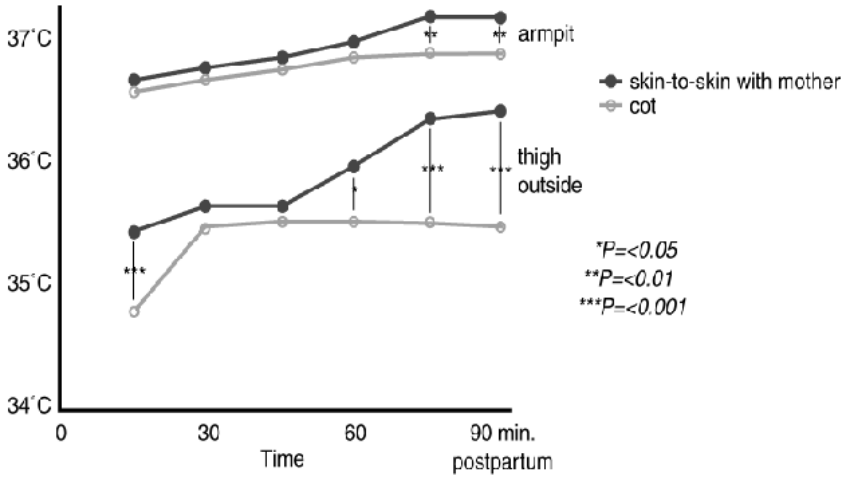


Figure (11): Effect of delivery room practices on early sucking patterns for ensuring successful breastfeeding initiation and continuation (Righard and Alade 1990).

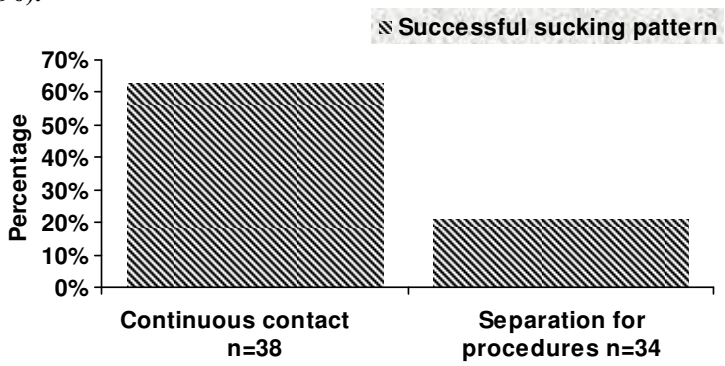


Figure (12): Risk of delayed breastfeeding on neonatal mortality.

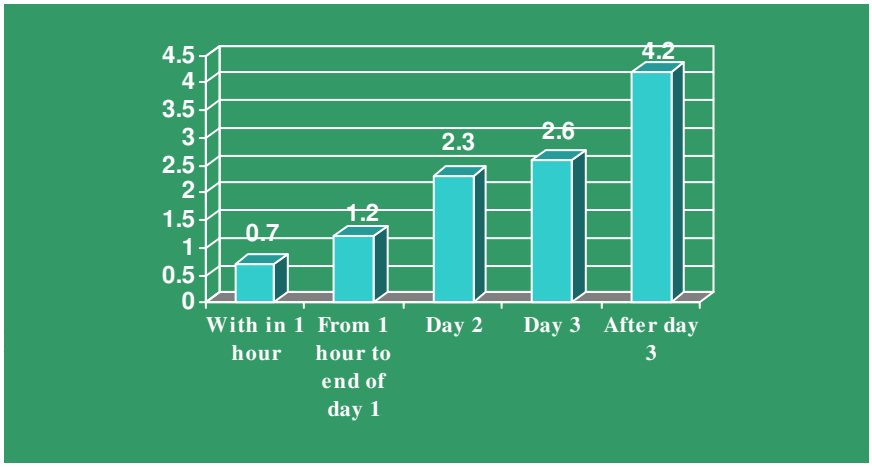


Figure (13) Score achieved by each of the criteria measured as a requirement for meeting Step 4.

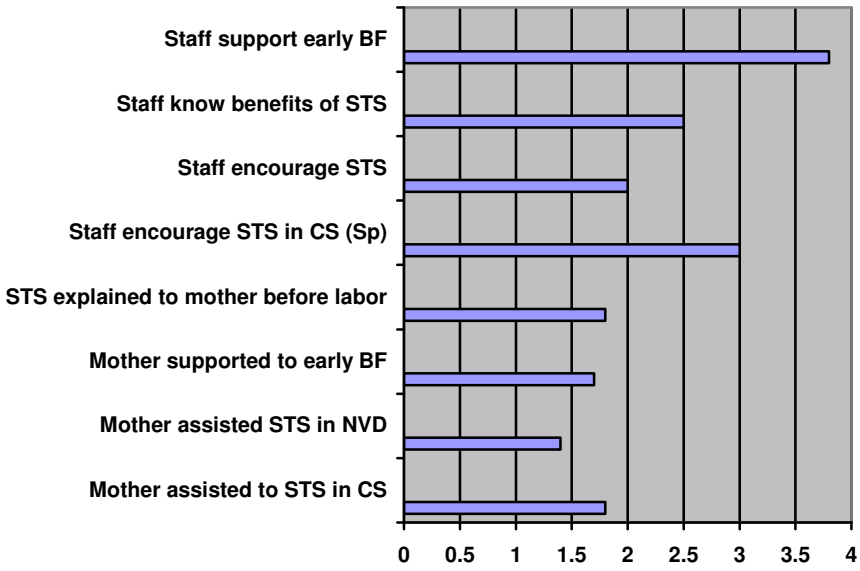
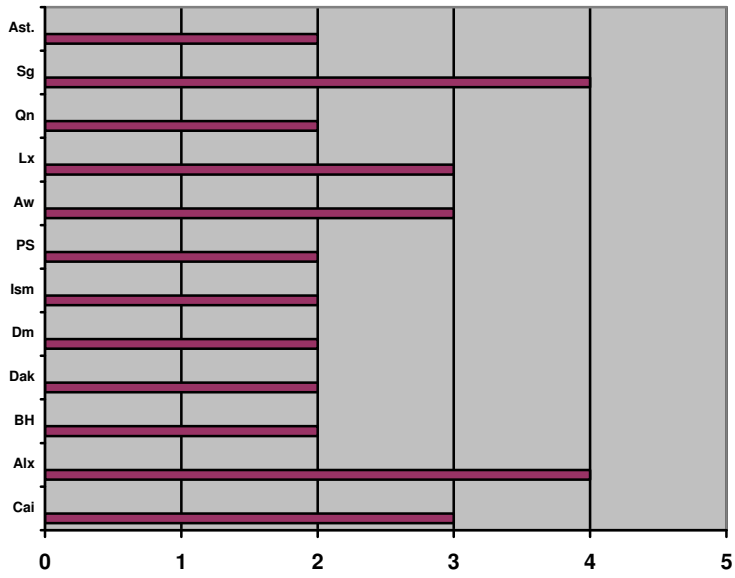


Figure (14): Score achieved for Step 4 by each of the 12 governorates.



Suggested actions needed for improving Step 4:

1. Strengthen the training component with regards teaching labor ward staff to assist mothers in uninterrupted skin-to-skin contact.
2. Orient and train neonatal staff, to evidence-based medical practice on *skin- to- skin care* and avoid unnecessary suctioning.
3. Prepare and disseminate clinical guidelines in the management of the first breastfeed.
4. Use culturally suitable clothes for mother and covers for baby while on mother skin-to-skin.
5. Train and instruct staff in antepartum to prepare mothers and family members to become involved in the *'first hour skin-to-skin'*, its importance.
6. Encourage natural child birth with mother friendly practices.
7. Encourage cesarean births to be done by using spinal or epidural as an alternative, to facilitate early skin-to-skin contact.

STEP 5: Show mothers how to breastfeed, and how to maintain lactation if separated from their infants.

Evidence supporting Step 5

Righard and Alade (1992) have shown that sucking technique has an effect on the success of breastfeeding continuity during the first 4 months. Mothers who were guided to proper technique were more likely to continue to breastfeed compared to those who were not guided.

Lu et al. (2001) have shown evidence from a national survey of importance of provider encouragement of breastfeeding success and continuity for three months; as 74.6% of those encouraged continued to breastfeed compared to only 43% of those not encouraged by provider at birthing facility.

Figure (15): Score achieved by each of the criteria measured as a requirement for meeting Step 5.

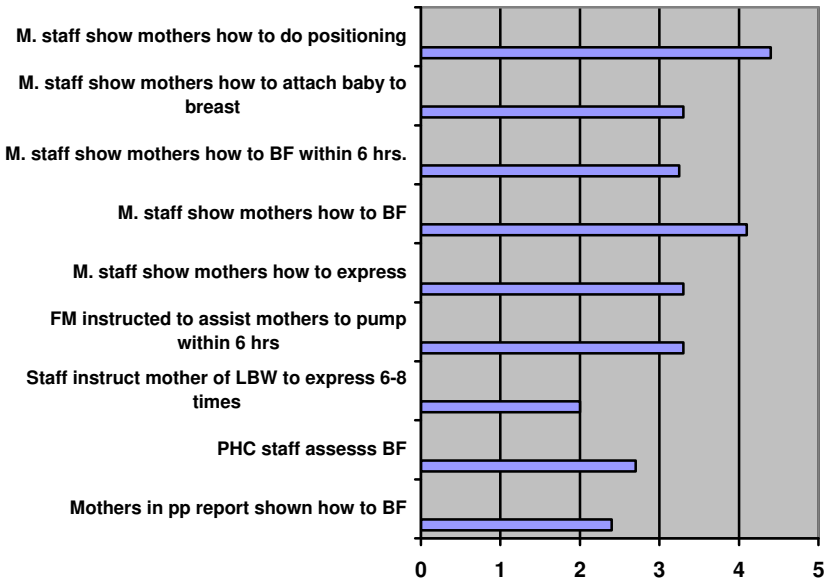
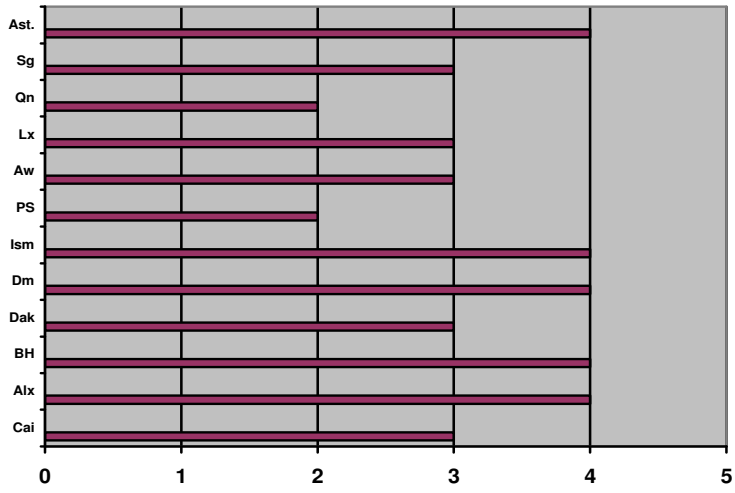


Figure (16): Mean risk score achieved for 'Step 5' by each of the 12 governorates.



Suggested actions needed for reinforcing Step 5

1. Strengthen training component in teaching mothers at delivery how to breastfeed and how to express their breastmilk if separated from their babies.
2. Establish educational areas inside the postpartum ward for counseling mothers at discharge to ensure correct breastfeeding, correct technique for expressing breastmilk and how to increase milk supply by exclusively breastfeeding and promoting skin-to-skin care.
3. Equip such areas in the hospital with educational material and appoint focal staff to conduct this education to all mothers on discharge.
4. Train staff in neonatal intensive care units (NICUs) to encourage mothers to express their breastmilk within 6 hours of delivery and to maintain their milk supply by expressing their milk 6-8 times a day until the baby is able to do that him/her self.
5. Prepare and disseminate clinical guidelines in the management of different breast conditions and various mother and infant

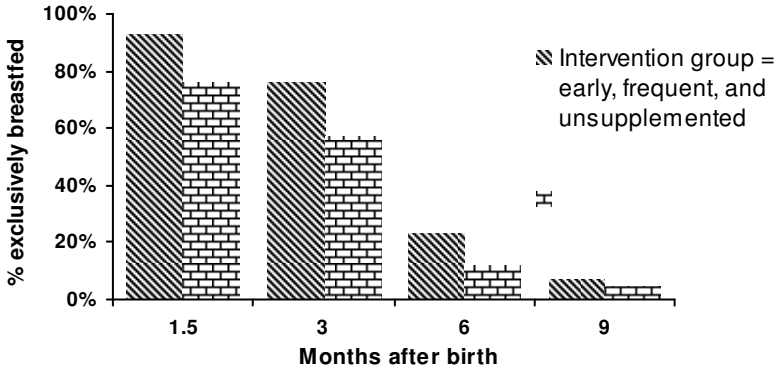
situations that may require skilled support for lactation management.

6. Promote manual expression, but also make breast pumps available in hospitals especially NICUs and health units for mothers to rent or use.

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

Evidence supporting Step 6

Figure (17): Long-term effects of a change in maternity ward feeding routines (Nylander et al. *1991*).



Impact of routine formula supplementation:

Decreased amount of milk removed from breasts leads to decreased frequency or effectiveness of suckling which leads to decreased amount of milk removed from breasts and consequently decreased milk production especially if artificial nipples are offered to the baby.

Figure (18): Score achieved by each of the criteria measured as a requirement for meeting Step 6.

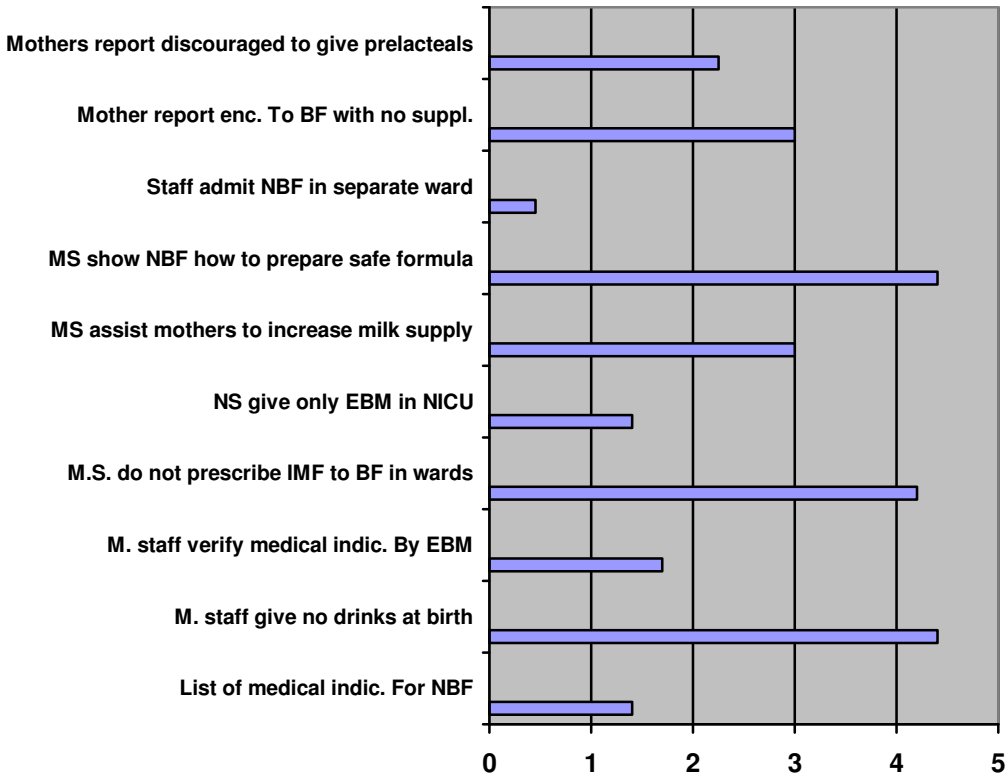
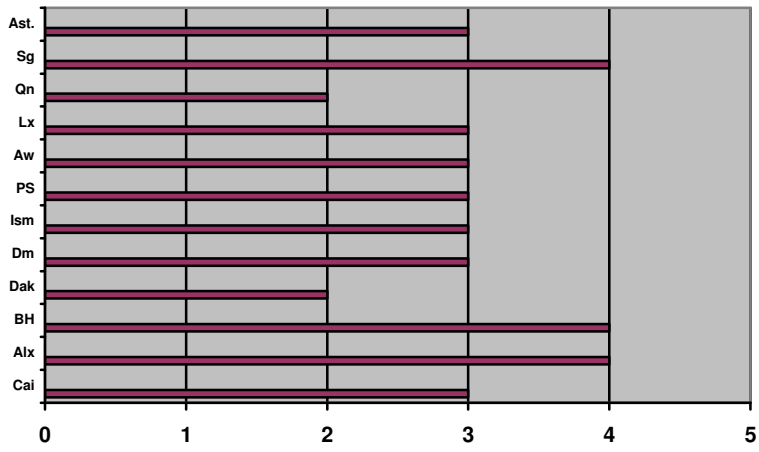


Figure (19): Mean risk score achieved for 'Step 6' by each of the 12 governorates.



Suggested actions needed for Step 6

1. Strengthen training component in exclusive breastfeeding.
2. Obtain consensus among pediatricians through recognized pediatric societies on the limited indications for supplementation.
3. Promote importance of exclusive breastfeeding through media campaigns with a focus on the hazards of formula feeding.
4. Increase awareness of health staff on how to increase mother's milk supply and how to assist her to relactate, so that they do not resort to prescribing infant milk formula to these mothers.
5. Encourage recognized pediatric societies and university task force staff to develop policies for promoting and supporting exclusive breastfeeding and developing clinical guidelines for managing infant feeding difficulties during infant illness and disseminate them in all facilities caring for infants.
6. Instruct NICU and maternity staff to show mothers how to express their milk and feed it to her baby by cup or spoon and how to store expressed breastmilk (EBM) and give it to the baby when mother is away by cup (NOT BOTTLE).
7. Train neonatal staff in neonatal intensive care units (NICUs) in the practice of Kangaroo Mother Care for promoting exclusive breast milk feeding.

STEP 7: Practise rooming-in — allow mothers and infants to remain together — 24 hours a day.

Evidence supporting this step

Why? Rooming-in has been shown to reduce costs, reduce infection, help establish and maintain breastfeeding, facilitate the bonding process and its implementation, requires minimal equipment and personnel (Soetjiningsih et al, 1986, Buranasin, 1991, Gonzales, 1990, Procianoy, 1983).

Figure (20-A): Score achieved by each of the criteria measured as a requirement for meeting Step 7.

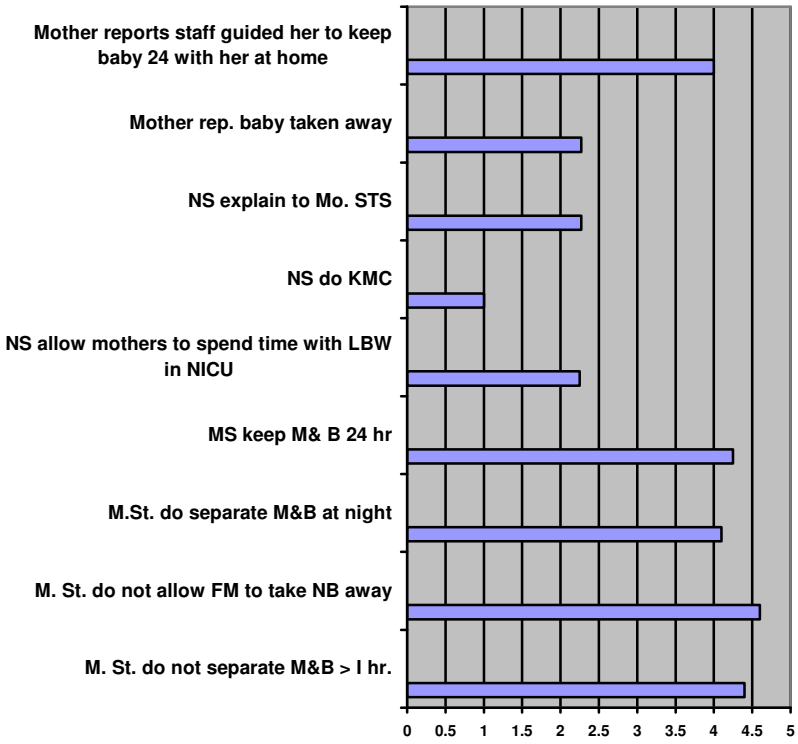
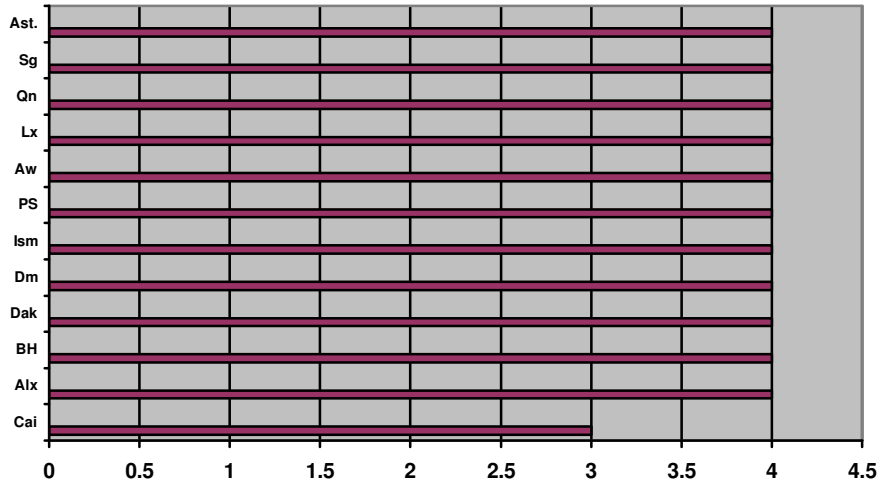


Figure (20-B): Mean risk score achieved for Step 7 by each of the 12 governorates.



Suggested actions needed for consolidating Step 7

1. Encourage mothers and babies to stay in hospitals after delivery for at least 48 hours to ensure established lactation.
2. Make maternity wards and labor area homely and family friendly to encourage women to deliver and stay in hospital.
3. Change NICU policies so as to allow mothers to easily visit and stay with their babies throughout the day and night.
4. Make arrangements to have separate wards for mothers who are not breastfeeding and admit them in it, so as not to have a spill over effect on breastfeeding mothers.
5. Ensure that if infant milk formula is needed, for the limited rare conditions, its prescription, education on use, and purchase must be done through an outlet that is not attended by breastfeeding mothers.
6. Encourage NICUs to implement Kangaroo Mother Care practice.

STEP 8: Encourage breastfeeding on demand.

Evidence supporting this Step:

Increasing the breastfeeding frequency during the first 24 hours after birth has been shown to significantly decrease the incidence of hyperbilirubinaemia (jaundice) *(Yamauchi and Yamanouchi, 1990; DeCarvalho et al., 1982; Rashad et al, 2006).*

Figure (21): Score achieved by each of the criteria measured as a requirement for meeting Step 8.

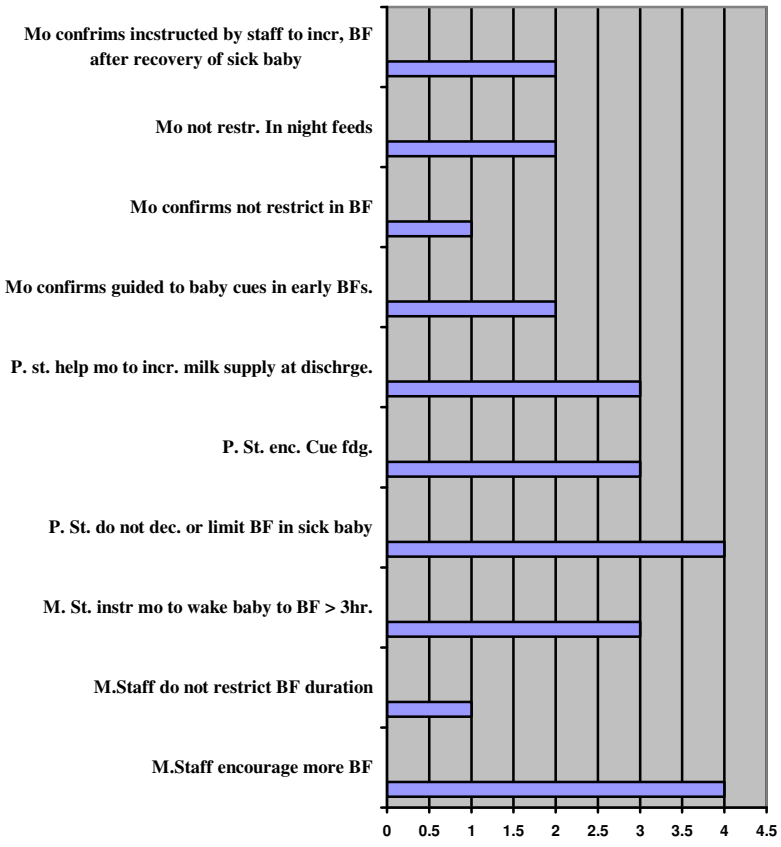
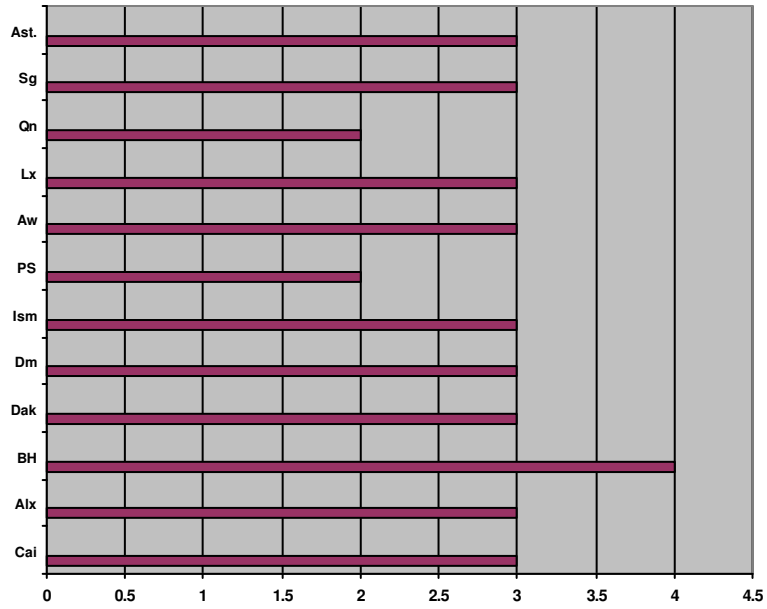


Figure (22): Mean risk score achieved for Step 8 by each of the 12 governorates.



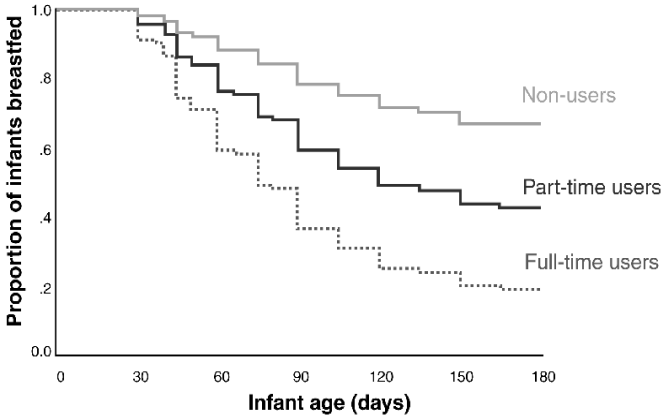
Suggested actions needed to strengthen Step 8

1. Instruct maternity staff to encourage mothers, through counseling, to increase the frequency of breastfeeding and not to restrict duration of breastfeeds and teach her how to recognize and respond to her infants' cues.
2. Develop guidelines for the management of hyperbilirubinemia based on early and increased frequency and duration of breastfeeding and feeding expressed breastmilk whenever increased intake is required.
3. Train pediatric and primary health care staff how to increase mother's milk supply after sickness and how to assist non-breastfeeding mothers admitted to their wards to relactate. .

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

Evidence supporting this step

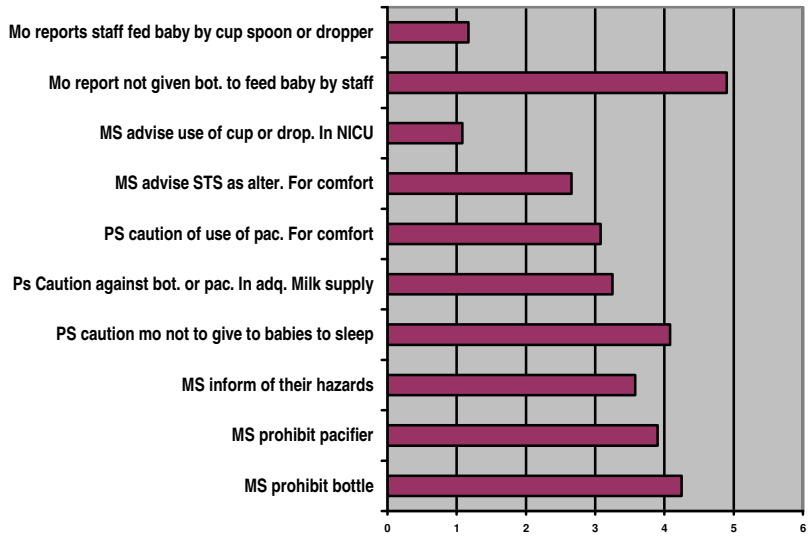
Figure (23) shows the increasing proportion of infants who stopped breastfeeding by 6 months of age in relation to the frequency of pacifier use at one month (Victora et al., 1997).



Moving from status to actions

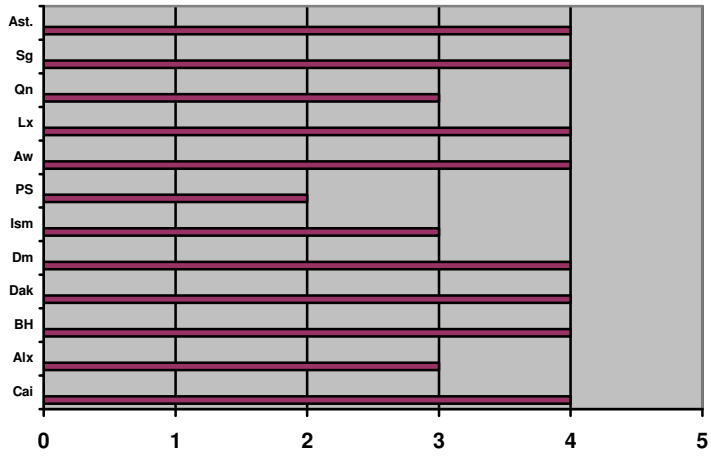
Findings from the ELCA-MOH-UNICEF BFHI status survey (2008) demonstrated that there was a significant difference in the practice between UE and LE in staff with regards prohibiting bottles and pacifiers. Less staff in LE prohibits mothers against the use of these devices although they reported being aware of their hazards. They were also unaware of alternative soothing methods for fussy babies as by skin-to-skin care, which could explain why they could not prohibit their use..

Figure (24): Mean risk score for each of the criteria measured as a requirement for meeting Step 9.



(Mo: mother, rep. reports, sp: spoon, PS primary health staff, MS: maternity staff, bot: bottle, pac, pacifier).

Figure (25) Mean risk score achieved for 'Step 9' by each of the 12 governorates



Suggested actions to be taken by staff

1. Counsel mothers to offer skin-to-skin as an alternative to offering pacifiers to their babies.
2. Feed sick or malnourished babies, who are unable to suckle, by cup *not bottle or artificial nipples.*
3. Teach mothers and support staff in pediatric wards and neonatal intensive care units how to perform cup feeding in practice.
4. Inform mothers during clinic visits that bottles and pacifiers are not necessary and may be even hazardous.
5. Disseminate educational material throughout the health facility about the hazards of bottles and pacifiers to breastfed babies.

Suggested actions to be taken by media

- Intensify media campaigns about hazards of bottles and nipples to breastfed babies.
- Educate media personnel about their hazards.
- Advocate placing warning labeling instructions on bottles and pacifiers.

STEP 10: Foster the establishment of breastfeeding support groups and refer mothers to them.

Evidence supporting Step 10

Figure (26): Efficacy of home-based peer counselling to promote exclusive breastfeeding: a randomised controlled trial (Morrow et al, 1999).

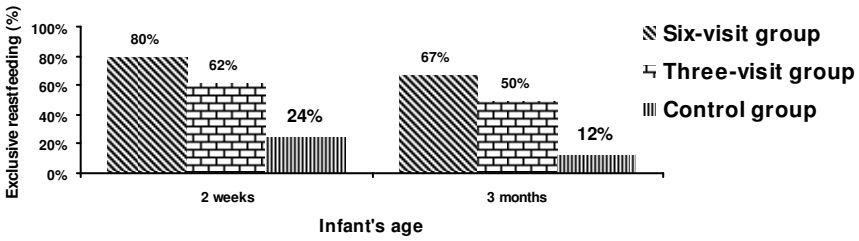


Figure (27): Effect of trained peer counselors on the duration of exclusive breastfeeding (Haider et al, 2002)

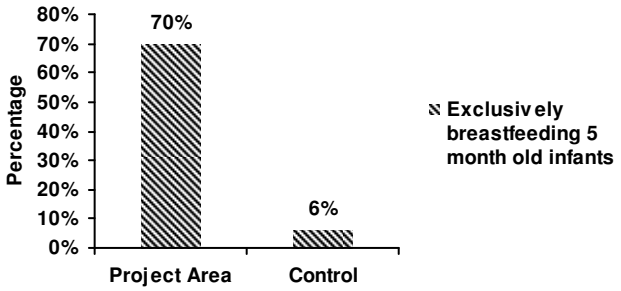


Figure (28): Score achieved by each of the criteria measured as a requirement for meeting Step 10.

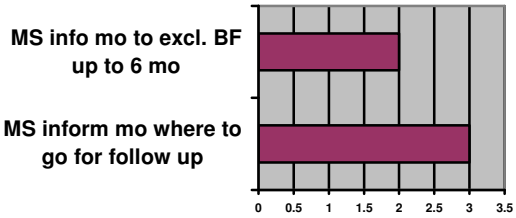
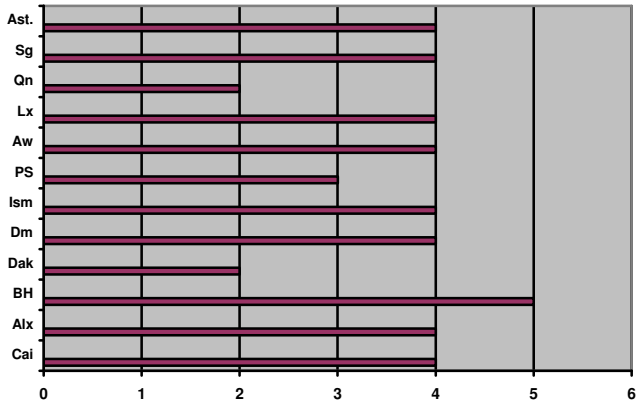


Figure (29) - Mean risk scores achieved for Step 10 by each of the 12 governorates.



Suggested actions needed by facility

1. Develop a two way referral system between primary health care and hospitals for mothers before and after delivery for ensuring the continuity of the *warm chain of breastfeeding support.*
2. Link Baby Friendly PHC centers with Baby Friendly Hospitals to ensure that the messages and health care are consistent with educational messages received in ANC in both health care service facilities.
3. Educate mothers about the services provided by primary health care for herself and her child before discharge from hospital.
4. Involve maternity secondary or tertiary hospitals in supporting educational seminars to community influential leaders and link them to the maternity services.
5. Establish residential (in-service training programs) for PHC workers inside the hospital to become oriented to Baby friendly hospital policies and practices for supporting breastfeeding.
6. Encourage implementation of the district health system approach for strengthening links between primary health care and district hospitals.
7. Encourage hospital staff to print discharge pamphlets with information on where to go and how to breastfeed.
8. Encourage urban hospitals or private hospitals not linked to PHC centers, but with established outpatient care, to open breastfeeding support clinics and refer mothers to them.
9. Include information about hotlines on support services for breastfeeding in the mother health card and child health card issued by the MOH.
10. Encourage hospitals and PHC centers to form mother support groups and involve them in disseminating breastfeeding educational messages and refer breastfeeding mothers to them for continued support.

A SUMMARY OF NEEDS OF BFHI BY STATUS OF TEN STEPS IN THE 12 GOVERNORATES BY SCORES ATTAINED

Evidence supporting the effect of implementing the Ten Steps on the success of breastfeeding continuity:

Figure (30): Median duration of exclusive breastfeeding for babies born in Baby-friendly hospitals in Switzerland (Merten et al. 2005).

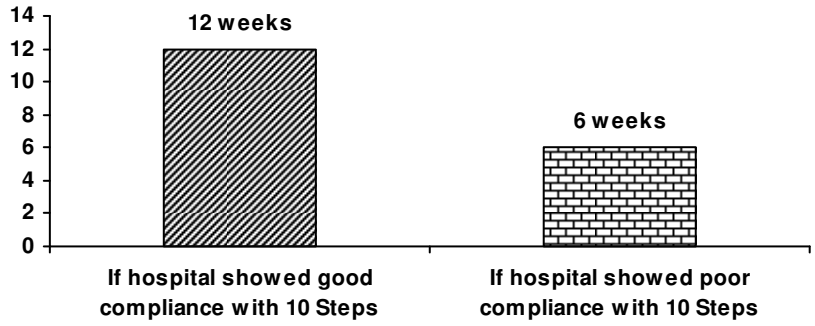
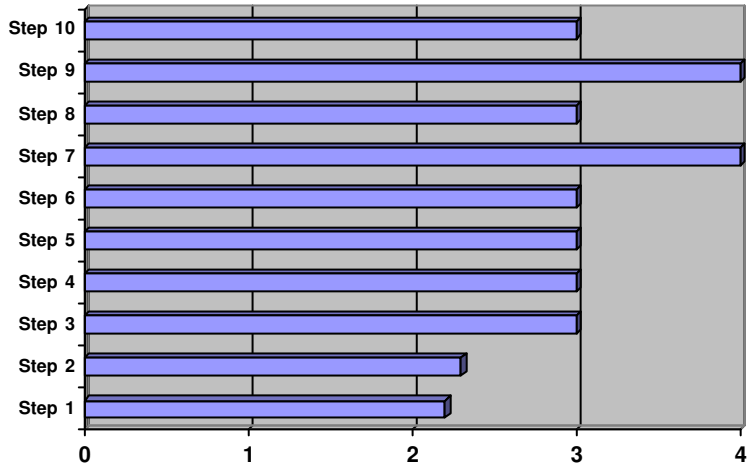


Figure (31): Summary of the Risk score achieved by each of The Ten Steps as a requirement for meeting BFHI status.



☞ Suggested actions needed at national level

1. Reactivate the national breastfeeding promotion committee formed in 1991.
2. Revise and update the national breastfeeding promotion policy declared in 1992.
3. Encourage replication of BFHI task force teams at subnational and institutional level.
4. Encourage hospitals and workplaces to disseminate their breastfeeding support policies to the public through media and press.
5. Encourage institutions to adopt online education about BFHI through web sites, online education, newsletters and CME journals for self learning.
6. Mobilize community support groups, influential NGOs and institutions to place pressure on the government to take action towards making hospitals, educational institutions and workplaces Baby and Mother Friendly.
7. Strengthen training component of BFHI and begin with high risk governorates and encourage other governorates to use its local resources to improve its target.
8. Link Baby friendly with other national health programs and community activities.
9. Reactivate the National Breastfeeding Week Campaign for Breastfeeding Promotion in the country.

☞ Suggested actions at governorate and facility level

- Formulate a sub-national breastfeeding committee. Appoint the Undersecretary of the Health Directorate for governorate as the subnational breastfeeding coordinator.
- Encourage adoption of the initiative by a key figure in the governorate as the Governor to gain political support for legislative actions of maternity rights and accreditation of Breastfeeding friendly workplaces and public areas.
- Institute a plan for facilities that *'need upgrading'* in the Ten Steps as follows:
    - Start by orientations to staff and community about BFHI, as a need, then formulate local BFHI promotion quality team.
    - The team will prepare a policy and disseminate it.
    - Institute infrastructural changes to meet change in policy (areas for breastfeeding initiation in labor ward and education in ANC & maternity wards)
    - The team will meet regularly to check problems and institute improvements.
    - They will plan and implement training in the Arabic translated UNICEF/WHO 20-hour BFHI course and in the monitoring tool.
    - They will invite the assessment team once their monitoring indicators indicate they are ready for designation.
- Encourage governorates with *needs for improvements or strengthening* of BFHI to follow the same process as above and to disseminate their successes in order to become leaders for the others that have needs for upgrading.

II.3. Mother Friendly Practices

By using the scoring system we are able to compare the status of the Mother Friendly criteria in the 12 governorates, which reflect practices in their respective previously designated maternity facilities, as follows:

Overall the criteria for mother friendly score range from 2 to 3, with lowest score of '1' obtained for allowing a companion of mother's choice to be present with mother during labor. Other practices that scored low include: explaining to mothers their preference of pain relief during labor and the procedures of labor, as well as assisting her to assume the position of her choice. Scores are distressingly low for keeping the baby with its mother immediately after birth and for procedures that could be delayed after the first hour of skin-to-skin such as suctioning of newborns which may not be routinely necessary for every newborn.

☞ Evidence to support Mother Friendly practices

The most recent systematic review of continuous labor support is available in full on this website (http://www.childbirthconnection.org). It summarizes the experiences of nearly 13,000 women who participated in 15 randomized controlled trials. In this review, when compared to women who did not receive continuous support, those who received continuous labor support from someone present just for this purpose were:

- 26% less likely to give birth by cesarean section
- 41% less likely to give birth with vacuum extraction or forceps
- 28% less likely to use any pain medications and
- 33% less likely to be dissatisfied with or negatively rate their birth experience.

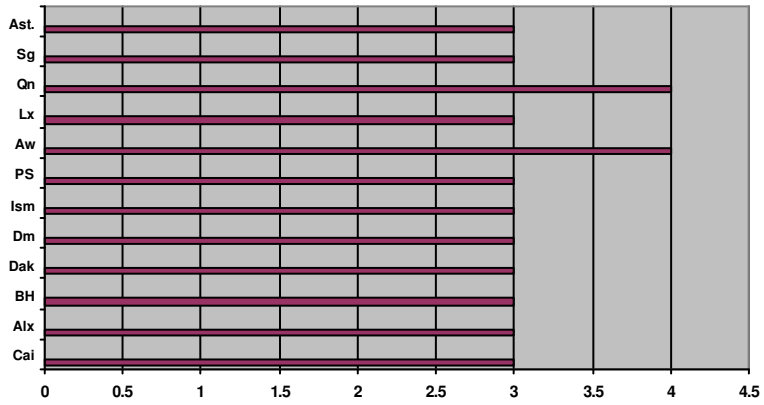
The authors (Hodnett et al., 2007) conclude that continuous support during labor should be the norm, rather than the exception. All women should be allowed and be encouraged to have support people with them continuously during labor.

Studies in Egypt have shown that involvement of a supportive family member as the husband or a woman companion at birth have significant effect on preventing complications by reducing stress associated with labor and giving women a more satisfactory birthing experience (Abul-Fadl, 1999).

Table (5): Summary of range of mean scores of the criteria required as partial fulfilment of Mother Friendly status

Criteria	Score
1- Staff who allow women to have companions of their choice to provide continuous physical and/or emotional support during labor and birth, if desired.	1-2
2- Staff who allow women to drink and eat light foods early in the first stage of labor, if desired.	3
3- Staff who encourage women to consider the use of non-drug methods of pain relief.	2-3
4- Staff who discourage analgesic or anesthetic drugs.	3
5- Staff who ask women about their personal preferences of pain relief methods.	1
6- Staff who encourage women to walk and move about during labour, if desired.	4-5
7- Colleagues who encourage women to assume positions of their choice while giving birth.	1-2
8- Staff who explain any medical interventions needed to the mother before hand.	3
9- Staff who encourage childbirth with least medical interventions.	3-4
10- Mothers report encouraged by staff to have spinal anesthesia with cesarean-section.	3
11- Mothers explained procedures of labor.	1
12- Mothers given adequate local anesthesia for the episiotomies during vaginal delivery.	2-3
13- At delivery staff standing close to mother comfort her by holding her hand and help her to breathe and instruct her when to push in labor.	3
14- Baby not taken away from mother immediately after delivery.	1-2
Risk Score	2 -3

Figure (32): Mean scores achieved for 'Mother Friendly' by governorate.



☞ Suggested actions for 'Mother Friendly' status

- Get consensus from obstetric (maternity) staff to include the Mother Friendly practices in the policy.
- Gain political support for legislative actions of mother friendly within the accreditation of Hospitals and Primary health care centers with ANC, MCH and labor home services.
- Institute a plan for facilities that *'need upgrading'* in Mother Friendly (MF) as follows:
    - Start by orientations to staff and community about Mother Friendly.
    - Prepare and disseminate health facility policy for 'Mother Friendly' (MF) at antenatal points of service care and public level.
    - Institute infrastructural changes to meet change in policy (areas for education of family members as labor companions in ANC & labor wards)
    - Do training in the 20 hour BFHI course and institute indicators for Mother Friendly in the BFHI monitoring tool to become designated as MF&BFHI.
    - Invite the assessment team once their monitoring indicators indicate that criteria for Mother Friendly and BFHI are achieved for the designation of the health facility.

II.4. Code Implementation

By using the scoring system we are able to evaluate the status of Code implementation in the 12 governorates that reflect their respective health facilities as follows:

Overall criteria measured scored a mean of 2.5. Presence of copies of the code or orientation of the staff about the code score only 1, while pediatric staff that prohibit advertising and do not accept gifts or support from companies whose products fall within the scope of the code score from 1 to 2. There is a very high need to monitor adequate implementation of the Code in all health facilities.

☞ Evidence to support Code compliance

All mothers and families should be afforded the right to make informed choices about feeding their infants based on professional advice and with no commercial pressures from the infant milk formula companies or distributors. The World Health Organization issued the International Code of Marketing of Breastmilk Substitutes in 1981s. The code urges governments to take action to protect the public and mothers from marketing tactics that interfere with the mother's decision to breastfeed her baby exclusively (WHO, 1981).

Studies in Egypt have shown that compliance to the code must involve control by the government and that subsidized infant milk formula (IMF) plays an important role in encouraging mothers to offer babies formula feeds at low cost. Since one tin of powdered milk only last for 4 days, the mother resorts to diluting the formula to save on its use, eventually the mother's milk dries up and the baby is fed on diluted formula and succumbs into the vicious cycle of infection and malnutrition ending in death. Despite such findings formula continues to be distributed at low cost and mothers continue to be misled by the attractive labels on IMF tins and bottles. The latter are easily available and promoted in the market through priority shelving, show panes, with toys and pictures that animate mothering and nurturing on the label (Abul-Fadl, 1989).

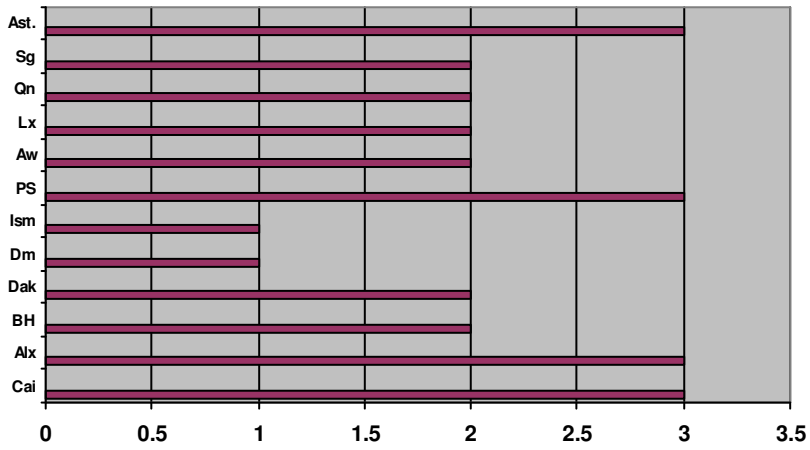
Summary of Needs for Code Implementation

Table (6): Summary of mean scores for achieving code compliance

Practices that Support Code Implementation	Mean Score
1-**Top officials** do not accept free or low cost IMF in the facility.	**2.5**
2-**Top officials** report prohibiting acceptance of any free or low cost IMF in your health facility from companies.	**1.3**
3- **Top officials**. have a copy of the ICMBMS	**0.8**
4- **Maternity Staff** who received orientation about ICMBMS.	**1.8**
5- **Paediatric Staff** oriented to the ICMBMS.	**1.08**
6-**Paediatric Staff** who prohibit any advertising or distribution of BMS to mothers.	**1.75**
7- Paediatric Staff who do NOT accept gifts or invitations or free IMF from these companies.	**2.1**
8- **Mothers** who confirm they have not been exposed to information about breastfeeding from an IMF company source in health facility.	**4.9**
Risk score for compliance with code	**2.5**

IMF: Infant Milk Formula, BMS: Breastmilk substitutes, ICMBMS: International Code of Marketing BMS

Figure (33): Mean scores achieved for Code compliance based on mean staff responses by governorate



☞ Suggested actions for improving 'Code Compliance'

1. Enact the International Code of Marketing of Breastmilk Substitutes by legislating it into a law.
2. Gain political support for legislative actions at national and subnational level to monitor the code and ensure its implementation.
3. Print and disseminate the summary of the International Code of Marketing of Breastmilk Substitutes and its subsequent resolutions and ensure that it is available to all health care and administrative staff dealing with mothers and babies.
4. Conduct regular monitoring activities to monitor implementation and compliance to the code and identify and report the companies and distributors that are violating the code.
5. Conduct regular training in code implementation and monitoring to administrative staff and top officials.
6. Send periodic reminders to officials responsible for control of labeling instructions and for admitting infant milk formula to alert them to the articles of the code and hazards of commercial marketing on the decision of the mother not to breastfeed and the economic impact this has on the country's economy, the expenditure on health care, the out-of-pocket expenditure and socioeconomic status of the family.
7. *Link these messages with the current findings of the hazardous composition of breastmilk substitutes especially infant milk formula and its effect on child health growth and development (e.g. melamine scandal and the enterobacter sakazaki outbreak).*

II.5. Community-based support for continued breastfeeding

Global Strategy of Infant & Young Child Feeding

Maintaining the momentum of the global Baby Friendly initiative is among the actions stressed in the *WHO/UNICEF Global Strategy for Infant and Young Child Feeding* that was endorsed by the World Health Assembly and UNICEF in 2002.

The *Global Strategy* reaffirms the relevance and urgency of the operational targets of the *Innocenti Declaration,* including implementation of the *Ten Steps to Successful Breastfeeding* and full application of the *International Code of Marketing of Breast-milk Substitutes* and its subsequent resolutions, stressing that BFHI should continue to be implemented, and that designated health facilities be monitored and reassessed on an on-going basis.

The *Global Strategy* reaffirms the relevance and urgency of feeding infants adequate and suitable complementary feeding, especially feeding high risk groups as preterms, malnourished and infants of HIV mothers.

The *Global Strategy* urges governments to ensure that sectors of government and non governmental organizations that work with mothers and children devise appropriate strategies to encourage integration of breastfeeding and infant feeding policies within their health programs.

It also encourages ministries of health to integrate breastfeeding within other health programs including 'Growth monitoring programs' (GMP), 'Expanded programs of immunization' (EPI) and 'Family Planning' programs, the 'Integrated Management of Childhood Illness (IMCI) to strengthen the practice of exclusive breastfeeding, timely complementary feeding and continued breastfeeding for two years or more.

The baseline survey findings scoring model indicated a risk for early discontinuation of breastfeeding due to suboptimal support of breastfeeding. Family planning represented an opportunity for improvement if corrective action is taken.

The extent of integration of information related to breastfeeding practices that support exclusive breastfeeding in the first six months through other PHC programs as 'Expanded Program of Immunization' (EPI), family planning and growth monitoring scored a mean of 2.7, indicating a high need for integration between programs in primary health care.

The scoring model identifies the needs for program management issues for implementing the GSIYCF in the 12 governorates as follows:

Table (7): Summary of needs for supporting exclusive breastfeeding (0-6 months), timely complementary feeding and continued breastfeeding for up to 2 years of age through integration with other MCH programs as growth monitoring, EPI & family planning.

Practices by primary health care staff in other programs to support breastfeeding continuity	Mean score out of 5
Mothers encouraged to exclusively breastfeed for 6 months during visits for **growth monitoring.**	2.8
Mothers report being encouraged to exclusively breastfeed for 6 months during **immunization sessions.**	2.6
Mothers confirm being informed of hazards of bottle feeding during **immunization sessions** and family planning sessions.	2.5
Mothers confirm being guided during **family planning sessions** to exclusively breastfeed for 6 months.	2.2
Mothers confirm being guided during **family planning sessions** to increase frequency of breastfeeding especially at night.	1.5
PHC staff who report encouraging complementary feeding at **ONLY After** 6 months.	3.6
PHC staff who report that they encourage breastfeeding to continue > 2 years of age.	3.6
Risk score interpreted as needs (out of 5)	**2.7**

EPI: Expanded Program of Immunization, PHC: Primary Health Care

☞ Suggested needs for action

- Strengthen community outreach services for breastfeeding and complementary feeding education and support through training peripheral workers and volunteers.
- Introduce monitoring systems through outreach programs to ensure continued full and effective coverage.
- Ensure infant feeding counseling is integrated in all infant and child health care service programs for consistency of information.

II.6. Information Systems for Monitoring Breastfeeding Practices

The momentum of the BFHI global initiative needs to be maintained as stressed in the *WHO/UNICEF Global Strategy for Infant and Young Child Feeding* that was endorsed by the World Health Assembly and UNICEF in 2002 for promoting, protecting and supporting breastfeeding. This can only be done through established registration and information systems that can monitor and audit practices (procedures) and outcomes as a part of the continuous quality improvement processes of successful management of programs (Cambell et al, 1995, Merten et al., 2005, Hofvander, 2005, Rosenberg et at al, 2008).

To maintain the credibility and sustainability of the BFHI, monitoring and reassessment is periodically needed. How to do this in a positive spirit without creating an enormous burden on central authorities is a challenge. A mixture of internally conducted regular checks and periodical external checks can be done (UNICEF-WHO, 2006).

Specific purposes of monitoring and reassessment

There are three common purposes:

- to support and motivate facility staff to maintain baby-friendly practices
- to verify whether mothers' experiences at the facility are helping them to breastfeed
- to identify if the facility is doing poorly on any of the Ten Steps and thus whether needs to do further work to make needed improvements

A fourth purpose relates to national measures to end free and low-cost supplies of breast-milk substitutes, feeding bottles and teats:

- to verify if governments and other responsible organizations are implementing and enforcing the International Code of Marketing of Breast-milk Substitutes and subsequent WHA resolutions.

Monitoring is a dynamic system for data collection and review that can provide information on implementation of the *Ten Steps* to assist with on-going management of the *Initiative*. It can be organized by the hospitals themselves or at a higher level in the system. It can be relatively inexpensive, if the monitors are either from the hospitals or already employed within the health care system. Data should be collected either

on an on-going basis or periodically, for example on a semi-annual or yearly basis, to measure both breastfeeding support provided by the hospitals and mothers' feeding practices. Hospital management and staff should use the results to identify areas needing improvement and then develop plans of action to make needed changes. The monitoring results and plan of action should be shared with the national authority responsible for BFHI, including whatever BFHI coordination group is in place. Plans for making any improvements indicated can be discussed as well as any technical guidance or support needed from the national level.

When possible, monitoring of adherence of selected *Global Criteria* should be integrated into a broader system of hospital auditing or quality assurance.

The Baseline survey assessed the presence of a registration and reporting system for infant feeding data. This scored 2.3. Although a registration system was present in hospitals, it did not include data of infant feeding practices. Also, although there was recording and reporting of some infant feeding data by primary health care staff this does not cover all Ten Steps.

It is recommended that the registration system for infant feeding data be revised to cover the Ten Steps and be instituted and unified for hospitals and primary health care, MCH centres and reported to central authorities for decision making and country plans for the GSIYCF.

Table (8): Summary of scores attained for Monitoring & Evaluation (M&E) of Breastfeeding Practices by staff in hospitals and PHC facilities interpreted as needs:

Monitoring & Evaluation Practices	**Mean score**
Top officials report having a registration system in the health facility	4.5
Top officials report registering infant feeding data	1.17
Top officials report infant feeding data to higher authorities	0.9
Top officials use this information to improve practices in the hospital	1.17
Paediatric or PHC staff registers and monitor infant feeding practices on regular basis	2.25
Paediatric & PHC staff report data to Breastfeeding committee or higher authority	0.75
Paediatric & PHC staff encouraged to do or share in research in infant feeding	1.3
Risk score (out of 5)	2.3

☞ Suggested needs for action

- Monitor infant and young child feeding (IYCF) through indicators with a focus on timely initiation (within one hour with skin to skin contact) and exclusive breastfeeding (0-6 months), use of nipples and continuity.
- Develop an urgency to establish baseline data and publish surveillance reports for purposes of decision making, planning effective strategies and advocacy.
- Encourage staff to share in research or to do their own research in infant feeding to identify needs and study effects of various interventions.
- Integrate infant feeding data in the health information systems of PHC and quality assurance departments.

II.7. Quality of Service Delivery as Perceived by Mothers

The needs of quality improvement in service delivery as perceived by mothers are shown in table (9). Fees, meals and medication were identified as opportunities for improvement as they showed the lowest scores compared to other services.

Finally, women's satisfaction with the quality of services they received in the delivery area scored a mean of 4.4 reflecting a high degree of tolerance and acceptability. They scored lowest for affordability of the fees and for willingness to return to same hospital in their next delivery, which indicates an overall true dissatisfaction. Efforts should be made to make maternity facilities more homely and family friendly to encourage mothers to deliver in hospitals under medical supervision.

Table (9): Summary of mean score interpreted by needs for meeting mother satisfaction of care received during delivery in the hospital.

Governorates	Mean score	Needs
Staff treatment and communication	4.5	Strengthening
Waiting time in outpatients	4.1	Strengthening
Examination by medical staff (gentle, with decency,	4.5	Strengthening

not painful)		
Medication (affordable, accessible, timely)	3.9	Improvements
Investigations (affordable, accessible)	4.1	Strengthening
Meals (timely, clean, enough, palatable)	3.5	Improvements
Toilets and Bathing facilities (running water, clean, hot water, easy to access and use)	4.3	Strengthening
Transport inside hospital: timely, comfortable	4.2	Strengthening
Cleanliness and hygiene	4.2	Strengthening
Fees affordable	3.8	Improvements
Mother intends to return to this same hospital	3.8	Improvements
Mean Score	4.4	Strengthening

☞ Suggested needs for action

- Build capacity of administrative and health staff in quality assurance targets for Baby friendly and the global strategy of feeding infant and young children.
- Integrate BFHI in the quality committees and quality teams for identifying opportunities for improvement within the medical care curative and preventive sectors.
- Use discharge interviews to assess satisfaction of internal and external customers for identifying gaps in care and evaluate the effect of interventions.
- Train staff how to perform a quality improvement project using quality tools as Pareto charts, fish bones charts and SWOT (strength, weakness, opportunities, threat) analysis to identify strategies and formulate plans, check results using the PDCA (plan-do-check-act) cycle, display results using graphic presentations and control the process using control charts.
- Celebrate success stories and disseminate their results in the community and initiate new quality improvement projects for continuous quality improvement.
- Encourage the establishment of centers of excellence in BFHI to have the ripple effect throughout the country.

Section III

Breastfeeding Patterns in the Community

III.1.1. Highlights on Epidemiological Surveys

Comparing Knowledge, Attitudes and Practices of Mothers towards Breastfeeding in Upper Egypt versus Lower Egypt

Abul-Fadl, et al, 2010: *Presented in the Annual International Meeting of Academy of Breastfeeding Medicine in San Francisco, 27-30 October, 2010.*

Aim: To assess knowledge, attitude and practices (KAP) of mothers towards breastfeeding.

Methodology: Selection of 25 breastfeeding mothers from 35 maternal and child health care units, with babies were aged 2 to 24 months from 12 governorates, with a total of 1052 mothers. They were interviewed on face to face basis.

Findings: The KAP of mothers showed regional differences between Upper Egypt (UE) and Lower Egypt (LE). Community practices revealed exclusive breastfeeding rates during the first six months were significantly less in Lower Egypt (LE) governorates (43.2%) compared to Upper Egypt (UE) (49.6%). Less mothers knew about benefits of breastfeeding to themselves in UE (38.3%) compared to LE (61.5%). Only 25.9% in LE and 38.5% in UE reported initiating breastfeeding immediately after birth, with some STS in 62.1% and 52.2%, respectively. Two thirds of the mothers in both Upper and Lower Egypt continued to introduce herbal drinks or decoctions to their babies in the first six months. Less than one half of the mothers in UE knew of the hazards of unnecessary supplements. They reported that the source of information about supplements came from social network and media and less from health workers. On demand feeding and night feeding that was once defective before BFHI implementation in the early 1990s has significantly improved and the benefits of night feeding are known to two thirds of the mothers. A significant portion of mothers (43.2% in LE and 39.2% in UE) reported offering pacifiers to their babies. More than one half of the mothers in LE (55%) knew the negative effect of pacifiers on breastfeeding compared to 40.4% in UE. Two thirds of the cases report that a relative was the one who encouraged offering pacifiers to the baby. Over one half of mothers fed their baby using a bottle. This is because almost two thirds in UE think that babies cannot feed except by a bottle, compared to only one third in LE. Young mothers, hospital delivery, illiteracy and low social class were risk factors for poor practices.

Conclusions: Community practices are influenced by regional differences, place of delivery, level of education, age and social class.

III.2. Mothers' Knowledge of Breastfeeding Benefits

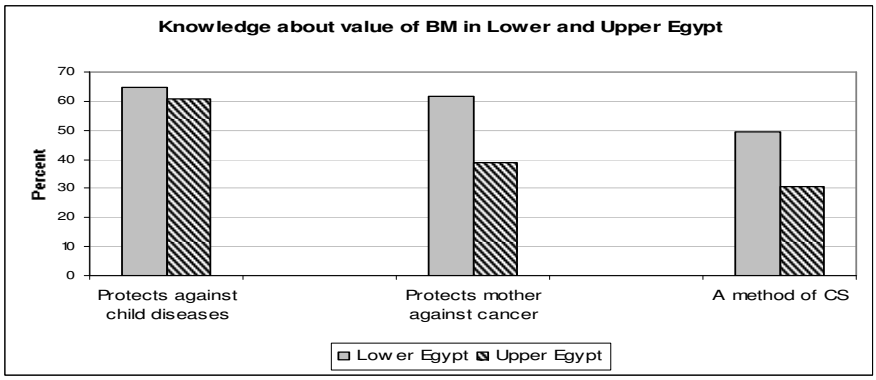
'Step 3' of the Baby Friendly Hospital Initiative (BFHI) urges health workers to inform pregnant women and mothers about the benefits of breastfeeding. The knowledge of mothers about the benefits of breastfeeding reflects the degree to which this step is disseminated within the community.

Mothers in LE had more knowledge about the protective effects of breastfeeding for themselves and their child, while a significantly lower percentage of mothers in UE knew about its protective effect for women against breast cancer. The lowest level of knowledge was about the contraceptive effect of breastfeeding using LAM (lactational amenorrhea method of contraception) particularly in UE. Less than one third of mothers in UE and one half in LE reported they knew how breastfeeding can be used a contraceptive method (Table 11).

Table (11): Knowledge of mothers about the benefits of breastfeeding (UE vs LE).

Geographical Site / Type of knowledge about breastfeeding	Lower Egypt	Upper Egypt	p-Value
Breastfeeding Protects children from disease	64.9	60.8	0.000
Breastfeeding Protects mothers from cancer	61.5	38.8	0.000
Breastfeeding could be used as a method of contraception (using LAM criteria)	49.3	30.7	0.000

Figure (36): Knowledge about breastfeeding and Breastmilk (BM) benefits in UE vs LE (CS: contraception).



III.3. Bonding by Baby's Crawl to the Breast

'Step 4' of the Baby Friendly Hospital Initiative calls for early initiation of breastfeeding within the first hour through immediate uninterrupted skin-to-skin (STS) contact with the mother and during which the baby shows readiness to breastfeed with no interference from health workers, except to give support to the mother and observe the baby's wellness.

Several studies have shown how the baby finds his way to the breast, when placed naked on the mothers' bare chest and left to experience what is know named as the 'Baby's first crawl to the breast'.

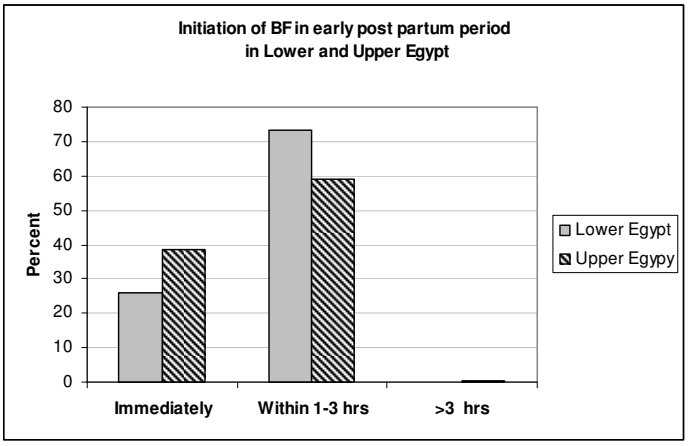
The study showed that early initiation was statistically significantly delayed in LE, as three quarters of the mothers did not initiate breastfeeding except after the first hour (at P<0.0001) as shown in table 12. This is probably related to the higher percentage of home deliveries with no medical interventions in UE that permit early initiation. These findings are concomitant with the low mean scores of hospital practices for step 4 in LE (mean= 2.4) compared to higher mean scores in UE (mean= 3.2) as shown in table (23-c) which corresponds to the scoring model used in this study. Initiation with any skin-to-skin contact was higher in LE. However the initiation did not fit with the current UNICEF/WHO criteria for early first hour uninterrupted STS.

Table (12): Initiation of breastfeeding in the early postpartum period in Lower and Upper Egypt

Geographical Site / Initiation - STS	Lower Egypt	Upper Egypt	p-Value
Immediately	**25.9**	**38.5**	**.000**
Within 1-3 hours	**73.1**	**59.1**	
After more than 3 hours	**.0**	**.6**	

Initiated with any Skin-to-Skin Contact	**62.1**	**52.2**	**.003**

Figure 37: Initiation of breastfeeding **in early post partum period in Lower and Upper Egypt**



Knowledge about benefits of early initiation through Skin-to-Skin contact

There was an overall poor knowledge of mothers about the benefits of skin-to-skin care. This was seen more among the mothers interviewed in Upper Egypt (Table 13). This may be due to the lower levels of education in UE, as the higher the education level of the mother the more likely was she to know more about the benefits of early initiation and skin-to-skin care for the baby and mother. The difference was again statistically significant for almost all of the benefits at $P<0.001$, except for breastfeeding ($P>0.05$).

Table (13): Knowledge about Benefits of Skin-to-Skin Care (STSC) in Lower versus Upper Egypt.

Geographical Site / Benefits of STSC	Lower Egypt	Upper Egypt	p-Value
Provides warmth for the baby	54.8	47.6	.000
Promotes growth of baby	43.1	40.8	.000
Promotes weight gain	35.9	26.2	.000
Better Breathing	38.1	26.4	.000
Better Quality of Sleep	50.0	44.4	.000
Lesser Crying	60.2	49.9	.000
Supports breast feeding	52.7	54.5	.000

Several randomized and quasi-experimental studies have examined the influence of early postnatal contact on the initiation or continuation of breastfeeding and in some cases on other aspects of mother-infant interaction. Babies who suckled early latched more easily and were more likely to be exclusively breastfed at 4 months (Righard and Alade, 1990, Wang and Wu, 1994).

Widström et al. (2008) showed that non-sedated infants follow a predictable pattern of pre-feeding behaviour when held on the mother's chest immediately after birth, but timing varies widely. Movements started after 12 to 44 minutes, and were followed by spontaneous suckling with good attachment at 27 to 71 minutes. Widström observed that sucking movements reached a peak at 45 minutes, which thereafter declined and were absent by two to two and a half hours after birth. They concluded that it is baby's choice to breastfeed and that maternity staff should facilitate this demand by newborn babies to become truly Baby friendly.

Studies indicate that maternal infant skin-to-skin contact lasting for longer than 20 minutes after birth may help to increase the duration of exclusive breastfeeding. The current UNICEF recommendation for 'Step 4' is that babies should be allowed uninterrupted skin-to skin for one hour

until the first breastfeed. The adoption of such practices by Egyptian health workers requires intensive efforts to change practices.

III.4. The Culture of Early Supplements

Two thirds of the mothers in both Upper and Lower Egypt introduce herbal drinks or decoctions to their babies in the first six months. While one third of the mothers in Upper and Lower Egypt give infant milk formula before six months (Table 14). This means that only one third do not give drinks and two thirds do not give other milks, this coincides with the mean score for hospital practices of '3' which was equal for both UE and LE. It also reflects the sharp decline in exclusive breastfeeding rates in the early critical months of life reaching 16.7% at 4-5 months as shown by the EDHS of 2005, but appears to have doubled in the EDHS findings of 2008 to 28.8%. This could reflect the reallocation of subsidized infant milk formula from being freely available in the pharmacies to be dispensed only through MCH. This was accompanies by training of PHC staff in breastfeeding management in order to minimize dispensing of formula. As a result budget of subsidization fell considerably.

Causes supplementation were shown by the ELCA/MCH-MOH/UNICEF survey to be due to:

1. More mothers in LE believe that infants need foods before the age of six months (63% in LE versus 43% in UE at P<.0001).
2. The source of information is mainly the relatives and friends followed by media and least by health workers as shown in table (15).

Table (14): Comparing types of supplements offered to babies during the first six months of life in Lower and Upper Egypt

Geographical / Site	Lower Egypt	Upper Egypt	p-Value

Supplements			
Herbal tea	**66.1**	**67.4**	
Artificial milk	**32.8**	**32.2**	**0.3**
Animal milk	**0.4**	**0.4**	

The Knowledge of mothers about the hazards of unnecessary supplements

The Knowledge of mothers about the hazards of unnecessary supplements was significantly higher in LE (56%) compared to the mothers interviewed in UE (44.9%) at P<0001.

This widespread malpractice is the underlying cause for the continued morbidity rates from diarrhea and other diseases despite the success achieved by the diarrheal control programs in the past and the current IMCI programs.

In other countries, strategies that used intensive media campaigns with the risk approach to improve exclusive breastfeeding rates in the first six months have shown to be effective in decreasing the introduction of unnecessary supplements to babies. Learning from the success stories in these countries may be useful in design of media campaigns (Fairbank et al., 2000, Lal et al., 1992, Wright et al, 1997, Aurbach et al., 1991, Green, 1989).

Inadequate implementation of the Ten Steps by hospitals appears to be a major hindrance to successful continuation of breastfeeding. Improving hospital practices complemented by effective media campaigns for promoting exclusive breastfeeding for 6 months has been shown to show the highest effect on successful breastfeeding continuation.

Table (15): Comparison of source of information about supplements given to the baby before six months in Upper Egypt (UE) versus Lower Egypt (LE).

Geographical Site Source	LE	UE
Relatives and friends	**52.5**	**35.9**
Media	**30.4**	**42.0**
Doctor / Nurse	**2.8**	**7.6**

Table (16): Reasons for introduction of drinks or food before 6 months in LE versus UE.

Geographical Site Reasons	LE	UE	p-Value
Sickness of baby	**30.6**	**36.2**	**.02**
Sickness of mother	**32.7**	**28.6**	**.000**
Mother takes drugs	**23.9**	**33.6**	**.000**
Pain in the nipple	**36.0**	**56.1**	**.000**
Mothers needs to go to the market	**32.3**	**47.8**	**.000**

III.5. Rooming-in & Access of Babies to Mothers

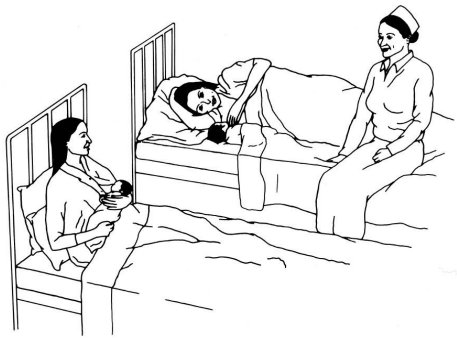
In both Upper and Lower Egypt, rooming-in practices were very common. This was even much higher in the past. The small percentage not roomed-in represents babies who were admitted to the neonatal intensive care for incubator care. Bedding-in is much more common than rooming-in due to the limited resources of cots for babies to be placed by the side of the mother's bed. These are more common in private hospitals. Younger mothers preferred to keep the baby in a cot near their bed, while older mothers seemed to prefer to keep their baby in the same bed. The high percentage of rooming-in coincides with the mean scores of rooming-in shown in hospital practices in the BFHI status for step 7.

We also asked mothers how they cared for their baby. Only one third of the mothers mentioned that they cared for them without the use of carry cots or baby prams. This is an encouraging finding that can facilitate the introduction as kangaroo mother care as the ideal method for caring for young babies.

Table (17): Practice of rooming-in in the postpartum period in Lower and Upper Egypt

Governorate	Lower Egypt	Upper Egypt	P-value
Baby in mother's bed over 24 hours:	**87.6**	**83.5**	**0.07**

bedding in			
Baby kept in same room with mother over 24 hours: rooming-in	**18.2**	**16.1**	**0.4**
Baby wrapped in a blanket or put in a carrier cot or buggy or push chair	**33.2**	**36.1**	**0.3**



III.6. On-demand Night & Day Breastfeeding

There is evidence to show that mothers are programmed to respond to the babies' desire to breastfeed rather to schedule feed their babies. This is nature's way to regulate milk production and settle baby's needs for growth and development.

The practice of night feeding has shown a remarkable improvement over the past decade and a half. In early 1990s night feeding was a problem in the BFHI muticentre baseline study conducted by UNICEF in Egypt (1993). However the EDH surveys of 2005 and 2008 indicate that night feeding ranges between 5.3 times in health facility deliveries compared to 5.8 -6 times in deliveries carried out by the daya. The practice is highest in Frontier governorates and lowest among working mothers.

This is also coincides with staff practices that do not restrict night feeding as was the trend in the early 1990s. However the score given by hospital practices (mean=3) was lower than the score given by the community practices survey and this discordance is probably is due to the short hospital stay that was not enough to measure 24 hour practices.

Table (18): Comparison of mother's practices towards responding to hunger cues and breastfeeding at night in relation to geographical site

Geographical Site / Breastfeeding at night and Responding to hunger cues	Lower Egypt	Upper Egypt	p-Value
Breastfeeds at night	**95.7**	**95.0**	**0.03**
Mother thinks breastfeeding At night is useful	**75.5**	**79.3**	**0.002**

Breastfeeds in response to hunger cues	**78.9**	**76.3**	**0.0001**

III.7. Alternatives to Pacifiers and Bottles

There have been no changes in the trends in use of bottles and pacifiers as it is a culture embedded by the marketing tactics of companies. Mothers see at the norm for settling crying and colicky babies. Their widespread displays in shops and on the media have assisted the promotion of this culture. Hazards and alternatives need to be promoted.

A significant portion of mothers (43.2% in LE and 39.2% in UE) reported offering pacifiers to their babies. Most of these mothers believe that these pacifiers are the best way to soothe the baby. In two thirds of the cases a relative is the one who provided mother with the advice to use a pacifier. Many mothers know that carrying the baby is a better way to soothe the baby than to give him or her a pacifier, however mothers in LE were more knowledgeable than UE mothers in this regards (80.8% in LE compared to 71.6% in UE at $P<0.001$).

More than half of the mothers in LE (55%) know the negative effect of pacifiers on breastfeeding compared to 40.4% in UE, the difference was statistically significant at $P<0.001$.

The use of bottles was even more common than pacifiers, as over one half of mothers fed their baby using a bottle (56.8%) in UE and somewhat less in LE (51.9%). This is because almost two thirds

(60.5%) in UE think that babies cannot feed except by a bottle, compared to only one third in LE (39.2%) and the difference was statistically significant at P<0.001. Also more mothers in LE (66%) compared to less mothers in LE (44%) knew the negative effects of bottles on breastfeeding (P<0.0001).

The mean use of bottles and pacifiers was in the range of 80% to 52% for LE and 72% to 57% for UE. These findings are concomitant with the mean scores of hospital practices for step 9 for LE 3.4 and 4 for UE. Hence hospital practices can influence to some extent later use of nipples, however pressures from the social network can influence mother's practices. Hence the importance of the educational role of hospitals in raising the awareness of the mothers and families about the hazards of these devices to breastfeeding and infant health.

The practice of feeding babies by bottles came from pressure from the social network of family and friends (50%) and less from the media (17%). However mothers did state they were influenced by hospital advertisements of bottles and infant milk formula in 11.1% in LE and 9% in UE, the difference was statistically significant at P<0.001.

Table (19): Knowledge Attitude and Practice (KAP) of mothers about hazards of offering pacifiers and feeding bottles to their babies in Upper versus Lower Egypt.

Geographical Site / KAP for Pacifiers and Bottles	Lower Egypt	Upper Egypt	p-Value
Mother gave her baby a pacifier	43.2	39.4	0.2
Thinks pacifier calms her baby	44.0	47.2	0.3
A relative provided a pacifier	63.4	64.2	0.05
Knows that carrying baby is better than providing a pacifier	80.8	71.6	0.001

Mother carried baby instead of Giving a pacifier	**77.6**	**66.5**	**0.003**
Mother used a bottle for feeding	**51.9**	**56.8**	**0.2**
Thought that a baby cannot drink Except with a bottle	**39.2**	**60.5**	**0.0001**
Knows negative effect of pacifiers on breastfeeding	**55.3**	**40.4**	**0.0001**
Knows negative effect of using bottles on breastfeeding	**63.4**	**44.0**	**0.0001**
Used bottle in response to relatives	**52.7**	**55.8**	**0.0001**
Used bottle in response to mass media	**17.4**	**17.4**	**0.0001***
Used bottle in response to hospital Advertisement	**11.1**	**9.1**	**0.0001**

*** Percentage of mothers who used pacifiers that was not influenced by media was 65.7% in LE and 75% in UE, the difference was significant. Other data was included under do not know or non responders.**

It is concluded that hospital practices play an important role in influencing the overall breastfeeding patterns of infants especially in the early weeks and months of life when poor infant feeding practices can have detrimental effects on the immediate and long term health and survival of these babies. Promoting Baby friendly health facility practices in maternity, pediatric hospitals and in primary health care is an urgent need to protect the health and well being of children and women in our country and reduce the high expenditure of the country on imported infant milk formula.

Summary:
A Snapshot of MBFHI Baseline in Egypt

Summary of the levels of performance, opportunities for improvement and recommended action for the six expanded initiatives under study

Fields assessed	Mean Level of performance	Opportunities for improvement	Opportunities for strengthening	Recommended action
1- The Ten Steps for Baby Friendly status	Needs upgrading	Steps 1, 2, 3 & 6	All other steps	**Revival of BFHI in all sectors of health & medical services (IE-BFHI*)**
2- Mother Friendly	Needs to be implemented	Women choices, education & leaving baby with mother in labor	All other criteria	**Develop training plans & material for Mother Friendly & integrate with BFHI**
3- Code Implementation.	Needs to be legislated	Copies of Code	All other areas	**Dissemination & training**
4- Supporting Breastfeeding continuity	Needs strengthening	Family planning education on breastfeeding	All other programs	**Training and dissemination of BF education material via other programs**
5- Monitoring & Evaluation	Needs upgrading	Registration reporting & data based decision making	Infant feed data registration system	**Developing, training and monitoring registration systems**
6- Mother satisfaction with quality of services	Needs strengthening	Fees and intent to return	All remaining criteria	**Integrate BFHI with quality & accreditation systems**

				in MOH

***IE-BFHI: Integrated Expanded Baby Friendly Hospital Initiative**

The Ten Steps to Successful Breastfeeding

Every facility providing maternity services and care for newborn infants should:

1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
2. Train all health care staff in skills necessary to implement this policy.
3. Inform all pregnant women about the benefits and management of breastfeeding.
4. Help mothers initiate breastfeeding within a half-hour of birth.
5. Show mothers how to breastfeed, and how to maintain lactation even if they should be separated from their infants.
6. Give newborn infants no food or drink other than breastmilk, unless *medically* indicated.
7. Practice rooming-in -- allow mothers and infants to remain together -- 24 hours a day.
8. Encourage breastfeeding on demand.
9. Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

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Section IV

Interventions for Improving Breastfeeding Practices

V.1. A Monitoring Tool to Revive Baby Friendly in Pre-designated Hospitals in Egypt

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Extracted from: Hisham Sherif's Master Thesis in Pediatrics conducted in Benha Faculty of Medicine,Benha University in 2008

Summary:

Introduction: Reviving Baby Friendly Hospital (BFH) practices is a major challenge for the country to improve breastfeeding rates. Interventions are needed to revive the pre-designated BFH in the region.

Aim: To improve the quality of facility support services to breastfeeding mothers and babies by monitoring the infant feeding practices based on the UNICEF/WHO Ten Steps of the BFHI.

Methods: It was a mixed longitudinal cross-sectional intervention study. A monitoring tool was designed adapted from the UNICEF-BFHI tool. It was implemented by the trained staff of the maternity and neonatal intensive care unit (NICU) departments of Damanhour Teaching Hospital. Infant feeding practices were periodically assessed by sampling twenty mother-infant pairs at three weeks intervals over a period of four months with a total of 120 mother-infant pairs over the entire period of study from August to November 2008. Two weeks after the final monitoring session, 80 mother- infant pairs were sampled from four other hospitals in the same region for comparison.

Results: Pre and post implementation showed significant improvement in the practices and increase in the exclusive breastfeeding practices needed to meet the global criteria of BFHI in the intervention site but not in other neighboring hospitals.

Recommendations: It is concluded that the monitoring tools are useful in creating the momentum for reviving BFHI status in pre-designated hospitals but sustaining them depends on the political drive and the need to control the marketing practices of infant milk formula companies that influence staff practices in NICU and pediatric wards.

IV.2. Interventions to achieve First Hour Skin-to-skin contact

A Comparison of Three Interventions to Achieve Continuous Uninterrupted Skin-To-Skin Until The Completion of The First Breastfeed As The Standard of Care

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Abstract of a poster presentation in the 14th Annual International Meeting 'Lesson from History, Implications f Tomorrow' Williamsburg, Virginia, November 5-8, 2009. Published in the Journal of Breastfeeding Medicine of the Academy of Breastfeeding Medicine Volume 4(4): 240, December, 2009.

Background: The standard care of the revise World Health Organization (WHO) and UNICEF Baby Friendly Hospital Initiative (BFHI) calls for continuous uninterrupted skin-to-skin care beginning immediately after birth and continuing uninterrupted until the completion of the first breastfeed. Implementation of this practice has the potential to decrease Egyptian neonatal deaths by 22%.

Objective: To examine the real world effectiveness of three intervention conditions designed to change the standard of care in five hospitals in Upper Egypt using a 5-day immersion model Practice, Reflection, Education and training combined with Ethnography for Sustainable Success (PREESS), training of trainers using the WHO/UNICEF 20 hour course, and combined approach.

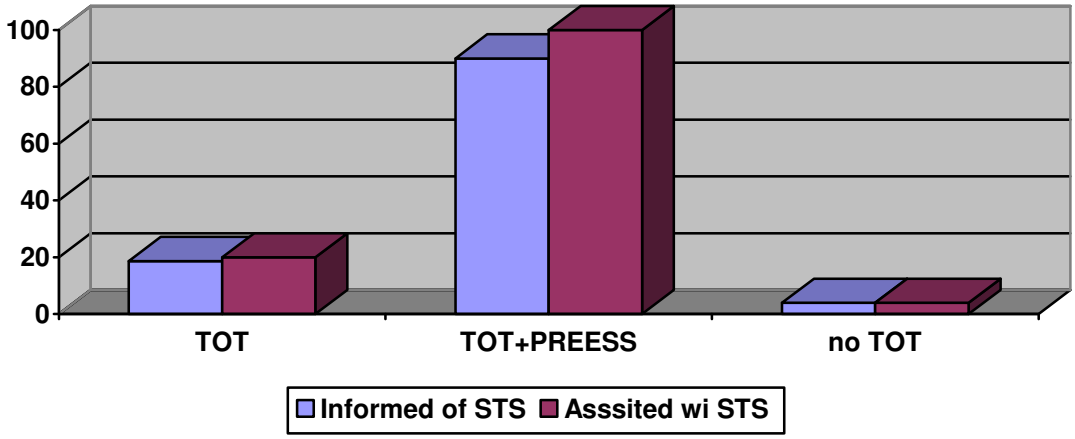
Methods: A five-day immersion model (PRECESS - Practice, Reflection, Education and training Combined with Ethnography for Sustainable Success), was implemented in an Upper Egypt hospital. The methodology has five steps. The first step is to educate the staff about the new procedure with experts in the field. The second step is the practical application of the new procedure, with experts and staff working together, continuing the educational process. The third step is to video tape the evolving process as the hospital staff implement the new procedures. The fourth step is an Interaction Analysis workshop to review and discuss barriers and solutions. The fifth step in the continuing application of the procedure.

Six months following the interventions a national cross sectional descriptive study collected data related to practices that support the BFHI. Data from the study were examined in relation to the eight hospitals that participated I the interventions.

Results: Only staff at the 2 hospitals that experienced the immersion model and the combined approach reported that their colleagues were practicing at standard of care. The staff at the remaining six hospitals reported that none of their colleagues routinely introduced skin-to-skin care immediately after birth and continuously until the completion of the first feeding.

Conclusions: Constant with other studies, the authors found that training alone is insufficient to effect sustainable practice change. The 5-day immersion model, alone and combined with training, was an ineffective strategy to change the standard of care.

Figure (1): Comparing responses of mothers on discharge from the obstetric about staff support on breastfeeding initiation through skin to skin (from baseline BFHI survey of MoH/MCH-UNICEF-ELCA, 2008)



First Hour Skin-To-Skin Contact in Egyptian Hospitals: Barriers and Outcome

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Research, extracted from thesis dissertation for Master degree in pediatrics by AlShaimaa AlDeib.

Abstract presented in the International VELB conference in 21-23 October, 2010 in Basil, Switzerland.

Background: Initiating breastfeeding within one hour of birth is one of the Ten Steps to Successful Breastfeeding (Step 4) on which the Baby Friendly Hospital Initiative was based and launched in 1991. Step 4 was revised in 2006 into a new interpretation by UNICEF that stated that "initiation of breastfeeding should be started by placing the baby in skin-to-skin for 1-2 hours or up to the first breastfeed. There have been many barriers to implementation of this step in Egypt as stated above.

Aim: To implement direct skin-to-skin contact (SSC) between the mother and her baby during the first hour of life, to observe the babies' pre-feeding behaviour and to identify the barriers that impede with optimum direct SSC up to the first breastfeed. Also to follow-up the outcome of his practice on mother' feeding practices after one week and one month.

Methodology: The study was conducted with 100 term mothers and babies at delivery. They wee divided into 50 normal vaginal and 50 caesarian section deliveries. They were selected from in El-Shatby University Hospital (ESUH) and Abou Kir Hospital (AKH). Mothers were informed antenatally about the benefits of SSC and how to do it to consent to the technique of SSC. The barriers were analyzed by fish-bone and flow charts to identify the root causes and bottle necks in procedures to successful completion of SSC.

Findings: SSC duration, it was higher in NVD than C.S as well as in primiparous and multiparous mothers; SSC was significantly longer in primiparous females, especially among those who delivered vaginally. SSC was interrupted early for suctioning, weighing, wrapping, and giving vitamin K injection to the baby. Taking the baby away for resuscitation was the commonest barrier encountered especially among C.S. deliveries. Complications of regional anesthesia and high turn over rates in the delivery area were common barriers. Mostly the rigid traditional protocols and overly conservative beliefs were the root cause barriers. We observed fifteen different responses before finally latching on the breast in vaginally delivered babies compared to twelve responses in babies delivered by C.S. The responses demonstrated varied from one baby to another but the sequence was similar. By one month 76% of vaginally delivered mothers and 82% of cesarean delivered mothers were exclusively breastfeeding their babies.

Conclusion: Early first hour SSC is possible in Egyptian settings, but staff training and preparation of mothers before delivery can facilitate the procedure and make it more acceptable. SSC can improve the exclusive breastfeeding rates of both cesarean and vaginal deliveries and should be encouraged as a routine practice labor.

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Annex I:

BFHI Baseline Survey

(ELCA-MOH/MCH-UNICEF, Egypt, 2008)

Methodology

This is a cross-sectional descriptive survey utilizing a multi-staged stratified random sample of maternity health facilities with high utilization rates in twelve randomly selected governorates in Egypt, a total of 70 health facilities were targeted.

Inclusion criteria for health facility:

- Hospital with services for mothers during pregnancy, delivery and post natal care for mother and baby with an affiliated MCH center in primary health care (PHC) that provides antenatal care (ANC) and child welfare services.
- Health facility previously designated as Baby friendly during the mid decade goals of the 1990s by MOH and UNICEF.
- Public facilities only including, General and district Hospitals (MOH) and adjoining urban medical centers or MCH centers in rural areas, University Hospitals and Teaching Hospitals of the National Organization of Teaching Hospitals (no private hospitals were included).

Sampling

Selection of the governorates was done randomly and included the two urban governorates (Cairo and Alexandria) and 10 regional governorates: five in Upper Egypt and five in Lower Egypt. The selection was predetermined by the governorates that had more hospitals that were previously designated as Baby friendly and had hospitals with high turn over of deliveries as well as being willing to participate in the survey. Table 2 lists the governorates and hospitals included in the study.

- **Data Collection tools include**:
    a. BFHI self-appraisal guided the in-depth interview with health officials including health facility director and heads of concerned departments.
    b. Specifically designed guided interview tools for:
        i. Health officials in health care system authority.
        ii. Medical and nursing staff in obstetric departments.
        iii. Medical and nursing staff in pediatric and NICU departments.
        iv. Mothers in post partum delivery ward (vaginal : caesarean 2:1), pregnant women and breastfeeding mothers (< six months)

Sites for pilot testing:

Pilot testing of the survey instruments were done in: i- the Kasr Alaini Hospital and Centre of Social & Preventive Medicine (CSPM) of Cairo University hospital, ii- Dar-Ismail Maternity Hospital in Alexandria and, iii- Damanhour Teaching hospital in Behiera governorate.

Sampled governorates for the actual survey with the number of hospitals in each included**:** Alexandria (4), Assyout (4), Aswan (5), Cairo (3), Sohag (3), Qena (4), Luxor (1), Damitta (2), Port Saed (1), Ismailia (2)Dakahlia (5) governorates.

Table 1: Presentation of sample size selected by governorate and target interviewed in the Baseline BFHI survey

Governorates	**Cai**	**Alx**	**BH**	**Dak**	**Dm**	**Ism**	**PS**	**Aw**	**Lx**	**Qn**	**Sg**	**Ast.**	**Total**
Health facilities survey	4	5	9	9	2	4	2	9	2	8	6	10	**70***
Number of top officials	13	15	17	16	8	8	4	25	4	16	12	22	**160**
Number of staff who serve mothers ** (maternity and ANC staff)	50	68	120	58	25	43	20	82	20	92	60	81	**719**
Number of staff who serve babies** (neonatal, paediatric, PHC staff)	68	62	105	57	25	32	25	80	10	92	60	83	**699**
Number of mothers with babies in the postpartum period mothers who delivered in the facility	61	73	145	61	26	46	25	106	25	71	55	88	**782**
Number Of breastfeeding mothers with Babies below 2 years of age	**72**	**77**	**155**	**99**	**43**	**60**	**5**	**217**	**40**	**84**	**90**	**110**	**1052**
Total	**268**	**297**	**244**	**494**	**236**	**146**	**134**	**519**	**101**	**363**	**283**	**394**	**3412**

* Includes Hospitals and Maternal and Child Health Centres ** Staff includes Medical and Nursing Personnel, ANC: Antenatal Care, PHC: Primary Health Care, ++ KAP survey.

Table 2: List of Hospitals by governorate in Lower and Upper Egypt.

Governorate	Hospitals
List of predesignated Hospitals surveyed in Lower Egypt:	
I-Beheira Governorate	1- Damanhour General Teaching Hospital. 2- Damanhour Maternity Home (Dar Welada). 3- KafrElDawar District Hospital & PHC. 4- Etai Baroud District Hospital & PHC. 5- Kom Hamada Hospital & PHC. 6- Shabrkhiet District Hospital & PHC.
II- Dakhlia Governorate	7- Mansoura University Hospital. 8- Mansoura General Hospital & PHC. 9- Meet Ghamr District Hospital & PHC. 10- Aga Hospital & PHC. 11- Sinbilaween District Hospital & PHC.
III- Dameitta Governorate	12- Dameitta General Teaching Hospital. 13- ElZarka Medical Centre for Family Medicine and Delivery Home (Dar Welada ElZarka).
IV- Ismailia	**14-** Ismailia General Hospital & PHC **15-** ElTal ElKabeer District Hospital & PHC
V- Port-Saed	16- Port Saed General Hospital & Medical Centre
VI- Alexandria	17- Dar Ismail Maternity General Hospital 18-Abu Keer MOH Hospital & PHC 19- Fawzi Moaz Pediatric Hospital 20- AtFal ElRaml Hospital & PHC
VII- Cairo Governorate	21- ElGalaa Teaching Hospital 22- ElMounira General Hospital & PHC 23- Manshiaet ElBakry General Hospital & PHC.
List of predesignated Hospitals surveyed in Upper Egypt:	
VIII- Aswan Governorate:	24- Aswan Teaching Hospital 25- Daraw District Hospital & PHC 26- Kom Ombo District Hospital & PHC 27- Edfo District Hospital & PHC 28- Nasr District Hospital & PHC
IX- Luxor Governorate	29- Luxor General Hospital
X: Qena Governorate:	30- Qena General Hospital 31- Qous Disrict Hospital 32- Dishna District Hospital 33- Naga Hamadi District Hospital
XI- Sohag Governorate:	34- Sohag General Hospital 35- Tahta District Hospital 36- Tema District Hospital
X- Assiut Governorate	37- Assiut General Hospital (AGH) 38- Eman Kadema Hospital (EKH), 39- Dayrout District Hospital (DrDH), 40- AbuTeeg District Hospital (ATDH), 41- Assiut University Hospitals (AUH): Child Health University Hospital, Women Health Hospitals of Assiut University

ANNEX- II:

Tabulated Results of secondary Analysis of BFHI Baseline survey using a scoring models for comparative analysis

1- STATUS OF TEN STEPS OF UNICEF/WHO BFHI

Step One:

Have a written breastfeeding policy that is routinely communicated to all health care staff: Table (20) compares the scores achieved by the different governorates with regards criteria for Step 1 based on responses from top officials, maternity, neonatal, paediatric and PHC staff.

Table (20): Score achieved by each of the criteria measured as a requirement for meeting 'Step 1' by governorate.

Governorates	Cai	Alx	BH	Dak	Dm	Ism	PS	Aw	Lx	Qn	Sg	Ast.	Mn.
Health facilities with drafted policy	5	5	4	0	0	0	0	3	0	0	2	3	**1.8**
Health facility has a committee for supporting breastfeeding or BFHI	2	4	1	4	0	3	0	2	0	0	2	2	**1.7**
Committee includes representative of all the departments that serve mothers and children	2	3	1	0	0	0	0	2	0	0	1	1	**0.8**
Drafted policy for the hospital that promotes breastfeeding is available	4	5	5	0	0	0	0	3	3	0	3	3	**2.2**
Policy cover the Ten Steps to successful breastfeeding and to protect breastfeeding	2	2	2	0	0	0	0	3	0	0	3	3	**1.3**
Policy available so that all health staff and mothers can see it and go back to it	4	5	5	1	0	0	0	3	0	0	3	3	**2**
Officials report that there is a mechanism for disseminating this policy	3	4	5	1	2	0	0	1	1	1	3	1	**1.8**
Maternity staff received orientation about Ten Steps	2	3	2	1	0	2	0	2	1	2	2	2	**1.6**
Maternity staff oriented to early initiation through first hour skin-to-skin (STS)	2	3	1	3	1	3	0	2	0	1	2	2	**1.7**
Paediatric staff aware of breastfeeding committee	2	4	2	2	1	2	1	2	0	0	1	1	**1.5**
Paediatric staff aware of policy and Ten Steps	2	3	3	1	1	2	1	2	2	0	1	1	**1.6**
Total (11 x 5=55)	30	41	31	13	5	12	2	25	7	4	23	22	**18**
Percent of total score	54.5	74.5	56.4	23.6	9.1	21.8	3.6	45.5	13	7	42	40	**32.7**
Risk score	**3**	**4**	**3**	**2**	**1**	**2**	**1**	**3**	**1**	**1**	**3**	**3**	**2**

Percent weighted (wtd.) score= total wtd. score divided by 55 (11x5), collective wtd. score= wtd. score of the percent wtd. Score

STEP 2:

<u>Train all health care staff in skills necessary to implement this policy</u>: Table (21) compares the scores achieved for 'Step 2' in the 12 governorates. The highest scores attained for training and skills were seen in Alexandria and the lowest was in Dakhlia, Luxor and Sohag.

Table (21): Score achieved by each of the criteria measured as a requirement for meeting Step 2.

Governorates	**Alx**	**Cai**	**PS**	**BH.**	**Dak.**	**Dm**	**Ism.**	**Aw**	**Lx**	**Qn**	**Sg**	**Ast.**	**Mn.**
Maternity Staff received any training in LM over past 5 yrs	2	2	0	2	2	1	3	1	0	0	0	2	**1.3**
Pediatric staff received training in LM in past 5 years	3	3	3	1	1	3	1	1	0	3	1	1	**1.75**
Received clinical training in Lactation	3	2	1	2	1	1	1	2	3	2	1	1	**1.7**
Received training in assisting with early breastfeeds	3	2	3	2	1	2	1	3	0	1	1	2	**1.75**
Received training in procedure of milk expression	3	2	3	1	2	1	2	2	0	1	1	1	**1.6**
Sub-total Score	14	11	10	8	7	8	8	9	3	7	4	7	**8**
Maternity staff knowledge about management of 5 common breast conditions (weighted* score)													
Breast engorgement	5	5	5	4	4	5	5	5	4	5	4	4	**4.6**
Sore nipple	5	5	0	4	4	5	5	4	4	5	4	4	**4.1**
Cracked nipple	5	4	0	4	3	5	4	4	5	5	4	4	**3.9**
Mastitis	5	3	0	3	1	5	1	4	4	5	4	3	**3.2**
Breast abscess	5	2	0	1	0	1	1	4	1	2	5	1	**1.9**
Sub-total wtd. score for LM+ of breast conditions	25	19	5	16	12	21	16	21	18	22	21	16	**17.7**
Mean. score for LM of breast conditions	5	3.8	1	3.2	2.4	4.2	3.4	4.2	3.6	4.4	4.2	3.2	**3.5**
Total wtd. score for training & LM	19	14.8	11	11.2	7.4	12.2	11.4	13.2	6.6	11.4	8.2	10.2	**11.4**
**Percent mean Score	63.3	49.3	36.7	20	13.5	40.7	20	44	22	20	27.3	34	**38**
Risk score for step 2	4	3	2	2	1	3	2	3	2	2	2	2	**2**

+ LM: lactation management
*** Weighted. score= mean score from responses for management of breast conditions= wtd. score**
**** Percent mean score= total score divided by 30 (6 criteria x 5),**

STEP 3:

Inform all pregnant women about the benefits and management of breastfeeding: Tables (22 **a,b and c)** compare the scores achieved for step 3 in the 12 governorates. The set of mean scores for the mothers was significantly lower for

mothers than for staff. The highest scores attained for antenatal education was seen in Beheira and the lowest was in Dakhlia, Port Saed and Qena governorates.

Tables 22-a,b,c: Score achieved by staff (a), mothers (b) and both together(c) for each of the criteria measured as a requirement for meeting Step 3.

a- Staff Scores:

Governorates	**Alx**	**Cai**	**PS**	**BH.**	**Dak.**	**Dm**	**Ism.**	**Aw**	**Lx**	**Qn**	**Sg**	**Ast.**	**Mn.**
Staff in ANC inform mothers of benefits of breastfeeding	4	4	5	4	1	3	4	3	5	4	4	4	**3.75**
Staff in ANC inform mothers how to breastfeed after birth	3	4	0	2	1	3	4	2	5	3	4	4	**2.9**
Total	7	8	5	6	2	6	8	5	10	7	8	8	**6.65**
Percent of total score	70	80	50	60	20	60	80	50	100	70	80	80	**66.5**
Risk score	4	5	3	4	2	3	5	3	5	4	5	5	**4**

b- Mother scores

Governorates	**Alx**	**Cai**	**PS**	**BH.**	**Dak.**	**Dm**	**Ism.**	**Aw**	**Lx**	**Qn**	**Sg**	**Ast.**	**Mn.**
Mothers received ANC education in 1- Early initiation	3	3	5	4	2	3	4	2	2	1	3	2	**2.8**
2- Importance of exclusive breastfeeding at birth	3	1	0	4	2	2	4	2	2	1	3	2	**2.17**
3- Exclusive BF for **6** months	3	1	0	4	1	1	4	2	2	1	3	2	**2**
4- Birthing practices that facilitate BF	3	1	0	2	1	2	4	2	2	0	2	1	**1.7**
Informed about **benefits** of STS in present pregnancy	2	1	0	1	1	1	2	2	1	0	1	1	**1.08**
Total	14	7	5	15	7	9	18	10	9	3	12	8	**9.75**
Percent of total Score	56	28	20	60	28	36	72	40	36	12	48	32	**39**
Risk. score	3	2	2	4	2	2	3	3	2	1	3	2	**2**

c- Total scores for staff and mothers

Governorates	**Alx**	**Cai**	**PS**	**BH.**	**Dak.**	**Dm**	**Ism.**	**Aw**	**Lx**	**Qn**	**Sg**	**Ast.**	**Mn.**
Total (7x5=35)	21	15	10	21	9	15	26	15	19	10	20	16	
Percent of Total Score	60	42.85	28.6	60	25.7	42.85	74.3	42.85	54.3	28.6	57.1	45.7	
Risk score	4	3	2	4	2	3	4	3	3	2	3	3	**3**

STEP 4: Help mothers initiate breastfeeding within a half-hour of birth through first hour uninterrupted skin-to-skin contact: The step was very poorly implemented in most of the governorates. Tables (23- **a,b,c)** compare the scores achieved for 'Step 4' in the 12 governorates in relation to staff and mothers and weighted mean scores for both. The set of mean scores for the mothers was significantly lower than for staff before correction. Even after correction half the governorates (50%) had a score of 2 for this step only 2 (Alexandria and Sohag) had scores of 4.

Tables 23-a,b,c : Score achieved by staff (a), mothers (b) and both together(c) for each of the criteria measured as a requirement for meeting Step 4.

a- Score for staff responses

Governorates	**Alx**	**Cai**	**PS**	**BH**	**Dk**	**Dm**	**Is**	**Aw**	**Lx**	**Qn**	**Sg**	**At**	**Mn**
Colleagues assist in First breastfeed within one hour of delivery	3	4	5	5	4	4	5	4	5	3	4	2	4
- Staff encourage breastfeeding in First hour	4	4	2	5	4	3	4	4	5	3	4	2	3.8
Staff who know that the practice of one hour of STS can reduce the need for analgesia in pp	4	3	0	3	4	3	2	2	3	1	3	2	2.5
Colleagues assist skin-to-skin in delivery room until first breastfeed	3	2	3	2	2	0	1	2	0	2	3	3	2
Staff encourage STS in their practice	4	3	4	3	3	1	1	4	2	2	5	4	3
Staff who encourage mothers with caesarean delivery (spinal) to hold baby STS to breastfeed	4	4	1	2	2	1	1	**3**	**0**	**1**	**1**	**2**	1.8
Staff who report that before going to the labor room procedure of STS is explained to mother	5	2	0	2	1	1	2	**2**	**0**	**1**	**2**	**2**	1.7
Total (35)	27	22	15	22	20	13	16	**21**	**15**	**13**	**22**	**17**	**18.8**
Percent wtd. Score	77.1	62.9	42.8	62.8	57.1	37.1	45.7	60	42.8	37.1	62.8	48.6	**53.7**
Risk score	4	4	3	4	3	2	3	4	3	2	4	3	**3**

b- Score for mother responses before correction

Governorates	**Alx**	**Cai**	**PS**	**BH.**	**Dak.**	**Dm**	**Ism.**	**Aw**	**Lx**	**Qn**	**Sg**	**Ast.**	**Mn.**
Mothers encouraged by staff to breastfeed immediately after normal delivery or CS	**3**	**1**	**0**	**1**	**3**	**4**	**0**	2	1	0	1	1	**1.4**
Mothers assisted to skin-to-skin immediately after NVD	**3**	**1**	**0**	**1**	0	**0**	**3**	3	3	2	4	2	**1.8**
Mothers assisted to skin to skin immediately after recovery in cesarean	**2**	**4**	**0**	**0**	0	**0**	**2**	0	2	0	4	1	**1.25**
Total	**8**	**6**	**0**	**2**	3	**4**	**5**	5	6	2	9	4	**4.45**
Mean score	2.7	2	0	0.7	1	1.3	1.7	1.7	2	0.7	3	1.3	**1.5**
Percent total. Score	53.3	40	0	13.3	20	26.7	33.3	33.3	40	13.3	60	26.7	**29.7**
Risk score for step 4	3	3	0	1	2	2	2	2	3	1	4	2	**2**

c- Mean score for staff and mother after balancing weighted score for mothers with staff:

Governorates	**Alx**	**Cai**	**PS**	**BH.**	**Dak.**	**Dm**	**Ism.**	**Aw**	**Lx**	**Qn**	**Sg**	**Ast.**	**Mn.**
Total Score for staff	27	22	15	22	20	13	16	**21**	**15**	**13**	**22**	**17**	**18.8**
Mean score (ms) for mother	2.7	2	0	0.7	1	1.3	1.7	1.7	2	0.7	3	1.3	**1.5**
Total score for mother after correction (cms x7)	**18.9**	**14**	**0**	**4.9**	**7**	**9.1**	**11.9**	**11.9**	**14**	**4.9**	**21**	**9.1**	**10.4**
Total score (staff +mother cms)	**45.9**	**36**	**15**	**27**	**27**	**22**	**27.9**	**32.9**	**29**	**17.9**	**43**	**26.1**	**29.2**
Percent score (70)	**65.6**	**51.4**	**21**	**38.6**	**38.6**	**31.4**	**39.8**	**47**	**41**	**25.6**	**61.4**	**37.3**	**41.7**
Risk score for step 4	**4**	**3**	**2**	**2**	**2**	**2**	**2**	**3**	**3**	**2**	**4**	**2**	**3**

Weighted score = criteria of staff/criteria of mothers = factor for correction (8/2=4)

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

Tables (24 **a,b,c)** compare the scores achieved for 'Step 5' in the 12 governorates. The set of mean scores for the mothers was lower for mothers than for staff even after correction but the difference was not statistically significant. Half (50%) of the governorates achieved scores of 4, remaining scored 3 Governorates of UE were more at risk.

Tables (24-a,b,c): Score achieved by staff (a), mothers (b) and both together(c) for each of the criteria measured as a requirement for meeting Step 5.

a- Score for staff responses

Governorates	Alx	Cai	PS	BH	Dk	Dm	Is	Aw	Lx	Qn	Sg	At	Mn
M. Staff who teach mothers how to position baby at their breast	5	4	4	4	4	5	5	**4**	**5**	**3**	5	**5**	4.4
M. Staff who teach mothers how to attach their baby to their breast	5	4	4	4	5	4	5	**4**	**5**	**3**	4	**4**	4.25
M. **Staff who teach mothers how** to massage their breast and express their milk if their baby is unable yet to suckle	4	4	0	3	4	4	3	**3**	**5**	**2**	4	**4**	3.3
M. Staff who ensure that baby is breastfeeding correctly within the first 6 hours after birth	4	4	0	4	4	5	4	**1**	**5**	**1**	4	**3**	3.25
M. Staff who assist mothers who have difficulties in breastfeeding	4	5	5	5	5	4	2	**5**	**3**	4	3	**4**	4.1
M. Staff who assist mothers with difficulties to **express breast**	4	4	5	4	5	5	1	**3**	**1**	1	2	**4**	3.3
Neonatal Staff who instruct FM who bring preterm in unit **to begin expressing their milk within 6 hours** of delivery	4	2	1	4	2	1	2	3	**5**	12	1	**3**	3.3
N. Staff who instruct her to **express 6-8 times a day**	5	2	1	4	2	1	1	2	2	1	1	**2**	2
PHC staff who ensure correct positioning and attachment at breast at 6 weeks	5	4	0	3	2	2	3	3	2	2	3	3	2.7
Total	40	33	20	35	33	31	26	28	33	29	27	32	30.6
Percent of total weighted score (9 x 5 =45)	88.9	73.3	44.4	77.8	73.3	68.9	57.8	62.2	73.3	64.4	60	71.1	68
Mean score	5	4	3	4	4	4	3	4	4	4	4	4	4

b- Score for mother responses

Governorates	Alx	Cai	PS	BH.	Dak.	Dm	Ism.	Aw	Lx	Qn	Sg	Ast.	Mn.
Mothers report shown by staff how to breastfeed	3	2	2	4	2	4	4	3	1	1	2	1	**2.4**
Corrected score for mothers (ms x 9)	27	18	18	36	18	36	36	27	9	9	18	9	**21.6**
Percent of weighted score after correction (45)	60	40	40	80	40	80	80	60	20	20	40	20	**48**
Mean score	4	3	3	5	3	5	5	4	2	2	3	2	**3**

Weighted score = criteria of staff/criteria of mothers = factor for correction (8/2=4)

c- Score for both mother and staff responses after balancing out staff with mothers

Governorates	Alx	Cai	PS	BH.	Dak.	Dm	Ism.	Aw	Lx	Qn	Sg	Ast.	Mn.
Total for staff	40	33	20	35	33	31	26	28	33	29	27	32	30.6
Total for mothers	27	18	18	36	18	36	36	27	9	9	18	9	21
Total for both after correction	67	51	38	71	51	67	62	55	42	38	45	41	51.6
Percent weighted score	**74.4**	**56.6**	**42.2**	**78.9**	**56.7**	**74.4**	**68.9**	**61.1**	**46.7**	**42.2**	**50**	**46.5**	**57.8**
Risk. score for step 5	**4**	**3**	**3**	**4**	**3**	**4**	**4**	**4**	**3**	**3**	**3**	**4**	**3**

STEP 6: Give newborn infants no food or drink other than breast milk, unless medically indicated: Tables (25**-a,b,c)** compare the scores achieved for 'Step 6' in the 12 governorates. The set of mean scores for staff and mothers were not different after correction. The highest score achieved was 4 in Aexandria, Beheira, Port Saed and Sohag and lowest in Qena (2).

Tables (25- a, b & c): Score achieved by staff (a), mothers (b) and compiled scores of mothers (after correction) and staff (c) for each of the criteria measured as a requirement for meeting 'Step 6'.

a- Score for staff responses

Governorates	Alx	Cai	PS	BH	Dk	Dm	Is	Aw	Lx	Qn	Sg	At	Mn *
Officials report that they have a list of acceptable medical indications for feeding infant milk formula	2	3	3	1	0	0	0	3	0	0	3	**2**	1.4
M. Staff who encourage women after birth not to give any fluid or drink to the baby except her own breastmilk (unless medically indicated)	3	5	5	3	4	5	5	5	5	4	5	4	4.4
Staff who verify any medical indication by evidence based medical practice	3	4	5	1	1	2	1	2	0	0	5	2	1.7
Staff who report that BF mothers admitted with sick babies(with no medical indication to IMF) a**re** not prescribed IMF during their	2	5	5	4	4	5	4	5	4	4	4	5	4.25

stay or at discharge													
N. Staff confirm that babies in NICU are given only breastmilk	2	1	1	2	2	0	0	2	0	2	2	3	1.4
Staff who help mothers with sick babies increase their milk supply or/relactate **near discharge**	5	4	3	4	3	2	2	2	4	1	2	3	3
Staff educate mothers on how to prepare safe formula if they are not breastfeeding	5	5	5	5	4	5	3	4	5	3	4	5	4.4
Pediatric Staff routinely admit mothers who are not breast- feeding in a separate ward.	1	1	0	1	0	0	0	0	0	0	1	1	0.45
Total	23	28	27	21	18	19	15	23	18	14	26	25	**21.4**
Percent weighted score (40)	57.5	70	67.5	52.5	45	47.5	37.5	57.5	45	35	65	62.5	**53.5**
Mean score	3	4	4	3	3	3	3	3	3	3	4	4	**3**

b- Scores for mother responses

Governorates	**Alx**	**Cai**	**PS**	**BH.**	**Dak.**	**Dm**	**Ism.**	**Aw**	**Lx**	**Qn**	**Sg**	**Ast.**	**Mn.**
Mother reports staff at delivery encouraged her to breastfeed the baby with no supplements	4	2	5	4	2	2	4	3	4	1	3	2	3
Corrected weighted score (score x 4 *)	16	8	20	16	8	8	16	12	16	4	12	8	12
Discouraged to offer prelacteals	3	2	1	3	1	2	3	3	3	1	3	2	2.25
Corrected weighted score (score x 4 *)	12	8	4	12	4	8	12	12	12	4	12	8	25
Total weighted corrected scores	30	16	24	28	12	16	28	24	28	8	24	16	
Percent weighted score (40)	75	40	60	70	30	40	70	60	70	20	60	40	
Mean score	4	3	4	4	3	3	4	4	4	2	4	3	

Weighted score = criteria of staff/criteria of mothers = factor for correction (8/2=4)

c- Compiled score for staff and mother responses (after adjustment)

Governorates	**Alx**	**Cai**	**PS**	**BH.**	**Dak.**	**Dm**	**Ism.**	**Aw**	**Lx**	**Qn**	**Sg**	**Ast.**	**Mn.**
Total for staff	23	28	27	21	18	19	15	23	18	14	26	25	
Total for mothers	30	16	24	28	12	16	28	24	28	8	24	16	
Total for both	53	44	51	49	30	35	43	47	46	22	50	41	42
Percent weighted score (out of 80)	66.25	55	63.75	61.25	37.5	43.75	53.75	58.75	57.5	27.5	62.5	51.3	52.5
Risk score (step 6)	**4**	**3**	**4**	**4**	**2**	**3**	**3**	**3**	**3**	**2**	**4**	**3**	**3**

Mn: Mean for criterion

STEP 7:Practise rooming-in — allow mothers and infants to remain together — 24 hours a day:

Tables (26-**a,b,c)** compare the scores achieved for 'Step 7' in the 12 governorates. This Step achieved a score of 4 in almost all governorates (11 out of 12).

Tables (26-a,b,c): Score achieved by staff (a), mothers (b) and both together(c) for each of the criteria measured as a requirement for meeting Step 7.

Govern. Criteria measured	Alx	Cai	PS	BH	Dk	Dm	Is	Aw	Lx	Qn	Sg	At	*Mn
Staff who do not separate the baby from the mother for more than one hour unless medically indicated.	3	2	5	5	5	5	5	5	5	4	4	5	4.417
Staff who do not allow family members to take newborn baby away from mothers.	3	2	5	5	5	5	5	5	5	5	5	5	4.583
Staff do not allow newborn to be away from mother over night.	3	1	5	3	5	5	5	4	5	3	5	5	4.083
Encourage the baby remain in a cot near mother all day and night.	4	5	5	4	5	5	4	3	3	3	5	5	4.25
Staff who allow mothers to spend as much time during the day with their babies in the NICU.	4	1	4	**5**	**2**	**1**	**1**	**3**	0	3	1	**2**	2.25
N. staff who encourage Kangaroo mother care (KMC).	4	3	0	1	1	1	2	**1**	3	0	1	**2**	1
Staff explain to NICU mother importance of holding baby skin to skin.	4	3	2	1	4	3	2	1	4	1	1	**1**	2.27
Total	25	17	26	24	27	25	24	22	25	19	22	**25**	23.4
% of total weighted score (5 x 7= 35)	71.4	48.6	74.3	68.6	77.1	71.	68.6	62.8	71.4	54.3	62.8	**71.4**	66.8
Risk score	**4**	**3**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**3**	**4**	**4**	**4**

B- Score for mother responses

Govern. Criteria	Alx	Cai	PS	BH	Dk	Dm	Is	Aw	Lx	Qn	Sg	At	*Mn
Mother reports her baby was not taken away from her. Corrected score (score x 2.3)	6.9	6.9	6.9	9.2	9.2	9.2	11.5	9.2	9.2	11.5	9.2	9.2	9.008
Mother reports baby roomed in Corrected score (score x 2.3)	9.2	9.2	6.9	6.9	6.9	9.2	9.2	11.5	9.2	11.5	11.5	9.2	9.2
Mother reports staff guide her if discharged before 24 to rooming-in	6.9	4.6	11.5	6.9	4.6	4.6	0	6.9	4.6	2.3	4.6	4.6	5.175
Total	23	20.7	25.3	23	20.7	23	20.7	27.6	23	25.3	25.3	23	23.433
Percent total score (out of 35)	65.7	59.1	72.3	66	59.1	65.7	59.1	78.9	65.7	72.3	72.3	65.7	66
Mean score	4	3	4	4	3	4	3	4	4	4	4	4	4

Weighted score = criteria of staff/criteria of mothers = factor for correction (7/3=2.3)

C- Score for both mother and staff responses:

Governor. Criteria	Alx	Cai	PS	BH	Dk	Dm	Is	Aw	Lx	Qn	Sg	At	*Mn
Total score for staff (out of 35)	25	17	26	24	27	25	24	22	25	19	22	**25**	23.4
Total score of mothers (out of 35)	23	20.7	25.3	23.6	20.7	23	20.7	27.6	23	25.3	25.3	23	23.433
Total	48	37.7	51.3	47.6	47.7	48	44.7	49.6	48	44.3	47.3	48	46.8
Percent for step (out of 70)	68.6	53.8	73.3	68	68	68.6	63.8	70.8	68.6	63.3	67.1	68.6	66.8
Risk score for step 7	**4**	**3**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**

*** Mn: Mean for criterion**

STEP 8: Encourage breastfeeding on demand: Tables (27- **a,b,c)** compare the scores achieved for 'Step 8' in the 12 governorates. This Step achieved highest scores in Beheira of LE and lowest in Qena of UE.

Tables (27 a,b,c): Score achieved by staff (a), mothers (b) and both together(c) for each of the criteria measured as a requirement for meeting 'Step 8'.

a- Scores for staff responses

Governorates	Alx	Cai	PS	BH	Dk	Dm	Is	Aw	Lx	Qn	Sg	At	Mn
M. Staff who report that encourage mothers to breastfeed as frequently as possible in the early days after delivery	4	5	5	5	5	5	5	5	5	5	5	**5**	4
M. Staff who place any restrictions on the duration of the breastfeed at each breast	1	2	1	3	2	0	2	1	3	1	1	**2**	1
M. Staff who instruct mothers to wake the baby to feed if sleeps for more than 3 hours	5	3	4	4	3	4	4	4	3	1	4	**4**	3
P. Staff who do <u>not decrease or limit duration</u> of BF of sick babies	2	4	5	4	5	3	4	4	3	3	4	3	4
P. Staff who encourage the mother to feed her baby in response to feeding cues	**1**	5	5	**4**	**4**	**5**	**4**	5	3	4	4	3	3
P. Staff help mothers with sick babies to <u>increase their milk supply</u> or/relactate <u>near discharge</u>	5	4	3	4	3	2	2	2	4	1	2	3	3
Total	18	23	23	24	22	19	21	21	21	15	20	20	18
Percent score (6x5=30)	60	76.7	76.7	80	73.3	63.3	70	70	70	50	66.7	66.7	60
Mean	4	4	4	5	4	4	4	4	4	3	4	4	4

b- Scores for mothers' responses

<u>Governorates</u> <u>Criteria measured</u>	Alx	Cai	PS	BH	Dk	Dm	Is	Aw	Lx	Qn	Sg	At	*Mn
Mother was guided to baby's cues in early feeds	4.5	3	0	3	3	4.5	4.5	1.5	0	**1.5**	3	**1.5**	3
Mother reports staff instructed her not	1.5	1.5	0	3	3	1.5	1.5	1.5	0	1.5	3	**1.5**	1.5

restrict frequency or duration of a breastfeed													
Not to restrict night feeding	1.5	1.5	0	3	3	3	1.5	3	3	**0**	4.5	**1.5**	3
To increase the frequency during illness and increase duration of breastfeeding during convalescence	3	3	0	4.5	1.5	4.5	4.5	3	4.5	4.5	4.5	**1.5**	3
Total	10.5	9	0	13.5	10.5	13.5	12	9	7.5	7.5	15	6	10.5
Percent weighted score (30)	35	30	0	45	35	45	40	30	25	25	50	20	35
Mean score	2	2	0	3	3	3	3	2	2	2	3	2	2

Weighted score = criteria of staff/criteria of mothers = factor for correction (6/4=1.5)

c- Score for both mother and staff responses

Governorates Criteria measured	**Alx**	**Cai**	**PS**	**BH**	**Dk**	**Dm**	**Is**	**Aw**	**Lx**	**Qn**	**Sg**	**At**	***Mn**
Total score for staf	18	23	23	24	22	19	21	21	21	15	20	20	18
Total for mothers	10.5	9	0	13.5	10.5	13.5	12	9	7.5	7.5	15	6	10.5
Total	28.5	32	23	37.5	32.5	32.5	33	30	28.5	22.5	35	26	28.5
Percent out of total score (60)	47.5	53.3	38.3	62.5	54.2	54.2	55	50	47.5	37.5	58.3	43.3	47.5
Risk score for step 8	**3**	**3**	**2**	**4**	**3**	**3**	**3**	**3**	**3**	**2**	**3**	**3**	**3**

STEP 9: Give no artificial teats or pacifiers (also called dummies or soothers) to (fullterm) breastfeeding babies: Tables (28 **a,b,c)** compare the scores achieved for 'Step 9' in the 12 governorates. Score achieved for this step ranges from 5 to 2 for staff and 5 to 3 for mothers with a mean of 4 for all. Although staff does not encourage use of artificial nipples, yet it appears to be an inherent community practice encouraged by marketing tactics.

Tables (28-a,b,c): Score achieved by staff (a), mothers (b) and both together(c) for each of the criteria measured as a requirement for meeting Step 9.

Governorates	**Alx**	**Cai**	**PS**	**BH**	**Dk**	**Dm**	**Is**	**Aw**	**Lx**	**Qn**	**Sg**	**At**	**Mn.**
Staff who prohibit mothers to offer the newborn any bottles.	5	4	4	3	5	4	4	4	**5**	5	5	**3**	4.25
Staff who prohibit mothers to offer the newborn any pacifiers.	5	4	1	3	5	4	4	4	**5**	4	5	**3**	3.917
Staff who inform them of their hazards.	5	4	2	4	5	4	4	4	**5**	3	4	**4**	3.583
Staff caution mothers against giving their baby a bottles or pacifiers if she complains of problems with sleep at night.	4	5	3	4	5	5	3	4	5	3	4	4	4.083
Staff caution mothers	5	4	0	3	5	3	2	3	5	2	4	3	3.25

against giving their baby a bottles or pacifiers if she complains of 'milk not enough'													
Staff caution mothers against giving their baby a bottles or pacifiers if she complains of baby refusing to feed	5	4	0	3	4	3	3	3	5	2	2	3	3.083
Staff advise mother to sooth baby by increasing STS	4	3	0	1	3	3	3	4	4	1	2	4	2.667
Staff who report EBM* is fed by cup or spoon, syringe or dropper.	3	1	1	1	1	0	0	**2**	0	2	1	**1**	1.083
Total (8x5= 40)	21	29	11	22	33	26	23	**28**	34	22	27	**25**	25.08
Percent of total score	52.5	72.5	27.5	55	82.5	65	57.5	**70**	85	55	67.5	**62.5**	62.75
Mean score	3	4	2	3	5	4	3	**4**	5	3	4	**4**	4

b- Score of mother responses

Governorates	**Alx**	**Cai**	**PS**	**BH**	**Dk**	**Dm**	**Is**	**Aw**	**Lx**	**Qn**	**Sg**	**At**	**Mn.**
Mothers who report that staff offered the baby bottles or pacifiers. (corrected score= score x 4)	20	20	20	20	20	20	20	16	20	20	20	20	19.667
Mothers encouraged by staff during baby illness to express milk & give by spoon. (corrected score= score x 4)	4	4	0	12	4	4	4	4	4	4	8	4	4.667
Total	24	24	20	32	24	24	24	20	24	24	28	**24**	24.334
Percent of total score (out of 40)	60	60	50	80	60	60	60	50	60	60	70	60	60
Mean score	**4**	**4**	**3**	**5**	**4**	**4**	**4**	**3**	**4**	**4**	**4**	**4**	**4**

Weighted score = criteria of staff/criteria of mothers = factor for correction (8/2=4)

c- Scores based on both staff and mother responses

Governorates	**Alx**	**Cai**	**PS**	**BH**	**Dk**	**Dm**	**Is**	**Aw**	**Lx**	**Qn**	**Sg**	**At**	**Mn.**
Total score for staff	21	29	11	22	33	26	23	**28**	34	22	27	**25**	25.1
Total score for mother	24	24	20	32	24	24	24	20	24	24	28	**24**	24.3
Total	45	53	31	54	57	50	47	48	58	46	55	49	49.4
Percent for step (out of 80)	56.25	66.25	38.75	67.5	71.25	62.5	58.75	60	72.5	57.5	68.75	61.25	61.75
Risk score for step 9	3	4	2	4	4	4	3	4	4	3	4	4	4

*** Mn: Mean for criterion**

STEP 10:

Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic: Table (29) compare the scores achieved for 'Step 10' in the 12 governorates. The highest scores attained for this step was seen in Beheira and the lowest was in Dakhlia and Qena governorates

Table (29): Score achieved by the criteria measured for both staff and mothers as a requirement for meeting Step 10.

Governorates	Alx	Cai	PS	BH.	Dak.	Dm	Ism.	Aw	Lx	Qn	Sg	Ast.	Mn
M. staff inform mothers at discharge how to breastfeed and where to go for follow-up	**4**	**4**	**0**	**4**	**2**	**4**	**5**	**3**	**3**	**2**	**3**	**4**	**3**
At discharge mothers report they received instructions from hospital to exclusively breastfeed in the first six months.	**3**	**2**	**4**	**4**	**1**	**2**	**1**	**3**	**3**	**1**	**3**	**2**	**2**
Total wtd. score (2x5=10)	**7**	**6**	**4**	**8**	**3**	**6**	**6**	**6**	**6**	**3**	**6**	**6**	**5**
Percent of total wtd. score	**70**	**60**	**40**	**80**	**30**	**60**	**60**	**60**	**60**	**30**	**60**	**60**	**50**
Risk Score	**4**	**4**	**3**	**5**	**2**	**4**	**4**	**4**	**4**	**2**	**4**	**4**	**3**

Table (30): Summary of wtd. Scores attained for each of The Ten Steps by governorate:

Governorates	Alx	Cai	PS	BH.	Dak.	Dm	Ism.	Aw	Lx	Qn	Sg	Ast.	Mn
Step 1	4	3	1	3	2	1	2	3	1	1	3	3	**2**
Step 2	4	3	2	2	1	3	2	3	2	2	2	2	**2**
Step 3	4	3	2	4	2	3	4	3	3	2	3	3	**3**
Step 4	4	3	2	2	2	2	2	3	3	2	4	2	**3**
Step 5	**4**	**3**	**3**	**4**	**3**	**4**	**4**	**4**	**3**	**3**	**3**	**4**	**3**
Step 6	**4**	**3**	**4**	**4**	**2**	**3**	**3**	**3**	**3**	**2**	**4**	**3**	**3**
Step 7	**4**	**3**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**
Step 8	**3**	**3**	**2**	**4**	**3**	**3**	**3**	**3**	**3**	**2**	**3**	**3**	**3**
Step 9	3	4	2	4	4	4	3	4	4	3	4	4	**4**
Step 10	**4**	**4**	**3**	**5**	**2**	**4**	**4**	**4**	**4**	**2**	**4**	**4**	**3**
Total wtd. Score	38	32	25	36	25	31	31	34	30	23	34	32	
Percent total wtd. score (10x5=50)	76	64	50	72	50	62	62	68	60	46	68	64	
Risk score for Ten Steps	4	4	3	4	3	4	4	4	4	3	4	4	

2- Status of Mother Friendly Practices

Tables (31-a,b,c): Score attained by responses from staff (a), mothers (b) and both together(c) for each of the criteria measured as a requirement for meeting mother friendly

a- Responses from staff

Governorates	Alx	Cai	PS	BH.	Dak.	Dm	Ism.	Aw	Lx	Qn	Sg	Ast.	Mn
Staff who allow women to have companions of their choice to provide continuous physical and/or emotional support during labour and birth, if desired.	2	2	0	3	1	1	1	4	0	2	2	1	1.6
Staff who allow women to drink and eat light foods early in the first stage of labour, if desired.	2	3	0	5	3	4	1	3	4	5	3	4	3.1
Staff who encourage women to consider the use of non-drug methods of pain relief.	4	3	3	4	3	3	2	2	3	2	2	3	2.8
Staff who discourage analgesic or anesthetic drugs.	4	4	4	3	3	1	2	4	3	4	5	3	3.3
Staff who ask women of the personal preferences of pain relief methods.	3	2	0	2	1	1	0	2	1	1	3	1	1.4
Staff who encourage women to walk and move about during labour, if desired.	2	4	5	5	4	5	5	5	5	5	4	5	4.5
Colleagues who encourage women to assume positions of their choice while giving birth.	1	2	0	1	2	1	1	1	3	2	1	2	1.4
Staff who explain any medical interventions needed to the mother before hand .	0	2	0	4	3	4	4	4	5	3	3	4	3
Staff who encourage childbirth with least medical interventions.	2	3	5	4	3	4	4	5	1	4	5	5	3.75
Total scores	20	**25**	**17**	31	23	24	20	30	25	28	28	28	24.85
Percent of total (9x5=45)	44.4	**55.6**	**37.8**	68.9	51.1	53.3	44.4	66.7	55.6	62.2	62.2	62.2	55.1
Risk score	**3**	**3**	**2**	**4**	**3**	**3**	**3**	**4**	**3**	**4**	**4**	**4**	**3**

b- Score of mother responses

Governorates	Alx	Cai	PS	BH.	Dak.	Dm	Ism.	Aw	Lx	Qn	Sg	Ast.	Mn
Mothers report encouraged by staff to have spinal anesthesia with C-section.	8	10	10	0	6	4	4	6	6	10	8	4	6.3
Mothers explained procedures of labor.	2	2	0	0	2	0	6	6	0	0	4	6	2.3
Mothers given adequate local anesthesia for the episiotomies during vaginal delivery.	4	4	8	4	4	4	6	6	6	10	6	6	5.7
At delivery staff standing close to mother comfort her by holding her hand and help hereto breathe and push in labor.	4	6	6	6	10	8	8	8	8	2	8	6	6.7
Baby not taken away from mother immediately after delivery.	4	4	0	2	0	6	4	2	0	8	0	4	2.8
Total scores	22	26	24	12	22	22	28	28	20	30	26	26	23.8
Percent score (out of 50)	44	52	48	24	44	44	56	56	40	60	52	52	47.7
Risk score	3	3	3	2	3	3	3	3	3	4	3	3	3

Weighted score = criteria of staff/criteria of mothers = factor for correction (9/5=1.8 approx. To 2)

c- Risk score based on both staff and mother responses

Governorates	Alx	Cai	PS	BH.	Dak.	Dm	Ism.	Aw	Lx	Qn	Sg	Ast.	Mn
Total for staff	20	**25**	**17**	31	23	24	20	30	25	28	28	28	24.85
Total for mother	22	26	24	12	22	22	28	28	20	30	26	26	23.8
Total for both mother + staff	42	51	41	43	45	46	48	58	45	58	54	54	48.75
Percent (14x5=70)	44.2	53.7	43.2	45.6	47.4	48.4	50.5	61.1	47.4	61.1	56.8	56.8	51.35
Risk Score	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**4**	**3**	**4**	**3**	**3**	**3.2**

3- Status of Compliance to Code

Tables (32-a,b): Score achieved by each of the criteria measured for staff and mothers separately as an assessment of staff and facility compliance to code at governorate level.

a- Top officials and Staff

Governorates	Alx	Cai	PS	BH	Dk	Dm	Is	Aw	Lx	Qn	Sg	At	Mn.
Top officials do not accept free or low cost IMF in the facility	1	**2**	4	2	2	4	4	1	5	1	2	3	2.5
T.O. Prohibit accepting any free or low cost IMF in your health facility from companies	3	2	0	2	0	0	0	3	0	2	1	3	1.3
T.O. have a copy of the ICMBMS	4	1	0	1	0	0	0	2	0	0	**1**	1	0.8
M. Staff who received orientation about ICMBMS	3	3	0	2	3	1	2	2	2	1	2	1	1.8
P. Staff oriented to the ICMBMS	1	2	4	1	1	0	1	1	0	0	1	1	1.08
P. Staff who prohibit any advertising or distribution of BMS to mothers	3	2	5	2	0	0	2	2	1	2	1	1	1.75
P. Staff who do NOT accept gifts or invitations or free IMF from these companies	3	3	5	2	3	1	2	2	0	1	1	2	2.1
Total (out of 7x5=35)	18	15	18	12	9	6	11	13	8	7	9	12	11.5
Percent of total score	51.4	42.8	51.4	34.3	25.7	17.1	31.4	37.14	22.8	20	25.7	34.3	32.8
Mean risk score	3	3	3	2	2	1	2	2	2	2	2	3	2.25

b-Mean score for mothers

Governorates	Alx	Cai	PS	BH	Dk	Dm	Is	Aw	Lx	Qn	Sg	At	Mn.
Mothers report not exposed to information about breastfeeding from an IMF company source	5	5	5	5	5	5	5	**5**	**5**	5	5	**4**	4.9
Corrected score for mother (7/1=7)	35	35	35	35	35	35	35	35	35	35	35	**28**	34.4
Percent of total score	100	100	100	100	100	100	100	100	100	100	100	**80**	98.3
Mean risk score	5	5	5	5	5	5	5	**5**	**5**	5	5	**4**	4.9

IMF: Infant Milk Formula, BMS: Breastmilk substitutes, ICMBMS: International Code of Marketing BMS

4- Status of support for continued exclusive breastfeeding after discharge from hospital up to six months:

Table (33): Comparing support for exclusive breastfeeding, timely complementary feeding and continued Breastfeeding for two years of age by growth monitoring, Expanded Programs of Immunization (EPI) & Family Planning programs.

Governorates	**Alx**	**Cai**	**PS**	**BH**	**Dk**	**Dm**	**Is**	**Aw**	**Lx**	**Qn**	**Sg**	**Ast**	**Mn.**
Mothers encouraged exclusively BF for 6 mo during **growth monitoring**	3	1	4	4	4	1	4	3	3	2	3	2	2.8
Mothers encouraged exclusively BF for 6 mo during **immunization sessions**	2	2	3	4	2	1	4	3	2	3	4	1	2.6
Mothers informed of hazards of bottle feeding during **immunization sessions** and family planning sessions	3	2	2	3	2	2	3	2	2	3	4	2	2.5
Mothers guided during **family planning sessions** to exclusively breastfeed for 6 months	2	2	2	3	2	2	3	2	2	2	3	1	2.2
Mothers guided during **family planning sessions** to BF more & esp. at night	1	1	1	3	1	0	2	2	2	1	3	1	1.5
Staff who encourage complementary feeding at **ONLY after** 6 months	4	3	4	2	4	2	5	**4**	5	5	2	3	3.6
Staff encourage breastfeeding to continue for > 2 years	2	4	4	3	4	4	4	0	5	5	4	4	3.6
Total wtd score	17	15	20	22	19	12	25	16	21	21	23	14	18.8
% wtd. Score/35	48.6	42.8	57.1	62.8	54.3	34.3	71.4	45.7	60	60	65.7	40	54.3
Risk score	**2.4**	**2.1**	**2.8**	**4.4**	**2.7**	**1.7**	**3.5**	**2.3**	**3**	**3**	**3.3**	**2**	**2.7**

5- Status of Monitoring and Evaluation of Infant feeding data

Table (34): Score achieved by each of the criteria assigned in study for monitoring infant feeding data.

Governorates	**Alx**	**Cai**	**PS**	**BH**	**Dk**	**Dm**	**Is**	**Aw**	**Lx**	**Qn**	**Sg**	**At**	**Mean Score (out of 5)**	**% of Wtd. score**
Top officials report having a registration system in HF.	5	5	5	3	5	5	5	**5**	5	**3**	4	**4**	4.5	**90**
T.O. report registering infant feeding data.	3	3	2	1	0	0	0	**2**	0	0	1	**2**	1.17	**23.3**
T.O. report infant feeding data to higher authorities.	1	2	1	0	0	0	0	**3**	0	0	3	**1**	0.9	**18.3**
T.O. use this information to improve practices in the hospital.	2	3	1	1	0	0	0	**2**	0	2	2	**1**	1.17	**23.3**
P. Staff who register and monitor infant feeding practices regularly.	3	4	5	2	3	2	1	2	0	1	1	3	2.25	**45**
P. Staff report data to Breastfeeding committee or higher authority.	2	1	0	1	1	0	2	0	0	0	0	2	0.75	**15**
Pediatric & PHC Staff encouraged to do research in infant feeding.	3	1	1	2	1	1	3	1	0	1	1	1	1.3	**26.7**
Total wtd. Score	19	19	15	10	10	8	11	15	5	7	12	14	12.04	
Percent wtd. score of total (7x5=35)	54.3	54.3	42.9	28.5	28.5	22.9	31.4	42.9	14.3	20	34.3	40	34.4	
Risk score	3	3	3	2	2	2	2	3	1	2	2	3	2.3	

6- Mother Attitudes towards Quality of Service Delivery

Table (35): Score achieved by each of the criteria measured for customer (mother) satisfaction of care received during delivery in the hospital.

Governorates	Alx*	Cai	PS	BH	Dk	Dm	Is	Aw	Lx	Qn	Sg	At	Mn
How staff treated and communicated with her		5	5	4	5	5	5	4	5	3	4	5	4.5
Waiting time in OPDs & MCH		5	5	3	4	5	4	4	4	3	4	4	4.1
Examination by medical staff (gentle, with decency, not painful)		5	5	4	5	5	5	4	5	3	4	5	**4.5**
Treatment (affordable, accessible, timely)		5	5	3	3	5	5	3	4	4	4	2	**3.9**
Investigations (affordable, accessible)		5	5	3	3	5	5	4	4	3	5	3	**4.1**
Meals (timely, clean, enough, palatable)		4	5	3	4	3	3	4	4	2	3	3	**3.45**
Toilets and Bathing facilities (running water, clean, hot water, easy to access and use)		5	5	4	4	4	5	4	5	3	3	5	**4.27**
Transport inside hospital: timely, comfortable		5	5	4	4	4	5	4	5	3	2	5	**4.18**
Cleanliness and hygiene		5	5	3	5	4	5	4	4	2	4	5	**4.18**
Fees affordable		4	5	5	1	3	5	4	5	3	5	2	**3.8**
Mother intends to return to this same hospital		5	5	4	5	4	5	3	2	3	4	2	**3.8**
Total score		53	55	40	43	47	**52**	42	**47**	32	42	41	**44.9**
Percent score of total (11x5=55)		96.4	100	72.7	78.2	85.5	**94.5**	76.4	**85.5**	58.2	76.4	74.5	**81.6**
Risk score		5	5	4	4	5	**5**	4	**5**	3	4	4	**4.36**

* The directors of the hospitals in this governorate refused to have this questionnaire done for the mothers in their facility.

ANNEX-II

WHO/UNICEF BFHI Global Criteria

Global Criteria for achieving BFHI status

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

The health facility has a written breastfeeding or infant feeding policy that addresses all 10 Steps and protects breastfeeding by adhering to the International Code of Marketing of Breast-milk Substitutes. It also requires that HIV-positive mothers receive counselling on infant feeding and guidance on selecting options likely to be suitable for their situations.

The policy is available so that all staff who takes care of mothers and babies can refer to it. Summaries of the policy covering, at minimum, the Ten Steps, the Code and subsequent WHA Resolutions, and support for HIV-positive mothers, are visibly posted in all areas of the health care facility which serve pregnant women, mothers, infants, and/or children.

These areas include the antenatal care, labour and delivery areas, maternity wards and rooms, all infant care areas, including well baby observation areas (if there are any), and any infant special care units. The summaries are displayed in the language(s) and written with wording most commonly understood by mothers and staff.

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

The head of maternity services reports that all health care staff members who have any contact with pregnant women, mothers, and/or infants, have received orientation on the breastfeeding/infant feeding policy. The orientation that is provided is sufficient.

A copy of the curricula or course session outlines for training in breastfeeding promotion and support for various types of staff is available for review, and a training schedule for new employees is available.

Documentation of training indicates that 80% or more of the clinical staff members who have contact with mothers and/or infants and have been on the staff 6 months or more have received training, either at the hospital or prior to arrival that covers all 10 Steps, and the Code and subsequent WHA resolutions. It is likely that at least 20 hours of targeted training will be needed to develop the knowledge and skills necessary to adequately support mothers. 3 hours of supervised clinical experience are required.

Documentation of training also indicates that non-clinical staff members have received training that is adequate, given their roles, to provide them with the skills and knowledge needed to support mothers in successfully feeding their infants.

Training on how to provide support for non-breastfeeding mothers is also provided to staff.

A copy of the course session outlines for training on supporting non-breastfeeding mothers is also available for review.

The training covers key topics such as:

 the risks and benefits of various feeding options,

 helping the mother choose what is acceptable, feasible, affordable, sustainable and safe (AFASS) in her circumstances,

 the safe and hygienic preparation, feeding and storage of breast-milk substitutes,

 how to teach the preparation of various feeding options, and

 how to minimize the likelihood that breastfeeding mothers will be influenced to use formula.

The type and percentage of staff receiving this training is adequate, given the facility's needs.

Out of the randomly selected clinical staff members*:

 at least 80% confirm that they have received the described training or, if they have been working in the maternity services less than 6 months, have, at minimum, received orientation on the policy and their roles in implementing it

 at least 80% are able to answer 4 out of 5 questions on breastfeeding support and promotion correctly

 at least 80% can describe two issues that should be discussed with a pregnant woman if she indicates that she is considering giving her baby something other than breastmilk.

Out of the randomly selected non-clinical staff members**:

 at least 70% confirm that they have received orientation and/or training concerning breastfeeding since they started working at the facility

 at least 70% are able to describe at least one reason why breastfeeding is important,

 at least 70% are able to mention one possible practice in maternity services that would support breastfeeding.

 at least 70% are able to mention at least one thing they can do to support women so they can feed their babies well.

* *These include staff members providing clinical care for pregnant women, mothers and their babies.*

** *These include staff members providing non-clinical care for pregnant women, mother and their babies or having contact with them in some aspect of their work.*

Global Criteria - Step Three

If the hospital has an affiliated antenatal clinic, the head of maternity or antenatal services reports that at least 80% of the pregnant women who are provided antenatal care receive information about breastfeeding.

A written description of the minimum content of the antenatal education is available. The antenatal discussion covers the importance of breastfeeding, the importance early skin-to-skin contact, early initiation of breastfeeding, rooming-in on a 24 hour basis, feeding on demand or baby-led feeding, frequent feeding to help assure enough milk, good positioning and attachment, exclusive breastfeeding for the first 6 months, and the fact that breastfeeding continues to be important after 6 months when other foods are given.

Out of the randomly selected pregnant women in their third trimester who have come for at least two antenatal visits:

 at least 70% confirm that a staff member has talked with them or offered a group talk
that includes information on breastfeeding
 at least 70% are able to adequately describe what was discussed about two of the following topics: importance of skin-to-skin contact, rooming-in, and risks of supplements while breastfeeding in the first 6 months.

Global Criteria - Step Four

Out of the randomly selected mothers with vaginal births or caesarean sections without general anaesthesia in the maternity wards:
 at least 80% confirm that their babies were placed in skin-to-skin contact with them immediately or within five minutes after birth and that this contact continued for at least an hour, unless there were medically justifiable reasons for delayed contact.
 at least 80% also confirm that they were encouraged to look for signs for when their babies were ready to breastfeed during this first period of contact and offered help, if needed.
(The baby should not be forced to breastfeed but, rather, supported to do so when ready.)
(Note: Mothers may have difficulty estimating time immediately following birth. If time and length of skin-to-skin contact following birth is listed in the mothers' charts, this can be used as a crosscheck.)
If any of the randomly selected mothers have had caesarean deliveries with general anaesthesia, at least 50% should report that their babies were placed in skin-to-skin contact with them as soon as the mothers were responsive and alert, with the same procedures followed.
At least 80% of the randomly selected mothers with babies in special care report that they have had a chance to hold their babies skin-to-skin or, if not, the staff could provide justifiable reasons why they could not.
Observations of vaginal deliveries, if necessary to confirm adherence to Step 4, show that in at least 75% of the cases babies are placed with their mothers hold skin-to-skin within five minutes after birth for at least 60 minutes, and that the mothers are shown how to recognize the signs that their babies are ready to breastfeed and offered help, or there are justified reasons for not following these procedures. (Optional)

Global Criteria - Step Five

The head of maternity services reports that mothers who have never breastfed or who have previously encountered problems with breastfeeding receive special attention and support both in the antenatal and postpartum periods.
Observations of staff demonstrating how to safely prepare and feed breast-milk substitutes confirm that in 75% of the cases, the demonstrations were accurate and complete, and the mothers were asked to give "return demonstrations".
Out of the randomly selected clinical staff members:
 at least 80% report that they teach mothers how to position and attach their babies for breastfeeding and are able to describe or demonstrate correct techniques for both, or can describe to whom to refer mothers for this advice.
 at least 80% report that they teach mothers how to hand expression and can describe or demonstrate an acceptable technique for this, or can describe to whom to refer mothers for this advice.
 at least 80% can describe how non-breastfeeding mothers can be assisted to safely prepare their feeds, or to whom they can be referred for this advice.
Out of the randomly selected mothers (including caesarean):
 at least 80% of those who are breastfeeding report that nursing staff offered further assistance with breastfeeding the next time they fed their babies or within six hours of birth (or of when they were able to respond).
 at least 80% of those who are breastfeeding are able to demonstrate or describe correct positioning, attachment and suckling
 at least 80% of those who are breastfeeding report that they were shown how to express their milk by hand or given written information and told where they could get help if needed
 at least 80% of the mothers who have decided not to breastfeed report that they have been offered help in preparing and giving their babies feeds, can describe the advice they were given, and have been asked to prepare feeds themselves, after being shown how.
Out of the randomly selected mothers with babies in special care:
 at least 80% of those who are breastfeeding or intending to do so report that they have been offered help to start their breastmilk coming and to keep up the supply within 6 hours of their babies' births
 at least 80% of those breastfeeding or intending to do so report that they have been shown how to express their breastmilk by hand
 at least 80% of those breastfeeding or intending to do so can adequately describe and demonstrate how they were shown to express their breastmilk by hand
 at least 80% of those breastfeeding or intending to do so report that they have been told they need to breastfeed or express their milk 6 times or more every 24 hours to keep up the supply.

Global Criteria - Step Six

Hospital data indicate that at least 75% of the full-term babies delivered in the last year have been exclusively breastfed or exclusively fed expressed breast milk from birth to discharge, or, if not, that there were documented medical reasons or fully informed choices.
Review of all clinical protocols or standards related to breastfeeding and infant feeding used by the maternity services indicates that they are in line with BFHI standards and current evidence-based guidelines.

No materials that recommend feeding breast milk substitutes, scheduled feeds or other inappropriate practices are distributed to mothers.
The hospital has an adequate facility/space and the necessary equipment for giving demonstrations of how to prepare formula and other feeding options away from breastfeeding mothers.
Observations in the postpartum wards/rooms and any well baby observation areas show that at least 80% of the babies are being fed only breastmilk or there are acceptable medical reasons or informed choices for receiving something else.

At least 80% of the randomly selected clinical staff members can describe two types of information that should be discussed with mothers who indicate they are considering feeding breast milk substitutes
At least 80% of the randomly selected mothers report that their babies had received only breast milk or, if they had received anything else, it was either for acceptable medical reasons, described by the staff, or as a result of fully informed choices.
At least 80 % of the randomly selected mothers who have decided not to breastfeed report that the staff discussed with them the various feeding options and helped them to decide what was suitable in their situations.
At least 80% of the randomly selected mothers with babies in special care who have decided not to breastfeed report that staff has talked with them about risks and benefits of various feeding options.

Global Criteria - Step Seven

Observations in the postpartum wards and any well-baby observation areas and discussions with mothers and staff confirm that at least 80% of the mothers and babies are rooming-in or, if not, have justifiable reasons for not being together.
At least 80% of the randomly selected mothers report that their babies have stayed with them in their rooms/beds since they were born, or, if not, there were justifiable reasons.

Global Criteria - Step Eight

Out of the randomly selected mothers:
 at least 80% report that they have been told how to recognize when their babies are hungry and can describe at least two feeding cues.
 at least 80% report that they have been advised to feed their babies as often and for as long as the babies want or something similar.

Global Criteria – Step Nine

Observations in the postpartum wards/rooms and any well baby observation areas indicate that at least 80% of the breastfeeding babies observed are not using bottles or teats or, if they are, their mothers have been informed of the risks.
At least 80% of the randomly selected breastfeeding mothers report that, to the best of their knowledge, their infants have not been fed using bottles with artificial teats (nipples).
At least 80% of the randomly selected mothers report that, to the best of their knowledge, their infants have not sucked on pacifiers.

Global Criteria - Step Ten

The head/director of maternity services reports that:
 mothers are given information on where they can get support if they need help with feeding their babies after returning home, and the head/director can also mention at least one source of information
 the facility fosters the establishment of and/or coordinates with mother support groups and other community services that provide breastfeeding/infant feeding support to mothers, and this same staff member can describe at least one way this is done.
 the staff encourages mothers and their babies to be seen soon after discharge (preferably 2-4 days after birth and again the second week) at the facility or in the community by a skilled breastfeeding support person who can assess feeding and give any support needed and can describe an appropriate referral system and adequate timing for the visits.
A review of documents indicates that printed information is distributed to mothers before discharge, if appropriate, on how and where mothers can find help on feeding their infants after returning home and includes information on at least one type of help available.
Out of the randomly selected mothers at least 80% report that they have been given information on how to get help from the facility or how to contact support groups, peer counsellors or other community health services if they have questions about feeding their babies after return home and can describe at least one type of help that is available.

Global Criteria – Code compliance

The head/director of maternity services reports that:
 No employees of manufacturers or distributors of breast milk substitutes, bottles, teats or pacifiers have any direct or indirect contact with pregnant women or mothers
 The hospital does not receive free gifts, non-scientific literature, materials or equipment, money, or support for in-service education or events from manufacturers or distributors of breast milk substitutes, bottles, teats or pacifiers
 No pregnant women, mothers or their families are given marketing materials or samples or gift packs by the facility that include breast milk substitutes, bottles/teats, pacifiers, other infant feeding equipment or coupons.
A review of records and receipts indicates that any breast milk substitutes, including special formulas and other supplies, are purchased by the health care facility for the wholesale price or more.
Observations in the antenatal and maternity services and other areas where nutritionists and dieticians work indicate that no materials that promote breast milk substitutes, bottles, teats or dummies, or other designated products as per national laws, are displayed or distributed to mothers, pregnant women, or staff.
Infant formula cans and prepared bottles are kept out of view.
At least 80% of the randomly selected clinical staff members can give two reasons why it is important not to give free samples from formula companies to mothers

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بسم الله الرحمن الرحيم
"والوالدات يرضعن أولادهن حولين كاملين" سورة البقرة الأية o233

توصيات المؤتمر العلمى الذى أقامته كلية طب بنها فى قاعة جامعة بنها للمؤتمرات تحت رعاية الأستاذ الدكتور حسام العطار رئيس الجامعة تحت عنوان:

"تفعيل المؤسسات الصديقة للأم و الطفل الرضيع ضرورة لجودة الرعاية الصحية للأمهات والمواليد فى القليوبية"

يعتبر دور الجامعة فى نشر و تشجيع المبادرة جزء لا يتجزء من رسالتها فى خدمة المجتمع وتطوير البيئة ودعما أيضا لسياسة الدولة لدعم الرعاية الصحية للأسرة و التعامل مع المشكلة السكانية لذلك فان الجامعة بالتعاون مع وزارتى الصحة والأسرة والسكان والجهات المعنية بالمحافظة و تحت رعاية معالى محافظ القليوبية توصى بما يلى:

1- العمل على نشر هذة المبادرة فى جميع المستشفيات التى بها أقسام توليد ورعاية لحديثى الولادة ومتابعة للحامل ورعاية للرضع على مستوى محافظة القليوبية بالتعاون مع وزارة الصحة والأسرة والسكان بالمحافظة والجمعيات المحلية المتخصصة فى هذا المجال وذلك تحت رعاية معالى المستشار عدلى حسين محافظ القليوبية.

2- اقامة مؤتمرات تحت اشراف قسمى الولادة والأطفال بكلية طب بنها تحت رعاية عميد الكلية ورئيس الجامعة بالتعاون مع أقسام النساء والتوليد والأطفال بالجامعات الأخرى فى وجه بحرى وقبلى لنشر هذة المبادرة فى جميع المستشفيات بالمحافظات الأخرى على مستوى الجمهورية مع الاستعانة بالمنظمات والمؤسسات المحلية و العالمية فى هذا المجال.

3- ادخال محتوى الخطوات العشر فى مناهج طب الأطفال و النساء و التوليد وطب المجتمع لطلبة كليات الطب و التمريض بالتنسيق مع وحدة الجودة بالجامعة.

4- اقامة ورشات عمل تدريبية على هامش المؤتمرات المنعقدة للعاملين بالمستشفيات للتهيئة و التدريب على المحتوى التربى المعد من قبل منظمة اليونيسف لتدريب متخذى القرار والقائمين على رعاية الأم الحامل والوالدة والمرضع و الرضيع.

5- اصدار و اعداد و طباعة مواد لتوعية وتثقيف الأمهات وكتب ومجلات لتدريب العاملين

6- دعم التعليم الطبى المستمر من خلال انشاء موقع الكترونى لنشر المبادرة وتمكين المستشفيات الحصول على جميع المواد والأدوات والأخبار المحلية والعالمية فى هذا المجال لنشر المبادرة داخل وخارج الجمهورية على مستوى الاقليم العربى بالتعاون مع منظمة الصحة العالمية و منظمة اليونيسف.

7- مراجعة وتكييف وترجمة أدوات المتابعة المستحدثة من قبل منظمة الصحة العالمية ومنظمة اليونيسف لتكون أداة لمتابعة وتقييم المستشفيات ونشرها فى المؤسسات الصحية التى ترغب فى الحصول على اللقب و التقدير الدولى

8- اعداد مهرجانات على مستوى القومى والعالمى تحت رعاية سيدة مصر الأولى لتقدير وتوزيع جوائز مادية وعينية للأعمال المتميزة للمؤسسات الحاصلة على لقب مستشفى صديقة للأم والطفل الرضيع بالتعاون مع الوزارات والهيئات والمجالس والجمعيات المحلية والاقليمية والدولية والمنظمات الدولية المعنية فى هذا المجال.

9- نشر مفاهيم الرعاية الحديثة للمواليد ناقصى النمو بالرعاية بطريقة الاحتضان فى وضع راسى مباشرة الجلد للجلد مع الأم أو الأب و دعم دور الأب و الأهل أثناء الولادة وفى رعاية المبتثرين من خلال مواد مطبوعة ومنشورة الكترونيا ومؤتمرات و دورات تدريبية فى هذا المجال.

10- تكثيف حملات اعلامية لنشر هذه المبادرة و اعلان أسبوع أعياد الأم والأسرة (21-28 مارس) كأسبوع اعلامى تحت رعاية سيدة مصر الأولى لتكثيف التوعية عن المستشفيات التى تلقب بمستشفى صديقة للأم و الرضيع.

نبذة عن التقرير

يستهدف هذا التقرير التنموى تطبيق اعلان الجمعية العالمية لمنظمة الصحة العالمية بعنوان: "استراتيجية تغذية الرضع و صغار الأطفال" لحماية الرضع دون 6 أشهر بالرضاعة المطلقة ثم الاستمرار بالرضاعة لمدة عامين بالأغذية التكميلية المناسبة و ذلك حيث أن:

- "يؤدى حرمان الطفل من الرضاعة الطبيعية الى وفاة ما يقرب من مليون ونصف طفل فى العالم سنويا" تقرير منظمة اليونيسف.
- تبلغ وفيات الأطفال دون الخامسة 11 مليون طفل سنويا و يمكن انقاذ نصف هؤلاء اذا تم ارضاعهم رضاعة مطلقة بدون اضافات من سوائل أو أغذية قبل 6 شهور و الاستمرار بالرضاعة مع الأغذية المكملة لمدة عامين.
- يتسبب ادخال الألبان الصناعية قبل 6 شهور الى أمراض خطيرة مثل الاسهال و الالتهاب الرؤوى و الالتهاب السحائى وفقدان البصر و الطرش والتأخر بوجه عام فى النمو و التطور وبالأخص فى ناقصى النمو.

و لذلك فان مبادرة المؤساسات الصحية صديقة للطفل الرضيع هى مبادرة عالمية معلنة منذ عام 1991 من منظمة الصحة العالمية واليونيسف لدعم وحماية صحة وتغذية الرضيع من خلال الخطوات العشر التى تشجيع ممارسات العاملين الصديقة للأم ورضبعها برعايتها أثناء الحمل والولادة وما بعد الولادة طبقا للمعايير العالمية للمبادرة المبنية على الطب المدعم بالأدلة العلمية الحديثة من أجل جودة الرعاية الصحية للأم والرضيع فى فترة ما حول الولادة .

وتحصل المؤسسة الصحية على لقب "صديق للأم والطفل" اذا تم استيفاء الشروط والمعايير العالمية للاعتماد وتمنح شهادة بذلك وجائزة تقديرية من المنظمات العالمية والمحلية. و من ثم يجب أن تقوم المؤسسة بمتابعة و تقييم و تقويم وتطوير أداء العاملين بها ونشر نتائجها للابقاء على اللقب.

وقد كانت مصر حاملة اللواء لدول الشرق الأوسط و التى تم اختيارها ضمن 12 دولة فى ذاك الوقت و تم حصول أكثر من 150مستشفى و رعاية على هذا اللقب ب1996 ثم فى سنة2000 قامت ادارة الجودة بوزارة الصحة و السكان بادخالها فى نظام اعتماد المستشفيات بالوزارة و تطبيقها فى عدد كبير من الرعايات الحاصلة على الاعتماد.

وقد تم استحداث المبادرة فى 2006 و قامت مصر مرة أخرى بالاسراع بالمشاركة بدراسة احتياجات اعادة تنشيط المبادرة عندما دعمت الادارة العامة للرعاية الأمومة بوزارة الصحة و السكان بتشجيع و دعم جمعيات علمية مثل جمعية استشارى الرضاعة الطبيعية بالمشاركة مع خبراء من قسم الأطفال بكلية طب بنها وقسم صحة المجتمع بكلية طب جامعة القاهرة بدراسة احتياجات المستشفيات لتكون صديقة للطفل والأم فى 40 مستشفى و30

رعاية أمومة ودار ولادة فى 12 محافظة بدعم من منظمة اليونيسف بالقاهرة وخبراء من مؤسسة صحة الطفل بالولايات المتحدة الأمريكية.

و قد قام الباحثين بدراسة احتياجات اعادة تنشيط أداء المستشفيات التى حصلت على اللقب فى الماضى من خلال بحث لتقييم أداء العاملين فى تطبيق الخطوات العشر وذلك من خلال خمس استمارات بحثية موجه الى الاداريين بالمستشفيات والعاملين من اطباء والتمريض بأقسام الولادة و الأطفال أو الرعاية و الأمهات عند الولادة (الطبيعية و القيصرية وبأطفالهم بالحضانة) وأخيرا دراسة أنماط الرضاعة بالمجتمع باستمارة بحثية عن معرفة واتجاهات و ممارسات الأمهات بأطفال ريرضعون طبيعيا دون العامين، كما اعدت استمارات لملاحظة المكان و الملصقات التوضيحية و الاعلانية للأمهات و المواد التعليمية للأطباء والتمريض.

و قد اقيم البحث فى 70مؤسسة صحية ب12 محافظة من محافظات الجمهورية هم: القاهرة و الأسكندرية ثم 5 فى وجه بحرى هم: البحيرة و الدقهلية و دمياط و الاسماعلية وبور سعيد و خمسة فى وجه قبلى هم أسوان و الأقصر و قنا و سوهاج و أسيوط. و تم زيارة 40 مستشفى و 29 رعاية باجمالى 157 ادارى و719 عامل صحى بالولادة و699 بالأطفال و782 أم والدة و 1100أم بالمجتمع.

وقد تم تقسيم النتائج كما يلى:

أولا: الخطوات العشر للمؤسسات الصحية الصديقة للطفل الرضيع.

ثانيا: ممارسات الولادة الصديقة للأم.

ثالثا: الالتزام بتطبيق المدونة الدولية لتسويق بدائل لبن الأم.

رابعا: المساندة والمتابعة بعد الخروج من المستشفى لاستمرار الرضاعة المطلقة و ادخال الأغية التكميلية بعد 6 أشهر.

خامسا: تسجيل و تقييم بيانات ممارسات الرضاعة الطبيعية.

سادسا: اتجاهات الأمهات تجاه جودة تقديم الخدمة

و قد أظهرت الدراسة احتياجات وفرص لتحسين الأداء يمكن التركيز عليها لسد الفجوات للتمكن من اعادة تنشيط المبادرة كما يلى:

أولا: الخطوات العشر للمؤسسات الصحية الصديقة للطفل الرضيع:

1- الخطوة الأولى: التركيز على اعادة تنشيط لجان دعم الرضاعة الطبيعية مركزيا وداخل المستشفيات و تشكيل لجان على مستوى المحافظات و الادارات الصحية.

2- الخطوة الثاني: تفعيل التدريب على الخطوات العشر و نشرها على جميع الأماكن التى تؤدى خدمات لرعاية الحامل و الوالدة و رفع كفاءة العاملين بالرعاية و أقسام الأطفال فى مهارات ادارة ادرار اللبن و التغلب على صعوبال الرضاعة.

3- الخطوة الثالثة والسادسة: تكثيف التوعية للحامل و المرضع ورفع كفاءة أقسام التثقيف الصحى و الاعلام داخل المؤسسات بادخال مستحدثات التكنولوجيا فى هذا المجال.

4- ألخطوة الرابعة: التركيز على تفعيل البداية المبكرة من خلال الالتصاق المباشر بين الأم و الطفل خلال الساعة الأولى بعد الولادة وادخال الممارسات الصديقة للأم الوالدة بالسماح بوجود مرافق أثناء الولادة للدعم العاطفى لها و تثبيط الام الولادة بدون أدوية منومة.

5- الخطوة السابعة: ادخال نظم واجراءات للسماح للأمهات التى لديها أطفال بالحضانة وللاقامة بالقرب منهم وعمل التسهيلات الادارية لاحتجازهم.

6- الخطوة الثامنة و التاسعة: تشجيع الرضاعة المتكررة عند ظهور علامات الرغبة فى الرضاعة مع توجه الأم لزيادة عدد مرات الرضاعة وايقاذ الطفل اذا نام أكثر من 3 ساعات و بالأخص فى حالة وجود صفراء أو مرض الطفل مع اعتصار اللبن للحفاظ علي ادرارة و اعطاءه بالكوب وليس بالبزازة مع توجه الأمهات الى تسكين الطفل برعايته بطريقة الجلد بالجلد و ليس باللهاية .

7- الخطوة العاشرة: ادخال نظم الاحالة لدعم الرضاعة و ادخال بيانات و مؤشرات متابعة الممارسات المتعلقة بالخطوات العشر و صداقة الأم داخل المستشفيات التى بها خدمات ولادة أو رعاية أطفال.

8- الالتزام بالمدونة الدولية و منع التسويق لمنتجات الألبان و أغذية الرضع داخل وخارج المؤسسات الصحية و توعية العاملين بها و نشرها و لصقها فى جميع الأماكن التى تتردد عليها الأمهات بأطفالهن مع توعبتهم عن مخاطر هذة المنتجات على صحة و نمو وتطور أطفالهن.