Master in Public Health Nutrition MASTER THESIS

Protection and promotion of breastfeeding and marketing of products under the scope of the International Code of Marketing of Breastmilk Substitutes in Southeast Asia

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List of Abbreviations

ASEAN Association of Southeast Asian Nations

A&T Alive & Thrive

BFHI Breastfeeding Friendly Hospital Initiative

BMS Breastmilk Substitutes

CEDAW Convention on Elimination of all kinds of Discrimination Against Women

CEDAW Committee on Elimination of Discrimination Against Women

CRC Convention on the Rights of the Child

CRC Committee on the Rights of the Child

FF Follow-on Formula

IYCF Infant and Young Child Feeding

GUM Growing-Up Milk

IBFAN International Baby Food Action Network

ICCPR International Covenant on Civil and Political Rights

ICDC International Code Documentation Centre

ICESCR International Covenant on Economic, Social and Cultural Rights

IF Infant Formula

ILO International Labour Organization

IYCF Infant and Young Child Feeding

LMIC Low- and middle-income countries

MDG Millennium Development Goals

MF Milk Formula

MPL Milk for Pregnant and Lactating Women

NCD Non-communicable diseases

SDG Sustainable Development Goals

The Code The International Code of Marketing of Breastmilk Substitutes

UDHR Universal Declaration of Human Rights

UN United Nations

UNGP United Nations Guiding Principles on Business and Human Rights

UNICEF United Nations Children's Found

WHA World Health Assembly

WHO World Health Organization

Abstract

Background and aim: Breastfeeding is crucial for child survival and development, and

exclusive breastfeeding is recommended for the first six months of the infant's life, with

continued breastfeeding until two years of age and beyond. Marketing of breastmilk

substitutes has a negative impact on the recommended breastfeeding behaviour, and interferes

with maternal and child rights. The International Code of Marketing of Breastmilk Substitutes

(the Code) was launched to guide breastfeeding promotion and regulate breastmilk substitutes

marketing. The aim of this study is to examine the protection of breastfeeding through

international recommendations and national measures adopting provisions from the Code, as

well as the breastfeeding promotion and breastmilk substitutes marketing through mass media

in five Southeast Asian countries.

Methods: Media clips collected from January 2015 to January 2016 through media

monitoring services were analysed, in addition to international frameworks in support of the

protecting of breastfeeding and national measures for implementation of the Code. Relevant

provisions from the Code were chosen to assess compliance.

Results: Several international recommendations and human rights conventions are in support

of breastfeeding. All the five countries studied had national measures for implementation of

provisions from the Code, either legally enforceable or voluntary. "Growing-up milk" for

children above 12 months was the most common product advertised for, counting for more

than two thirds of the collected advertisement clips. Social medias were used by companies to

promote all categories of breastmilk substitutes.

Conclusions: Despite international frameworks and national measures to promote and protect

breastfeeding, breastmilk substitutes are marketed through various media outlets. Companies

are in violation of the Code, hindering states to fulfil their obligation to protect breastfeeding.

There is a need for strengthening of national measures for implementation of the Code,

especially in expanding the covered age range and better monitor compliance on social media

outlets.

Keywords: Breastfeeding, Breastmilk Substitutes, Mass Media, The Code, Southeast Asia

VIII

1 Background and study objectives

Breastfeeding is crucial for child survival and health, and has substantial benefits for mothers and infants across all socio-economic classes (Victora et al., 2016). Exclusive breastfeeding is recommended for the first six months of an infants's life, with continued breastfeeding through two years of age or beyond (Rollins et al., 2016; World Health Organization [WHO] & United Nations Children's Found [UNICEF], 2003). Despite the well-recognized health outcomes associated with breastfeeding, global breastfeeding rates remain low (WHO & UNICEF, 2014) and sales of breastmilk substitutes (BMS) are currently \$44 billion USD annually, growing by nearly 10% per year (Rollins et al., 2016). Due to rapid economic growth and industrialisation in the Southeast Asian region, combined with a high child population, new market opportunities for baby food are emerging, with BMS as one of the main products (Euromonitor International, 2013).

The marketing of BMS has a negative impact on the recommended breastfeeding behaviour (Piwoz & Huffman, 2015; Rollins et al., 2016). The International Code of Marketing of Breastmilk Substitutes (the Code) was issued 35 years ago by the World Health Assembly (WHA), to help guide the promotion of breastfeeding and restrict BMS marketing (WHO, 1981). Although not legally binding, the Code is a recommendation from the highest international policy making body in the field of health, the WHA, calling on individual governments to legislate and enforce the Code, using its provisions as a minimum standard for these national efforts (WHO, 1981).

Under the Convention on the Rights of the Child (CRC) and the Convention on Elimination of all kinds of Discrimination Against Women (CEDAW) state parties have obligations to respect and protect breastfeeding, and ensure effective regulation of the marketing of BMS through implementation and monitoring of the Code (Committee on the Elimination of Discrimination Againts Women [CEDAW], 2016; Committee on the Rights of the Child [CRC], 2013; United Nations [UN] General Assembly, 1989, 1979).

1.1 Collaboration

This thesis is written in collaboration with Alive & Thrive (A&T), an initiative under the non-profit human development organization FHI 360, funded by the Bill & Melinda Gates Foundation and the governments of Canada and Ireland (Alive & Thrive, n.d.). Through technical support and large-scale programs in Asia and Africa, A&T is working to improve infant and young child feeding (IYCF) practices and maternal nutrition.

In April 2013, A&T Vietnam in coordination with the Vietnam National Assembly's Institute of Legislative Studies, Irish Aid and UNICEF, and with technical support from the European Union, the International Baby Food Action Network (IBFAN), the International Code Documentation Centre (ICDC), and WHO, organized a regional advocacy workshop for IYCF called: "Developing Stronger Policies and Laws on Infant and Young Child Feeding in the ASEAN Region and Beyond". Vietnam has achieved two major policy change successes: extending maternity leave to six months and expanding the ban on promotion of BMS to cover products for children up to two years (Alive & Thrive, 2014; WHO, UNICEF, & IBFAN, 2016). Delegations from 13 countries convened in Hanoi to learn about the process leading to those successful changes.

Subsequently, A&T, along with UNICEF and Save the Children, are providing technical assistance to seven countries in the Southeast Asian region to strengthen the regional and national policy environments for IYCF (Alive & Thrive, 2014). Because of indications that national measures for implementation of the Code need strengthening and better monitoring and enforcement mechanisms, this is one of the focus areas. The seven countries met in Bangkok, Thailand, in 2014, to develop country specific action plans to enable policy change, built around the lessons learned from Vietnam. To support these efforts, A&T monitored mass media in five countries of the region, namely Cambodia, Indonesia, Myanmar, Thailand, and Vietnam to assess the current situation and compliance with the Code. In April 2016, country delegations once again convened in Bangkok for an advocacy workshop on IYCF, this time called: "Strategy Updates in Selected Countries in the ASEAN Region and Beyond". In addition to the latest evidence, national advances to protect and promote breastfeeding were presented and discussed. The author of this master's thesis participated in that regional workshop and presented findings from this study.

1.2 Study objectives

The main objective of this study is to examine the protection of breastfeeding through international frameworks and national measures adopting provisions from the Code, as well as the promotion of breastfeeding and the marketing of BMS through mass media in five Southeast Asian countries. This thesis will assess compliance with relevant provisions from the Code, both by the states in the selected countries and by BMS companies. The specific objectives of the study are to:

- 1. Describe international frameworks and national measures to promote breastfeeding and regulate the marketing of BMS.
- 2. Describe media coverage of and advertisements for breastfeeding and BMS.
- 3. Assess compliance of states and companies with relevant Code provisions by identifying violations and circumventions.

1.3 Definitions

For the purpose of this study, the same definitions as in the Code are applied:

Marketing is defined as: product promotion, distribution, selling, advertising, product public relations, and information services (WHO, 1981).

Breastmilk substitutes (BMS) means any food being marketed or otherwise represented as a partial or total replacement for breastmilk, whether or not suitable for that purpose (WHO, 1981).

The industry uses the term "milk formula" (MF) to cover BMS, and though not standardised categories with variations between BMS companies concerning age ranges and terms (IBFAN-ICDC, 2015; Pereira et al., 2016), the following list of industry products that follow under the MF umbrella were considered in this study:

- **Infant formula** (IF) including milk or milk-like formulations usually for infants between zero and fibve months, and commonly referred to as "Stage 1". There are a variety of infant formulas available on the marked and special formulas like soy formula, lactose-free formula and therapeutic milks are also included (IBFAN-ICDC, 2015).
- Follow-up or follow-on formula (FF) including milk or milk-like formulations commonly marketed for babies from six months of age and until 11 or 23 months. Often called "Stage 2". As breastfeeding is recommended to continue for two years and beyond, this product, because it is meant to replace breastmilk, is always considered a BMS (IBFAB-ICDC, 2015).
- Toddler milk or Growing-up milk (GUM), commonly promoted for young children between 12 and 36 months and called "Stage 3 and 4". The recommended age range overlaps with the period when young children should still be partially breastfed as continued breastfeeding is recommend for up to 24 months and beyond ("and beyond" could be interpreted to mean up to 36 months) (IBFAN-ICDC, 2015).

In addition to BMS, the following products were also included in the study:

Feeding bottles and teats, which are included in the scope of the Code and defined as any container and a teat meant to feed infants (WHO, 1981).

Milks for pregnant and lactating women (MPL) do not come under the scope of the Code, but is a product potentially undermining breastfeeding and the overall spirit of the Code. It targets pregnant and lactating mothers, and could sometimes be seen marketed as "Stage 0" with similar brand as those for BMS (IBFAN-ICDC, 2015).

This study is limited to breastfeeding promotion and BMS marketing through mass media, and does not cover distribution of information materials or product promotion at hospitals, health care facilities, point of sales etc. Nor does it cover complementary foods that come within the scope of the Code when marketed for children less than six months. Compliance will therefore only be assessed for Code provisions relevant for issues covered by this study's objectives.

Elaboration of theoretical aspects and methods follows in the next chapters. Specific objective 1 will partially be answered in the results chapter of this introduction and partially in the article written in accordance with author guidelines for publication in the Journal of Public Health Nutrition (Journal of Public Health Nutrition, n.d.). Specific objective 2 and 3 will in its totality be addressed in the article, in addition to discussion of the results. The last chapter of this introduction elaborates methodological issues of this study.

2 Theoretical aspects

2.1 Child malnutrition

Children are vulnerable to malnutrition, because of their high need of energy and nutrients for growth and development (UNICEF et al., 2010), and malnutrition was estimated as the cause of 45% of global child deaths in 2011 (Black et al., 2013). Malnutrition is used to describe both under- and overnutrition. Undernutrition encompasses stunting (low height for age), wasting (low weight for height) and micronutrient deficiencies, while overnutrition includes obesity and over-consumption of specific nutrients (Association of Southeast Asian Nations [ASEAN], UNICEF, & WHO, 2016; Black et al., 2008). Undernutrition is highly prevalent in low- and middle-income countries (LMIC), with increases in mortality and overall disease burden as a result (Black et al., 2008). LMIC also experience a growing problem with overweight and obesity, resulting in a double-burden of malnutrition (DBM) (Black et al., 2013; Shrimpton & Rokx, 2012; WHO, 2004). The coexistence of under- and overnutrition, within the country, the household, the individual or the life-course is known as the DBM (Shrimpton & Rokx, 2012). It may occur within individuals, i.e. with lack of micronutrients but with an excessive energy intake from macronutrients. Within the life-course, children with poor growth in an early stage are more likely to become overweight and obese later in life (ASEAN et al., 2016; Black et al., 2013).

The first 1000 days from conception until the child's second birthday, is a window of opportunity to assure optimal growth and development, with adequate nutrition as a crucial element (Black et al., 2013; UNICEF, 2013). In that time frame, the nutritional needs of the child are increased due to rapid growth and development, and a high risk of infections (UNICEF, 2013). The negative effects of undernutrition on physical development and brain function are largely irreversible. Children having suffered from undernutrition during the first 1000 days will most likely never meet their full potential, physically or cognitively, which can result in stagnated productivity and development of a country (Victora et al., 2008).

2.2 Breastfeeding

Breastfeeding prevents malnutrition and gives children the best start in life (Victora et al., 2016). The recently launched Lancet Breastfeeding Series states that breastfeeding is one of the highest impact interventions providing not only benefits for children, but also women and society (Rollins et al., 2016). Breastfeeding reduces infant morbidity and mortality, increases Intelligence Quotient (IQ) score, improves school achievement and boosts adult earnings (Victora et al., 2016).

In the Global Strategy on IYCF, the following statement and recommendation is given:

Breastfeeding is an unequalled way of providing ideal food for the healthy growth and development of infants; it is also an integral part of the reproductive process with important implications for the health of mothers. As a global public health recommendation, infants should be exclusively breastfed for the first six months of life to achieve optimal growth, development and health. Thereafter, to meet their evolving nutritional requirements, infants should receive nutritionally adequate and safe complementary foods while breastfeeding continues for up to two years of age or beyond. (WHO & UNICEF, 2003)

To obtain a successful lactation, an early initiative to breastfeed (within the first hour after birth) is also recommended (WHO & UNICEF, 2003). Almost every mother is able to produce an adequate amount of breastmilk to exclusive breastfeed her child, given the right support and encouragement (UNICEF, 2014). In many parts of the world, mixed feeding is practiced, giving the infant under six months a combination of breastmilk and other liquids or foods. First of all, such practise is exposing the child to infections, but may also cause the supply of breastmilk to decrease when the baby sucks less at the breast (UNICEF, 2014; Save the Children, 2013).

By adhering to international breastfeeding recommendations, 823,000 deaths of children under five could be prevented annually (Victora et al., 2016). For the mothers, an estimated annual amount of 20,000 deaths from breast cancer could equally be prevented (Victora et al., 2016). Short-term benefits of breastfeeding include protection against diarrhoea and respiratory infections for infants by providing immunization (Save the Children, 2013; Victora et al., 2008) in addition to breastfeeding being a hygienic and safe form of infant feeding that requires no storing or equipment. There is also evidence of reduced risk of obesity and chronic diseases later in life of breastfed children (Horta & Victora, 2013; Victora et al., 2016).

2.3 Breastfeeding practices and global goals

In 2012, the WHA introduced six Global Nutrition Targets for 2025, as a part of their implementation plan on maternal, infant and young child nutrition (WHO, 2014). While only

38% of infants aged between zero and six months are exclusively breastfed globally, the fifth target is to increase the rate of exclusive breastfeeding in the first six months up to at least 50% (WHO, 2014). Those Global Nutrition Targets are aligned with the Sustainable Development Goals (SDGs), which seek to realize the human rights of all and achieve gender equality and empowerment of all women and girls within 2030 (UN, 2015). In addition to take account for the three dimensions of sustainable; development, economic and environmental, the SDGs builds on the Millennium Development Goals (MDGs) and seek to complete what was not accomplished during the timeframe of those previous goals (UN, 2015). Improvements in breastfeeding would help achieve the SDGs targets for health, food security, education, equity, development, and the environment (Rollins et al., 2016). In order to meet the global targets and goals, all parts of society need to be in support of breastfeeding; including workplace, family, norms in the community, heath care facilities and no marketing of BMS (Rollins et al., 2016).

2.4 Breastmilk substitutes – a threat to an optimal breastfeeding practice

Despite the well-recognized harms from not breastfeeding, global sales of BMS is currently \$44 billion USD annually and growing by nearly 10% per year (Rollins et al., 2016). Many BMS are marketed aggressively, with LMIC as the most vulnerable (Rollins et al., 2016; Meier & Labbok, 2011). Several cases of unethical marketing of BMS have been reported the past decades, causing severe adverse health outcomes (Palmer, 2009; Meier & Labbok, 2016). In the beginning of the 20th century, BMS was first introduced by the industry as an alternative to feed infants for mothers that for some reasons were not able to breastfeed. For the first 30 years of its existents, IF was the only product in that category and primarily used at hospital settings. Over the years, the industry has developed a large product line of BMS (Palmer, 2009). While the rival product of BMS, breastmilk, is both free and superior, it is in the companies' interest to undermine breastfeeding and thus limit the use of the rival product (Palmer, 2009).

With poor sanitation and overall poverty, the use of BMS can be dangerous, exposing the infants for risk of infections, when not prepared under appropriate hygiene circumstances (Hoddinott, Tappin, & Wright, 2008; Save the Children, 2013). When BMS are promoted beyond their original purpose, they can create an exploitative dependency that can lead to deadly consequences of their use (Meier & Labbok, 2011). When BMS is promoted aggressively and claimed to be the best for the child; the mothers' confidence in her own ability to breastfeed is reduced (Meier & Labbok, 2011; Piwoz & Huffman, 2015). Health

care facilities and health workers have been the target of many marketing strategies, including donation of free samples at hospitals or clinics (Save the Children, 2013; Palmer, 2009). When mothers are given free samples at birth and becoming dependent of BMS, over-dilution of the milk formula may occur if the mothers are not able to buy sufficient later due to poverty, increasing the risk of infants to not receive adequate energy and nutrients (Meier & Labbok, 2011).

In countries where marketing of BMS is prohibited, the sales rates are found to be much lower than in countries that have less restrictions (Brady, 2012). Mothers who recall seeing advertising of BMS are more likely to use such products compared to mothers who do not recall seeing these kinds of promotions during their pregnancy, and exposure to breastfeeding information is associated with a longer duration of breastfeeding (Brady, 2012). It has also been shown that marketing of BMS via media in Thailand, has a negative impact on breastfeeding in Lao PDR, suggesting that cross-border influence should be addressed globally with an extra focus on areas sharing the same language and culture (Phoutthakeo et al., 2014). The mothers from Lao PDR, who participated in the study, reported a high exposure to commercials of BMS in Thai language, in particular through TV commercials. This gave them a more positive attitude towards the use of BMS which was a determinant for whether exclusive breastfeeding for six months was practiced or not (Phoutthakeo et al., 2014). Being confronted with accusations that their marketing practices undermines breastfeeding, BMS companies have denied and argued against. WHA made a declaration in 1994, saying: "Those who suggest that direct advertising has no negative effect on breastfeeding should be asked to demonstrate that such advertising fails to influence a mother's decision about how to feed her infant." (cited in Coutsoudis, Coovadia, & King, 2009).

2.5 Conceptual framework on the Causes of Malnutrition

First developed and introduced in 1990 (UNICEF, 1998), the UNICEF Conceptual Framework on the Causes of Malnutrition has provided guidance for nutrition programming for the past 30 years. An updated version was presented in the report on Regional Nutrition Security in ASEAN, and illustrates the latest knowledge on the causes and levels of causality of malnutrition, the short- and long-term consequences, and the intergenerational effects (ASEAN et al., 2016). Figure 1 is adopted from the conceptual framework, and relevant causes for this thesis' objectives are highlighted in blue. Starting with basic causes at social level, insufficiently information on IYCF and breastfeeding, marketing of breastmilk

substitutes, culture and social norms not in support of breastfeeding, and insufficient legislations and regulations to protect breastfeeding, could lead to inadequate care and feeding practices and behaviours, meaning the infants and young children are not breastfed according to international recommendations. This can further result in poor dietary intake, both in quality and quantity, leading to undernutrition and/or overnutrition immediately or later in the child's life-course, with consequences for both physical and mental health and across generations.

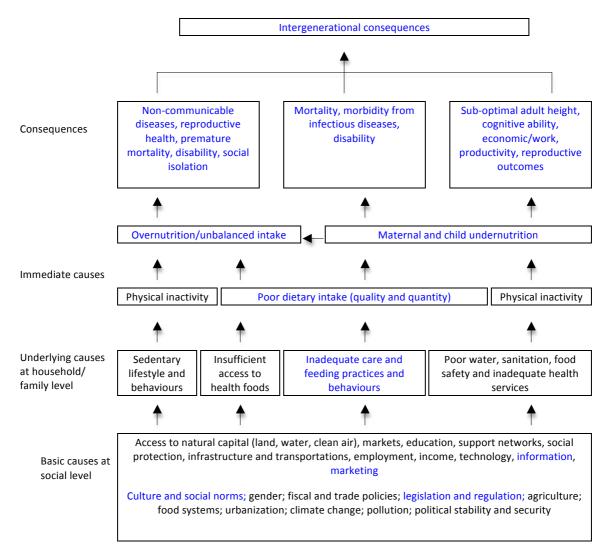


Figure 1 Conceptual Framework on the Causes of Malnutrition adopted from ASEAN et al. 2016

2.6 The human rights framework

The human rights are moral principles or norms, and considered fundamental rights that are inherited in all human beings. They were first stated in the Universal Declaration of Human Rights (UDHR) in 1948, and then later elaborated in several human rights instruments, with

the International Covenant on Civil and Politic Rights (ICCPR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR) as the two fundamental conventions (Buergenthal, Shelton, & Stewart, 2009 2009).

In the human rights framework, we speak of rights holders and duty bearers. The holders of human rights are individuals, and the states are the principal duty bearers with three levels of obligations; to respect, to protect and to fulfil the rights of its people (Eide, 2001). The first level imposes the state to respect the already existing enjoyment of its citizen's human rights. Secondly, states should ensure the full protection of peoples' human rights from interference from a third party, i.e. acts by corporations or other human beings. At the third level, the state has an obligation to fulfil, either by facilitation or direct provision (Eide, 2001).

2.6.1 The right to adequate food and nutrition

The first provision for the right to adequate food and nutrition is provided in the UDHR article 25(1):

Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control. (United Nations, 1948)

Furthermore, article 11(1) in the ICESCR elaborates: "the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions" (UN General Assembly, 1966). Article 11(2) emphasizes "the fundamental right of everyone to be free from hunger and malnutrition" (UN General Assembly, 1966). After a request from the global society for a clarification of the content of the right to adequate food, the Committee on Economic, Social and Cultural Rights (CESCR) adopted the General Comment No. 12 in 1999, which reaffirmed and defined the right to adequate food as: "realized when every man, woman and child, alone or in community with others, have physical and economic access at all times to adequate food or means for its procurement" (CESCR, 1999).

While national and international responses to reduce malnutrition historically have been based on compassion, interventions to tackle malnutrition are now, with increasing recognition of adequate food as a human right, seen as legal obligations to ensure adequate food and nutrition for all people (Kent, 2005). The CRC from 1989 also focuses on nutrition as a crucial part of a child's right to health (UN General Assembly, 1989). State parties to the convention should take appropriate measures so that education and support regarding children's health and nutrition is accessible for all, with a special emphasis on the advantages of breastfeeding (UN General Assembly, 1989).

2.7 Breastfeeding as a human right

Breastfeeding is a unique way of fulfilling the right to adequate food and nutrition for infants and young children by providing both complete food and care (Engesveen, 2005). The right to breastfeeding could be viewed as a combined right of the mother and the child; children has the right to be breastfeed, not in the sense that the mother is obligated to breastfeed, but the mother's right to breastfeed her child should be respected and protected (Kent, 2006). Both the human rights of the mother and the child can therefore be seen as instruments to be used to claim support that will help facilitate an optimal breastfeeding practice (Engesveen, 2005; Kent, 2006).

For the three levels of obligation that are considered in the human rights framework, the first level imposes the State to respect existing good breastfeeding practices. At the second level, States has an obligation to protect breastfeeding mothers from interference by third parties, including aggressive marketing of BMS beyond its original purposes by companies. Finally, the obligation to fulfill by facilitating would mean constructing an enabling environment for breastfeeding with for example the adoption and implementation of the Code, and ensuring that mothers have access to maternity leave and proper information and support towards an optimal breastfeeding practice (Engesveen, 2005).

2.8 The International Code of Marketing of Breastmilk substitutes

The Code was adopted by WHA in 1981, with an aim to

Contribute to the provision of safe and adequate nutrition for infants, by the protection and promotion of breastfeeding, and by ensuring the proper use of breastmilk substitutes, when these are necessary, on the basis of adequate information and through appropriate marketing and distribution. (WHO, 1981)

With the development of the Code, a rights-based approach was taken to breastfeeding, and global commitment was sought to respect, protect and support breastfeeding, and to create standards and norms to assure the promotion of breastfeeding and for regulating the marketing of BMS (Meier & Labbok, 2011). The Code advocates for infants to be breastfed. If breastfeeding for some reason is not possible, the Code also advocates that infants be fed safely on the best available nutritional alternative. The Code does not prohibit the existence and availability of BMS when needed, but BMS should not be promoted (WHO, n.d.).

The Code consist of eleven articles and gives guidelines on how governments, manufacturers and distributors of BMS, and health care workers should be responsible for promoting and respecting breastfeeding (WHO, 1981). Subsequent WHA resolutions have clarified the content and closed loopholes, and should be read together with the original eleven articles.

Article 1-3 states the aim of the Code, clarifies the scope and defines relevant terms. Article 4 addresses the governments and how they are responsible for providing information about breastfeeding, infant and young child nutrition and the proper use of BMS when needed. In Article 5, concerning the general public and mothers, manufactures and distributors are given prohibitions on marketing practices, including advertisements, point-of-sale promotions, distributions of gifts or articles promotion BMS and contact-seeking with pregnant women or mothers of infants and young children.

Article 6 and 7 provides guidelines for health care systems and health workers, and how such facilities and professionals should promote breastfeeding, and not be an area for promotion BMS beyond its original purposes. Article 8 addresses persons employed by manufactures and distributors and how BMS should not be included in sales quotas, and marketing personnel should not perform educational functions in relation to pregnant women or mothers of infant and young children unless requested and approved by the appropriate authority of the government. Article 9 and 10 provides guidelines for the correct labeling of BMS so that the correct use of these products and the superiority of breastmilk are clearly stated, in addition to addressing the quality of BMS. Finally, article 11, provides provisions on the implementation and monitoring of the Code.

The Code considers governments as primarily responsible for providing correct information and support regarding breastfeeding, and to give effect to the principles and aim of the Code, for example by adopting regulating measures (WHO, 1981). The Code is most effective when incorporated into legally enforceable measures and subsequently regulated, monitored, and

enforced at the national level (Lutter, 2013; Piwoz & Huffman, 2015; Rollins et al., 2016). The inclusion of some provisions of the Code within legal documents exists in 135 of 194 countries, while 49 countries have non-legal or no measures in place¹ (WHO et al., 2016).

The Code has a strong linkage to the CRC and is seen as a necessary tool for governments to fulfill their obligations under that human right convention. The monitoring body of the CRC, the Committee on the Rights of the Child, acknowledges that in fulfilling the child's right to health, the public must be protected from false and biased information that persuades mothers to give up breastfeeding in favor of artificial feeding. When national implementation of the CRC is reviewed, the committee calls upon countries to ensure full protection, promotion and support to breastfeeding, and to give effect to the Code (WHO, 2011). Despite the Code being adopted more than 30 years ago, there is still a way to go to assure full realization of all its commitments globally. WHO describes the Code as "a catalyst for change and a core element in which countries should invest to curb child mortality through improved infant and young child nutrition" (WHO, 2011).

2.9 The responsibility of companies

The human rights council unanimously endorsed the UN Guiding Principles on Business and Human Rights (UNGP) in 2011, affirming an international understanding of the responsibility of companies to respect human rights in their operations (UN, 2011). The UNGPs are grounded in the "Protect, Respect and Remedy" framework:

- (a) States' existing obligations to respect, protect and fulfill human rights and fundamental freedoms;
- (b) The role of business enterprises as specialized organs of society performing specialized functions, required to comply with all applicable laws and to respect human rights;
- (c) The need for rights and obligations to be matched to appropriate and effective remedies when breached. (UN, 2011)

In the Code, it is also stated that companies should regard themselves as responsible to make sure their marketing practices are in compliance with international guidelines (WHO, 1981).

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¹ No information on the remaining ten countries

The WHO recommends utilizing international human rights and accountability mechanisms in order to improve implementation and monitoring of the Code. However, as both the Code and the UNGPs are voluntary, the lack of appropriate mechanisms to hold companies accountable for human rights abuses is an ongoing challenge and debate internationally. Important initiatives and processes, aimed at developing stronger accountability-instruments for corporations, are currently ongoing (UN General Assembly, 2014).

2.10 The Southeast Asian Region

Despite economic growth, malnutrition remains a severe public health issue in the Southeast Asian Region (ASEAN et al., 2016; Black et al., 2013). Stunting and wasting among children under the age of five is still high (ASEAN et al., 2016). The Southeast Asian Region is also going through a nutrition transition (ASEAN et al., 2016), switching to a more westernised diet and causing an increase in non-communicable diseases (NCDs) (WHO, 2004). The DBM, with both under- and overnutrition as health issues, is rising in the region (ASEAN et al., 2016).

Due to a large child population and economic progress, many emerging Asian markets are fuelling strong and sustainable growth in the baby food market. It is expected that the most dynamic growth and the largest expansion within this market over the period 2013 – 2018 will be in milk formula (MF), comprising all of the products from IF to GUM (Euromonitor International, 2013). The growth engine for this product category, is the GUM marketed for children over 12 months, predicted to account for 50% of absolute growth in MF between 2013 and 2018 (Euromonitor International, 2013). While the Asian markets are expected to rise, some of the largest developed Baby Food markets (France, Italy and Japan) will experience a decline in per baby expenditure, due to low birth rates, high market maturity and industry consolidation (Euromonitor International, 2013). Due to rapid economic growth and industrialisation in the Southeast Asian region, combined with a large child population, new market opportunities for baby food are emerging, with BMS as one of the main products (Euromonitor International, 2013). This is recognised by the baby food industry, increasing their marketing of BMS particularly in emerging economies (Kent, 2015; Rollins et al., 2016). Of the six WHO regions, Southeast Asia has the highest proportion of countries with full implementation of all provisions from the Code as a law, with 36% or four out of eleven countries (WHO et al., 2016). Despite efforts to promote and protect breastfeeding, including adoption and legislation of the Code, exclusively breastfeeding rates of children less than six months is low in certain ASEAN. Less than 50 percent of women initiate breastfeeding within the first hour of birth, and only 30 percent exclusively breastfeed their children in the first six months in the region (ASEAN et al., 2016). In seven countries (Cambodia, Indonesia, Laos, Myanmar, Thailand, Timor Leste and Vietnam) in the Southeast Asia region, adopting optimal breastfeeding practices has the potential to prevent 12,400 child and maternal deaths per year (Walters et al., 2016).

3 Sampling and methods

This chapter describes the methods employed for collecting and analysing data in the thesis, including the study design, sampling procedure and the research strategy. It also gives an account for categorisation of the data materials and how analysis was performed.

This study examines protection and promotion of breastfeeding and marketing of BMS in mass media, using existing international frameworks, national measures for implementing the Code, and media clips sampled through media monitoring services. Relevant provisions provided in the Code were used as a framework for analysis. The main assumption of this study is that the states are not sufficiently meeting their obligation to protect and promote breastfeeding, and that BMS companies are in breach with relevant national measures and the Code, as well as international frameworks.

3.1 Study design and approach

This study is cross-sectional and descriptive, as it examines the situation at one point in time (Levin, 2006), and does not analyse association between exposure and outcome (i.e. causality) (Grimes & Schulz, 2002). A grounded theory approach was taken for the analysis, meaning that the researcher started with preliminary reading of existing literature and data (Macnamara, 2005), in order to identify issues appropriate for analysis, and to find provisions of the Code relevant for a compliance assessment. This study uses both qualitative and quantitative data to describe the current situation of media coverage, which is a recognized approach in media analysis (Macnamara, 2005).

3.2 Research questions, indicators and data sources

Table 1 provides an overview of the study research questions with their corresponding indicators and data sources. The research questions are linked to the three specific objectives presented in chapter 1.2.1.

Table 1: Research questions, indicators and data sources

Research Questions	Indicators	Data sources
Objective 1: Describe internation the marketing of BMS	tional frameworks and national measures to	promote breastfeeding and regulate
1.1 Which are the international frameworks supporting the promotion of breastfeeding and protection from marketing of BMS?	 Existing international frameworks: In support of the right to adequate food and nutrition Seeking to promote breastfeeding Seeking to regulate marketing of BMS 	 International human rights conventions International guidelines and recommendations
1.2 Which are the national measures aiming at implementing the Code?	Existing national measures: • Having included provisions from the Code	National measures for implementation of the Code
1.3 How are the national measures in support of regulating the marketing of BMS?	 Legal status (voluntary or legally enforceable) Products included Age range covered Inclusion of BMS marketing restrictions 	National measures for implementation of the Code
Objective 2: Describe the stat	us of media coverage of and advertisements	for breastfeeding and BMS
2.1 What is the current situation in the paid advertisements for BMS?	 Amount of collected advertisements Marketing strategies Category of products promoted 	Media clips from media monitoring
2.2 What is the current situation in editorial content covering breastfeeding and BMS?	 Amount of collected editorial content Core issues/messages Stakeholders 	Media clips from media monitoring
2.3 What is the current situation in social media posts on the topics of breastfeeding and BMS?	 Marketing strategies Core issues/messages Category of products promoted 	 Media clips from media monitoring Additional Facebook posts collected by the researcher
Objective 3: Assess complian violations and circumventions	ce of states and companies with relevant Co	de provisions by identifying
3.1 To what extent is the current situation in breach with relevant provisions from the Code?	 Advertising or promotion of any form of products under the scope of the Code (Article 5) Direct or indirect contact between manufacturers and mothers (Article 5) Promotion of free gifts or samples (Article 5) Marketing personnel performing educational functions (Article 8.2) Dissemination of breastfeeding information by governments/health authorities (Article 4) Implementation and enforcement of Code provisions by governments (Article 11) 	 National measures for implementation of provisions from the Code Media clips from media monitoring The Code

3.3 Sampling procedure

3.3.1 International frameworks and national measures

International frameworks in support of promotion of breastfeeding and regulation of marketing of BMS, as well as relevant national measures for Code implementation were identified through policy reviews and literature searches. The English versions of which were accessed from available Internet resources.

3.3.2 Media monitoring

Media clips were sampled by independent media agencies using systematic media monitoring in the selected countries for periods of three to six months from January 2015 through January 2016 (see Appendix 1 for Scope of Work for iSentia, contracted to performed media monitoring in Thailand and Indonesia). Media monitoring is defined as the process of reading, watching or listening to the editorial content of media sources on a continuing basis, and then, identifying, saving and analyzing content that contains specific keywords or topics (Comcowich, 2010). It can be used as a tool for identifying mentions of specific topics, brands or organizations and is therefore a commonly used service by companies or other stakeholders holding a brand name, to see how their brand is presented in the media or to keep track of their competitors. The monitoring of the mainstream media is more evolved, while the area of social media is still under constant renewing and methods for monitoring still needs to be further developed (Comcowich, 2010).

News monitoring is the most common type of media monitoring and involves monitoring newspapers, magazines, journals, TV, radio stations and the Internet. Now it is also common to monitor social media on the Internet such as Facebook, Twitter, message boards, blogs and forums. A media monitoring service provides efficient monitoring of media channels (Comcowich, 2010). At a first step, the search profile is determined, meaning choosing the media outlets to be monitored, type of articles or mentioning to be delivered, the time period of the monitoring and the method of article delivery. Also, the search terms need to be chosen, meaning which keywords or brands that most appear in the article. The articles corresponding to the search criteria's is referred to as a "clip" (Comcowich, 2010).

In this study, the media agencies monitored paid advertisements placed by companies, including advertorials (defined as media materials combining information with product or brand promotion), editorial content (defined as all content produced by journalists), and social media posts. All materials containing the following keywords or products were sampled:

breastfeeding, infant formula, follow-up or follow-on formula, toddler milk, growing-up milk, feeding bottles and teats, and milk for pregnant and lactating women. Popular brand names of products in these categories were identified by the media agencies and also used as keywords. The author of this thesis personally participated in meetings with two of the contracted media agency in order to verify collected data and get a better overview of their methods for data collection.

The media channels to be monitored were chosen by the media agencies based on their experience and knowledge of the media landscape, and included two types of media: 1) mainstream media, comprising broadcast (news or advertisements broadcasted through TV channels), online news and printed media, and 2) new media including all formats of social medias. The sampling procedure for each media channel was as follows:

Mainstream media:

Broadcast media: To access broadcasting records of news or advertisements broadcasted through media channels, the media agency either recorded themselves or had an agreement with the TV channels. Media agency staff systematically reviewed all recorded materials, listening and looking for the keywords or brands. All clips of interest were saved.

Online news: Data crawling, which entails using a computer program that visits web sites to review all materials related to keywords or search terms, was used to scan online newspapers and other news sources. Once materials were collected, the media agency verified the sample, and sorted it ensure all captured materials were relevant.

Print media: The media agency subscribed to a large number of print publications. Staff manually reviewed these publications searching for the terms of interest. When material corresponding to the search criteria was found, the staff scanned the press clip and saved it.

Social media:

For social media, a data crawler was used, as for online news, to detect the keywords or brands of interest. The review focused on social media fan pages. Monthly reports for the top three online conversations on each subject with an English summary were provided by the media agency. In addition, after companies were identified through the media monitoring, the researchers collected additional social media data from their Facebook pages.

3.4 Categorisation of variables

The advertisement clips were categorized based on the industry categories of products listed in chapter 1.3 of this thesis' introduction. Since no direct advertisements for IF or FF for

children below 12 months were identified the researcher found it appropriate to combine those two products as one category. As the GUMs were promoted for children either above 12 or 24 months, two categories of GUM were constructed, one from 12 months and one from 24 months. When a range was given, the lowest age was used to determine which category the product was placed in, even if the upper age extended beyond that category, i.e. products said to be suitable for children from one to three years were found, was placed in category GUM from 12 months. If uncertainties regarding the age range of the product, the companies' national websites were consulted to get an overview of their product categories. Advertisements combining the promotion of GUM and MPL were counted for in both of the corresponding categories. An advertisement not classified as promoting BMS (promoting products for children above 36 months, or other milk products for adults or for culinary purposes) or duplicates was sorted out. Only new monthly unique advertisements were included in the calculations. The advertisements clips were sub-categorized based on the media channel they appeared in: broadcast or print/online. Categorization and simple calculations were carried out in Excel, using pivot tables. Computer storage folders were also used to sort the media clips.

3.5 Analysis

The data analysed in this study consisted of international frameworks, national measures for implementation of provisions from the Code, media clips provided by the media agencies, with corresponding English translations when needed, and additional Facebook posts collected by the researcher. International frameworks were identified and analysed to explore possible human rights instruments and guidelines to be used to protect breastfeeding and regulate the marketing of BMS. National measures related to the Code were analysed to assess BMS marketing regulations operating in the studied countries. The assessment focused on the legislative status (voluntary or legally enforceable) of related measures, the products and age ranges covered, and the inclusion of BMS marketing limitations. Media analysis was used for the media clips, relaying mostly on the English translations. Text, pictures, and audiovisual were examined to identify key messages and issues, stakeholders involved, and products that were promoted.

3.5.1 Provisions from the Code used for the analysis

For the purpose of this study, the following articles of the Code were selected to analyse and assess compliance by countries and companies: Article 4 on information and education, Article 5 relating to the general public and mothers, Article 8.2 addressing persons employed

by manufactures and distributors, and Article 11 concerning implementation and Monitoring (WHO, 1981).

Article 5 addresses the general public and mothers and prohibits all kinds of advertising or other form of promotion to the general public of products within the scope of the Code. Manufactures and distributors are also prohibited from providing direct or indirect samples of product covered by the scope or any gifts of articles or utensils promoting the use of BMS or bottle-feeding to pregnant women, mothers or members of their families. Marketing personnel should neither seek direct or indirect contact of any kind with pregnant women or with mothers of infants and young children. Sub-article 8.2 concerning persons employed by manufactures and distributors states that such personnel should not as a part of their job responsibilities perform educational functions in relation to pregnant women or mothers of infants and young children.

In Article 4 in the Code on Information and Education, a number of points to be included in information materials concerning breastfeeding are listed. The researcher didn't interpret the Code as this necessarily would apply to editorial content. A more common interpretation of the Code would be that those points are to be included in information materials distributed at health care facilities etc., and therefore goes beyond the coverage of this study. Still, under article 4.1 it is stated that "governments should have the responsibility to ensure that objective and consistent information is provided on infant and young child feeding for use by families and those involved in the field of infant and young child nutrition" (WHO, 1981). Also, in regard of CRC and the General Recommendation no 14 on CEDAW, state parties are called on to ensure parents to have access to information on infant and child nutrition, including breastfeeding, and broad dissemination of information in through several media outlets (CEDAW 2016; UN General Assembly, 1989). To use media to encourage breastfeeding, can therefore be seen as a part of the commitments of the states to promote breastfeeding. The sources of the breastfeeding information found in the media clips were therefore reviewed in order to possibly identify the source, and whether governments in some way take part in the media coverage of breastfeeding. Compliance of the states is also addressed in the sense that they are listed as responsible to take action to implement and enforce the Code, described in Article 11, as well as their responsibilities to protect breastfeeding under relevant international frameworks. Labels were only partially visible in the advertisements clips and it was therefore decided not to examine aspects of labelling of the products, which comes under Article 9 of the Code.

3.5.2 Compliance assessment

For the compliance assessment, obligations of governments and BMS companies were addressed, with a specific focus to identify violations and circumventions. It was decided to include circumventions in the analysis. Circumvention was defined as any practice not directly in violation of the Code, but in some way evading the restrictions. That also made the basis for recommendations for further strengthening of national measures and identification of shortcomings of the Code itself. A type of circumvention considered in this study was cross-promotion, defined as promotion of one product making reference to another product by similarities in product design, labelling and/or colouring scheme.

3.6 Ethical considerations

The data do not contain personal data and only materials already available for the public. Therefore, no ethical approval was obtained for any parts of the study.

4 Results

In this chapter, additional results to those shown in the article are presented. The following results are corresponding to specific objective 1.1: Which are the international frameworks supporting the promotion of breastfeeding and protection from marketing of BMS?

4.1 International frameworks

Several international frameworks support the promotion of breastfeeding and protection from marketing of BMS (table 2). The most direct international document aiming to protect breastfeeding and regulate the marketing of BMS is the International Code of Marketing of Breastmilk Substitutes – the Code - adopted by WHA in 1981. Through its 11 articles and subsequent resolutions, guidelines are provided on how governments should have the responsibility to promote breastfeeding and protect against unethical marketing of BMS through implementation and enforcement of the Code. The Code also has an aim to ensure correct information about the use of BMS when needed, and that the quality of such products meets international standards.

Through the right to adequate food and nutrition, described in the UDHR as a part of a standard of living and reaffirmed in article 11 of the ICESCR, all people have the right to adequate, nutritious food. In the ICESCR, Infants and young children are described as physically vulnerable individuals who need special attention in order to make adequate food accessible for all. General Comment 12 clarifies the content of the right to adequate food and nutrition and corresponding state obligations. As global recommendations include breastfeeding as an important part of assuring adequate food and nutrition for infants and young children, breastmilk could therefore be interpreted as a part of their right to adequate food and nutrition. This can further be supported with article 24 in the CRC from 1989, where nutrition is regarded as a crucial part of a child's right to health, and the advantages of breastfeeding are specially highlighted. State parties to the convention should take appropriate measures so that education and support regarding children's health and nutrition is accessible for all, with a special emphasis on the advantages of breastfeeding.

As breastfeeding is to be considered as a combined right of the mother and the child, human rights of the mother can also be used to claim support of breastfeeding. That includes the right to appropriate post-natal care (CRC, art. 24, CEDAW, art. 12.2) and the right to paid maternity leave (ICESCR Art. 10, CEDAW Art. 11.2), The CEDAW and Convention 183 of the International Labor Organization (ILO) also protects the mothers right to pre-natal care

and her right to breastfeed her child. In General Recommendation No. 34 to the CEDAW, on the Rights of Rural Women, states are called on to ensure broad dissemination of optimal health care information through media outlets, including information on breastfeeding and the impact on child and maternal health. States should also ensure effective regulation of the marketing of BMS and implementation and monitoring of the Code.

The Innocenti Declaration and the Baby-Friendly Hospital Initiative (BFHI) support previous global efforts to protect and promote breastfeeding and to create an enabling environment for mothers to breastfeed. The Global Strategy of WHO and UNICEF for IYCF from 2003, is based on the respect, protection, facilitation and fulfilment of accepted human rights principles, sets recommendations for initiation and duration of breastfeeding and renews the commitment to continuing joint action consistent with the Baby-friendly Hospital Initiative, the Code, and the Innocenti Declaration.

To regulate the marketing of BMS, the UN Guiding principles on Business and Human Rights (UNGP) can be used to hold companies responsible. The UNGP dictates the responsibility of companies to assure their operations are not causing adverse human rights impacts. This would also apply to BMS companies, breaching the right of the mother and the child to breastfeeding when marketing BMS beyond its original purposes.

Table 2. International frameworks supporting the promotion of breastfeeding and protection from marketing of BMS

	Year	Main content/ relevant article(s)	Promoting breastfeeding	Marketing of BMS
Universal Declaration of Human Rights (UDHR) (UN, 1948)	1948	Article 25(1), "everyone has the right to a standard of living adequate for the health and well-being of himself and his family, including food"	X	
International Covenant on Economic, Social and Cultural Rights (ICESCR) (UN, 1966)	1966	Article 11 "The States Parties to the present Covenant recognize the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing, and housing" and also recognizes "the fundamental right of everyone to be free from hunger"	X	
Convention on Elimination of all kinds of Discriminations Against Women (CEDAW) (UN General Assembly, 1979)	1979	The right to maternity leave; article 11(2) and post-natal are; article 12(2)	X	
The International Code of Marketing of Breastmilk Substitutes (WHO, 1981)	1981	The aim of the Code is "to contribute to the provision of safe and adequate nutrition for infants, by the protection and promotion of breastfeeding, and by ensuring the proper use of breastmilk substitutes, when these are necessary, on the basis of adequate information and through appropriate marketing and distribution."	X	X
Convention on the Rights of the Child (CRC) (UN General Assembly, 1989)	1989	Article 24 "States Parties recognize the right of the child to the enjoyment of the highest attainable standard of health" (Paragraph 1) and shall take appropriate measures "to combat disease and malnutritionthrough the provision of adequate nutritious foods, clean drinking water, and health care"		X
Innocenti Declaration (WHO & UNICEF, 1990)	1990	"As a global goal for optimal maternal and child health and nutrition, all women should be enabled to practice exclusive breastfeeding and all infants should be fed exclusively on breastmilk from birth to 4-6 months of age." and " action to give effect to the principles and aim of all Articles of the Code and subsequent WHA resolutions in their entirety"	X	X
Baby-Friendly Hospital Initiative (WHO & UNICEF, 2009)	1991	An effort by UNICEF and WHO conceived in response to the Innocenti Declaration to ensure that all maternities, whether free standing or in a hospital, become centers of breastfeeding support.	X	X

	Year	Main content/ relevant article(s)	Promoting breastfeeding	Marketing of BMS
General Comment 12 on the Right to Adequate Food (CESCR, 1999)	1999	Clarifies the content on the right to adequate food	X	
Maternity Protection Convention (No.183) (ILO, 2000)	2000	"A woman shall be provided with the right to one or more daily breaks or a daily reduction of hours of work to breastfeed her child These breaks or the reduction of daily hours of work shall be counted as working time and remunerated accordingly."	X	
Global Strategy of Infant and Young Child Feeding (WHO & UNICEF, 2003)	2003	Based on respect, protection, facilitation and fulfilment of accepted human rights principles. Renewed commitment to continuing joint action consistent with the Baby-friendly Hospital Initiative, the Code, and the Innocenti Declaration	X	X
General Comment No. 15 on The right of the child to the enjoyment of the highest attainable standard of health (CRC, 2013)	2013	Reaffirming the states obligations under the "protect, promote and support" framework (Global Strategy for IYCF).	X	
UN Guiding Principles of Business and Human Rights (UN, 2011)	2014	Companies shall not cause adverse human right impact		X
General Recommendation 34 on the Rights of Rural Women (CEDAW, 2016)	2016	Article 39, f and g; state parties should assure broad dissemination of health care information, including breastfeeding in several media, and assure effective regulation of marketing of BMS through implementation and monitoring of the Code	X	X

5 Discussion of methodological issues

In this chapter, strengths and limitations of the data collection and the data set are discussed, and how these issues might challenge the quality of the study, including generalizability, possible sources of bias and validity.

5.1 Use of media monitoring service

When planning for a media monitoring performed by professional media agencies, the search profile needs to be very accurate in order to assure relevant materials are captured (Comcowich, 2010). If search terms too broad are applied, there is a risk of capturing irrelevant materials. On the other hand, a search profile to narrow will cause a risk of missed coverage of topics of interest. A&T had previous used services from the same media agency used for the media monitoring in Vietnam. The remaining three media agency were not previously contracted and could potentially have been asked to provide a monthly media scan to be used as a pilot study and verification of the search profile. Still, the collected materials were reviewed during the data collection process and refinements of the search profile were done through dialogues with the media agencies.

The use of media monitoring services to capture and collect media materials has both strengths and limitations. Among the strengths, are that such agencies have developed efficient methods to capture and collect a large number of media clips, and allows for a larger data sample across several countries. A limitation for this study is that media monitoring was performed by four different media agencies within the five countries, each of which had slightly different data collection methods. Even if all of the agencies initially where given the same instructions, this may have resulted in minor differences in the data sample selection. Therefore, any differences between the countries related to the sample selection, should be interpreted with caution.

5.2 Other considerations of the data gathering

For the social media monitoring, the researcher decided to collect an additional amount of clips to strengthen the analysis in that area. Only Facebook was chosen due to time constraints. Several other social media platforms could have been further investigated. While Internet penetration is lower in the region compared to global Internet use, Southeast Asia has among the highest social network penetration among their Internet users, with Facebook as the main platform (eMarketer, 2015). The growth potential for social network usage is therefore high in the region, indicating emerging marketing opportunities (eMarketer, 2015).

As social media was found to be an important area to monitor, both in view of violations observed and the growth potential, further research and Code monitoring should be centred on social media sites

Variations between the countries may also be due to the data collection being performed during different months of the year, possible being prone to seasonal variations. Also in the length of the media-monitoring period (three or six months), differences regarding the total amount of media clips sampled from each country are likely to have been influenced. The media monitoring could have been done for fewer months, since the researcher experienced a theoretical saturation of data during the period of monitoring, meaning reaching a point in the analysis of data that sampling more data didn't lead to more information related to the research questions (Fusch & Ness, 2015). An alternative approach could have been to perform monitoring every second month, and leaving the time to analyze the materials during the process and stop whenever saturation was obtained.

The differences in how the media agencies presented the collected media clips left the researcher with substantial work of systematizing the materials. That challenged the process of categorising the media clips, and might have reduced the intern validity of the study. To address this, a final sorting of the media clips and refinement of the variables was performed after the data collection was ended for all of the countries and the media clips were reviewed in totality. Language barriers were one further limitation of the study; content was reviewed primarily in Asian languages, but the analysis and results were written and presented in English (content translated into English was provided by the media agency). As a result, there may be discrepancies between the content and the interpretation.

5.3 Data set

Using media clips to analyse the current situation and to assess compliance, has strengths in the way that it gives an objective view of the situation. In contrary to surveys involving respondents, monitoring data are generated electronically, and therefore not prone to participation- or information bias, such as recall bias, which may present an issue in retrospective studies or Code monitoring activities where mothers are asked to recall breastfeeding variables or their exposure to BMS advertising (Durako, Thompson, Diallo, & Aronson, 2016a, 2016b; Gillespie, d'Arcy, Schwartz, Bobo, & Foxman, 2006).

Due to challenges with the language, a content analysis with a discourse analytic approach was not possible to perform. The use of certain words and tones etc. is therefore not reflected

in this study. This study also only collected content related to the promotion and marketing through mass media, thus missing below-the-line marketing tactics promoting BMS in hospitals and other health care services or at point of sale. Such violations were therefore only captured in this study if visible through media coverage. Similarly, this study centred on media coverage or advertisements related to BMS and didn't include complementary foods, which is within the scope of the Code when marketed for children below six months of age (IBFAN-ICDC, 2015). Several other arenas than mass media may also be used for breastfeeding promotion, and not covering all of those arenas, compliance with the Code concerning government's responsibility to disseminate clear and consistent information on breastfeeding, cannot be fully assessed. This study just gives an indication of what's being done through mass media.

5.4 Generalizability

This study being national and regional specific regarding national implementations of the Code, limits the generalizability of the results. Thus, the overall strategies identified used to market BMS showed little variations between the countries and also confirmed previous research results and findings from other monitoring activities in the region or other parts of the world (Brady, 2012; Durako, Thompson, Diallo, & Aronson, 2016a, 2016b; IBFAN-ICDC, 2014; Kent, 2015; Pereira et al., 2016; Piwoz & Huffmann, 2015; Pries at al., 2016). The study also show how media monitoring can be used as a method for Code monitoring or has the potential for other public health related issues where mass media marketing would be relevant, i.e. marketing of unhealthy foods for children.

5.5 Age range considered in the Code

Concerning the age range of the Code, whether it includes BMS promoted for children only up until 24 months or if products for children until 36 months should be regarded as included in the scope, is a grey area with room for interpretation. Interpreting the Code in the broadest sense, any product that can replace breastmilk in the child's diet is a BMS. Considering the international recommendations that children should be breastfed for two years and *beyond*, this could mean until 36 months. The interpretation of IBFAN, the leading global network of non-governmental organizations that helps to ensure the implementation of the Code, is that milk products for children until 36 months are to be considered as a BMS (IBFAN-ICDC, 2015). Previous research has also shown that there is many similar characteristics between IF, FF and GUM, which can justify GUM being categorized as BMS (Pereira et al., 2016).

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Breastfeeding protection and promotion, and mass media marketing of breastmilk substitutes: compliance with the Code in **Southeast Asia**

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Objective: To examine the protection and promotion of breastfeeding and the marketing of breastmilk substitutes through mass media in five Southeast Asian countries, and assess compliance with the International Code of Marketing of Breastmilk Substitutes (the Code).

Design: Media clips collected from January 2015 to January 2016 through a media monitoring service were analysed, in addition to national measures for implementation of the Code. The media clips included editorial content, paid advertisements and social media conversations/posts. Relevant provisions from the Code were chosen to assess compliance.

Setting: Five Southeast Asian countries; Cambodia, Indonesia, Myanmar, Thailand, and Vietnam.

Subjects: Eight hundred clips of editorial content, 387 advertisements (print, online, and broadcast), and 217 social media conversations/posts were collected and analysed.

Results: All the five countries had national measures for implementation of provisions from the Code, either legally enforceable or voluntary. "Growing-up milk" for children above 12 months was as the most common product advertised for, counting for more than two thirds of the collected advertisement clips. No organised efforts by governments to use mass media to disseminate optimal breastfeeding information were identified. Social media was used by companies to promote all categories of BMS products.

Conclusion: Despite national measures taken to implement the Code, BMS are marketed through various media outlets. BMS companies are in violation of the Code, hindering states to fulfil their obligation to protect breastfeeding. There is a need for strengthening of national measures, especially through expanding the age range and better monitor compliance on social media outlets.

Keywords: Breastfeeding, Breastmilk Substitutes, Mass Media, The Code, Southeast Asia

Background

Breastfeeding is crucial for child survival and health, and has substantial benefits for mothers, infants and young children among all socio-economic classes⁽¹⁾. Exclusive breastfeeding is recommended for the first six months of an infant's life, with continued breastfeeding through two years of age or beyond^(2; 3). By adhering to international breastfeeding recommendations, more than 800,000 deaths of children under five could be prevented annually⁽¹⁾. For the mothers, an estimated annually amount of 20,000 deaths from breast cancer could equally be prevented⁽¹⁾. In seven countries² in the Southeast Asia region alone, adopting optimal breastfeeding practices has the potential to prevent 12,400 child and maternal deaths per year⁽⁴⁾. Optimal breastfeeding practices benefits not only children and their families, but also governments and the economy, with savings in health care treatment and increase in cognitive development^(4; 5; 6). While only 38% of infants under six months are exclusively breastfed globally, the World Health Organization's (WHO) Global Targets on Infant and Young Child Feeding (IYCF) seek to increase the rate of exclusive breastfeeding in the first six months to at least 50% by 2025⁽⁷⁾.

The marketing of breastmilk substitutes (BMS) has a negative impact on recommended breastfeeding behaviours^(3; 8) because it undermines breastfeeding confidence among mothers, and affects social behaviour, attitudes, and norms^(8; 9). The International Code of Marketing of Breastmilk Substitutes was established 35 years ago, and has since been updated with subsequent relevant World Health Assembly (WHA) Resolutions (collectively referred to as "the Code"), to help guide the promotion of breastfeeding and restrict BMS marketing⁽¹⁰⁾. Although not legally binding, the Code is a recommendation from the highest international policy-making body in the field of health (the WHA), calling on individual governments to legislate and enforce the Code, using its provisions as a minimum standard for these national efforts⁽¹⁰⁾.

The Code is most effective when incorporated into legally enforceable measures and subsequently regulated, monitored, and enforced at the national level^(3; 11). The inclusion of some provisions of the Code within legal documents exists in 135 of 194 countries, while 49 countries have non-legal or no measures in place^{3 (12)}. Of the six WHO regions, Southeast

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² Cambodia, Indonesia, Laos, Myanmar, Thailand, Timor Leste and Vietnam

³ No information available for the remaining ten countries

Asia has the highest proportion of countries with full implementation of all provisions from the Code as a law, with 36% or four out of eleven countries⁽¹²⁾.

Despite efforts to promote and protect breastfeeding, including adoption of the Code, exclusive breastfeeding rates of children less than six months are low in certain Southeast Asian countries⁽¹³⁾. In the ten member states of the Association of South East Asian Nations (ASEAN), less than 50% of women initiate breastfeeding within the first hour of birth, and only 30 percent exclusively breastfeed their children in the first six months⁽¹³⁾.

Global sales of BMS amount to \$44 billion USD per year and are growing by nearly 10% annually⁽³⁾. Due to rapid economic growth and industrialisation in the Southeast Asian region, combined with a large child population, new market opportunities for baby food are emerging, with BMS as one of the main products⁽¹⁴⁾. This is recognised by the baby food industry, increasing their marketing of BMS particularly in emerging economies^(3; 15). So-called growing-up milk (GUM), which is marketed for children over 12 months, is described by Euromonitor International as the driving force within BMS, and is predicted to account for 50% of absolute growth in BMS sales between 2013 and 2018⁽¹⁴⁾.

The United Nations Convention on the Rights of the Child (CRC) includes the right to adequate nutritious foods for children in order to combat disease and malnutrition (Article 24), and the right of parents to have access to information about the advantages of breastfeeding⁽¹⁶⁾. In General Recommendation No. 34 on the Convention on Elimination of all kinds of Discrimination Against Women, states are called on to ensure broad dissemination of optimal health care information through media outlets, including information on breastfeeding and the impact on child and maternal health⁽¹⁷⁾. States should also ensure effective regulation of the marketing of BMS and implementation and monitoring of the Code⁽¹⁷⁾.

A previous review of Code implementation in Vietnam revealed shortcomings that in particular allowed for advertisements of BMS⁽¹²⁾. UNICEF and Alive & Thrive, an initiative funded by the Bill & Melinda Gates Foundation to save lives, prevent illness, and ensure healthy growth and development through improved breastfeeding and complementary feeding, helped build and lead coalitions of government and nongovernmental organization (NGO) partners to advocate for a total ban on promotion of BMS for children up to two years⁽¹²⁾. Subsequently, Alive & Thrive (A&T), along with UNICEF and Save the Children, are providing technical assistance to countries in the Southeast Asian region to strengthen the regional and national policy environments for infant and young child feeding (IYCF). To

support this effort, A&T monitored media coverage and advertisements in five countries of the region, namely Cambodia, Indonesia, Myanmar, Thailand, and Vietnam.

This study aimed to examine the current situation regarding the protection and promotion of breastfeeding, and the marketing of BMS through mass media in the five selected countries in Southeast Asia. The approach included i) reviewing national measures for implementing the Code; ii) evaluating recent media coverage of and advertisements for breastfeeding and BMS; and iii) identifying violations and circumventions of the Code.

Methods

Definitions of terms

The Code addresses marketing of BMS, feeding bottles, and teats, in addition to information concerning the product's use. For the purpose of this study, the following definitions from the Code have been applied: marketing is defined as product promotion, distribution, selling, advertising, product public relations, and information service; and BMS is defined as any food or beverage presented as a total or partial replacement of breastmilk, whether or not suitable for that purpose⁽¹⁰⁾.

The BMS industry uses the term "milk formula" to cover BMS. The following list of industry products that fall under the milk formula umbrella were considered in this study: infant formula (IF) for infants from 0 to 5 months, follow-on/follow-up formula (FF) for infants from 6 to 11 months, and toddler milk (TM) or growing-up milk (GUM) for young children aged from 12 or 24 months⁽¹⁸⁾. It is important to note that these are not standardised categories and BMS companies use variations of age ranges and terms⁽¹⁹⁾. Feeding bottles and teats that fall under the scope of the Code - defined as any container with a teat meant to feed infants and/or young children⁽¹⁰⁾ - were also included. Milk for pregnant and lactating women (MPL) is not covered by the Code's scope but was included in this study because of its similarities to the products under the milk formula category⁽¹⁸⁾. As international recommendations are that children are to be breastfeed until the age of two or beyond, any milk formula could be considered as replacing breastmilk up until 36 months and therefore covered by the scope of the Code⁽¹⁸⁾.

Data collection

National measures for implementation of the Code were identified through policy reviews and literature searches, the English versions of which were accessed from available Internet resources. To obtain data on media coverage and advertisements, independent media agencies

were used to perform systematic media monitoring for three or six month periods from January 2015 to January 2016. The data included English translations of the collected materials. The media agencies monitored paid advertisements placed by companies, including advertorials (defined as media materials combining information with product or brand promotion), editorial content (defined as all content produced by journalists), and social media posts. All materials containing the following keywords or products were sampled: breastfeeding, infant formula, follow-up or follow-on formula, toddler milk, growing-up milk, feeding bottles and teats, and milk for pregnant and lactating women. Popular brand names of products in these categories were identified by the media agencies and also used as keywords.

The media agencies monitored the most common media channels in each country, and targeted both mainstream media (print, online, and broadcast) and social media. In addition, after companies were identified through the media monitoring, the researcher collected additional social media data from their Facebook pages.

Analysis

For the purpose of this study, the following articles of the Code were selected to analyse and assess compliance by countries and companies: Article 4 on information and education, Article 5 relating to the general public and mothers, Article 8.2 addressing persons employed by manufactures and distributors and Article 11 on implementation⁽¹⁰⁾.

National measures related to the Code were reviewed to assess regulations operating in the studied countries. The assessment focused on the legislative status (voluntary or legally enforceable) of related measures, the products and age ranges covered, and the inclusion of BMS marketing limitations.

Media analysis was used for the media clips, relaying mostly the English translations. Text, pictures, and audiovisual were examined to identify key messages and issues, stakeholders involved, and products that were promoted. The advertisement clips were categorized based on the industry categories of products previously listed. When a range of a product was given, the lowest age was used to determine in which category to place the product, even if the upper age extended beyond that category, i.e. products said to be suitable for children one to three years were found, were placed in category GUM from 12 months. If uncertainties regarding the age range of the product, the companies' national websites were consulted to get an overview over their product categories.

For the compliance assessment, obligations of governments and BMS companies were addressed, with a specific focus to identify violations and circumventions. Circumvention was defined as any practice not directly in violation of the Code, but in some way evading the restrictions. A type of circumvention considered in this study was cross-promotion, defined as promotion of one product making reference to another product by similarities in product design, labelling and/or colouring scheme.

Results

National measures for implementation of the Code

All five countries included in this study have adopted the Code, and four countries have legally enforceable measures to implement Code provisions (Table 1). At this time, Thailand is the only country in this study with a voluntary agreement between the government and the companies. In Cambodia, Myanmar, and Vietnam, the national measures consider products for children up until 24 months. In Thailand and Indonesia, only BMS intended for feeding infants up to the age of 12 months are covered. Advertisements for BMS that come within the age range stipulated in national measures are prohibited in all of the countries. Indonesia has several regulations adopting different parts of the Code; the two regulations covering the scope of marketing in mass media were utilized for this study. In addition to measures directly adopting provisions from the Code, Vietnam has also banned advertisements for BMS for children less than 24 months under Article 7 of the Law of Advertisement.

Media coverage of and advertisements for breastfeeding and BMS

Advertisements

In total 387 advertisements (print/online and broadcast) were collected (table II). GUM was by far the most commonly advertised product across the region, accounting for more than two thirds of the total advertisements clips. The GUMs were generally advertised as suitable for children above either 12 or 24 months, depending on the age range stipulated in national measures. Typically, numbers and stages were used to indicate the age range of the products; IF=stage 1; FF=stage 2, GUM=stage 3 and 4. The age range and the corresponding number, however, differed between countries. In Thailand and Indonesia, where national measures enforce against products up to 12 months, Stage 3 was advertised for children over one year old, while in the three other countries, the BMS companies advertised the same product for children above two years in line with local prohibitions. No obvious distinctions between the products except the age range were found. Advertisements for milk for pregnant and lactating

women (MPL) were also seen, both alone and in combination with GUM. Stage 0 was occasionally used to designate MPL.

Some of the most common messages in GUM advertisements were claims that children would be tall and smart, have higher IQs, perform better at school, and have all of their nutritional needs met by regular intake of the product. The MPL advertisements claimed to benefit both the mother and the foetus, or newborn infant, depending on the product.

The use of advertorials, which combine information with product or brand promotion, was also observed, and accounted for 21% and 18% of the total advertisements clipped in Thailand and Indonesia, respectively. TV broadcasts were the main channel for advertisements in Cambodia and Myanmar, while the clips from Indonesia and Thailand were largely magazines. There were no advertisements for IF and FF for children under 12 months old in the collected media clips in any of the countries, nor advertisements for feeding bottles and teats.

Editorial content

Of the eight hundred clips of editorial content collected, 57% contained information about breastfeeding, and 43% related to BMS (Table III). Breastfeeding information was commonly found in editorial content, especially in Indonesia and Thailand. Articles were primarily published in lifestyle magazines targeting mothers and providing information about breastfeeding. The information came from a variety of sources and was in general not lined with recommendations given in article 4 of the Code, covering points to be included in breastfeeding information.

Several news stories centred on the establishment of lactation rooms, or the hosting or sponsoring of public events promoting breastfeeding by BMS companies in Indonesia, Thailand, and Vietnam. Vietnamese media also covered an instance when a company selling BMS provided training for medical workers. In Cambodia, several articles reported on the illegal marketing of BMS, and violations by companies of the national law and the Code.

Social media posts

For the social media, 217 social media posts or conversations were collected. Social media monitoring in Indonesia and Thailand targeted online conversations and revealed companies that manufacture BMS were providing advice about breastfeeding through their own Internet forums. This created a space for mothers to share experiences and seek advice about breastfeeding and bottle-feeding. The most common online conversation topics were new

mothers worrying about being able to produce enough breastmilk, questions around breastmilk having sufficient nutrients for newborns, and pressure received from the family to supplement breastmilk with formula. Frequently, other mothers encouraged women to supplement their breastmilk with formula if they were not able to produce sufficient supply on their own. There was general agreement between mothers that formula-fed infants would gain more weight than exclusively-breastfed infants. Several of the conversations revealed concerns about how to ensure optimal child nutrition and whether or not breastfeeding provides enough energy and nutrients. Questions about the correct use of formula and bottle-feeding were also prevalent. *Mother and Baby*, an Indonesian parenting magazine, used their Facebook page to post articles and their followers discussed breastfeeding topics in the comment column.

Companies used their Facebook pages to promote their brand and products, and often gave advice about infant and young child feeding. BMS for children under 24 months old was promoted either directly by showing the product or indirectly by using pictures of infants or the word "baby". IF was also promoted through pictures of newborns together with IF tins, and pictures of sales representatives offering free samples to new parents in hospitals as a way to welcome and celebrate the newborn. Parents were invited to like and share pictures online and the companies gave advice about infant and young child feeding.

Violations and circumventions

All forms of advertising for products that can partially or totally replace breastmilk in a child's diet are in direct violation of Article 5.1 of the Code. GUM advertisements were seen in all of the studied countries, promoting a product for children within the 0-36 months age range. In Cambodia, widespread use of baby pictures and feeding bottles in advertisements for GUM were observed, making cross-references to products that fall under national prohibitions. MPL advertisements were circumventing the Code because of the potential cross-promotion with the use of similar brands, labels, and colour schemes to BMS, and were likewise found in all of the countries.

Further violations of the Code were discovered in editorial content. Several articles and news stories described how companies that manufacture or distribute products under the scope of the Code organised or sponsored public events. Such activities are in violation of articles 5.5 and 8.2, that prohibit marketing personnel from making contact with mothers or performing educational functions. In addition, violations were seen on the companies' own Facebook

pages. Similar to the advertisements in traditional media outlets, products complying with national regulations were centrally featured. However, we also observed promotion of IF, directly or indirectly by using pictures and text including infants. The Facebook pages were used to promote events organised or hosted by companies, or promoting free products and discounts.

Discussion

The governments of Cambodia, Indonesia, Myanmar, Thailand, and Vietnam have taken actions to implement and enforce the Code by including certain provisions as legally enforceable measures, or in the case of Thailand, a voluntary agreement with manufacturers. The strategies used to market BMS identified through this study were: 1) GUM advertisements for children above 12 or 24 months (depending on the age range stipulated in national regulatory frameworks); 2) cross-promotion using similar branding, pictures, and logos to a range of products from MPL to GUMs for children up to 36 months and beyond; 3) advertisements for MPL alone or in combination with GUMs; 4) claiming unsubstantiated health benefits such as optimal development or contributing to stronger, taller, and more intelligent children; 5) sponsored health events positioning BMS companies as reliable sources for health information and; 6) using social media to promote BMS, give advice about infant and young child nutrition, and expand exposure to their products by encouraging mothers to "like" the posts and share their own experiences in the comment columns.

The media analysis revealed general compliance with national measures in the published or aired advertisements regarding the targeted age range of the promoted products, though one of the most commonly found circumvention observed in this study was through cross-promotion. Product-line extension, with the introduction of several products under the same market concept, makes it difficult for mothers to distinguish between the different products being marketed for various ages and allows for cross-promotion⁽⁸⁾. Product-line extension and brand-focused advertising may reduce the effectiveness of national restrictions on IF advertising⁽²⁰⁾.

Unsubstantiated health benefits were claimed for children when fed BMS. In Resolution WHA 63.23 from 2010, governments are called on to ensure that health claims shall not be permitted for foods for infants and young children⁽²¹⁾. A study among mothers in Cambodia found that nearly half of the total study participants had a desire to feed their child additional food if they had enough financial resources, with BMS as the most commonly reported food

aspired by the mothers to buy⁽²²⁾. The mothers reported believing BMS would benefit their children, by making them healthy and smart⁽²²⁾.

This study found that social media platforms like Facebook present a new and unregulated environment for BMS companies, widely used to promote all categories of BMS, share nutrition and breastfeeding information, and encourage parents to engage in digital conversations. Several companies have launched their own web-based communities and use them as a vehicle to promote products and perform educational functions directed at the parents of infants and young children^(23; 24). Mobile and web-based technologies track the behaviour of parents and offer an opportunity for companies to interact more directly with consumers⁽²³⁾. Social media can not only be utilised as an advertising platform, but a way to create and strengthen bonds between companies and customers, potentially developing more trustworthy relationships than does traditional media⁽²⁵⁾.

Other studies have found similar uses of social media. Encouraging users to post comments, experiences or pictures provides brand sites with potential marketing content without requiring companies to break any Code rules (i.e. the proscription of the use of images idealising artificial feeding)⁽²⁴⁾. Facebook was the primary social media outlet evaluated in this study, but other social media platforms are also being used for BMS promotional activities and should therefore be included in Code monitoring activities⁽²⁴⁾.

Overall, our study found no organised efforts by governments to disseminate information about breastfeeding via mass media. Mass media campaigns can be effective in changing behaviours, such as improving the desire to breastfeed^(26; 27). It has been argued that breastfeeding should be "advertised" through the same channels that the companies have used to promote their products, thus helping women to access services and other support that will help them initiate and continue breastfeeding⁽²⁸⁾. Because the baby food industry has greater financial resources, a recommended strategy for governments might be to stop the marketing of BMS rather than trying to outcompete the industry by increasing spending on breastfeeding promoting. Even if policies and programs promoting breastfeeding have the potential to mitigate the negative impact of BMS marketing, they are not likely to completely reverse the influence that marketing may have had⁽⁸⁾. It might also be effective to use media to raise awareness of the Code and the importance of optimal breastfeeding practice.

In WHA Resolution 54.2, governments are called on to strengthen mechanisms to ensure Code compliance in all forms of media, emphasizing new modern communication methods, including electronic means⁽²⁹⁾. However, there might be a need for clarification of the Code's provisions as they pertain to social media and for the WHA to provide recommendations and guidance for national implementation and enforcement of online prohibitions.

Recommendations for policy action

The media has the potential to be a significant stakeholder in the adoption of improved breastfeeding practices. By offering trainings or information sessions to journalists and making them aware of the consequences unethical marketing of BMS has on child health, journalists can act as "watchdogs" and help report on illegal marketing practices. Violations of the Code, many of which were uncovered during this study, hinder governments from fulfilling their obligation to encourage breastfeeding. The Code is an effective mechanism for action, but its effectiveness relies on political will to incorporate provisions into legally enforceable measures that are acted on and monitored⁽³⁾. As part of commitments made under the CRC and CEDAW, mothers of infants and young children need to have access to consistent and unbiased information regarding infant nutrition and breastfeeding.

The Code should be fully implemented through national enforceable measures, including dissemination of accurate information from health authorities, and implementation of effective monitoring mechanisms to hold BMS companies accountable for violations. The following are suggested action items for governments in the selected countries to better protect and promote breastfeeding:

- National measures to implement the Code should:
 - Be legally binding and adopt all parts of the Code, assuring strong regulatory measures against unethical marketing of BMS.
 - Cover all products that can replace exclusive or continued breastfeeding in the child's diet.
 - Expand the scope of products to include those up to 36 months in order to align with current marketing strategies.
 - Have strong monitoring and enforcement mechanisms, especially focusing on social media, cross-promotion and company-sponsored events.
- Health authorities should:
 - Utilize the potential of mass media, including social media, to disseminate information to promote breastfeeding.

- Ensure that media members are aware of the Code and the regulations that stipulate what they are permitted to broadcast and publish. Authorities should also conduct trainings for journalists to accurately report on breastfeeding topics.
- Clarify the roles and responsibilities of media agencies in charge of placing advertisements, including social media platforms.

Strengths and limitations of media monitoring

The use of professional media agencies for data collection has both strengths and limitations. Among the strengths of using a media monitoring service are that such agencies have developed efficient methods to capture and collect a large number of media clips, and allows for a larger data sample across several countries. The data collection is not prone to recall bias, which may present an issue in retrospective studies or other Code monitoring activities where mothers are asked to recall breastfeeding variables or their exposure to BMS advertising^(30; 31; 32).

However, language barriers were one limitation of the media monitoring; content was reviewed primarily in Asian languages, but the analysis and results were written and presented in English (content translated into English was provided by the media agency). As a result, there may be discrepancies between the content and the interpretation. Four different media agencies were used to perform the media monitoring in the five countries, each of which had slightly different data collection methods. This may have resulted in minor differences in the data sample selection.

Conclusion

This present study indicates that despite the national measures taken to implement the Code, BMS is marketed through various media outlets. BMS companies are in violation of the Code, hindering states to fulfil their obligation to protect the right of the mother and the child to breastfeeding. Drawing on findings from other studies, this could harm the recommended breastfeeding behaviour, leading to health and economic loss. There is a need for strengthening of national measures to sufficiently protect and promote breastfeeding, especially in expanding the age range to cover all products that can replace breastmilk in the child's diet and tackle cross-promotions, and better monitor compliance on social media outlets.

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Declaration of Conflicting Interest

The author declares no conflicts of interest.

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Tables

Table 1: National measures for implementation of provisions from the Code

Table 2: Advertisements for breastmilk substitute, including bottles and teats, and milk for pregnant and lactating women

Table 3: Editorial content relating to breastfeeding and breastmilk substitute

 Table 1 National measures for implementation of provisions from the Code

	Legal status	Products included	Age range	Advertisements for BMS prohibited in general media	Marketing personnel prohibited to perform educational activities/ sponsor events	Distribution of gifts/samples prohibited
CAMBODIA				_	-	
Sub-Decree on Marketing of Products for Infants and Young Child Feeding (38) Related legislation: Joint Prakas 066 Implementation of Sub-Decree on Marketing of Products for Infant and Young Child Feeding ³	Legally enforceable measure	Infant Formula, Follow-on Formula	0-23 months	X	X	X
INDONESIA						
Reg. Nr. 33 on Exclusive Breastfeeding (35) Related legislation: Act Number 36 Year 2009 on Health	Legally enforceable measure	Infant Formula	0-11 months	X	X	-
Reg. nr. 39 on Infant Formula Milk and Other BabyProducts ⁽³⁶⁾	Legally enforceable measure	Infant Formula, Follow-on Formula ¹	0-11 months	X	X^2	X
MYANMAR						
Order of Marketing of Formulated Food for Infant and Young Children ⁽³⁷⁾ Related legislation: National Food Law	Legally enforceable measure	Infant Formula, Follow-on Formula	0-23 months	X	X	X
THAILAND						
Code of Marketing of Foods for Infants and Young Children and Related Products	Voluntary	Infant Formula, Follow-on Formula	0-11 months	X	-	X
VIETNAM						
Decree on trading in and using of nutritional products for infants, feeding bottles and dummies ⁽³⁹⁾ Related legislation: Law on Children Protection,	Legally enforceable measure	Infant Formula, Follow-on Formula	0-23 months	X	X	X

	Legal status	Products included	Age range	Advertisements for BMS prohibited in general media	Marketing personnel prohibited to perform educational activities/ sponsor events	Distribution of gifts/samples prohibited
Care and Education						
Law on Advertisement (40)	Legally enforceable measure	-	0-23 months	X	-	-

Referred to as "baby products including milks"

² Prohibitions to *accept* sponsoring

³ Responsibilities of the implementation of the Sub-Decree is clarified

Table 2 Advertisements for breastmilk substitute, including bottles and teats and milk for pregnant and lactating women

	Cambodia	Indonesia	Myanmar	Thailand	Vietnam	Total
	n=117 (%)	n=104 (%)	n=44 (%)	n=84 (%)	n=38 (%)	n=387 (%)
By product/category ^{1,2}						
Bottles and teats	-	=	=	-	=	=
Infant formula and Follow-on Formula (0-	-	=	-	-	-	=
11 months)						
Growing-Up Milk (≥ 12 months)	-	77 (74.0)	-	54 (64.3)	-	131 (33.9)
Growing-Up Milk (≥ 24 months)	110 (94.0)	-	32 (72.7)	-	34 (89.5)	176 (45.4)
Milk for Pregnant and Lactating Women	7 (6.0)	8 (7.7)	12 (27.3)	12 (14.3)	3 (7.9)	42 (10.9)
Advertorials	-	19 (18.3)	-	18 (21.4)	1 (2.6)	38 (9.8)
By media channel						
Print	25 (21.4)	67 (64.4)	29 (65.9)	60 (71.4)	16 (42.1)	197 (50.9)
Broadcast	92 (78.6)	37 (35.6)	15 (34.1)	24 (28.6)	22 (57.9)	190 (49.1)

Table 3 Editorial content relating to breastfeeding and breastmilk substitute

	Cambodia	Indonesia	Myanmar ¹	Thailand	Vietnam	Total
	n=22 (%)	n=181 (%)	-	n=305 (%)	n=292 (%)	n=800 (%)
By topics						
Breastfeeding	16 (72.7)	139 (76.8)	-	188 (61.6)	110 (37.7)	453 (56.6)
Breastmilk substitute	6 (27.3)	42 (23.2)	-	117 (38.4)	182 (62.3)	347 (43.4)
By media channel						
Newspaper (print/online)	17 (77.3)	147 (81.2)	-	184 (60.0)	142 (48.6)	490 (61.1)
Magazines (print/online)	5 (22.7)	34 (18.8)	-	122 (40.0)	150 (51.4)	311 (38.9)

⁷Editorial content was not included in the media scanning in Myanmar

If BMS for several age ranges promoted in the same advertisement, the lowest age is considered

If Growing-Up Milk and Milk for Pregnant and Lactating Women were promoted in the same advertisement, counted in both categories

Appendix 1: Scope of Work, media agency



ALIVE & THRIVE

Vendor: ISENTIA VIETNAM CO., LTD

Purchase Order: 107003AT1004-iSentia-1

Scope of Work: Media Scan on Beast-milk substitute products and milk products for

pregnant women in Indonesia and Thailand

Duration: 1 January 2015 to 10 July 2015

Contract Oversight: Roger Mathisen, A&T Technical consultant

Ms. Phan Thi Hong Linh, PR and Advocacy Specialist, A&T/VietNam

Background

Alive & Thrive (A&T) is an initiative to save lives, prevent illness, and ensure healthy growth and development. Good nutrition in the first 1,000 days, from conception to two years of age, is critical to enable all children to lead healthier and more productive lives. Alive & Thrive is scaling up improved infant and young child feeding and maternal nutrition through large-scale programs in several countries in Asia and Africa and through strategic technical support and the dissemination of innovations, tools, and lessons worldwide. Alive & Thrive is funded by the Bill & Melinda Gates Foundation and the governments of Canada and Ireland. The initiative is managed by FHI 360.

Alive & Thrive Vietnam is being implemented by a consortium of organizations with broad experience and expertise. FHI 360 manages and coordinates the initiative and works with Save the Children, the International Food Policy Research Institute (IFPRI), the University of California-Davis and GMMB to meet the program needs in country.

In April 2013, Alive & Thrive Vietnam in coordination with the Viet Nam National Assembly's Institute of Legislative Studies, Irish Aid and UNICEF, and with technical support from the European Union, the International Baby Food Action Network (IBFAN), the International Code Documentation Centre (ICDC), and the World Health Organization, organized a regional advocacy workshop, titled "Developing Stronger Policies and Laws on Infant and Young Child Feeding in the ASEAN Region and Beyond". Delegations from 13 countries convened in Hanoi for to learn about the process that led to Viet Nam's two major policy change successes: extending maternity leave to six months and expanding the ban on advertising of breastmilk substitutes for children under 24 months.

As a follow-up to the workshop in 2013, Alive & Thrive along with UNICEF and Save the Children will provide technical assistance to seven countries, namely Cambodia, Indonesia, Lao, Myanmar, Thailand, Timor Leste and Viet Nam to sstrengthen the regional and national policy environment(s) for IYCF. Particular emphasis will be placed on National Codes, Maternity Entitlements and Health Systems Strengthening.

An important first step in the process was to convene the seven countries in Bangkok, Thailand in March 2014 to develop country-specific roadmaps to enable policy change at national and regional levels. The roadmaps were built around the policy change process developed out of the Viet Nam country experience. Country teams completed detailed national policy assessments in advance of the workshop, identified key policy priorities for a three year period and developed roadmaps to achieve policy goals. All seven countries have indicated that national measures (laws, sub-laws or regulations) need strengthening and improved monitoring and enforcement.

To enable the above and track compliance to national measures on marketing of breastmilk substitutes in six countries (Cambodia, Indonesia, Lao, Myanmar, Thailand, Timor Leste), A&T aims to complete a media scanning exercise. The exercise will involve completing a scan of all mass media channels (print, radio, TV, digital, social media, etc.) to capture the marketing and promotion of both breastfeeding and products which are under the scope of the national code (infant, follow-up or follow-on, growing-up formulas, bottles and teats). In addition, the scan will also include milks for pregnant women. To conduct the media scan as described above, we are seeking independent media agency/agencies to complete the scanning services and provide reports on a monthly basis for a period of three to six months between August 2014 and January 2015.

Specific Tasks

iSentia Vietnam Co., Itd will be responsible for the following tasks:

1.0 NEWS MONITORING PARAMETERS					
1.1) TOPIC MONITORED	iSentia will monitor all news materials which relates the following:- 1.1.1 News Monitoring: Breastfeeding Infant formula (for children under 12 months old), follow-up of follow-on formula (for children under 2 years old), growing-up formula (for children of 1-2-3 year old) Bottles and teats Milks for pregnant women				
1.2) REPORTING FORMAT	1.2.1 DAILY REPORTING – Daily Reporting – All print/TV & Online news will be uploaded onto our website http://news.isentia.asia/ by 8am and daily email report will be sent out at 11:00am (Monday –> Friday). Monthly customized report for top 3 conversation of each month on each subject to be summarized in English. Monthly executive summary for the news (2-3 pages writing, top 10 media title for each media type based on number of articles FHI 360 Log in ID and password will be provided by Isentia Co.,ltd				
1.3) MEDIA MONITORED	To be recommended by FHI 360				

2.0 SOCIA	AL MEDIA MONITORING				
2.1) INTUITIVE	Listen: An easy to use dashboard interface to manage and extract invaluable insights from consumers' conversations Intuitive, timely info, country – based data, multilingual capabilities, comprehensive data				
2.2) INSIGHTS	Report: A holistic range of analytical reports comprising of statistics, trends, character to help you derive insights and visualise your coverage NSIGHTS				
	Summary: Stay informed on who and what is being said about your brand and the business landscape you're in. Buzz reports are a tool to measure word of mouth and social media chatter around your brand. Analyse buzz trends and the share of voice between your different listening subjects. • Track the growth of conversations, unique voices and channels • Understand your stakeholders' response status				
	 Buzz: Analyses sentiments both summarized and its breakdown to help you compare results against competitors; track sentiment improvement over time and identify important sentiment changes and its reasons. Content is tagged with automated sentiment categories which you can revise independently. A tool to measure word of mouth and social media chatter around your brand Analyse buzz trends and the share of voice between your different listening subjects 				
	 Sentiment: Stay informed on who and what is being said about your brand and the business landscape you're in. Buzz reports are a tool to measure word of mouth and social media chatter around your brand. Analyse buzz trends and the share of voice between your different listening subjects. Analyses summarized sentiments and its breakdown Track sentiment improvement over time Identify important sentiment changes and its reasons. Content is tagged with automated sentiment categories which you can revise independently. 				
	Voice : Track the growth of conversations, unique voices and channels surrounding your brand. Understand how your stakeholders are responding in terms of interests, reactiveness and spreading the word across various listening subjects.				
	 Track the growth of conversations, unique voices and channels Understand your stakeholders's response status. 				
2.3) IN THE KNOW	Alerts: Keeping you on the forefront of any crisis or trending discussions about the subjects you care about				
	SENSITIVE ISSUES: Identify potential threats to your brand when issues start to gain traction and address these issues before it spreads				

ONLINE NEWS: Get timely online news highlights of your brand and ensure a holistic approach to your digital listening strategy

3.0 PROFESSIONAL FEES (MONTHLY)	
Description	Amount (VND)
1. Indonesia:	
+ News monitoring fee	
+ Monthly English Executive summary (2-3 pages) + top 10 media title for each media type based on number of articles	
+ Newest Ads monitoring fee	
+ Monthly English gist for breaking new ads	
+ English summary for top 3 conversation on each subject in social media	
+ 1-Social Monitoring Service:	
2. Thailand:	
+ News monitoring fee	
+ Monthly English Executive summary (2-3 pages) + top 10 media title for each media type based on number of articles	
+ Newest ads monitoring fee	
+ Monthly English gist for breaking new ads	
+ English summary for top 3 conversation on each subject in social media	
+ 1-Social Monitoring Service:	

4.0 TERMS & CONDITION OF SERVICE					
4.1) MEDIA SCAN PERIOD	Full Term : 1 January 2015 – 30 June 2015				
4.2) PAYMENT TERMS	Monthly billing with payment terms will be done within 20 days from the date of invoice.				

DELIVERABLE AND DUE DATE

	Deliverable	Due Date	Payment
1	January 2015 media scan report in Thailand and Indonesia	10 February 2015	
2	February 2015 media scan report in Thailand and Indonesia	10 March 2015	
3	March 2015 media scan report in Thailand and Indonesia	10 April 2015	
4	April 2015 media scan report in Thailand and Indonesia	10 May 2015	
5	May 2015 media scan report in Thailand and Indonesia	10 June 2015	
6	June 2015 media scan report in Thailand and Indonesia	10 July 2015	

Payments will be made upon delivery and approval of deliverables by <u>Nemat Hajeebhoy-A&T</u> <u>Country Director</u>