Violations of the International Code of Marketing of Breast Milk Substitutes in South African health facilities

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It all starts here ™

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This work is dedicated to my family for supporting and encouraging me when I was losing hope, and to the Almighty God for the opportunity and wisdom he granted me to complete this study.

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ABSTRACT

INTRODUCTION

Exclusive breastfeeding (EBF) for the first six months of an infant's life is recognized by the World Health Organisation (WHO) and the United Nations Children's Fund (UNICEF) as the most effective and essential strategy for optimal growth and prevention of infant mortality. One of the factors that influences a mothers choice to exclusively breastfeed her child, is the marketing of breast milk substitutes. The International Code of Marketing of Breast-milk Substitutes (ICMBS) was developed to promote, protect and support EBF. Although South Africa (SA) has voluntarily adopted the ICMBS in 1981 to help protect and promote EBF, the exclusive breastfeeding rates in SA remain very low (<8%). In a renewed attempt to protect and promote exclusive breastfeeding in SA, the code has been legislated in December 2012 to ensure compliance.

AIM

To assess the extent of ICMBS violations in health facilities in four Provinces in SA.

DESIGN

This was cross-sectional study. A purposive stratified cluster sample of eight to twelve health facilities was drawn in four Provinces (Gauteng, North-West, Free-State and Eastern Cape) in SA. Fixed structured interviews were conducted by trained fieldworkers with three health workers from each of the 40 health facilities to determine the extent of ICMBS violations as well as awareness of the ICMBS. The receipt of free gifts, free/low cost supplies/samples of formula milk, bottles or teats, and free materials or equipment from companies who sell breast-milk substitutes (BMS), infants foods/drinks and bottles or teats (violation of articles 6.2, 6.3, 6.6, 6.8, 7.3 and 7.4 of the ICMBS) were determined.

RESULTS

A total number of four violations were reported by four health workers from three of the 40 health facilities (7.5%). ICMBS violations were reported only in Gauteng Province with no violations in North West, Free State or Eastern Cape Province. All four violations involved the receipt of free gifts for personal use (including a pen, booklet, calendars and booklet/poster) from a BMS company (Nestlé), violating article 7.3 of the ICMBS. Health workers from four health facilities also reported the receipt of information materials and/or equipment for use in the facility, including leaflets, maternal and infant feeding product booklets and water bags from Nestlé. However, since the brand name of a product within the scope of the ICMBS was not visible on any of the materials or equipment, none of these gifts constituted a violation. In terms

of ICMBS awareness, 46 health workers (38%), including the four health workers who received gifts, from 19 health facilities situated mainly in Eastern Cape and Gauteng Province were familiar with the ICMBS.

CONCLUSIONS

Violations were reported in 7.5% of health facilities, including the health facilities where health workers were aware of the code. Implementation and training of the ICBMS in health facilities is there for warranted.

KEY WORDS: Code violations, breast-milk substitutes, health facilities

OPSOMMING

INLEIDINIG

Eksklusiewe borsvoeding (EBV) vir die eerste ses maande van ’n baba se lewe word deur die Wêreld Gesondheidsorganisasie (WGO) sowel as die Verenigde Nasies se Kinderfonds (UNICEF) erken as die effektiefste strategie vir die versekering van optimale groei en die voorkoming van sterftes onder babas. Een van die faktore wat n ma se keuse om eksklusief te borsvoed beïnvloed, is die bemarking van borsmelkplaasvervangings. Die Internasionale Kode van Bemarking van Borsmelkplaasvervangings (ICMBS) is ontwikkel om EBV aan te moedig, te beskerm en te ondersteun. Hoewel Suid-Afrika uit vrye wil die ICMBS in 1981 aangeneem het, om te help om eksklusiewe borsvoeding te beskerm en te bevorder, bly die eksklusiewe borsvoedingskoers in Suid-Afrika baie laag (<8%). In ’n hernude poging om eksklusiewe borsvoeding in Suid-Afrika te beskerm en te bevorder, is die genoemde kode wetgewing gemaak in Desember 2012.

DOELWIT

Om ’n raming van die omvang van oortredings van die ICMBS in gesondheidsfasiliteite in die vier provinsies van Suid-Afrika te maak.

METODES

’n Doelbewuste gestratifieerde trossteekproef van agt tot twaalf gesondheidsfasiliteite is uit die vier provinsies, naamlik Gauteng, Noordwes, Vrystaat en die Oos-Kaap geneem. Vasgestelde gestruktureerde onderhoude is afgeneem deur opgeleide veldwerkers met drie gesondheidswerkers by elk van die 40 gesondheidsfasiliteite, om die omvang van ICMBS oortredings asook die bewustheid van die ICMBS te bepaal. Die ontvang van gratis geskenke, gratis/lae-koste voorrade/voorbeelde van formulemelk, bottels en tiete, gratis materiaal of toerusting van maatskappye wat borsmelkplaasvervangings (BMS) verkoop, babavoedsel/-drank en bottels en tiete (oortreding van artikels 6.2, 6.3, 6.6, 6.8, 7.3 en 7.4 van die ICMBS) is bepaal.

RESULTATE

’n Totaal van vier oortredings is deur vier gesondheidswerkers by drie van die 40 gesondheidsfasiliteite (7.5%) gerapporteer. Hierdie oortredings van die ICMBS is net in Gauteng gerapporteer, met geen oortredings in die Noordwes, Vrystaat of Oos-Kaap Provinsie nie. Al vier oortredings het die ontvangs van gratis geskenke vir persoonlike gebruik (insluitende ’n pen, boekie, kalenders en boekie/plakkaat) vanaf ‘n BMS maatskappy (Nestlé) behels, wat ’n oortreding van artikel 7.3 van die ICMBS beteken. Gesondheidswerkers van vier fasiliteite het

ook die ontvangs van inligtingsmateriaal en/of toerusting vir gebruik in die fasiliteit gerapporteer, insluitende pamflette, moeder en baba voedingsprodukte boekies, en watersakke vanaf Nestlé. Aangesien daar egter geen handelsnaam van ‘n produk op enige van die geskenke sigbaar was nie, word hierdie geskenke nie as oortredings van die ICMBS beskou nie. In terme van ICMBS bewustheid, 46 gesondheidswerkers (38%), insluitende die gesondheidwerkers wat gratis geskenke ontvang het, van 19 gesondheidsfasiliteite wat hoofsaaklik die Oos-Kaap en Gauteng geleë is, was bekend met die ICMBS.

GEVOLGTREKKING

Oortredings van die ICMBS is gerapporteer by 7.5% van die gesondheidsfasiliteite, insluitende die gesondheidsfasiliteite waar gesondheidswerkers bewus was van die kode. Uitvoering en opleiding van die ICMBS by gesondheidsfasiliteite word dus aanbeveel.

SLEUTELWOORDE: Oortredings van die kode, borsmelkplaasvervangings**,** gesondheids-fasiliteite

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DEFINITION OF TERMS

Breast-milk substitutes: Any food being marketed as a partial or total replacement of breast milk, whether or not suitable for that purpose.

Gift: An item or material given willingly by a company to anyone for personal use.

Health care system: The sum total of all the organizations, private and public institutions or organizations engaged directly or indirectly in health care for mothers and childcare institutions. It also includes health workers in private practice.

Health worker: A person working in a health care system, whether professional or non-professional, including voluntary unpaid workers (dieticians, nurses, midwives, doctors, social workers, clerk etc.)

Infant formula: A formulated product especially manufactured in accordance with the applicable Codex standard to satisfy, by itself, the nutritional requirements of infants during the first six months of life up to the introduction of appropriate complementary feeding.

Manufacturer: Entity engaged in manufacturing process such as production, preparation, processing, preservation or any other manufacturing process of a designated product, whether directly or through an agent.

Marketing: Is the product promotion, distribution, selling, and advertising of a designated product.

Proprietary product: A designated product which is clearly associated with a particular manufacturer, distributor or retailer.

Sample: Single or small quantities of a product (within the scope of the code) provided for free.

Teat: A device for an infant or young child to suck on and is used to feed food from a bottle, feeding cup or other feeding device.

ABBREVIATIONS

AFASS	Available, Feasible, Acceptable, Sustainable and Safe
BFHI	Baby Friendly Hospital Initiative
BMS	Breast-milk Substitutes
DOH	Department of Health
EBF	Exclusive Breastfeeding
FAO	Food and Agriculture Organization
HSRC	Human Sciences Research Council
IBFAN	International Baby Food Action Network
ICMBS	International Code of Marketing of Breast-milk Substitutes
IGBM	Inter-Agency Group on Breastfeeding Monitoring
IRIN	Integrated Regional Information Network
IYCF	Infant and Young Child Feeding
KMC	Kangaroo Mother Care
MBFHI	Mother Baby Friendly Hospital Initiative
MDGs	Millennium Development Goals
NGOs	Non-Governmental Organizations
NZIFMA	New Zealand Infant Formula Marketer's Association
OPHA	Ontario Public Health Association
PMTCT	Prevention of Mother to Child Transmission
SA	South Africa
SADHS	South Africa's Demographic and Health Survey
SANHANNES	South African National Health and Nutrition Examination Survey
SPSS	Statistical Package of Social Sciences
UNICEF	United Nations Children's Funds
UN IGME	United Nations Inter-Agency Group for Child Mortality Estimations
WHA	World Health Assembly
WHO	World Health Organization

CHAPTER 1: INTRODUCTION

1.1 BACKGROUND

According to United Nations Inter–Agency Group for Child Mortality Estimation, the global mortality rate in children younger than five years of age has only decreased by 3% from 1990 to 2013, and remains high with 46 per 1000 live births (UN IGME, 2014). More than 2.3 million children die of malnutrition every year (Crosby *et al.,* 2013). Black *et al*. (2013) has indicated that suboptimal breastfeeding practices, including non-exclusive breastfeeding, contribute to 11.6% of mortality in children younger than five years of age. This was equivalent to about 804 000 child deaths in 2011 (Bhutta *et al.,* 2013). Approximately only 39% of children globally are exclusively breastfed for four months and a significantly smaller percentage are exclusively breastfed for the recommended full six months (WHO, 2007).

The first 1 000 days of life, from conception to a child's second birthday, has been shown to offer a critical window of opportunity during which optimal nutrition, particularly exclusive breastfeeding, gives children a healthy start in life (Bhutta *et al.,* 2013). Very recently the Rome Declaration on Nutrition was released following the 2nd International Conference on Nutrition in Rome that was held on 19-21 November 2014, where a commitment to action was made to develop policies, programmes and initiatives for ensuring healthy diets throughout the life course, in particular during the first 1000 days, and to promote, protect and support EBF during the first six months of life (WHO/FAO, 2014).

EBF for the first six months is recognized by the World Health Organisation (WHO) and the United Nations Children's Fund (UNICEF) as the most effective and essential strategy for optimal growth and prevention of infant mortality (Barannes *et al.,* 2011). Breast-milk contains all the necessary nutrients and anti-bodies that protects and boost the immune system and promote healthy growth and development (Maharaj & Bandyopadhyay, 2013). Quigley *et al.* (2007) estimated that optimal breastfeeding practices could help reduce child mortality rates that are caused by diarrhoea and lower respiratory tract infections. Similarly, a systematic review by Kramer and Kakuma (2004) confirmed that EBF in the first six months decreases morbidity from gastrointestinal and allergic diseases, without any negative effects on growth. Additionally, breast-milk is cost effective, readily available and always at the right temperature. Breastfeeding also has benefits for the mother including a sense of accomplishment/mothers feel proud for being able to provide for their babies, bonding with the baby, and weight loss (Berg *et al.,* 2012).

Although the South African National Department of Health, Directorate: Nutrition pledged its commitment to address the state of infant and young child feeding at the highest level of governance with the publication of The Tshwane Declaration for the Support of Breastfeeding in SA in August 2011, infant feeding practices in South Africa are suboptimal, with rates of breastfeeding, especially exclusive breastfeeding (EBF), remaining low (<8%) (Shishana *et al.,* 2013). Data from the 2003 South African Demographic and Health Survey (SADHS) and other studies showed that although breastfeeding is initiated early post-delivery, mixed feeding rather than EBF is the norm. This may contribute to the fact that South Africa is one of the countries with the highest infant mortality rates at 42.2 per 1000 live births (DOH, 2007). One of the reasons for the low EBF rate is that mothers are failing to make informed decisions about infant feeding because of breast-milk substitutes (BMS) that are being marketed to the general public and even in the health facilities (Mason & Roholt, 2006).

A strategy to improve EBF rates, and that particularly focuses on restricting the inappropriate marketing of BMS to the public, is the International Code of Marketing of Breast-Milk Substitutes (ICMBS, also referred to as the "Code") (WHO 1981). In 1981, a global meeting was held by the WHO and UNICEF to discuss the need for an ICMBS. In agreement, the ICMBS was developed as a global policy framework with the aim to contribute to the provision of safe and adequate nutrition for infants by protecting, promoting and supporting EBF through discouraging the inappropriate marketing of BMS. Following the meeting in 1981, the World Health Assembly (WHA 34.22) adopted the ICMBS and urged its member states to ban the aggressive marketing strategies that undermine breastfeeding either directly or indirectly through promotions of bottles, teats, infant formulas and foods and drinks for infants younger than six months of age (WHO, 1981). Having become a UN member in 1995, South Africa adopted the World Health Assembly ICMBS and the subsequent relevant WHA resolutions (WHO, 1981).

The ICMBS does not prohibit marketing of infant formula, bottles, teats or baby foods; it only controls the marketing and distribution strategies such as the provision of free samples, gifts, materials, and low cost supplies to mothers and health workers in health facilities, retail stores and to the general public. The ICMBS also covers labelling standards of formulas and complementary foods. The present study focus on ICMBS violations in health facilities, since health facilities and health workers working with pregnant women and mothers with new born babies, are being targeted by BMS companies (Mason *et al.,* 2013). Health workers work closely with mothers making it easy for them to influence mother's infant feeding decisions, and BMS companies perceive health workers as personnel who have the power

to recommend or suggest products to mothers (Rawa *et al.,* 2013). Additionally, health facilities are used as platforms to distribute samples of BMS with the aim to market BMS to health workers and mothers (MacInnes *et al.,* 2007). It is currently unclear what the extent of ICMBS violations in South African health facilities is.

1.2 AIM AND OBJECTIVES

The aim of the study was to assess the extent of ICMBS violations in health facilities in four provinces in South Africa.

The specific objectives were:

(1) To determine the percentage of health facilities who received visits from companies that manufacture and/ or distribute BMS, bottles and/or teats.

(2) To determine the percentage of health facilities where health workers reported having received:

- free gifts, financial or material inducements *(violation of article 7.3)*
- free samples of formula milk, bottles, teats or any other drink or food for infants younger than six months *(violation of article 7.4)*

(3) To determine how many health workers are aware of the ICMBS.

(4) To determine the percentage of health facilities which have received:

- informational or educational equipment or material without the request or written approval of the appropriate government authority, or material that refer to a proprietary product i.e. a product clearly associated with a particular manufacturer, distributor or retailer (*violation of article 6.3)*
- promotional material or equipment (with the name of a proprietary product) from companies *(violation of article 6.8)*
- free/low cost supplies of BMS, bottles or teats that were not for the use for infants who have to be fed with BMS (*violation of article 6.6*).

(5) To determine the total number of violations reported in health facilities from four provinces in South Africa.

1.3 SIGNIFICANCE OF THE STUDY

Although SA had adopted and implemented the ICMBS in 1981, it has only been legislated recently when new regulations relating to foodstuffs for infants and young children that are in accordance with the ICMBS and subsequent World Health Assembly (WHA) Resolution, (R991) were released on the 6th December 2012. Compliance with the ICMBS in SA is currently unclear. The UNICEF/South African Baseline Code Violation Assessment study carried out a national assessment of the compliance with the provisions of the ICMBS and subsequent relevant WHA resolutions, and measured the scale of violations using the Interagency Group on Breastfeeding Monitoring (IGBM)* protocol (IGBM, 2005).

The present study will form a sub-study in the UNICEF study and will specifically examine the extent of ICMBS violations in health facilities, an important platform where pregnant women and new mothers receive information from health workers regarding infant feeding practices. Unfortunately, health facilities and health workers are also targeted by BMS companies to market their products and distribute information to mothers. Pregnant women and parents should receive independent and objective information about infant feeding from health workers to ensure that those who wish to breastfeed are supported and not influenced to make other choices (Government Gazette, 2012). In order to protect pregnant women and mothers visiting health facilities from aggressive marketing practices of BMS, companies should be refrained from marketing their products in health facilities. Articles six and seven of the ICMBS pertaining to health facilities and health workers intent to achieve this (see Addendum D for details on Articles six and seven of the ICMBS). Assessing the extent of ICMBS violations in health facilities will therefore strengthen the monitoring of existing marketing regulations and to take actions against violations. Furthermore, the data obtained from this study can serve as baseline data for a follow-up study examining the impact of legislation on ICMBS code adherence.

On completion of the study, information obtained will be shared with the Department of Health. A short communication on ICMBS violations will also be submitted for publication in a relevant scientific journal. Finally, this document will also be made available to the North-West University library to assist students and other researchers with literature on code of marketing BMS.

*The IGBM is a UK-based coalition of international non-governmental organisations, churches, academic institutions and interested individuals, formed in 1994 to initiate and oversee a monitoring exercise to establish if, and to what extent, the ICMBS was being violated in selected countries.

1.4 RESEARCH TEAM

Name	Title	Role in the study
Prof J Jerling Prof E Wentzel-Viljoen Dr A Van Graan	Project coordinating team	Responsible for the overall quality of the study
Dr L Havemann-Nel	Supervisor of the MSc dissertation	Supervised the writing of the protocol, literature, methodology, analysis of the results and final mini-dissertation.
Dr A Van Graan	Co-supervisor of the MSc dissertation	Assist with supervising the writing of the protocol, literature, methodology, analysis of the results and final mini-dissertation.
Ms P Radebe Ms L Siziba Ms N Mahononi Ms P Ngoveni Mr J Du Plessis Mr W Dube Ms N Muravha	Core study team	Data collection, checking the forms, filing completed forms according to facility and form number.
Ms A Behr Ms L Moeng	National Department of Health	Ethical approval and to ensure access to health facilities
Ms C Witten Mr D Clark	Core study team from UNICEF	Training the research team about the code and IGBM protocol.
Ms N Muravha	MSc student	Writing of the protocol, literature review and methodology. Data entry, statistical analysis, interpretation of results and final mini-dissertation

1.5 STRUCTURE OF THE MINI-DISSERTATION

This mini-dissertation is presented in five chapters. The references for chapters one, two, three and five are according to the North-West University Harvard style. Chapter one provides a short rationale for the study, outlines the aim and objectives, explains the significance of the study and gives an overview of the research team. Chapter two presents the literature review where the researcher elaborates on the relevance and significance of the ICMBS. Chapter three explains the research methods and procedures followed to collect data, including the study design, study population, sampling procedure, data analysis and ethical aspects. Chapter four illustrates the findings of the study. Chapter five provides a discussion of the findings. In the final chapter, the researcher also draws a conclusion, acknowledges the limitations and makes recommendations based on the findings.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

According to United Nations Inter–Agency Group for Child Mortality Estimation (UN IGCM), the global mortality rate in children younger than five years of age has only decreased by 3% from 1990 to 2013, and remains high with 46 per 1000 live births (UN IGME, 2014). More than 2.3 million children die of malnutrition every year (Crosby *et al.,* 2013). Recent analyses indicate that suboptimal breastfeeding practices, including non-exclusive breastfeeding, contribute to 11.6% of mortality in children younger than five years of age. This was equivalent to about 804 000 child deaths in 2011 (Black *et al.,* 2013). Approximately only 39% of children globally are exclusively breastfed for four months and a significantly smaller percentage are exclusively breastfed for the recommended full six months (World Health Organization, 2007).

The first 1 000 days of life, from conception to a child's second birthday, has been shown to offer a critical window of opportunity during which optimal nutrition, particularly exclusive breastfeeding, gives children a healthy start in life (Bhutta *et al.,* 2013). In order to optimise nutrition during this critical period, a *comprehensive implementation plan on maternal, infant and young child nutrition* was endorsed by the World Health Assembly (WHA 65.5) in 2012 with six specified global nutrition targets for 2025 (World Health Organization, 2014). Target number five of the plan is to increase the rate of exclusive breastfeeding (EBF) during the first six months of life to 50% by 2025. Very recently the Rome Declaration on Nutrition was released following the 2nd International Conference on Nutrition in Rome from 19-21 November 2014, reaffirming the commitments made to reach the WHO 2025 Global Nutrition Targets. A commitment to action was also made to develop policies, programmes and initiatives for ensuring healthy diets throughout the life course, in particular during the first 1000 days, and to promote, protect and support exclusive breastfeeding during the first six months of life (FAO/WHO 2014).

2.2 WHY EXCLUSIVE BREASTFEEDING?

The WHO recommends that infants should be exclusively breastfed for the first six months of life for optimal nutrition. At the age of six months, infants should be given nutritionally, adequate and safe complementary foods while breastfeeding continues for up to two years of age or beyond (WHO & UNICEF, 2003). EBF for the first six months of life is recognized by the World Health Organisation (WHO) and the United Nations Children's Fund (UNICEF) as the most effective and essential strategy for optimal growth and prevention of infant

mortality (Barannes *et al.,* 2011). Furthermore, EBF has the single largest potential impact on child mortality of any preventative intervention (Jones *et al.,* 2003). In fact, EBF for the first six months has the potential to help prevent 1.4 million deaths in children under five each year (Barennes *et al.,* 2012). Breast-milk contains the necessary nutrients that protect and boost the immune system and promote healthy growth and development (Maharaj & Bandyopadhyay, 2013). Breastfeeding provides social, economic and psychological benefits for both the mother and the baby (Weimer, 2001).

EBF for the first six months is one of the best preventative interventions of infant mortality, could possibly prevent 12-13% of all under five deaths in the developing countries (Black *et al*., 2008). Black *et al.* (2008) further confirmed that EBF for the first six months decreases illnesses from gastrointestinal and allergic diseases, without any negative effects on growth. Mason and Roholt (2006) stated that breastfed babies are less likely to have infections, allergies, and diarrhoea, and that they have better motor development compared to non-breastfed infants. This is because breast milk is safe and clean, always available at the right temperature, easy to digest and contains immune factors and anti-bodies (Barennes *et al*., 2012). Breastfeeding also has benefits for the mother including a sense of accomplishment/mothers feel proud to be able to provide for their infants, bonding with the baby, and weight loss (Berg *et al*., 2012). Furthermore, breast-milk is cost effective and can help save the mother money.

In addition to preventing malnutrition in young infants, breastfeeding has also been shown to have a defensive mechanism against the development of non-communicable diseases, including obesity, hypertension and diabetes later in life (Arslanian, 2000). A study by Arslanian (2002) showed that breastfeeding babies at an early age reduce the risk for developing diabetes later in life. Despite the numerous benefits of breastfeeding, breastfeeding practices, particularly exclusive breastfeeding are still sub-optimal in developing and developed countries (Lauer *et al.,* 2004), and efforts are needed to establish EBF for the first six months as the norm globally. In addition, encouraging long-term breastfeeding globally could help reduce the widespread of obesity and other non-communicable diseases worldwide.

2.3 BREASTFEEDING SITUATION IN SOUTH AFRICA (SA)

Previously as part of the South African policy and guidelines for the implementation of the Prevention of Mother to Child Transmission (PMCT) programme, HIV-infected mothers were counselled on infant feeding options and were given the option of either EBF for six months or to formula feed their infants exclusively for the first 6 months. Since the National

Breastfeeding Consultation Meeting in August 2011, the National Department of Health issued a national policy directive phasing out the distribution of free infant formula from 1 April 2012 to 30 September 2012 as part of the PMCT strategy (NDOH, 2013). The National Department of Health also pledged its commitment to address the state of infant and young child feeding at the highest level of governance; with the publication of The Tshwane Declaration for the Support of Breastfeeding in South Africa in August 2011. Despite these efforts EBF rates as reported in the SANHANES-1 remains low with only 7.4% of children below the age of 6 months who were exclusively breastfed (Shisana *et al.* 2013).

Data from the 2003 South African Demographic and Health Survey and other studies showed that although breastfeeding is initiated during the first day of life, mixed feeding rather than EBF is the norm. This may contribute to the fact that South Africa is one of the countries with the highest infant mortality rates 42.2 per 1000 live births (DOH, 2007).

2.4 REASONS FOR LOW EBF RATES/BARRIERS TO BREASTFEEDING

Hindrances to low EBF rates include amongst other the believe of insufficient milk supply, fear of HIV transmission, lack of knowledge, poor family and community support, misinformation about breastfeeding, and short duration of maternity leave among working mothers (De Jager *et al.,* 2012; DOH, 2013). A 2012 global survey on why women started and stopped breastfeeding amongst 3994 women from seven countries (USA, Brazil, South Africa, Egypt, UK, India and China), reported that 40% of mothers stopped due to decreased milk supply, 9% of mothers reported that they find it 'awkward' to breastfeed outside their homes, 55% of working mothers indicated that their place of work do not offer facilities to express breast-milk and/or that they felt too embarrassed to express at work, and as a result has resorted to formula feeding (De Jager *et al.,* 2012). Other barriers include delayed initiation of breastfeeding after delivery, lack of community involvement in breastfeeding workshops or talks, and lack of breast feeding support/breastfeeding support groups (USDOH, 2011). Of all the barriers mentioned above, the confusion around infant feeding and HIV transmission has been shown to be the biggest barrier of breastfeeding (IRIN, 2011).

In addition, health workers working with pregnant women and mothers with newborn babies are not necessarily sufficiently equipped to help these women establish breastfeeding before they leave the clinic (WHO, 2003). Another reason that has shown to decrease EBF rates is the aggressive marketing of BMS that influence a mother's choice of feeding (Mason & Roholt, 2006).

2.5 STRATEGIES TO PROMOTE EBF

Exclusive breastfeeding is declared as the most crucial global health intervention for optimal infant nutrition (Jones *et al.,* 2003). In line with the millennium development goals (MDGs) South Africa also pledged to ensure a two-thirds reduction in under five mortality by 2015. As a number of child health programmes and interventions aim to promote, protect and support exclusive breastfeeding and include the following:

2.5.1 Mother Baby Friendly Initiative (MBFI)

The WHO together with UNICEF launched the Baby Friendly Hospital Initiative (BFHI) in 1991 in response to the 1990 Innocenti declaration on the protection, promotion and support of breastfeeding. This initiative was implemented in hospitals with the aim to advance the maternity services to enable mothers to breastfeed immediately after delivery, and to continue exclusive breastfeeding until six months through adopting "The ten steps of successful breastfeeding" as shown in Box 1 (WHO, 2009). Even though the MBFI's focus is hospital and maternity services, it also recognizes that community involvement in promoting, protecting and support of breastfeeding is necessary for women to initiate and sustain breastfeeding (DOH/WHO, 2011). More recently, three additional items have been added to "The ten steps" to ensure adherence with the ICMBS, and make provision for support to the mother regarding labour and feeding in the context of HIV (Box 1), hence the change in name from the BFHI to the MBFI.

South Africa had their first public health facility BFHI accreditation (st Monica) in 1994 in the Western Cape Province (WHO, 2009). The BFHI review conducted in 2008 in eight Provinces in South Africa found that 73% of the mothers (n=493) reported that breastfeeding was initiated soon after delivery. However, by 10 weeks of age, 46% of the study population indicated they had given formula milk (DOH, 2008). In order to increase the rate of EBF that is supressed by the early introduction of complementary food, the DOH recommends that all health facilities with maternity wards should implement the MBFI and have their facility MBFI accredited by 2015.

Box 1: The ten steps plus three additional items of successful breastfeeding (NDOH, 2013)

1. A written policy on infant feeding that is routinely communicated to all health care staff must be in place
2. All health care staff must be trained in the necessary skills to implement this policy
3. All pregnant women must be informed about the benefits and management of breastfeeding
4. Babies must be placed in skin-to-skin contact with their mothers immediately following birth for at least an hour
5. Mothers must be shown how to breastfeed, and how to maintain lactation even if they should be separated from their infants
6. No food or drink must be given to newborn infants other than breast milk unless medically indicated, and Exclusive Breastfeeding must be encouraged for 6 months
7. Rooming-in must be practiced where mothers and infants must be allowed to remain together 24 hours a day
8. Breastfeeding on demand must be encouraged
9. No artificial teats or pacifiers (also called dummies or soothers) must be provided for breastfeeding infants
10. The establishment of infant feeding support groups must be fostered and mothers must be referred to them on discharge from the hospital or clinic

Additional Items

11. Facilities must comply with the International Code of Breastmilk Substitutes and relevant WHA resolutions;
12. Guidance and support to women related to HIV and Infant feeding must be provided
13. Mother friendly labour and delivery care for successful breastfeeding must be practiced

2.5.2 Tshwane declaration on breastfeeding

At the national breastfeeding meeting held in August 2011 attended by the minister of health together with other stakeholders aside the ministry of health, the Tshwane declaration was announced as the strategy that will help raise EBF rates. The Tshwane Declaration is committed to and declared South Africa as a country that actively promotes, protects and supports exclusive breastfeeding as a public health intervention to optimise child survival, irrespective of the mother's HIV status. South Africa therefore adopts the 2010 WHO guidelines on HIV and infant feeding, and recommends that health services should principally counsel and support mothers known to be HIV infected to exclusively breastfeed their infants for six months with continued breastfeeding thereafter up to 12 months under antiretroviral cover. Furthermore, the Tshwane Declaration calls an end to distribution of free

infant formula. However, health facilities are permitted to provide infant formulas as treatment only to babies with approved medical conditions. In addition, it is committed to promote the human milk banks in health facilities as an effective strategy to reduce infant illnesses and mortality through giving babies who cannot breastfeed donated breast-milk (NDOH, 2013).

2.5.3 International Code of Marketing of Breast milk Substitutes (ICMBS)

Inappropriate marketing practices of BMS and related products undermine breastfeeding in the way that mothers are pressurized by companies' strategies to opt for formula feeding rather than breastfeeding (WHO, 2013). The ICMBS is incorporated in the MBFI as one of the strategies that elevate the health facility to be declared mother and baby friendly if all the provisions of the code are practiced. The WHA 34.22 Resolution have encouraged and stressed the importance of member states promoting, protecting and supporting breastfeeding through having an important legislation that will enforce all parties involved to adhere to the ICMBS (WHA 34.22).

2.6 WHAT IS THE INTERNATIONAL CODE OF MARKETING OF BREAST-MILK SUBSTITUTES?

In 1979, the WHO in collaboration with the UNICEF held an international meeting attended by different stakeholders including member states, health organizations, and non-governmental organizations (NGOs) and the infant food industry. The aim of the meeting was to highlight factors that affect infant and young children's health. One factor that stood out was the aggressive marketing practices of BMS to the general public including the misleading labelling of infant formulas, distribution of samples and freebies. The development of ICMBS was suggested as the main intervention that will assist in regulating the marketing practices of BMS. In agreement, the ICMBS was then developed as a global policy framework with the aim to contribute to the safe provision of safe and adequate nutrition for infants through protection, promoting and supporting breastfeeding (WHO, 1981).

The code was then adopted following the meeting in 1981 by the World Health Assembly (WHA) and urges its member states to refrain the aggressive marketing strategies that directly or indirectly undermine breastfeeding. The provisions of the code prohibit the promotions of bottles, teats, infant formulas and foods and drinks for infants younger than six months of age (Brady, 2012). The WHA Resolutions recognize the importance of infant feeding, indicating that breastfeeding is the most important and convenient means of infant

feeding (Sheryl & Abrahams, 2012). The cause of concern before ICMBS adoption was the increase of child malnutrition, morbidity and mortality rates worldwide. One of the main reasons being that mothers no longer breastfeed their infants but use infant formula even though they do not meet the AFASS criteria (Available, feasible, affordable, sustainable and safe) for the use of infant formula, predominantly due to low-socio economic status, poor hygienic practices and no access to clean and safe water (WHO, 2006).

In 1996 the WHA held a meeting, wherein all 191 member states confirmed their support for the adoption of the ICMBS and the implementation of relevant resolutions (Taylor, 1998). The role of Governments is to partner with other stakeholders and work in collaboration to implement and monitor the Code in their respective countries (NZIFMA, 2007). Furthermore, manufactures and distributors of BMS products within the scope of the Code are accountable for monitoring their promotion conducts and make sure that their conduct does not violate the Code. The Code does not refrain the sale and production of BMS; it is against the marketing practices that undermine breastfeeding. Any promotion which undermines breastfeeding is said to be violating the Code (WHO, 1981). In 1994 the WHA 47.5 banned distribution of free or low cost supplies of infant formulas to health care facilities (Babak *et al.,* 2004). In a 2004 survey conducted in 81 health care facilities in Ukraine, 17% of the health facilities reported that they have received low cost supplies of BMS in violation of article 6.6 of the Code (Babak *et al.,* 2004).

2.6.1 Code implementation

In 1989, WHO and UNICEF issued a statement protecting, promoting and supporting breastfeeding. In 1990, the Innocentia Declaration was also a major motivation for Code implementation (WHO & UNICEF, 2009). For effective Code implementation, different stakeholders including health professionals, government officials, politicians, manufactures and consumers need to be involved (WHO, 2013). Once a country pledge to commit to the implementation of the ICMBS in their country, the government bodies are responsible for drafting regulations (Armstrong & Sokol, 2001). South African government has adopted the ICMBS voluntarily in 1995. However, in 2012 South Africa legislated the Code when government released new regulations relating to foodstuffs for infants and young children (R991), making it compulsory for food manufacturers, including manufacturers of BMS in South Africa to adhere to the ICMBS and WHA Resolutions (UNICEF, 2011).

2.6.2 Violation of the ICMBS

Violation of the ICMBS can be done in all public places including health facilities, shops, pharmacies, and through advertisements in billboards. Kean *et al*. (2010) has reported that 500 violations of the Code were documented in 46 countries across the globe. In 2011 a study on monitoring of violations of the ICMBS in Lao People's Democratic Republic conducted in 21 health facilities with 35 health workers, reported that 100% of the health workers reported receipt of free gifts from BMS (Barennes *et al.,* 2012). A multisite cross sectional study of 186 health professionals in 43 health facilities in Togo and Burkina Faso by Aguayo *et al.* (2003) examined the extent of Code violations in health facilities, and showed that 14% of health facilities reported receiving donations of BMS from manufacturing companies, whilst 12% of health professionals reported having received free samples of BMS, promotional gifts and information materials.

In a 2008 survey amongst 427 health workers at 12 government hospitals in Pakistan, more than one-third of the health workers interviewed (38.4%), confirmed that they have received gifts such as pens, pencils and calendars labelled with the name of a proprietary product, including infant formula, from companies (Salasibew *et al.,* 2008). Furthermore, 15.4% have received free samples of infant formula, and 12.4% confirmed that they have received sponsorship for attending conferences, which violate the code (article 7.3). In addition another survey conducted in 1998 amongst 3050 mothers and 466 health workers at 165 health facilities in four countries (Bangladesh, Poland, Thailand and South Africa), indicated that 18% of health workers have received gifts from manufacturers or distributors of BMS, and 56% of the health facilities received information from manufacturers which violated the Code (Taylor, 1998). When company materials on BMS are displayed in health facilities, it may be perceived as recommendations by the DOH and companies take advantage of this useful opportunity to promote their products. An International Baby Food Action Network (2004) report on evidence for the violation of the ICMBS indicated that manufacturers continue to target health facilities and health workers for promotion of their products, especially in countries where the Code was adopted voluntarily and where the Code has not been enforced through legislation.

2.7 CODE OF PRACTICE FOR HEALTH WORKERS

According to the WHO, (1981) a health professional is defined as a person working in the health care system, whether professional or non-professional, including voluntary unpaid workers (ward assistants, nurses, midwives, clerks, dieticians, etc.). Health workers play a role in the implementation of the Code; as well as a responsibility to protect, promote and

support breastfeeding. Most importantly they have a responsibility to help ensure that their institutions adhere to the provisions of the Code. On the other hand health workers with lack of knowledge about the programmes and strategies that are in place to promote and protect breastfeeding especially EBF (MBFI, ICMBS, IYCF, KMC and Tshwane declaration on breastfeeding) fail to support or encourage mothers to breastfeed and they hinder the implementation of the ICMBS at the national level (Sokol *et al*., 2008).

The WHO (1981) stated that health workers who work with pregnant women and mothers who have babies younger than six months should make it their responsibility to familiarize themselves with the ICMBS and national regulations about the Code in their respective countries. According to UNICEF (2009) health workers involved in care of maternal and infant nutrition have the obligation to give mothers information about the benefits of breastfeeding and the adverse effect of formula-feeding, and stop the promotion of proprietary products within the scope of the code in health facilities. They should not accept gifts and samples from BMS manufacturers; neither should they pass the samples to mothers (UNICEF, 2009).

In New Zealand the ministry of health drafted its own health worker's code that is more or less in line with the stipulations of article seven of the ICMBS. The health worker's code is communicated to each health care worker and it helps health workers to monitor their conducts to evaluate if they conform to the ICMBS. As in the Code, health workers are urged to protect, promote and support breastfeeding, giving clear and adequate information about breastfeeding, as well as the health risks and costs of formula feeding (NZIFMA, 2007).

2.8 HEALTH WORKER'S KNOWLEDGE OF THE ICMBS

BMS companies target health workers for promotion of their products on the premises that health workers work closely with pregnant women and mothers (Armstrong & Sokol, 2001). A number of studies have been conducted to assess health worker's knowledge of the ICMBS. Witherspoon (2012) conducted a descriptive study on nurse's knowledge of the recommendations of the WHO (ICMBS) in two hospitals in Geneva, recruiting professional nurses, midwives and nursing managers (n=49). The findings from Witherspoon (2012) showed that 54.5% of these nurses have never heard about the Code; whilst 53.2% were aware of the Code but unsure on where to obtain information on the ICBMS in their work place. Similarly, Salasibew *et al.* (2008) also conducted a study in Pakistan to assess health professionals' awareness of the ICMBS amongst 427 health staff who are involved in routine breastfeeding consultations at 12 urban government hospitals including paediatricians, obstetricians, midwives, nurses, doctors and a lady health visitor. Their study revealed that

of the 427 health workers interviewed, 79.6% were not aware of the ICMBS. Aguayo *et al*. (2003) also examined awareness of the Code in 43 health facilities amongst 186 health providers, 95 in Togo and 91 in Burkina Faso, and reported that 85% of health providers in Togo have never heard about the Code, and 74% of health workers in Burkina Faso have never heard about the Code. None of the 95 health providers interviewed in Togo have attended any ICMBS formal training (Aguayo *et al*., 2003). It was further indicated that 58 respondents had heard about the BFHI.

2.9 SUMMARY

The ICMBS is seen as one of the most effective interventions that will put an end to the unacceptable marketing practices of BMS that undermine breastfeeding. The Code does not ban the sales of BMS it prohibited the marketing of BMS as partial or total replacement of breast-milk. Studies that monitored violations of the ICMBS show that BMS manufacturers are using health care facilities to promote their products and to give out free samples to mothers and health workers. To increase the rate of EBF in South Africa, health workers need to play a role in protecting, promoting and supporting breastfeeding. They need to adhere to the ICMBS and report violations of the ICMBS that take place in health facilities. However, studies have also reported that awareness of the ICMBS in health facilities is not good.

CHAPTER 3: METHODOLOGY

3.1 STUDY DESIGN

The study was a cross-sectional study.

3.2 SAMPLING DESIGN

A purposive stratified cluster sample of eight to twelve health facilities were sampled from four provinces (Gauteng, Eastern Cape, Free State and North-West) including metropolitan and non-metropolitan health facilities (Table 3.1). In total 40 health facilities (clinics and hospitals) were sampled and visited. Facilities were randomly selected (www.random.org) in each province. One hospital per province was randomly selected and included in the sample on request of the Department of Health (DoH). Potential replacement facilities were also identified as a risk management strategy. This was done for the potential situation of unrest, clinic days that did not fit into the schedule, and in cases where facilities could not have been reached, or were uncooperative. A sample of three health workers involved with providing care to pregnant women and mothers with babies younger than six months were randomly sampled in each health facility (in total 120 health workers).

3.2.1 Sampling of health facilities

Access to the health facilities was granted by the DoH. A list of only health facilities that were visited by more than 7500 patients in 2011 was accessed from the DoH. The list was used as a screening tool to include health facilities where there is an average daily attendance of at least 38 patients per day. Days on which pregnant women and mothers with babies younger than six months visit the facility were considered.

Table 3.1: Selected health facilities

Province	District	Facility
North-west	Bojanala platinum	Hebron clinic
North-west	Dr K Kaunda	Mohadin clinic
North-west	Dr K Kaunda	Alabama clinic
North-west	Ruth Segomotsi Mompati	Tlakgameng clinic
North-west	Ngaka Modiri Morena	Bodibe 1clinic
North-west	Ngaka Modiri Morena	Tswelelopele clinic
North-west	Dr K Kaunda	Potchefstroom clinic
North-west	Ngaka Modiri Morena	Mahikeng hospital
Free-state	Thabo Mofutsanyane	Relebohile clinic

Province	District	Facility
Free-state	Mangaung	Gaongalelwe clinic
Free-state	Thabo Mofutsanyane	Monontsho clinic
Free-state	Mangaung	Winnie mandela clinic
Free-state	Mangaung	Palenomi hospital
Free-state	Fezile dabi	Seeisoville clinic
Free-state	Thabo Mofutsanyane	Ma-haig clinic
Free-state	Thabo Mofutsanyane	Marakong clinic
Gauteng	Ekurhuleni	Tembisal hospital
Gauteng	West rand	Khutsong clinic
Gauteng	Johannesburg	Tladi clinic
Gauteng	Tswane mm	Phedisong clinic
Gauteng	Ekurhuleni	Philip moyo clinic
Gauteng	Tswane mm	Soshanguve clinic
Gauteng	Tswane mm	Soshanguve block TT
Gauteng	Johannesburg	Witkoppen clinic
Gauteng	Johannesburg	Thuthukani clinic
Gauteng	Johannesburg	Mayibuye clinic
Gauteng	Tswane mm	Boekenhoutkloof clinic
Eastern cape	OR Tambo	Lusikisiki clinic
Eastern cape	Nelson Mandela	Motherwell clinic
Eastern cape	OR Tambo	Elizabeth gateway clinic
Eastern cape	Nelson Mandela	Zwide clinic
Eastern cape	OR Tambo	Qumbu clinic
Eastern cape	Alfred Nzo	Tabankulu clinic
Eastern cape	Alfred Nzo	St. Patricks clinic
Eastern cape	Nelson Mandela	Kwazakele clinic
Eastern cape	Nelson Mandela	West end clinic
Eastern cape	Nelson Mandela	Chatty clinic
Eastern cape	OR Tambo	Holy cross clinic
Eastern cape	OR Tambo	Flagstaff clinic
Eastern cape	OR Tambo	Mhlakulo clinic

3.2.2 Sampling procedure

Sampling of health workers was performed following the procedure outlined in the Interagency Group on Breastfeeding Monitoring (IGBM) protocol (IGBM, 2005).

- On arrival at each of the selected health facilities, a list of names and designations of all health workers working with pregnant women and mothers of young infants and who will be available for interviews was requested.

- A number was allocated to each health worker on the list.
- Each number was duplicated on a separate piece of paper and placed in a container.
- Four numbers were drawn from the container by one of the field workers.
- The three health workers on the list who corresponded with the first three numbers that were drawn from the container were included in the study. A fourth number were drawn in case one of the first three selected health workers declined to participate.

3.3 DATA COLLECTION

3.3.1 Data collection plan

In the selected health facilities, data were collected by means of a fixed structured interview administering a questionnaire (Addendum B) that was adopted and adapted from the IGBM protocol (IGBM, 2005). The questionnaire was translated into local South African languages (Xhosa and Setswana). Trained fieldworkers administered the questionnaires that contained questions pertaining to BMS company visits, ICMBS violations in health facilities, ICMBS awareness, and receipt of free samples, gifts, materials, equipment and low cost supplies. The trained fieldworkers conducted the interview with one participant at a time in an enclosed area/private office. Training of fieldworkers was done prior to the start of the study to familiarise them with the Code, the interview procedures and the questionnaire. The interviews with all the health workers from the respective health facilities were conducted over a period of three months (Addendum C).

3.3.2 Piloting

A pilot study was conducted before the main study to test the adapted questionnaire for face validity, and to determine how long it will take to complete an interview. The pilot study was conducted in a health facility that did not form part of the study sample (i.e. Steve Tshwete clinic in North-West Province) where the questionnaire was administered to randomly selected health workers.

3.4 DATA ANALYSIS

Data were analysed using the Statistical package of social sciences (SPSS) version 11. Prior to analysis, data on the questionnaires were coded and checked for missing values. Data were then entered into an excel sheet and checked for outliers and/or invalid codes. Data were presented as frequency counts and percentage distribution.

3.5 ETHICAL CONSIDERATION

The research protocol for the UNICEF project was approved by the ethics committee (Addendum A) of the North-West University (NWU-00008-13-A1). The National Department of Health was also approached for ethical approval. The study proposal for the sub-study was presented and reviewed by the subject group of Nutrition in the Faculty of Health Sciences at North-West University.

Prior to data collections, participants were required to sign an informed consent form explaining the aim, objectives and procedures of the study. Trained fieldworkers conducted the interview administering the questionnaire with one participant at a time in an enclosed, private space in the participants preferred language/home language. Anonymity was ensured by allocating a subject code to each participant, and only the subject code was documented on the questionnaire. Study participants were further free to withdrawn from the study at any time without any prejudice.

Study results will be made available to the Department of Health.

CHAPTER 4: RESULTS

One hundred and twenty two health workers working in 40 health facilities were interviewed in the four provinces to collect information on adherence to the ICMBS. The different types of health workers who completed the interview are summarized in Table 4.1. The majority of health workers interviewed are qualified nurses (n=98) of which 37 reported they were the nursing sister in charge.

Table 4.1: Summary of the different health workers that were interviewed (n=122)

Type of health worker	N	Percentage (%)
Nursing sister in charge	37	30.3%
Nurse	61	50%
Midwife	20	16.4%
Health promoters	3	2.5%
Nutrition counselors	1	0.8%
Total	**122**	**100%**

4.1 VISITS FROM BMS MANUFACTURING COMPANIES

Of the 40 health facilities, health workers from only five (12.5%) facilities reported one or more visit from a representative or distributor of a company that manufactured BMS, feeding bottles or teats during the preceding six months (Table 4.2). It was the same company (i.e. Nestlé) who visited all five health facilities in a total of 15 times during the preceding period of 6 months. The purposes for visiting the respective facilities are summarized in Table 4.2, with the most common purpose: “to provide product information to health workers/personnel”.

4.2 ICMBS VIOLATIONS REPORTED BY HEALTH WORKERS IN HEALTH FACILITIES

In the present study, a *total number of four violations* were reported by four health workers in three (7.5%) of the 40 facilities (Table 4.3). These three facilities were also amongst those that were visited by Nestlé. All four violations constituted the violation of Article 7.3 (receipt of free gifts by health workers) (Table 4.3). ICMBS violations were reported *only in Gauteng* province. No violations were reported in the Free State, North-West or the Eastern Cape Province.

Table 4.2: Summary of facilities visited by Nestlé Company

Facilities visited	Province	Number of visits	Purpose of visit/s
Alabama clinic	North-West	1	-To provide samples to pregnant women/mothers
Tladi clinic	Gauteng	2	-To introduce a new product (x3) -To give product information to health workers
Witkoppen clinic	Gauteng	6	-Educate mothers on how to use new products -To give product information to health workers -To promote their new product
Thuthukani clinic	Gauteng	4	-To notify that they are no longer allowed to distribute their products -To give product information to health workers
Mayibuye clinic	Gauteng	4	-To give health workers information of latest (x2) - To give health workers information on milk substitutes to share with the mothers.

4.3 FREE GIFTS AND SAMPLES RECEIVED BY HEALTH WORKERS IN SELECTED HEALTH FACILITIES

A total number of four health workers (3.3%), including two nurses and two nursing sisters in charge, from three of the 40 health facilities (7.5%) (all three situated in Gauteng Province) received a free gift once which constitutes a violation of article 7.3 (Table 4.3). The gifts included a pen, a booklet, calendars, and a booklet/poster for personal use. The fieldworker personally saw all the gifts except for the pen, and confirmed that none of these gifts carried a specific brand name. However, the booklet and poster received by the nurse from Mayibuye clinic carried the company name (i.e. Nestlé) that manufactures amongst other BMS for infants younger than six months. Nonetheless, according to article 7.3: “No financial or material inducements to promote products within the scope of this code should be offered by manufacturers or distributors to health workers or members of their families, nor should these be accepted by health workers or members of their families”, therefore these gifts, regardless whether they carried a brand name or not, constitute violations. None of the health workers reported that they have received free samples such as infant formula, follow-on formula, feeding bottles, teats or any other food or drink for babies younger than 6 months of age from any BMS companies.

Table 4.3: Summary of reported ICMBS violations by health workers in selected health facilities in South Africa

Type of violation	Number of times reported	Specification of violation (e.g. type of free gift)	Facility in which violation was reported
Free gifts received (violation of article 7.3)	4	Pen *(reported by nurse)*	Thuthukani clinic (Gauteng)
		Booklet for personal use *(reported by nursing sister in charge)*	Tladi clinic (Gauteng)
		Booklet and poster *(Reported by nurse)*	Mayibuye clinic (Gauteng)
		Calendars *(Reported by nursing sister in charge)*	Mayibuye clinic (Gauteng)
Total number violations	**4**	**Total number of facilities where violations were reported**	**3 (7.5%)**

4.4 FREE MATERIALS AND EQUIPMENT RECEIVED IN HEALTH FACILITIES

Health workers from four of the 40 health facilities (10%), all who reported visits from Nestlé, also reported that their facility received free materials (including education materials) and/or equipment from Nestlé during one of the visits (Table 4.4). Two health facilities (Witkoppen and Alabama) received leaflets. Mayibuye facility received 'maternal and infant feeding product booklets' and Thuthukani facility received a water bag for use in the facility. All the free material and equipment received carried the company name (i.e. Nestlé) as reported by the respective health worker. According to the ICMBS (articles 6.6 and 6.8), donations of educational material or equipment for use in the facility may be made, and these donations may bear the donating company's name or logo, however the donation should not carry a specific brand name or refer to a proprietary product within the scope of the code. The booklets on 'maternal and infant feeding products' as specified by the respective nursing sister in charge at Mayibuye did not carry the name of a proprietary product. The donation of these booklets does therefore not constitute a violation. Unfortunately the fieldworker did not see the water bag or leaflets to confirm if they carry the brand name of a proprietary product within the scope of the code or not. Therefore these donations can't be counted as violations either. No receipt of free materials was found in Free-State, North West and Eastern Cape Province.

Table 4.4: Free materials and/or equipment received in respective health facilities

Free material and/or equipment	Clinic	Type of material or equipment
Free educational material	Witkoppen clinic	Leaflets
	Alabama clinic	Leaflets
	Mayibuye clinic	Booklets for facility use
Free equipment	Thuthukani clinic	Water bag

4.5 FREE OR LOW COST SUPPLIES TO HEALTH FACILITIES

In the present study, health workers from eight health of the 40 health facilities (20%) (Hebron, Mohadin, Alabama, Tlakgameng, Tswelelopele, Mahikeng, Thuthukani and Seeisoville) received free or low cost supplies of formula milk from the central medical store or depot (i.e. low cost supplies officially ordered by a health care professional). According to the ICMBS (article 6.6): "Donations or low price sales to institutions or organizations of supplies of infant formula or other products within the scope of the ICMBS, whether for use in the institutions or for distribution outside them, may be made. Such supplies should only be used or distributed for infants who have to be fed on breast milk substitutes." Therefore, receipt of low cost supplies in the above mentioned health facilities do not constitute a violation. Three health workers from other health facilities (Bodibe, Tembisa and Witkoppen) were unsure of whether the health facility had received free or low cost supplies from companies or the central medical depot.

4.6 KNOWLEDGE ABOUT THE ICMBS AND TSHWANE DECLARATION

When asked: "Do you know of the International Code of Marketing of Breast milk Substitutes", the majority of the health professionals (62%) were unaware of the code, whilst only a third (38%) have heard about the code. Those who have heard about the code included nurses (16%), nursing sisters in charge (14%), midwives (6%) and health promoters (2%). The majority of these health workers were from Eastern Cape (41.3%) and Gauteng province (23.9%). Three of these nurses who indicated that they have received and accepted a free gift from Nestlé, were included in the group who indicated that they have heard about the ICMBS code. In slight contrast to ICMBS awareness, more than half of the

health workers (55%) in the presents study reported that they were familiar with the Tshwane declaration for the support of breastfeeding.

4.7 MOTHER BABY FRIENDLY INITIATIVE (MBFI) STATUS

An additional question was included in the questionnaire to determine if the respective hospital or clinic has Mother Baby Friendly Initiative (MBFI) status, since MBFI status include ICMBS adherence. In the present study, health workers from 22 health facilities (55.5%) reported that their health facilities have MBFI status. Of these facilities, 8 were from Gauteng (36.4%), 1 was from the Free State (4.5%), 6 were from North-West Province (27.3%) and 7 were from Eastern Cape (31.8%). Health workers from the remaining eighteen health facilities (45%), including the facilities where violations were reported (i.e. Thuthukani, Tladi and Mayibuye clinic) did not have Mother Baby Friendly Status.

4.8 ADDITIONAL COMMENTS FROM HEALTH WORKERS

A space was provided at the end of the questionnaire for health workers to make additional comments regarding the interview or questionnaire. Hundred and nine comments were received relating to different issues. The majority of comments (43%) were aimed at discouraging mix feeding and encouraging breastfeeding only to mothers with babies less than six months. About (6%) of health workers stated that they do not encourage infant formula feeding. Few health workers (2.4%) specified that infant formula should be provided to mothers who have special needs or who cannot breastfeed due to number of reasons. Only two health workers stated that they need education on the ICMBS. Some expressed concerns regarding shortage of breastfeeding posters and the need of extra rooms where mothers will feel free to practice breastfeeding.

CHAPTER 5: DISCUSSION

The main aim of the present study was to assess the extent of International Code of Marketing of Breast-Milk Substitutes (ICMBS) violations in health facilities in four provinces in South Africa. As part of the specific study objectives, visits from companies that manufacture breast-milk substitutes (BMS), feeding bottles or teats, to the respective health facilities, as well as the health workers awareness of the ICMBS were also examined.

A total number of four violations were reported in only three (7.5%) of the 40 health facilities. All four of the violations included the receipt of free gifts by health workers from a BMS company (violating article 7.3 of the ICMBS). The three facilities where violations were reported formed part of the five facilities that were visited by the same company (i.e. Nestlé) that manufactures amongst other BMS. Similarly to the International Baby Food Action Network 2004 report, Nestlé was reported to be one of the top companies which violated several provisions of the ICMBS by promoting infant formula and follow-up formula, and by disseminating information material on products within the scope of the code in health facilities. According to article 6.2 of the ICMBS "No facility of a health care system should be used for the purpose of promoting infant formula or other products within the scope of this code". This does not, however, preclude the dissemination of product information to health professionals with the aim to inform or train them about the use of products for certain medical reasons.

In the present study, five of the 40 health facilities (12.5%) reported one or more visits from a representative of a baby milk or baby food company. A study by McInnes *et al.* (2007) who conducted a survey amongst health workers from health facilities in Greater Glasgow also indicated that only a few health workers (4.7%) had been visited by BMS company representatives in the previous six months. Furthermore, in line with the present study, the main purpose of the visits was to provide product information (McInnes *et al.,* 2007). The findings from both the present study and McInnes *et al*. (2007) indicate that manufacturing companies of BMS are using health facilities not only to provide product information, but also to promote their products and distribute free samples to mothers.

ICMBS violations in the present study were only reported in Gauteng Province (Table 4.3). Furthermore, the health facilities where violations were reported were the same facilities that were visited by Nestlé, a company that manufacture BMS. The fact that Gauteng Province is the main hub of the South African industry with one of Nestlé's main branches situated in Gauteng, could explain why only health facilities in Gauteng were visited. The suggested link

between Nestlé visits and reported violations in this study, could in part also explain why violations were only reported in Gauteng. Of interest to note was also the fact that the health facilities where violations were reported did not have Mother Baby Friendly Status at the time of the study. To strengthen strategies for increasing EBF rates in SA, the Department of Health requires that all health facilities with maternity units must implement the Mother Baby Friendly Initiative (MBFI) and have their facility MBFI accredited by 2015. The aim of the MBFI is to implement "The 10 Steps to successful breastfeeding" and three additional items, one of which is the ICMBS. In order for a health facility to obtain MBFI, status, the facility has to adhere to specific criteria (i.e. 10 steps) including compliance with the ICMBS and relevant WHA resolutions (UNICEF, 2009; Bhutta *et al.,* 2008).

In the present study, health workers from 22 health facilities (55.5%) reported that their health facilities have MBFI status. Of these facilities, eight were from Gauteng (36.4%), one was from the Free State (4.5%), six were from North-West Province (27.3%) and seven were from Eastern Cape (31.8%). Since the inception of the Mother Baby Friendly Initiative (previously known as Baby Friendly Hospital Initiative) in South Africa in 1994, 70% of the health facilities in Gauteng, 37.5% of the health facilities in the Free State, 30% of the health facilities in North-West Province and 41% of health facilities in Eastern Cape Province have received MBFI status in the 2012/2013 financial year (NDoH, 2012). In total 266 of the 545 (49%) health facilities with maternity beds in South Africa were certified Mother Baby Friendly by the 2012/2013 financial year (NDoH, 2012).

5.1 RECEIPT OF FREE GIFTS BY HEALTH WORKERS

Of the 122 health workers interviewed, only four health workers (3.3%) from Tladi, Mayibuye and Thuthukani clinic received free gifts including a pen, calendars, a booklet, and a poster/booklet, violating article 7.3 of the ICMBS. Although the free gifts were of small value and only a small percentage of health workers in the present study reported receiving and accepting free gifts, article 7.3 states that: "No financial or material inducements to promote products within the scope of this Code should be offered by manufacturers or distributors to health workers or members of their families, nor should these be accepted by health workers or members of their families". A study conducted by Salasibew *et al.* (2008) in Pakistan reported that 164 of 427 health workers (38.4%) in health facilities also reported receiving small gifts including pens, pencils and calendars. Similar observations were reported with regards to the type of small gifts received in a study by McInnes *et al.* (2007) who reported that 7% of health workers received gifts including diaries, calendars and posters from BMS companies. A study by Aguayo *et al.* (2003) monitored the compliance with the ICMBS in West Africa: Togo and Burkina Faso, and reported that six health facilities (14%) had

received donations of BMS that were given to mothers free of charge. The authors further reported that health workers in five (12%) health facilities have received free samples of BMS as well as promotional gifts from BMS manufacturers, violation article 7.3 of the Code.

The health workers who reported receiving a gift in the present study included two nurses and two nursing sisters in charge, all qualified health professionals. A study by Salasibew *et al*. (2007) that examined ICMBS awareness and violations amongst health professionals in government hospitals in Pakistan, showed that general practitioners (doctors) (63.2%) were significantly more likely to have received free gifts within the scope of the Code followed by obstetricians (59.6%) and pediatricians (51.4%) compared to nurses (26.7%) and midwives (3.3%). As a result, the assessment indicates that BMS companies target highly qualified professionals (obstetricians, doctors and pediatricians) rather than nurses and midwives. However, the present study only recruited health workers who work in close proximity with pregnant women and mothers with young babies in public health facilities including nursing sisters in charge, nurses, midwifes and health promoters. Since companies try to seek direct contact with qualified health professionals/workers for the purpose of promoting their products, health professionals/workers must be familiar with the ICMBS in order to comply with the ICMBS and not give BMS companies a foothold in health facilities to promote their products. Awareness of the ICMBS is not necessarily enough to ensure health workers do comply with the Code, since three of the four health workers who accepted gifts in the present study were indeed aware of the Code.

Although more than half of the health workers (55%) in the presents study reported that they were familiar with the Tshwane declaration for the support of breastfeeding, only 38% were aware of the ICMBS. This finding is supported by the study conducted in Pakistan by Salasibew *et al.* (2008) who demonstrated that the majority of health workers (79.6%) in their study were also unaware of the ICMBS. The findings of these two studies are consistent with the results obtained in West Africa by Aguayo *et al.* (2003) which indicated that 80% of health workers in their study have never heard about the Code. These results confirm that there is lack of communication between director-general and health workers; in particular there is lack of health education, training, and sharing of information about ICMBS. Those who did indicate that they have heard about the Code are not necessarily familiar with the violations in the Code. For instance, the three health workers who received free gifts in the present study, thereby violating article 7.3 of the ICMBS, have heard about the Code, but still violated the Code.

5.2 DONATIONS OF EQUIPMENT AND MATERIAL TO HEALTH FACILITIES

In the present study four facilities (10%) received materials and equipment including leaflets, 'maternal and infant feeding product booklets' and a water bag. According to the ICMBS (articles 6.6 and 6.8), donations of educational material or equipment for use in the facility may be made, and these donations may bear the donating company's name or logo, however the donation should not carry a specific brand name or refer to a proprietary product within the scope of the Code. According to the respective health workers, the leaflets, booklets and water bags contained the company name. The booklets on 'maternal and infant feeding products' as specified by the respective nursing sister in charge did not carry the name of a proprietary product, therefore donation of these booklets does not constitute a violation. Unfortunately the fieldworker did not see the leaflets or the water bags, and could therefore not confirm whether these items carried the brand name of a proprietary product, hence constituting a violation. According to Amstrong and Sokol (2001) companies distribute materials that portray company logos, babies, toys and animals with the reason that mothers and health workers are familiar with such images. In other words it is clear that companies advertise their products without even mentioning the products brand name.

5.3 LOW COST SUPPLIES

All the facilities that have received free or low cost supplies, reported that the low cost supplies were officially ordered from the medical depot. No free or low cost supplies were directly from the manufacturing companies. In 1994 the World Health Assembly Resolution (WHA 47.5) urged member states to ensure that there are no donations of free or subsidized supplies of BMS and any other products within the scope of the Code in any health facility. Although the provision of low cost supplies from the medical depot in the present study does not constitute a violation, it should be taken into consideration that not all health workers are highly trained in breastfeeding management. Free supplies to the health facility should be delivered or donated if only they are requested with government approval by the authorized health professional, they should only be ordered for babies with special needs. In 1991 the UNICEF adopted the WHA resolution that urges governments to end the provision of free supplies of proprietary products within the scope of the ICMBS in health facilities. This is supported by a survey conducted by Amstrong and Sokol (2001) which stated that free or subsidized supplies of BMS and other products within the scope of the Code in health care systems should be ceased.

5.4 ADDITIONAL COMMENTS FROM HEALTH WORKERS

A space was provided at the end of the questionnaire to document any additional comments from health workers regarding the interview or questionnaire. Hundred and nine comments were received relating to different issues of which the majority (43%) discourage mixed feeding and encourage breastfeeding only to mothers with babies less than six months. Although health workers encourage mothers to breastfeed, it is still the mother's decision to choose infant feeding of her choice. Advertisements of BMS to the general public affect breastfeeding, as shown by Mclnnes *et al.* (2007) who reported that health workers stated that "once a mother had decided to bottle-feed it is pointless prevent her from taking BMS companies gifts or supplies". Few health workers indicated that infant formula should be provided to mothers who have special needs or who cannot breastfeed due to number of reasons. This is in contrast with the WHA resolution 47.5 that discourages the donation or provision of free or subsidized supplies of BMS in health facilities. Only two health workers stated that they need education on the ICMBS. The present study showed that the majority of health workers were unaware of the ICMBS. This suggests that knowledge of health workers about the ICMBS is poor and this is consistent with the results obtained by (Aguayo *et al.,* 2003). Health workers don't seem to take the effort to familiarize themselves with the ICMBS. Lastly some health workers expressed concerns regarding shortage of breastfeeding posters and the need of extra rooms where mothers will feel free to practice breastfeeding.

5.5 CONCLUSION AND RECOMMENDATION

A total number of four ICMBS violations were reported in three of the 40 health facilities (7.5%). The facilities where violations were reported were all situated in Gauteng, and were the same facilities that were visited by Nestlé, a company that manufacturers amongst other BMS. The findings showed a poor level of awareness and knowledge of the Code among the majority of health workers who participated in the study. Those who did indicate that they have heard about the Code are not necessarily familiar with the violations in the Code as demonstrated by the three health workers who accepted free gifts, thereby violating article 7.3 of the ICMBS, despite being aware of the ICMBS.

The present study acknowledges the following limitations: The study only included four Provinces in South Africa for baseline assessment due to financial and time constraints; as a result it does not indicate the prevalent Code violations on national level. Certain gaps in the IGBM protocol were observed and should be addressed for future surveys and future studies should aim to include all nine Provinces.

Based on the findings, health worker's awareness and knowledge about the ICMBS should be improved through conducting training by the department of health on the practical application of the Code. The aim of the training or workshop should be to emphasize the aim of the ICMBS and to inform health workers and companies about the practices that violate the Code. The mandate to implement MBFI in all public hospitals and health facilities by 2015 should be strengthened and be accompanied by effective information, training and monitoring to ensure that health workers do comply with the MBFI criteria including compliance with the ICMBS.

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ADDENDA

ADDEMNDUM A: ETHICAL APPROVAL OF THE PROJECT

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2013/04/23

ETHICS APPROVAL OF PROJECT

The North-West University Ethics Committee (NWU-EC) hereby approves your project as indicated below. This implies that the NWU-EC grants its permission that, provided the special conditions specified below are met and pending any other authorisation that may be necessary, the project may be initiated, using the ethics number below.

Project title: **South African baseline Code violation assessment**

Project Leader: : Prof J Jerling

Ethics number:

N	W	U	-	0	0	0	0	8	-	1	3	-	A	1
Institution				Project Number						Year			Status	

Status: S = Submission; R = Re-Submission; P = Provisional Authorisation; A = Authorisation

Approval date: 2013/04/12 **Expiry date:** 2018/04/11

Special conditions of the approval (if any): None

General conditions:

While this ethics approval is subject to all declarations, undertakings and agreements incorporated and signed in the application form, please note the following:

- *The project leader (principle investigator) must report in the prescribed format to the NWU-EC:*
  - *annually (or as otherwise requested) on the progress of the project,*
  - *without any delay in case of any adverse event (or any matter that interrupts sound ethical principles) during the course of the project.*
- *The approval applies strictly to the protocol as stipulated in the application form. Would any changes to the protocol be deemed necessary during the course of the project, the project leader must apply for approval of these changes at the NWU-EC. Would there be deviated from the project protocol without the necessary approval of such changes, the ethics approval is immediately and automatically forfeited.*
- *The date of approval indicates the first date that the project may be started. Would the project have to continue after the expiry date, a new application must be made to the NWU-EC and new approval received before or on the expiry date.*
- *In the interest of ethical responsibility the NWU-EC retains the right to:*
  - *request access to any information or data at any time during the course or after completion of the project;*
  - *withdraw or postpone approval if:*
    - *any unethical principles or practices of the project are revealed or suspected,*
    - *it becomes apparent that any relevant information was withheld from the NWU-EC or that information has been false or misrepresented,*
    - *the required annual report and reporting of adverse events was not done timely and accurately,*
    - *new institutional rules, national legislation or international conventions deem it necessary.*

The Ethics Committee would like to remain at your service as scientist and researcher, and wishes you well with your project. Please do not hesitate to contact the Ethics Committee for any further enquiries or requests for assistance.

Yours sincerely

Prof Amanda Lourens
(chair NWU Ethics Committee)

ADDENDUM B: HEALTH WORKERS QUESTIONNAIRE

Form 2: Questionnaire for Health Professionals

Province	
District	
Sub-district	
Facility name	
Data collector Name/ID	
Date of interview (dd/mm/yyyy)	

Thank you for agreeing to talk to me. I am interested in infant feeding and what happens here in this facility in relation to it. I will not take your name and will not repeat anything you say to anyone else. The information you provide will be anonymous and analyzed together with that provided by your colleagues form other health facilities. There will be a report but it will not be possible to identify you or where you work. The time you share with use and the information you provide is very valuable and will lead to improving child health in South Africa.

TYPE OF HEALTH WORKER

1. Type of health worker
   Tick only one

	Yes	**No**
a. Nursing sister in charge		
b. Medical doctor		
c. Nurse		
d. Midwife		
e. Dietitian/Nutritionist		
f. Pharmacist		
g. Other		

2. Have any personnel from baby milk or baby food companies visited this facility **in the last 6 months?**

Yes	**No**	**Don't know**

If **'NO'** or **'DON'T KNOW',** go to QUESTION 7. If **'YES'** continue

3. **Which company made the visit** (write in company name)	4. **How many times each in the last 6 months**(if answer is 'don't know', write 99)	5. **What was the purpose of the visit**[#] (do not read the list at the bottom)	6. **Was the visit requested by staff at this health facility?**
a.			Yes No Don't know
b.			Yes No Don't know
c.			Yes No Don't know
d.			Yes No Don't know
e.			Yes No Don't know
f.			Yes No Don't know

[#] Code for question 5:

1 = To seek direct contact with pregnant women or mothers
2 = To provide samples to pregnant women or mothers
3 = To provide information to pregnant women or mothers
4 = To give product information to health professionals/personnel
5 = To give samples to health professionals/personnel (does not apply to free formula supply for PMTCT in sites where this takes place)
6 = To give anything other than information and samples, to health professionals (e.g. cake...)
7 = Other – please specify
99 = Don't know

FREE GIFTS

7. Have you personally received from company personnel anything, **FOR YOUR OWN USE**, NOT including infant formula, any other drink or food for infants under 6 months of age, bottles or teats from companies **in the last 6 months**?

Yes	No	Don't know

If **'NO'** or **'DON'T KNOW'**, go to QUESTION 13. If **'YES'** continue

8. How many times have you received something **in the last 6 months?**

Answers	Don't know

9. If answers, write in

_____ times

10. What did you receive?

DO NOT READ THE LIST. Tick all that apply 'YES' and others 'NO'. JUST LISTEN AND PROMPT BY ASKING ***Anything else?*** Also provide the company names for the 'YES' options.

Item	**Yes**	**No**	**Company**	**Code**	**Brand name?** (Q12)	
					Yes (specify name)	**No**
a. Pens/Notepads						
b. Other stationary (e.g. pen bag, flash drive...)						
c. Bag/umbrella/clock etc						
d. Calendar/picture						
e. Clothing i.e. T-shirt						
f. Money						
g. Other Specify:						

11. Is it possible for me to see the gift?

Yes	**No**

If **'NO'** go to QUESTION 13

12. IF DATA COLLECTOR CAN SEE THE GIFT
Does the gift carry a brand name of a formula milk, bottle, teat or any other drink or food for infants under 6 months? If **'YES', write the brand name in the last column in Table above (Question 10)**

FREE MATERIALS OR EQUIPMENT

13. Has **this facility** been given any free material or equipment other than samples of products **in the last 6 months?**

Yes	**No**	**Don't know**

If **'NO'** or **'DON'T KNOW'**, go to QUESTION 20. If '**YES**' continue

14. How many items have been received **in the last 6 months?**

Answers	**Don't know**

If answers, write in _____

15. What was/were the item/s received? DO NOT READ THE LIST. JUST LISTEN AND PROMPT BY ASKING ***Anything else?***	**Yes**	**No**	16. Number of items received?	17. Which company gave the item(s) to you? If 'Don't know' write 99	**Code**	**Brand name? (Q19)**	
						Yes	**No**
a. Leaflets							
b. Posters / calendars							
c. Stationary							
d. Antenatal care equipment (scales...)							
e. Furnishings (table, chairs, TV, fridge...)							
f. Other medical equipment							
g. Growth charts (height boards, scales...)							
h. Can't remember							
i. Other Specify							

18. Is it possible for me to see the item?

    If **'NO'** go to QUESTION 20.

Yes	**No**

19. IF DATA COLLECTOR CAN SEE THE GIFT
    Does the item carry a brand name of a formula milk, bottle, teat or any other drink or food for infants under 6 months? If **'YES', write the brand name in the last column in Table above (Question 18)**

FREE SAMPLES

20. Have you been given any free samples of formula milk, bottles, teats or any other drink or food for infants **under 6 months in the last 6 months**?

Yes	**No**	**Don't know**

    If **'NO'** or **'DON'T KNOW'**, go to QUESTION 29. If **'YES'**, continue

21. How many times have you received samples in the last 6 months?

Answers	**Don't know/ Don't remember**

22. If answer, specify

_____
_____

Complete the table below to specify what type of sample it was, the number of samples received, which company manufactured the sample **and** what were the samples used for? DO NOT READ THE LIST. Tick all that apply **'YES'** and others **'NO'**. JUST LISTEN AND PROMPT BY ASKING ***Anything else?***

Q23: Sample			**Q24: Number of samples. If 'Don't know' write 99**	**Q25: Company**	**Q26: Sample use#** Do not read the list. Just listen and prompt by asking ***Any other use?***	**Q27: Brand name (Only if interviewer can see the samples – see Q27 next page)**		**Q28: Age indicated**	
	Yes	**No**				**Yes**	**No**	**<6mo**	**>6mo**
a. Infant formula									
b. Follow-on formula									
c. Any other food or drink for children under 6 months									
d. Feeding bottle									
e. Teat									
f. Other									

# Code for question 26:
1 = Professional evaluation and research
2 = To give to pregnant women or mothers
3 = For personal use
4 = Other (specify

27. Is it possible for me to see the sample(s)?
If **'YES'**, continue with QUESTION 27, if **'NO'**, go to QUESTION 28.

Yes	No

IF DATA COLLECTOR CAN SEE THE GIFT
Does the gift carry a brand name of a formula milk, bottle, teat or any other drink or food for infants under 6 months? If **'YES', write the brand name in the last column in Table above (Question 27)**

28. From what age was the product intended for?
If **'ANSWERS'**, complete the last column **(Q28)** in the table on the next page.

Answers	Don't know/ Don't remember

FREE OR LOW COST SUPPLIES OF FORMULA MILK

29. Has this facility received any free or low cost supplies of formula milk in the last 6 months?

If **'NO'** or **'DON'T KNOW'** go to QUESTION 35. If **'YES'**, continue

Yes	No	Don't know

30. From where did you get the free or low cost supplies?

Place	Yes	No	Don't know
a. Central medical store / depot (i.e. low cost supplies officially ordered by a health care professional e.g. dietician)			
b. Directly from company			
c. Other Specify			

If '**CENTRAL MEDICAL STORE/DEPOT'**, go to QUESTION 35. If from '**COMPANY**', continue and complete table below

31. Brand name of formula milk	Code	32. Company name who made delivery	Code	33. How many deliveries over last 6 months	34. Nr of samples per delivery

35. Do you know of the International Code of Marketing of Breast-milk Substitutes?

Yes	No

36. Do you know of the Tshwane Declaration?

Yes	No

37. Does this facility have Mother-Baby-Friendly (MBFI) status?

Yes	No	Don't know

38. Have you anything else that you would like to say?

ADDENDUM C: DISTRICTS AND DATES OF HEALTH FACILITY VISITS

Districts and Dates of Health Facility Visits

District	Sub-district	Facility	Dates
Bojanala platinum	Madibeng	Hebron	11/06/2013
Dr K Kaunda	Tlokwe	Mohadin	06/06/2013
Dr K Kaunda	Matlosana	Alabama	10/06/2013
Ruth segomotsi	Kagisano molopo	Tlakgameng	26/06/2013
Ngaka modiri morena	Ditsobotla	Bodibe 1	20/06/2013
Ngaka modiri morena	R moiloa	Tswelelopele	24/06/2013
Ngaka modiri morena	Tlokwe	Potchefstroom	24/07/2013
Dr K Kaunda		Mahikeng	25/06/2013
Bojanala platinum	Dihlabeng	Relebohile	10/07/2013
Thabo mofutsanyane	Thaba N'chu	Gaongalelwe	15/07/2013
Mangaung	Maluti a phofong	Monontsho	11/07/2013
Thabo mofutsanyane	Botshabelo	Winnie Mandela	16/07/2013
Mangaung	Bloemfontein	Palenomi Hospital	17/06/2013
Fezile dabi	Moqhaka	Seeisoville	21/06/2013
Fezile dabi	Maluti a phofong	Ma-haig	09/07/2013
Thabo mofutsanyane	Maluti a phofong	Marakong	08/07/2013
Thabo mofutsanyane	Ekurhuleni N1	Tembisal hospital	26/11/2013
Ekurhuleni	Merafong	Khutsong	25/11/2013
West rand	Region D	Tladi	09/09/2013
Johannesburg	Tswane 1 SD	Phedisong	21/11/2013
Tswane mm	Ekurhuleni N1	Philip moyo	18/11/2013
Ekurhuleni	Tswane 1 SD	Soshanguve	19/11/2013
Tswane mm	Tswane 1 SD	Soshanguve block	19/11/2013
Tswane mm	Johannesburg	Witkoppen	23/08/2013
Tswane mm	Johannesburg	Thuthukani	07/06/2013
Johannesburg	Johannesburg	Mayibuye	20/08/2013
Johannesburg	Qaukeni	Lusikisiki	23/09/2013
OR tambo	Nelson mandela B	Motherwell	01/10/2013
Nelson mandela	Qaukeni	Elizabeth gateway	25/09/2013
OR tambo	Nelson mandela A	Zwide	30/09/2013
Nelson mandela	Mhlontlo	Qumbu	17/09/2013
OR tambo	Umzimvubu	Tabankulu	19/09/2013
Alfred Nzo	Umzimvubu	St. Patricks	18/09/2013
Alfred Nzo	Nelson mandela A	Kwazakele	02/10/2013
Nelson mandela	Nelson mandela C	West end	04/10/2013
Nelson mandela	Nelson mandela C	Chatty	03/10/2013
Nelson mandela	Qaukeni	Holy cross	26/09/2013
OR tambo	Qaukeni	Flagstaff	26/09/2013
OR tambo	Mhlontlo	Mhlakulo	16/09/2013
OR tambo	Tswane 1 SD	Boekenhoutkloof	20/11/2013

ADDENDUM D: ARTICLE 6 AND 7 OF THE ICMBS

ARTICLE 6. HEALTH CARE SYSTEMS

6.1 The health authorities in Member States should take appropriate measures to encourage and protect breast-feeding and promote the principles of this Code, and should give appropriate information and advice to health workers in regard to their responsibilities, including the information specified in Article 4.2.

6.2 No facility of a health care system should be used for the purpose of promoting infant formula or other products within the scope of this Code. This Code does not, however, preclude the dissemination of information to health professionals as provided in Article 7.2.

6.3 Facilities of health care systems should not be used for the display of products within the scope of this Code, for placards or posters concerning such products, or for the distribution of material provided by a manufacturer or distributor other than that specific it Article 4.3.

6.4 The use by the health care system of "professional service representatives", "mothercraft nurses" or similar personnel, provided or paid for by manufacturers or distributors, should not be permitted.

6.5 Feeding with infant formula, whether manufactured or home-prepared, should be demonstrated only by health workers, or other community workers if necessary; and only to the mothers or family members who need to use it; and the information given should include a clear explanation of the hazards of improper use.

6.6 Donations or low-price sales to institutions or organizations of supplies of infant formula or other products within the scope of this Code, whether for use in the institutions or for distribution outside them, may be made. Such supplies should only be used or distributed for infants who have to be fed on breast-milk substitutes. If these supplies are distributed for use outside the institutions, this should be done only by the institutions or organizations concerned. Such donations or low-price sales should not be used by manufacturers or distributors as a sales inducement.

6.7 Where donated supplies of infant formula or other products within the scope of this Code are distributed outside an institution, the institution or organization should take steps to ensure that supplies can be continued as long as the infants concerned need them. Donors, as well as institutions or organizations concerned, should bear in mind this responsibility.

6.8 Equipment and materials, in addition to those referred to in Article 4.3, donated to a health care system may bear a company's name or logo, but should not refer to any proprietary product within the scope of this Code.

ARTICLE 7. HEALTH WORKERS

7.1 Health workers should encourage and protect breast-feeding; and those who are concerned in particular with maternal and infant nutrition should make themselves familiar with their responsibilities under this Code, including the information specified in Article 4.2.

7.2 Information provided by manufacturers and distributors to health professionals regarding products within the scope of this Code should be restricted to scientific and factual matters, and such information should not imply or create a belief that bottle feeding is equivalent or superior to breast-feeding. It should also include the information specified in Article 4.2.

7.3. No financial or material inducements to promote products within the scope of this Code should be offered by manufacturers or distributors to health workers or members of their families, nor should these be accepted by health workers or members of their families.

7.4 Samples of infant formula or other products within the scope of this Code, or of equipment or utensils for their preparation or use, should not be provided to health workers except when necessary for the purpose of professional evaluation or research at the institutional level. Health workers should not give samples of infant formula to pregnant women, mothers of infants and young children, or members of their families.

7.5 Manufacturers and distributors of products within the scope of this Code should disclose to the institution to which a recipient health worker is affiliated any contribution made to him or on his behalf for fellowships, study tours, research grants, attendance at professional conferences, or the like. Similar disclosures should be made by the recipient.