



CONTINUING EDUCATION ON BREASTFEEDING PROMOTION FOR HEALTHCARE PROFESSIONALS IN MEDICAL UNIVERSITY- SOFIA

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Abstract

Continuing education of health care professionals is essential for good clinical practice. Because of the accelerated development of medical science and technologies, physicians, nurses and other health professionals must maintain and improve their knowledge and skills throughout their careers. There is a large volume of evidence on health benefits of breastfeeding for mother's and child's health, but global recommendations of WHO and UNICEF in reference to infant and young child nutrition are not implemented and breastfeeding rates in Bulgaria remain low. Traditional practices for our country are early cessation of exclusive breastfeeding, early introduction of water, juices, formula and solid foods. The World Health Organization (WHO) and UNICEF in numerous documents emphasize the need for well-trained health professionals to lead the movement of breastfeeding promotion. The following study explores health care professionals' attitudes towards continuing education on best breastfeeding practices and proposes a training course for continuing education.

Keywords: Breastfeeding promotion, continuing education, health professionals.

INTRODUCTION

Exclusive breastfeeding has great protective role in relation to infant mortality and severe morbidity in developing countries. In developed countries and countries in transition, the importance of breastfeeding in relation to public health is often underestimated (Freeman, van't Hof & Haschke, 2000).

Benefits of breast milk and breastfeeding may be considered in several directions: 1/ infant health outcomes; 2/ maternal health outcomes; 3/ economic and environmental outcomes of breastfeeding.

Health benefits of breastfeeding for the infant are reduced risk of atopic dermatitis, asthma, otitis media, gastroenteritis, diarrhea, severe lower respiratory tract infections, obesity, type 1 diabetes (if never breastfed), type 2 diabetes, childhood leukemia, sudden infant death syndrome (SIDS) and necrotizing enterocolitis (NEC) (Horta & Victora, 2013; Ip et al., 2007). Breastfeeding reduces the risk of high blood pressure and high serum cholesterol in adulthood (Horta & Victora, 2013; Ip et al., 2007).

Table 1: Health benefits of breastfeeding for the infant (Ip et al., 2007)

Condition	% less in breastfed
Acute otitis media (exclusive breastfed 3-6 mos.)	50%
Atopic dermatitis (exclusive breastfed 3 mos.)	42%
Gastro-intestinal infection (infants breastfeeding)	64%
Lower respiratory tract diseases	72%
Asthma (in young children) – no family history, family history	27%, 40%
Obesity	4, 7, 24%
Type I diabetes	19, 27%
Type 2 diabetes	39%
Childhood leukemia	15, 19%
Sudden Infant Death Syndrome	36%
Necrotizing enterocolitis	4-82%

Health outcomes for breastfeeding women include less postpartum bleeding and more rapid uterine involution, increased child spacing, more rapid return to prepregnancy weight (Kac, Benicio, Velasquez-Melendez, Valente & Struchiner, 2004), reduced risk of postpartum depression (Dennis & McQueen, 2009), lower risk of pre-menopausal breast cancer (Ip et al., 2007; Marcus et al., 1999; Stuebe, Willett, Xue & Michels, 2009) and ovarian cancer (Danforth et al., 2007; Rosenblatt & Thomas, 1993), reduced risk of hip fractures after menopause (Schnatz, Barker, Marakovits & O’Sullivan, 2010).

Table 2: Health benefits of breastfeeding for the mother (Ip et al., 2007)

Condition	% less in breastfeeding
Maternal Type II Diabetes (reduction in risk per year of lactation)	4, 12%
Postpartum depression	association
Breast cancer (reduction per year of lactation)	4.3, 28%
Ovarian cancer	21%

Benefits of breastfeeding for the family and community include decreased absence from the workplace due to decreased family illness, lower expenditures for food and health care, reduced use of fuels, pharmaceuticals, plastic and waste related to dairy industry.

In accordance with the evidence of breastfeeding outcomes, The World Health Organization (WHO) and UNICEF jointly developed the *Global Strategy of Infant and Young Child Feeding* (WHO, 2003), in which document they postulated three global recommendations in reference to breastfeeding practices: 1/ early



initiation of breastfeeding (within the first hour after delivery); 2/ exclusive breastfeeding for the first six months of life; 3/ continued breastfeeding for up to two years of age or beyond (WHO, 2001).

In order to make recommendations apply universally, the WHO identifies several priority areas, which include training of medical professionals on breastfeeding. In accordance with the principles of the *Global Strategy of Infant and Young Child Feeding*, health care professionals must have basic knowledge to carry out breastfeeding promotion and support.

Knowledge of healthcare professionals regarding breastfeeding is considered the most important factor that determines supporting attitude (Bernaix L., 2000; Register, Eren, Lowdermilk, Hammond & Tully, 2000). Numerous quantitative studies on the knowledge and attitudes of health professionals have been conducted and they found differences between researched professional groups (Brodrigg, Fallon, Jackson & Hegney, 2009). A survey conducted in Australia found deficient in knowledge of midwives. Their knowledge of immunological role of breast milk, techniques to maintain lactation and the diagnosis and treatment of abscess of the breast during lactation, proved to be unsatisfactory (Cantrill, Creedy & Cooke, 2003).

Barriers to health professionals to support breastfeeding are also subject of research. These include lack of training (Brodrigg, Jackson, Fallon & Hegney, 2007; Smale, Renfrew, Marshall & Spiby, 2006), lack of personal experience in breastfeeding (Brodrigg, Jackson, Fallon & Hegney, 2007), insufficient professional experience and lack of time.

Healthcare professionals, thanks to their professional authority in the society can play a key role in mother's decision-making to breastfeed exclusively or use infant formula. Instead of supporting breastfeeding, health professionals cannot establish best nutritional practices, because of lack of appropriate knowledge and skills. In Bulgaria functions National Association "Support for Breastfeeding," which annually carries out continuing education courses to medical professionals for breastfeeding counselors.

Issues related to infant nutrition are discussed fragmentally in core curriculum of physicians, nurses, midwives and other healthcare professionals in our country. In other countries breastfeeding training for health professionals has been described as "inadequate" and "fragmented" (Smale, Renfrew, Marshall & Spiby, 2006). The importance of such training is great because it is proven to improve knowledge and attitudes towards breastfeeding (Cattaneo & Buzzetti, 2001; Ingram, Rosser & Jackson, 2005).

Training methods involve practices based on *Breastfeeding Management Course*, launched by WHO and UNICEF in 1993 in support of *Baby-friendly Hospital Initiative* (BFHI), multimedia programs (Kronborg, Vaeth, Olsen & Harder, 2008) and self learning. In 2009, WHO and UNICEF revised, updated and expanded the 18-hours *Breastfeeding Management Course* to 20 hours, of which at least 4.5 hours should be dedicated to clinical practice (WHO & UNICEF, 2009). Practical oriented training improves attitudes of health professionals towards breastfeeding (Ekstrom, Widstrom & Nissen, 2005).

According to a study in small rural hospital in Canada, a training session for 1.5 hours, held on nursing staff, resulted in a significant increase of exclusive breastfeeding and the effectiveness of BFHI. The aim of the training was to increase levels of exclusive breastfeeding, create positive attitude among medical personnel and therefore improve cooperation with the BFHI. After seven months the assessment revealed that exclusive breastfeeding increased by 23% (from 31% to 54%) and fewer nurses have offered to mothers supplement of infant formula (45% vs. 87% before training) (Martens, 2000). Another survey was conducted to baccalaureate nursing students at a major university in Hong Kong. It examined the effectiveness of a breastfeeding educational intervention. The studied group of 111 people received 10 hours of didactic instruction and eight week perinatal clinical rotation, while the control group of 162 student did not receive additional training. In the studied group was observed better understanding of the benefits of breastfeeding for mothers and babies. The authors concluded that strategies to promote breastfeeding are often overlooked in curricula on professional level (Dodgson & Tarrant, 2007).

AIM AND METHOD

The aim of this study is to assess training of health professionals on breastfeeding promotion, to examine their demand for additional and continuing education on this issue and to propose a model of a thematic course to improve knowledge and attitude of health professionals towards breastfeeding.

A descriptive survey design was used. The study was conducted in maternal hospitals in Sofia and in Medical University of Sofia between April and October 2013. A self-made questionnaire was developed. Midwives, primary care nurses, pediatric nurses and midwifery and nursing students in clinical practice who interact with women antenatally, during childbirth or in the immediate postnatal period were invited to participate. A total of 165 questionnaires were returned.

FINDINGS AND DISCUSSION

Demographic characteristics of medical professionals who participated in the survey are presented in Table 3.

Table 3: Demographic Characteristics of the Respondents (N= 165)

Characteristic	Nurse (N=105) Percentage	Midwife (N= 60) Percentage
Age (years)		
<25	8,6	5,5
26- 30	5,4	4,2
31-35	9,1	7,9
36-40	14,6	9,7
>41	26,2	8,5
Gender		
Woman	62	36,4
Man	0,6	0
Professional experience		
Practicing healthcare professionals	51,5	26,1
Graduating students	12,1	10,3
Personal breastfeeding experience		
Without any	38,7	61,2
<6 months	30,1	18,5
>6 months	31,2	20,3

Main sources of information on breastfeeding

Personal experience with breastfeeding was associated with a greater confidence of health professionals in their knowledge (DiGirolamo, Grummer-Strawn & Fein, 2003). Many of the respondents cited personal experience as the best source of information on breastfeeding (Fig.1). Only one respondent (intern midwife) use breastfeeding consultant as source of information.

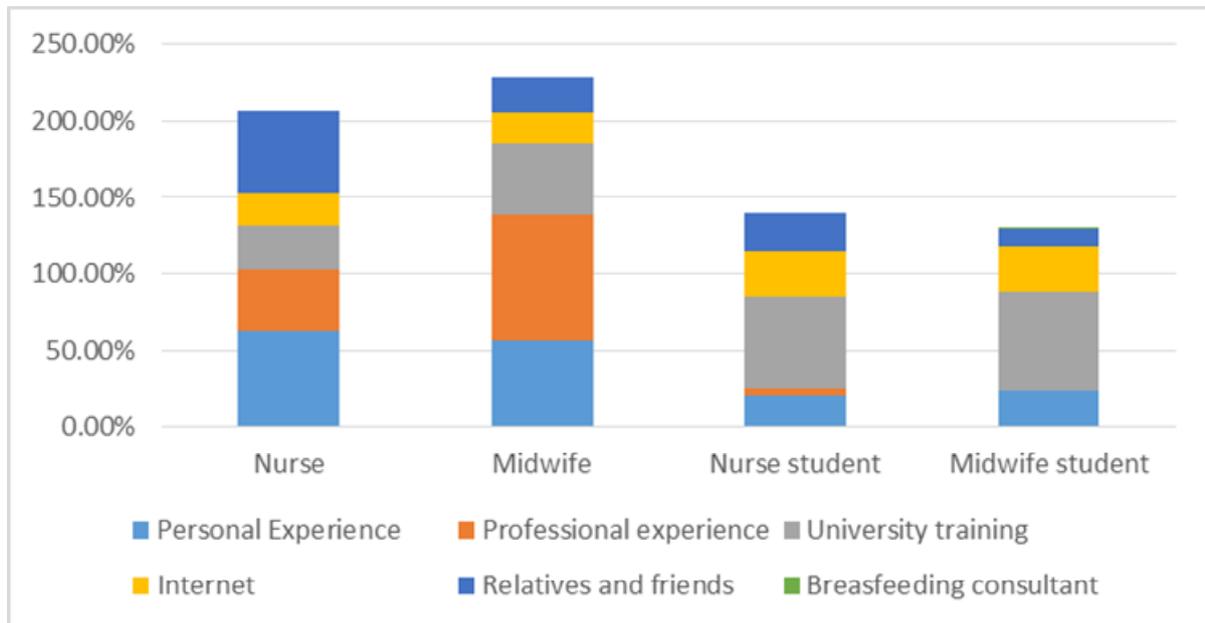


Figure 1: “Which sources of information on breastfeeding do you use?”

79.4% of the respondents indicate agreement with the statement that training on breastfeeding is necessary in the core curriculum, 15.2% remain neutral (Fig.2). Considerable proportion of intern nurses and intern midwives agree strongly and agree with the statement and the dependence is statistically significant ($\chi^2 = 10,949, p= 0,012$).

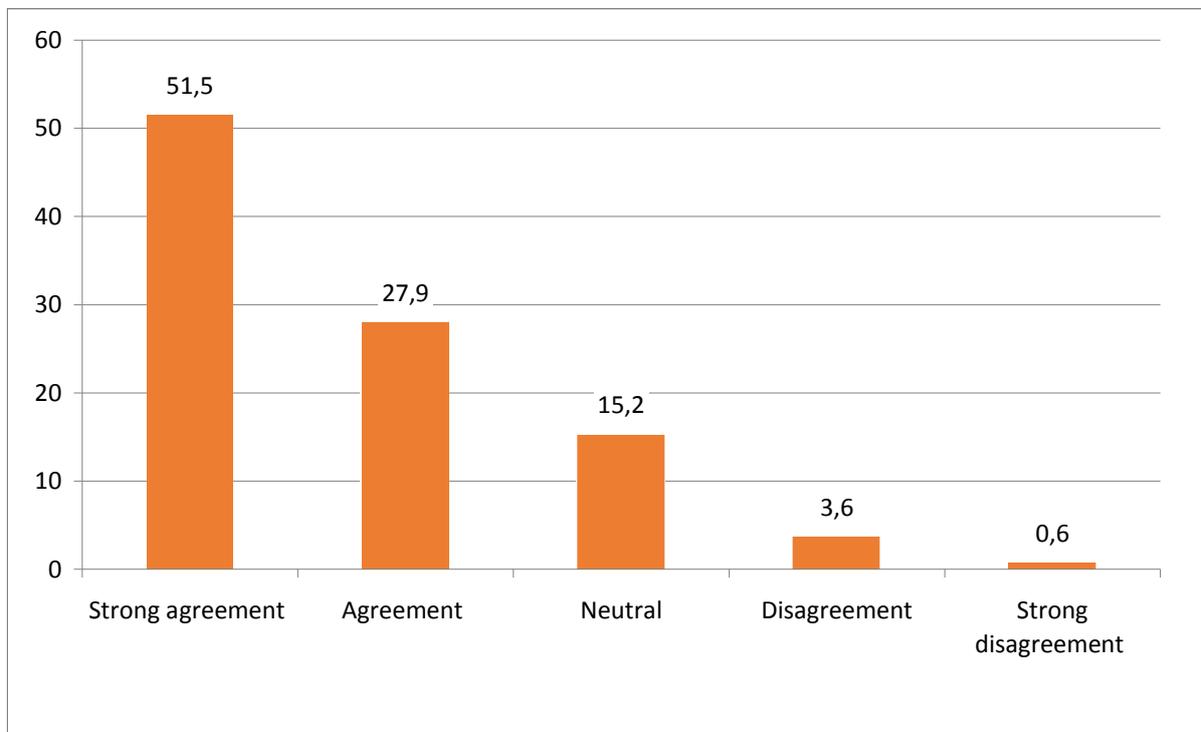


Figure 2: “Do you agree that training on breastfeeding is necessary in the core curriculum?”

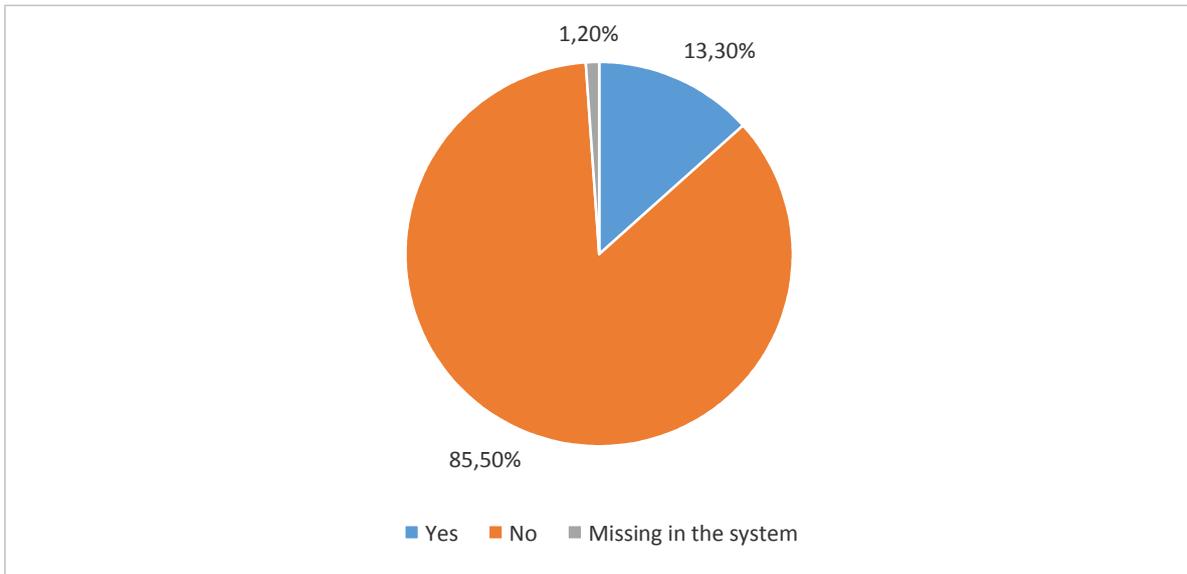


Figure 3: “Have you attended any training on breastfeeding?”

Fast development of all areas of science and practice makes continuing education a fundamental necessity for any health program or service that wants to maintain high professional standards (Velikov & Ivanov, 2012; Zlatanova – Velikova, Velikov & Vodenicharova, 2015). This applies to issues of breastfeeding promotion as well. No matter how routine the process breastfeeding looks, many authors found that it is a learned behavior and women need practical support and guidance to maintain lactation. Only 13,3% of respondents have participated in additional training on breastfeeding mainly in health institutions in which they work (Fig. 3) and 66,1% would like to participate in a course for continuing education (Fig. 4). Highest percentage of respondents midwives are willing to participate in continuing education course on this topic (82,5%). Most of the participants prefer skill based workshop with a mentor (36,4%) versus self- study training with provided materials (24,2%) and internet- based training (14,5%) (Fig. 5).

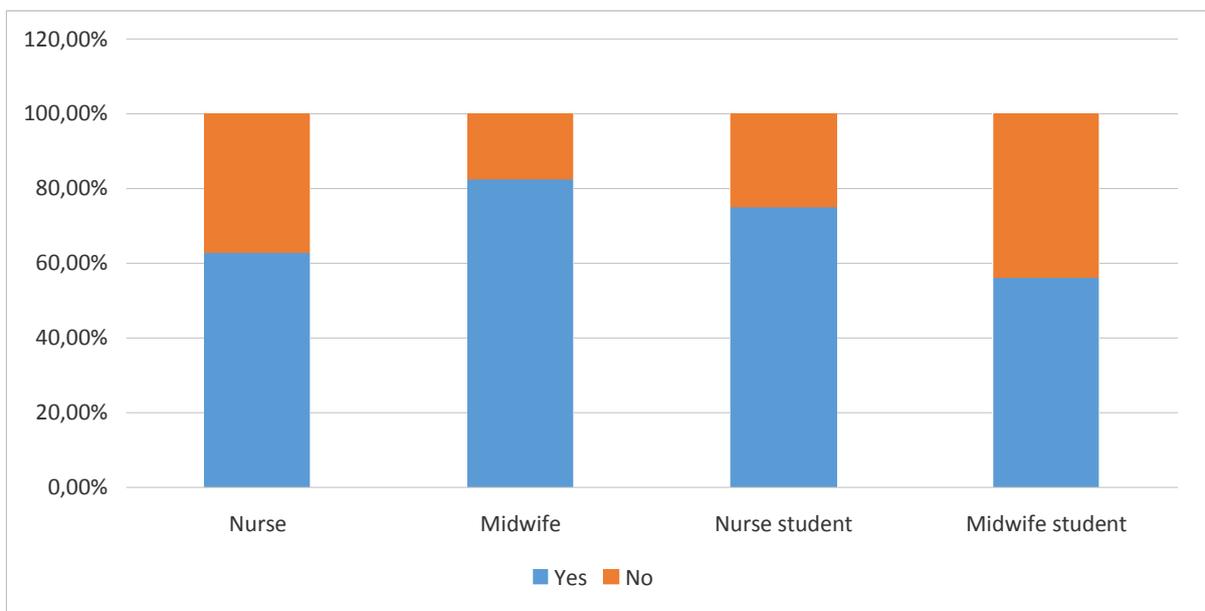


Figure 4: “Would you like to attend training on breastfeeding promotion? “

Preferred forms of additional education are: individual training, internet- based training, skill based workshop. Respondents are invited to express their preference for a form of additional training, but no one indicates other.

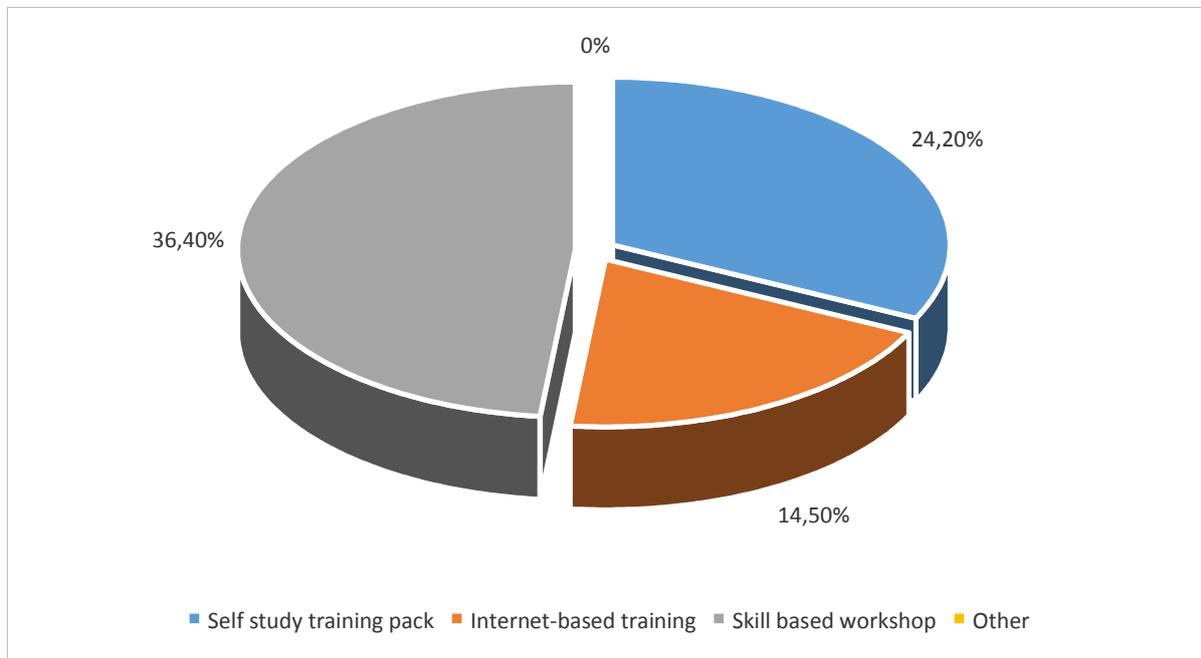


Figure 5: “What kind of training on breastfeeding do you prefer?”

Global recommendations on breastfeeding and the results of our own study of health professionals’ knowledge and attitudes regarding these recommendations, give reason to develop one-day thematic course for continuing education of nurses, midwives and other health professionals in Public Health Faculties in the country.

Training course development and implementation

The thematic course that we developed focuses on actual global recommendations in relation with the protection, promotion and support of breastfeeding, that are aimed to improve public health, particularly maternal and child health. We believe that complementing knowledge on this topic contributes to development of a better attitude and commitment of health professionals in breastfeeding promotion and contributes to professional improvement of medical personnel in accordance with European directives.

1. Target audience
The training is aimed at midwives, nurses and other health professionals who want improve and update their knowledge on global recommendations regarding breastfeeding.
2. Aim of the course and course objectives
The purpose of the thematic course is to improve health professionals’ knowledge and attitudes towards breastfeeding. Professional objectives set out in the course are:
 - 1) Health professionals to be aware of the benefits of breastfeeding for maternal and child’s health;
 - 2) Best practices on breastfeeding to be presented in accordance with national and international recommendations;
 - 3) Scientific evidence on benefits of exclusive and continued breastfeeding to be presented;
 - 4) The role of public support for breastfeeding to be discussed.

3. Time and place organization

Course is held in the form of workshop of 6 academic hours within a business day. Participation in the workshop may take up to 10 students from specialties "Nurse" and "Midwife and other healthcare professionals interested in the topic.

3. Lecture topics



- 1) Composition of breast milk;
- 2) Health benefits of breast milk and breastfeeding for the child and the mother;
- 3) Economic and environmental benefits of breastfeeding;
- 4) Contraindications for breastfeeding;
- 5) Recommendations regarding breastfeeding (global recommendations of WHO and UNICEF, directives of EU on breastfeeding promotion, National action plan "Food and nutrition" 2011-2016);
- 6) Role of social support groups for breastfeeding.

CONCLUSION

Global recommendations of WHO and UNICEF in reference to infant and young child nutrition are not implemented and breastfeeding rates in Bulgaria remain low. Traditional practices for our country are early cessation of exclusive breastfeeding, early introduction of water, juices, formula and solid foods. Although still neglected as a resource of public health, the role of breastfeeding for the improvement of child's and maternal health is scientifically proven. One of the steps in the document of WHO/UNICEF „Ten Steps to Successful Breastfeeding“ from the BFHI is: *Train all health care staff in skills necessary to implement breastfeeding policy.* It is of great importance both updating core curriculum and the establishment of courses for continuing education to improve the competence of already practicing health professionals.

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