

# Promotion of Human Milk Substitutes in the Opinion of Mothers of Young Children

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**Abstract Background.** The International Code of Marketing of Breast-milk Substitutes was established to reduce the detrimental effect of promotional activities of companies producing BMS on attitudes towards breastfeeding. **Objective.** The study was carried out to assess maternal opinions on promotional activities related to BMS in medical facilities, participation of medical staff in advising mothers to feed children with BMS, and other promotional activities related to those products. **Design.** This study was part of the Netcode survey. Data was collected via structured interviews and the results were analyzed with the use of descriptive statistics and Chi-Square Post-Hoc analysis using the program SPSS. **Settings.** Poland. **Participants.** Women caring for children age 0-36 months (N = 380). **Results.** More than one third of the interviewed women (35%) declared that they were informed to give milk products other than human milk to children below 6 months of age (n=132). Among people recommending these types of products, women mostly indicated health care professionals. In health centers mothers were mainly exposed to brochures and have received free samples of BMS. **Conclusions.** The investigation has shown a substantial exposition of women to marketing of BMS, with significant involvement of medical professionals. Promoting BMS to mothers who can feed naturally, without providing them enough support to continue natural feeding is unethical. Measures should be implemented to better adhere to the Code.

**Keywords:** breast-milk substitutes, ethical aspect, medical staff

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## 1. Introduction

Breastfeeding is one of the most important interventions contributing to optimal child health and development. Improving breastfeeding rates could help avoid more than 800 000 child deaths every year around the world in both developing and developed countries [1]. Breastfeeding brings both health benefits to the mother and child. It reduces the risk of premature death [1,2,3].

Rates of breastfeeding are affected by confusing messages from advertisement of breast-milk substitutes (BMS), bottles and teats [4,5]. World Health Organization (WHO) has developed recommendations for its members to regulate the marketing of breast milk substitutes, feeding bottles and teats since 1981 [4]. It has established the

International Code of Marketing of Breast-milk Substitutes (the Code). Updates of the Code have been developed by the World Health Assembly (WHA) to include changes in the tools used for advertising [5,6]. In effect implementation of the Code as well as the requirements for marketing of human milk substitutes, bottles and teats should be continually monitored and audited [4,7].

The International Code of Marketing was adopted because of an increase in child mortality due to BMS promotion. 250 000 child deaths are due to pneumonia and diarrhea [8]. In studies from Nepal, Ghana, and India there is substantial evidence that early initiation of breastfeeding reduces neonatal mortality by 44% among infants surviving at least 48 hours [9,10,11]. This intervention is especially beneficial for preventing sepsis-related deaths. These benefits are not limited to settings where water is unsafe, and newborn infections are

prevalent. In the United States suboptimal breastfeeding results in an increased risk of diseases such as necrotizing enterocolitis, otitis media, gastroenteritis, and lower respiratory tract infections [12].

Translating the Code into national legislature differs depending on the country [13]. Countries that have announced the adoption of the Code have implemented its rules and regulations partially or completely into national legislature. Establishment of laws protecting and promoting breastfeeding is important but may not be effective without adequate monitoring and consistent enforcement of these rules [14]. In 1981 Poland has joined the declaration Innocenti therefore committing to protection and promotion of breastfeeding at a national level. The Polish legislature insufficiently adapted to the rules and regulation of the Code and its resolutions. According to the National Implementation of the International Code Status Report 2018 only two, of the 15 necessary legal adjustments, have been passed by law in Poland [15]. In the 2020 report, Poland scored 39 which is interpreted as “some provisions of the Code included” [16]. Most importantly for this study, the law does not prohibit BMS promotion to healthcare workers and medical facilities. Milk substitutes promotion includes providing free/low cost supplies, materials and gifts. Legal documents covering the issue of marketing are scattered, ambiguous and provide space for misinterpretation and inaccuracies of conduct [17].

98% of Polish women commence breastfeeding [18], but simultaneously 65% of children are fed other milk products in addition to human milk before hospital discharge [19]. An official audit has shown that there are hospitals in Poland where 100% of children are fed other milk products, in addition to human milk, before discharge [20]. Currently 25% of hospitals are designated Baby-Friendly [21]. In 2018 the Ministry of Health has issued a regulation for perinatal care of which an important element is to promote and support breastfeeding [22].

Lack of control over activities of companies distributing milk substitutes, bottles and teats directed at medical professionals, results in unethical conduct. Doctors, midwives and nurses do not understand marketing mechanisms that they are subjected to and this makes the scale of the problem very hard to assess. Indeed, many health professionals are unaware of the ethical aspect of providing milk substitutes to otherwise healthy mothers. These abuses need to be properly defined, addressed and managed.

The aim of this study was to assess the opinions of mothers regarding the degree of participation of medical staff in advising them to feed children under the age of 6 months with human milk substitutes, promotional activities related to products included in the International Code together with the relevant resolutions of the WHA in medical facilities and participation of medical staff in other promotional activities relating to those products.

The findings of this study have become a basis for an ethical discussion regarding marketing of breast milk substitutes in a global perspective.

## 2. Methods

This study was part of the Netcode survey [23] conducted as a task of a larger project commissioned by

the Polish Ministry of Health (“Dissemination of principles of the International Code of Marketing of Breast-milk Substitutes among medical professional, collection and analysis of data on breastfeeding”).

Study group was comprised of mothers attending local health care centers. Polish speaking mothers of children age 0-36 months were included in the survey. Women that did not consent to participate in this investigation were excluded. The study group included 380 women, 190 women with children aged under 6 months and 190 women with children aged 6-36 months.

The data was collected from January to May 2019. Interviews were conducted by trained interviewers. The interviews were based on a structured questionnaire designed for mothers, which was part of the Netcode Toolkit [24]. In our study, we analyze the answers to questions about: advice to feed any products other than human milk to the child, promotion related to any milk products or feeding bottles and teats for children less than 36 months old or companies that sell these products at the health facility and received the sample of any milk products for children less than 36 months old. The questionnaire contained 36 closed-ended questions (Appendix). Women were interviewed with the Tablet Assisted Personal Interview (TAPI).

Medical facilities that participated in this study were randomly picked from a list of all health centers and maternity facilities in Warsaw, the capital of Poland. The list included 33 sites. Information regarding the study was sent to the management of the chosen facilities. In the preliminary phase of the study the facilities had to consent to carrying out the study in the facilities. Due to high percentage of decline, the recruitment strategy was modified. Women were recruited before entering the health centers and interviews were conducted after the visit, in the private homes of women. This resulted in two study groups of the final cohort. Group 1 were women interviewed on the premises of the medical facility (Facility Group), Group 2 were women interviewed at home (Home Group). Recruited mothers attended medical facilities for consultations related to vaccination and routine developmental checkups.

Statistical tests were used to specify differences in the responses of mothers surveyed in homes and in medical facilities. Because the differences were statistically significant, the results for the two groups are presented separately. The statistical tests used to identify the differences between these groups included a Chi-Square Post-Hoc analysis. Z-scores were calculated. Statistical significance was established at  $p$ -value  $< .05$ . SPSS was used to perform the analyses [22].

Descriptive statistics were applied to show the source of recommendations to give human milk substitutes to infants, participation of promotion activities in health centers and involvement of medical staff in other promotional activities related to human milk substitutes.

## 3. Results

The target list comprised of 33 health centers and maternity facilities. There was a high percentage of decline of participation in the study (21% in case of health

centers). In the final recruitment 180 women (47,4%) were recruited to the Facility Group and 200 women (52,6%) were recruited to the Home Group. The significant demographic characteristic differences between the two groups are shown in Table 1.

In both groups most women were not informed to give their children BMS (n=248), 65%. Home Group mothers interviewed were more likely to hear about the necessity to give their child these type of products (n=90, 45%), (z=4,40; p<0,000). Among persons recommending any

milk product other than human milk, most women pointed to health professionals and much more frequently those from the Home Group indicated the pediatricians (Table 2).

Recommended to mothers by medical personnel were Infant formula (0+ months) (n=80; 60,6%), Follow-up/on formula (6+ months) (n=43; 32,6%). There were no statistically significant differences between groups.

In health centers mothers had mainly contact with brochures and posters, but this observation was more frequently expressed by the Home Group (Table 3).

**Table 1. The significant demographic characteristic differences between the two studied groups (Home Group and Facility Group). N=380**

	Total N=380 N (%)	Home group n=200 n (%)	Facility group n=180 n (%)	Ch2 test: P
<b>Educational status</b>				
Primary education	22(5.8)	16(8.0)	6(3.3)	chi2 = 41,081; df = 4; <b>p &lt; .001</b>
Secondary education	163(42.9)	110(55.0)	53(29.4)	
Undergraduate/graduate	195(51.3)	74(37.0)	121(67.2)	
<b>Age (years)</b>				
≤ 25	56(14.8)	41(10.8)	15(4.0)	chi2 = 45,996; df = 3; <b>p &lt; .001</b>
26-29	122(32.2)	82(21.6)	40(10.6)	
30-34	138(36.4)	63(16.6)	75(19.8)	
≥ 35	63(16.6)	14(3.7)	49(12.9)	
Initiation of breastfeeding	360(94.7)	190(95.0)	170(94.5)	n.s.

n.s - not statistically significant.

**Table 2. Prevalence (%) of mothers (from two group) who reported that they had been advised to feed any milk products other than human milk to her child less than 6 months old, by type of person who gave the advice. (N=132)**

Variables	All n=380 n(%)	Facility Group n=180 n(%)	Home Group n=200 n(%)	Adjusted Z-score; P
<b>In the past six months, did anyone tell you that you should feed any milk products other than breast milk to your child?</b>				<b>z=4,40; p&lt;.000</b>
Yes	132 (34,74)	42 (23,33)	90 (45,00)	
No	244 (64,21)	137 (76,11)	107 (53,50)	
I don't know	4 (1,05)	1 (0,56)	3 (1,50)	
<b>Who recommended any milk products other than human milk?</b>				
	n=132 n(%)	n=42 n(%)	n=90 n(%)	
Paediatrician	67(50,76)	<b>16(38,10)</b>	<b>51(56,67)</b>	<b>z=4,2; p&lt;.001</b>
Midwife	32(24,24)	13(30,95)	19(21,11)	z=.8; n.s.
Nurse	31(23,48)	9(21,43)	22(24,44)	z=2,1; n.s.
Partner/relative/friend	12(9,09)	6(14,29)	6(6,67)	z=.2; n.s.
Family/general doctor	11(8,33)	4(9,52)	7(7,78)	z=.7; n.s.
Nutritionist	2(1,52)	0(0,00)	2(2,22)	z=1,3; n.s.
Shop/pharmacy personnel	6(4,55)	0(0,00)	6(6,67)	z=2,3; n.s.
Representative of a company	4(3,03)	0(0,00)	4(4,44)	z=1,9; n.s.
Other health professionals	1(0,76)	1(2,38)	0(0,00)	z=-1,1; n.s.
Other person	1(0,76)	1(2,38)	0(0,00)	z=-1,1; n.s.

n.s - not statistically significant.

**Table 3. Prevalence (%) of mothers (from two group) who reported that in the past 6 months they had heard or seen promotion related to any milk products or feeding bottles and teats for children less than 36 months old or companies that sell these products at the health facility, by type of product. (N=380)**

Variables	All n=380 n(%)	Facility Group n=180 n(%)	Home Group n=200 n(%)	Adjusted Z-score; P
Have you heard or seen any (type of promotion/message) at this/your health facility about any milk products or feeding bottles and teats for children less than 3 years old or companies that sell these products?				
Flyer/Brochure	107(28,16)	40(22,22)	67(33,50)	z=2,4; n.s.
Poster	67(17,63)	<b>10(5,56)</b>	<b>57(28,50)</b>	<b>z=5,9; p&lt;.001</b>
Logo on any objects	4(1,05)	2(1,11)	2(1,00)	z=.01; n.s.
Video	1(0,26)	1(0,56)	0(0,00)	z=-1,1; n.s.
Any other promotional materials/messages	2(0,53)	1(0,56)	1(0,50)	z=-.1; n.s.
No	242(63,68)	<b>133(73,89)</b>	<b>109(54,50)</b>	<b>z=-3,9; p&lt;.001</b>

**Table 4. Prevalence (%) of mothers (from two group) who reported that they had received at least one sample of any milk products for children less than 36 months old, by type of product. (N=380)**

Variables	All n=380 n(%)	Facility Group n=180 n(%)	Home Group n=200 n(%)	Adjusted Z-score; p
In the past six months, have you ever received any free samples of any baby milk products or bottles for children under three years old?				
Infant formula (0+ months)	45(11.84)	20(11.11)	25(12.50)	z=.4; n.s.
Follow-up/on formula (6+ months)	32(8.42)	<b>8(4.44)</b>	<b>24(12.00)</b>	<b>z=2.6; p&lt;.01</b>
Growing-up milk (12+ months)	4(1.05)	2(1.11)	2(1.00)	z=.1; n.s.
Feeding bottles and teats	12(3.16)	6(3.33)	6(3.00)	z=.2; n.s.
A combination of product categories	1(0.26)	0(0.00)	1(0.50)	z=.9; n.s.
Baby milk (age range not specified/unknown)	1(0.26)	1(0.56)	0(0.00)	z=-1.1; n.s.
Any other gift	4(1.05)	1(0.56)	3(1.50)	z=.9; n.s.
No	298(78.42)	<b>153(85.00)</b>	<b>145(72.50)</b>	<b>-3.0; p&lt;.01</b>

**Table 5. Prevalence (%) of mothers from two group who reported that in the past 6 months they had received at least one sample of any milk products for children less than 36 months old, by person who gave the sample. (N=82)**

Variables	All n=82 n (%)	Facility Group n=27 n (%)	Home Group n=55 n (%)	Adjusted Z-score; p
Who gave the sample?				
Paediatrician	30(36.59)	<b>1(3.70)</b>	<b>29(52.73)</b>	<b>z=5.0; p&lt;.001</b>
Midwife	16(19.51)	4(14.81)	12(21.82)	z=1.8; n.s.
Nurse	14(17.07)	4(14.81)	10(18.18)	z=1.4; n.s.
Representative of a company	12(14.63)	7(25.93)	5(9.09)	z=.8; n.s.
Shop/pharmacy personnel	7(8.54)	2(7.41)	5(9.09)	z=1.0; n.s.
Family/general doctor	4(4.88)	3(11.11)	1(1.82)	z=-1.1; n.s.
Gynaecologist	2(2.44)	1(3.70)	1(1.82)	z=.1; n.s.
Partner/relative/friend	2(2.44)	1(3.70)	1(1.82)	z=.1; n.s.
Other person	2(2.44)	2(7.41)	0(0.00)	z=-1.5; n.s.
Other health professionals	1(1.22)	0(0.00)	1(1.82)	z=.9; n.s.

In both group most mothers (n=242, 64%) have not heard or seen any promotions of BMS, bottles or teats for children under 36 months. On the other hand, 17.63% (n=67) has seen a poster and 28.16% (n=107) a leaflet.

Women have received free samples of BMS or bottles for children under the age of three within 6 months preceding the survey (Table 4). More often these situations were reported in the Home Group (Table 4). Medical personnel (81.70%) dominated among those who provided free samples (Table 5).

## 4. Discussion

The discussion surrounding bioethics of marketing BMS is a common topic of evidence-based literature. [26,27] Although WHO has attempted to put the problem in a legal perspective in many countries, among them in Poland, the problem has not been sufficiently dealt with.

Medical professionals, both physicians and midwives, frequently advise mothers on child nutrition and recommend feeding with BMS [28,29,30]. Cessation of breastfeeding is affected by medical staff opinions concerning child nutrition and feeding BMS before the age of 6 months [31]. The chance of successful lactation decreases while susceptibility to use recommended BMS increases, especially if women show low self-efficacy, are experiencing lactation problems and are not receiving support [32,33,34].

This research shows that 35% of women were advised to give BMS to children before the age of 6 months. Among the interviewed mothers, 59% pointed to physicians and 48% to a midwife or nurse as responsible for recommending BMS, bottles or teats. More satisfying results were obtained in a study conducted in Indonesia (n=492) where 20% of women received recommendation from medical professionals to use BMS. Similarly, in Cambodia (n=294), where only 18% of mothers surveyed in clinics received those recommendations [29,30]. In Turkey (n=282) significantly more mothers of children up to 2 years of age (86%), reported that they have been informed of BMS. This information was mostly given by midwives (approximately 53%) and physicians (approximately 20%) [35]. In the cited study participation of physicians in recommending human milk substitutes was significantly lower than observed by us.

The results of our survey are worrying, in the light of reports showing the impact of recommending human milk substitutes on mothers' decisions, regarding breastfeeding. In a study conducted in Egypt, recommendations by pediatricians were a direct cause of feeding children with BMS (37%). Interestingly, midwives/nurses were not named by the participants as those recommending products included in the Code [36]. Another study shows that mothers, who were recommended BMS by physicians, were 3 times more likely to use it and 6 times more likely to cease breastfeeding before the child's first year [37].

In the recent years there has been an unprecedented increase in global sales of BMS. The greatest increases

were noted in low - and middle- income countries, but also high-income. Researchers feel worried that these changes are not sufficiently noticed by international institution that monitor this phenomenon. As a result there are not enough interventions introduced to prevent the dynamic increase in sales of BMS [38]. According to Piwoz et al. the problem of BMS marketing is primarily a problem of low- and middle- income countries [12]. Poland is a country of very dynamic development and is currently considered a high-income country. Global sales of breast-milk substitutes reached US\$40 billion in 2013. Globally growth in sales exceeds 10% annually in many low- and middle-income countries. BMS are marketed directly to consumers through many channels such as mass media, various print advertisements but also by distribution of free supplies, and promotions to and through health workers and facilities, retailers, and policy makers. A growing problem is internet marketing via company web sites and social media. Web tracking of young mothers and families is easily accessible to companies and allows individual targeting based on activity on social media and web searches. Such marketing has an enormous effect on perception of social norms. It presents formula use as being extensive, modern, and perhaps even better than breast milk. An especially negative impact has been found when BMS are provided for free in maternity facilities and are promoted by health workers and media [12].

In this study the high percentage of recommending products included in the Code can result from many factors. Research shows that recommending mothers human milk substitutes can result from the lack of knowledge of medical staff, mothers' attitudes, lack of motivation and time to discuss or give support in a situation of a breastfeeding problem [27]. Numerous studies show lack of knowledge of staff, especially regarding WHO recommendations with respect to the length of breastfeeding, or influence of BMS on the success of lactation [39,40]. Mothers point to contradictory messages provided by medical personnel resulting from a lack of knowledge about current recommendations [28].

In our study majority of mothers did not see promotional materials in maternity facilities and health centers. 36% saw posters, leaflets or logos of products covered by the International Code. The presented rates of exposure to promotional activities were higher than those observed in Cambodia, where only about 19% of subjects had that observations but much lower than in Indonesia, where 72% would have contact with promotional materials in medical facilities [29,30]. Interestingly, in the conducted study, the Home Group and not the Facility Group indicated the presence of promotional materials in health centers. This maybe a form of bias. Medical facilities that agreed to participate in the study could have hidden some of the promotional materials before the interviews started in the medical facilities. Those that did not participate and were not aware of the recruiting taking place before entrance to the facility did not have a chance to change what was available to the eyes and ears of mothers. This difference may also result from the statistically significant differences in the level of education between the two groups. Higher education made the women more aware of the surroundings and promotional activities taking place.

In our study 22% of women declared that they received a sample of BMS. Most received it from a physician, midwife or nurse. Approximately 15% of Indonesian women, and 8.7% women surveyed in Cambodia reported receiving free samples of human milk substitutes from medical staff [29,30]. Poorer results were achieved in the United States in the Infant Feeding Practices Study II (n=1868), where almost 81% of women received sample bags of BMS [41]. In addition, the US study confirmed that handing out milk samples was associated with reduced exclusive breastfeeding at 10 weeks and 6 months. Study by Huang (n=1700), confirmed that mothers who received a sample of formula were more likely to use the formula in the first month of life [4]. Also, mothers receiving samples by post were less likely to exclusive breastfeed in the first 6 month of life [43].

The disconcertingly high percentage of women in the study reporting that medical personnel recommended them to give BMS to children could constitute a risk group of weaning the child without medical indications. Research shows that most mothers fear breastfeeding problems [35]. Feeding the child, decisions regarding use of BMS are a sensitive subject for mothers, resulting in difficult emotions like discouragement, shame and guilt [44,45,46]. If natural feeding is the optimum choice for the baby, artificial feeding is considered a failure. Studies show that 60% of women cease breastfeeding earlier than they wanted to [31,47]. Responsibility and a sense of guilt for this failure are transferred to the mother who feels responsible for feeding the child. Medical personnel, as experts in the field of child nutrition, by recommending a BMS, help remove from the woman a feeling of guilt for choosing a sub-optimal and socially less acceptable way of feeding her baby. Unethical is however categorizing use of BMS by mothers only as their individual choice and ignoring the moral responsibility of medical staff for participation in promotional activities and the lack of a systemic breastfeeding support system [47]. According to Apple, women are discouraged from relaying on opinions and intuitions of other women on how to feed their child. At the same time they are encouraged to relay on opinions of doctors. This creates a "scientific maternity" which expects the women to relay on research data and medical recommendations which are required for healthy development of the child. The role of professionals in influencing maternal choices becomes significant and is a source of moral responsibility [48].

Marketing activities not only affect mothers' decisions in relation to child nutrition but also behaviors and attitudes of medical staff in this regard [3,12,49]. The media created culture of child feeding affects how health professionals and the general public perceive breastfeeding [47].

Another aspect of the problem is that women do not have enough knowledge regarding types of BMS, and therefore they cannot tell the difference between commercials related to primary or follow-up milk. That is why they turn for expertise to medical personnel. In this perspective medical personnel have a great responsibility for providing information and creating attitudes towards BMS [50]. Representatives of the health care systems play an important social role and are perceived as a source of reliable information [51]. Companies use this to involve

health care workers in marketing activities to increase the sense of reliability of the advertised content and present them as authority in an ambiguous promotional message. This may diminish the perception of the importance of breastfeeding by mothers [3,12,49].

Physicians, midwives and nurses are responsible for promoting, the protection and support of breastfeeding as the basis principle of infant nutrition. In addition, they are ethically responsible for avoiding conflicts of interest that may occur in the case of receiving branded samples of products and various gratifications for prescribing BMS. When promoting protection and support of breastfeeding physicians should take in account the latest medical knowledge [52]. Citing Rios "In light of this preliminary evidence and acknowledging that medical actions have a moral dimension in their commitment to improving patients' health, it is posited that over prescribing infant formula constitutes a moral issue" [27]. Recommending human milk substitutes to mothers who can breastfeed has strong ethical connotations, because of the long-term influence on maternal and child health. Studies have shown that in the opinion of physicians, recommending compound human milk substitutes to mothers who can breastfeed is a moral issue [27]. The unethical aspect of this phenomenon is seen in three of the six components of moral intensity. Among them are magnitude of consequences, temporal immediacy and probability of effects. Research from Kuwait shows that patient's expectations and attitudes toward breastfeeding have the greatest influence on prescribing BMS (in Kuwait exclusive breastfeeding is not the norm - only about 20%) [27]. It has been scientifically proven that ethical behavior and judgments are influenced by the expectations of others and what is accepted by others, not the facts and objective consequences of actions taken [53]. Therefore, physicians may accept ethical justification for BMS prescription if the mother is not positive about long term breastfeeding and is expecting a BMS prescription. The belief that a moral decision is conditioned by circumstances and a specific situation, not by objective effects, is a relativistic [27]. Such an attitude can have negative effects, therefore it is important to conduct activities aimed at informing medical personnel about the objective benefits of breastfeeding and the risks arising from the widespread use of BMS, and taking initiatives affecting the attitudes of such personnel, e.g. the implementation of BFHI (Baby-Friendly Hospital Initiative) principles.

## 5. Limitations

The limitation of the study was the inability to modify the original Netcode tool during the project implementation. As a result, it was not possible to ask mothers information on the indications for BMS administration. This study is limited by the recruitment methods. It is difficult to determine whether the differences in the responses of women recruited before attending medical facilities and within medical facilities resulted in the different characteristics of the group or the differences in relation to the place of the interview. In addition, it is difficult to determine which group's answers more reflect the situation in the country. In the context of our discussion this

limitation proves the existence of an important moral, ethical issue. If the differences resulted from removing of promotional activities and instructing medical professionals on how to communicate with patients regarding issues of infant nutrition during the time of the survey than the problem is rooted even deeper than we can observe it.

## 6. Conclusion

The investigation confirmed that women in Poland are exposed to marketing activities of alternative products of human milk, with significant participation of medical professionals. At the same time health centers attended by mothers for routine checkups and vaccination are not free from marketing communications. Promoting and recommending human milk substitutes to mothers who can feed naturally is unethical.

Therefore, measures must be implemented to reduce advertising and educate physicians and midwives in promoting natural feeding regarding the International Code of Marketing of Breast-milk Substitutes. Consideration should be given to whether studies of the impact of marketing on the mother should not be additionally carried out outside of medical facilities.

Breastfeeding should be supported on many levels: national, social and medical. Promotion of the positive effects of natural feeding should be carried out both among parents, medical professionals and in the general public.

## Statement of Competing Interests

Aleksandra Wesołowska is the President of Human Milk Bank Foundation sponsored by Medela Company between May 2018 - October 2019.

## List of Abbreviations

BMS - Breast-milk Substitutes  
 WHA - World Health Assembly  
 WHO - World Health Organization  
 The Code - the International Code of Marketing of Breast-milk Substitutes.

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