World Health Organization
REGIONAL OFFICE FOR Europe

The best start in life

Breastfeeding for the prevention of noncommunicable diseases and the achievement of the Sustainable Development Goals in the WHO European Region

Moscow
Russian Federation

ABSTRACT

Healthy maternal nutrition, exclusive breastfeeding, and optimal infant and young child nutrition are critical for appropriate growth and development, as well as reducing the risk of developing noncommunicable diseases (NCDs), for both mothers and children. On 7–8 November 2018 the WHO Regional Office for Europe convened an international conference of key stakeholders to discuss good practices and share experiences on these important issues.

The WHO European Region lags behind on breastfeeding, and despite widespread understanding of what works, there is a persistent gap between knowledge and practice. There are, however, grounds for considerable optimism because some countries in the Region have among the highest breastfeeding rates worldwide, while others have recently achieved impressive increases in breastfeeding by taking policy action.

The European Region needs to reaffirm its commitment to promote, protect, support and strengthen healthy maternal nutrition, breastfeeding, and appropriate feeding of infants and young children. A series of priority actions were outlined.

Address requests about publications of the WHO Regional Office for Europe to:

Publications
WHO Regional Office for Europe
UN City, Marmorvej 51
DK-2100 Copenhagen Ø, Denmark

Alternatively, complete an online request form for documentation, health information, or for permission to quote or translate, on the Regional Office website (http://www.euro.who.int/pubrequest).

KEYWORDS

BREASTFEEDING

MATERNAL NUTRITION

INFANT AND YOUNG CHILD NUTRITION

NONCOMMUNICABLE DISEASES

BEST PRACTICES

SUCCESS STORIES

Contents

Abbreviations

ABM	Academy of Breastfeeding Medicine
BBF	Becoming Breastfeeding Friendly
BFHI	Baby-Friendly Hospital Initiative
BMI	body mass index
(the) Code	International Code of Marketing of Breast-milk Substitutes
EU	European Union
FBDGs	food-based dietary guidelines
ILO	International Labour Organization
IYCF	infant and young child feeding
NCDs	noncommunicable diseases
NICU	neonatal intensive care unit
SDGs	Sustainable Development Goals
UNICEF	United Nations Children's Fund
WBTi	World Breastfeeding Trends Initiative
WHO	World Health Organization

Executive summary

Healthy maternal nutrition, exclusive breastfeeding, and optimal infant and young child nutrition are critical, across the life course, to ensuring appropriate growth and development, as well as reducing the risk of developing noncommunicable diseases (NCDs), for both mothers and children. NCDs are the leading cause of death and disability in the World Health Organization (WHO) European Region, while some parts of the Region also face persistent challenges of inadequate nutrition. Policies to support, promote and protect breastfeeding and appropriate infant and young child feeding (IYCF) are key to tackling this double burden of malnutrition and can play a critical role in achievement of the Sustainable Development Goals (SDGs).

In May 2018 the Seventy-first World Health Assembly adopted a resolution urging Member States to increase investment to protect and promote breastfeeding; to reinvigorate the Baby-Friendly Hospital Initiative (BFHI) (for which guidance has recently been updated); to strengthen measures to give effect to the International Code of Marketing of Breast-milk Substitutes ("the Code"); to promote timely and adequate complementary feeding; to end inappropriate promotion of foods for infants and young children; and more.

On 7–8 November 2018 the WHO Regional Office for Europe convened an international conference of key stakeholders working in areas related to maternal nutrition, breastfeeding, and appropriate feeding of infants and young children. Over 150 participants came together in the First Moscow State Medical University named after I.M. Sechenov to discuss good practices and share experiences on these important issues. Participants at the meeting, which was organized in cooperation with the United Nations Children's Fund (UNICEF) and with the support of the Russian Ministry of Health, included representatives of 19 Member States and 30 regions of the Russian Federation, as well as national and international experts involved in science, policy and implementation relating to maternal, infant and young child nutrition. The high level of participation was indicative of the strong commitment to improving early nutrition across the European Region.

In a bid to reach out to the wider public, the conference also held a press event with the participation of a wide variety of supporters of breastfeeding, including WHO experts, activists and famous mothers.

The meeting heard that the European Region is lagging behind on breastfeeding and optimal maternal, infant and young child nutrition. The Region has relatively high results for early initiation of breastfeeding and a few countries have very high exclusive breastfeeding rates. However, the Region overall has the lowest rates, globally, of exclusive breastfeeding at six months, and there is huge variation between Member States. In addition, there is evidence of inappropriate complementary feeding practices, and families are confronted with a diverse range of commercial complementary foods which do not reflect IYCF guidelines. The European Region has the highest levels, worldwide, of childhood obesity, and the rates are rising faster in the Region than anywhere else. Furthermore, in many countries women's diets before and during pregnancy do not meet healthy diet guidelines, and overweight and obesity are highly prevalent among women of reproductive age.

Despite widespread understanding of what works to increase breastfeeding and improve maternal, infant and young child nutrition, there is a persistent gap between knowledge and practice. There remains considerable scope for improvement across the Region in relation to implementation of policies, legislation and other relevant tools. All countries in the Region have implemented the Code to some degree, but most national laws include only a few of the Code's provisions and are poorly enforced. Implementation of BFHI needs to be reinvigorated, upgraded and integrated into quality control/licensing systems to ensure that all babies are born in baby-friendly facilities. In relation to maternity protection,

many countries meet the requirement for length of paid maternity leave, but in some cases the associated costs are not covered by public funding, so this is another area that needs to be strengthened.

There are, however, clear grounds for considerable optimism about the future of maternal, infant and young child nutrition in the European Region. Some of the Region's Member States have among the highest breastfeeding rates worldwide, while others have recently successfully achieved impressive increases in breastfeeding by taking policy action.

The exchange of experience between the representatives of countries and the regions of the Russian Federation highlighted that most authorities face very similar barriers and challenges. Across countries, the health sector faces challenges in engaging the other sectors whose involvement is critical. Other common challenges include counteracting the influence and scare tactics of some private-sector actors, dealing with cross-border trade, and collecting data to monitor and report progress. In addition, it is a challenge to generate and sustain the political will to take action among high-level decision-makers and officials.

Drawing on the participants' collective experience, the meeting heard of many examples of good practice. These included, for example, introduction of new national or subnational laws to give effect to the Code and integration of Code monitoring into health care inspections, rapid implementation of the new BFHI guidance, and even expansion of the Ten Steps to Successful Breastfeeding to reflect the country context. Several countries reported training of health professionals, including those working in primary health care, and another case highlighted integration of breastfeeding counselling into care standards. There was also implementation of peer support programmes, with training of peer support workers. New guidelines had been issued (for instance, on infant nutrition, nutrition for pregnant and breastfeeding women, and NCD screening for pregnant women); and scientific studies had been used to overcome pockets of resistance to exclusive breastfeeding (for instance, in very hot climates where there are common concerns about babies becoming dehydrated). Innovative approaches – such as organizing breastfeeding flash mobs to raise awareness – were also reported, and the important role of passionate advocates for breastfeeding was emphasized.

Member State and regional representatives were clear that there is a need for substantial technical support to implement effective measures to increase breastfeeding and improve maternal, infant and young child nutrition. The specific needs identified included, for example, more guidance from WHO on issues such as complementary feeding, clinical aspects related to feeding of sick babies, and issues around breast-milk banks. Particular support to tackle inappropriate promotion of commercial complementary foods was requested, especially for smaller countries. More generally, ongoing support needs for capacity-building, training, help for operationalization of existing tools, and resource mobilization were identified. There was clearly widespread interest in learning from further exchanges of good practice and encouraging examples of progress in this important field.

It was noted that, in the case of breastfeeding, country action has not always matched the rhetoric. It is clear that breastfeeding needs to be seen as a choice of governments, requiring action at many levels and supportive systems; it should not be seen solely as an issue relating to mothers' choices.

There was broad agreement that the WHO European Region needs to reaffirm its commitment to promote, protect, support and strengthen healthy maternal nutrition, breastfeeding and appropriate feeding of infants and young children, through the following actions:

I. **Invest in nutrition** at the earliest possible stage, before and during pregnancy, including protecting, promoting, supporting and addressing barriers to adequate breastfeeding, while also providing support for appropriate complementary feeding.

II. **Increase measures that support appropriate breastfeeding** and complementary feeding practices; these include policies and standards addressed by multiple sectors, such as maternity leave and return-to-work legislation that protects exclusive breastfeeding for the first six months, such as paid maternity leave and workplace breastfeeding policies.

III. **Strengthen the capacity of health providers and services:**

- to support expectant and new mothers in maintaining a healthy diet and body weight;
- to provide consistent advice, effective individualized counselling and support for optimal child feeding from early initiation, to exclusive breastfeeding, and on to first foods.

IV. **Promote a healthy diet and nutrition** before conception, during and after pregnancy, and for infants and young children.

V. **Reinvigorate the Baby-Friendly Hospital Initiative,** including through establishment of new standards of care and practice, appropriate training, and routine monitoring and evaluation of its use and implementation.

VI. **Adjust national legislation to fully support implementation of the International Code of Marketing of Breast-milk Substitutes** through stronger legal measures that are enforced; and ensure comprehensive monitoring through organizations that are free from conflicts of interest.

VII. **End inappropriate promotion of foods** for infants and young children, and prevent children's exposure to marketing of foods and non-alcoholic beverages.

VIII. **Increase and improve monitoring and surveillance activities** for breastfeeding and complementary feeding practices, to strengthen the evidence base and inform appropriate and timely policies. There is a need to identify and use an internationally harmonized approach to assessing breastfeeding rates.

Welcome and official opening

Dr Igor Kagramanyan, First Deputy Chairman of the Committee on Social Policy, Federation Council of the Federal Assembly of the Russian Federation, welcomed participants to Moscow and highlighted the importance of the issues under discussion. The conference is very timely for the Russian Federation because there are a number of important national projects underway, including a Presidential Order, that relate to promoting health and preventing disease, including noncommunicable diseases (NCDs). Dr Kagramanyan wished participants a successful conference on behalf of the Committee on Social Policy.

Dr Elena Baibarina, of the Ministry of Health of the Russian Federation, welcomed participants on behalf of the Minister of Health. Breastfeeding is so important for children, whether they are sick or healthy. In the Russian Federation, breastfeeding plays an important part in achieving the goal of implementing the Presidential Order to reduce cardiovascular disease and increase life expectancy. The output of the conference should result in long-term benefits for children and adults. Dr Baibarina thanked the World Health Organization (WHO) for organizing the conference and wished participants success.

Dr Melita Vujnovic, WHO Representative to the Russian Federation, added her welcome on behalf of WHO. It is clear that NCDs are an enormous challenge and tackling them, together with infectious diseases, is key to achieving the Sustainable Development Goals (SDGs). Sustained breastfeeding should be seen not only as a choice of mothers, but also as a choice of governments. Dr Vujnovic wished participants a fruitful discussion on many aspects of this problem.

Amirhossein Yarparvar, of the United Nations Children's Fund (UNICEF), thanked and congratulated the Government of the Russian Federation for hosting this important meeting. Every parent wants the best for their children, but unfortunately there are challenges that can make it difficult to achieve this. It is disappointing that the WHO European Region, including central Asia, lags behind on exclusive breastfeeding, while at the same time witnessing the fastest increases in childhood obesity over the last two decades. It is important, therefore, for the conference to identify solutions to these challenges and accelerate progress. Breastfeeding is proven to be the most cost-effective and economical intervention for health. We know that the enabling factors include robust legislation with strong enforcement, baby-friendly health services, and interventions to support behaviour change. It is also clear that breastfeeding is not only the business of the health sector – other sectors, including social protection, education and food systems, need to be involved in a multisectoral approach. Mr Yarparvar emphasized that, more than ever, breastfeeding is a priority issue for UNICEF and thanked all participants for their engagement.

Professor Marina Sekacheva welcomed participants on behalf of the First Moscow State University named after I.M. Sechenov and on behalf of the Rector. The university is well placed to host the conference because it has a history of collaboration with WHO, a centre for control of NCDs, and the capacity to disseminate these practices to all its students. Professor Sekacheva thanked WHO, UNICEF and the Ministry of Health of the Russian Federation for organizing the conference and wished all participants a successful and productive time.

Dr João Breda, of the WHO European Office for Prevention and Control of Noncommunicable Diseases, WHO Regional Office for Europe, welcomed participants to this first international conference addressing breastfeeding and NCDs. The high level of participation – over 150 participants, with 19 Member States and 30 regions of the Russian Federation represented – reflects the importance of

working together to improve healthy maternal nutrition, exclusive breastfeeding, and optimal infant and young child nutrition. It is important to acknowledge that, although there are some outstanding examples of success in the WHO European Region, the Region as a whole lags behind on breastfeeding and infant and young child nutrition.

The conference is timely because NCDs present a major challenge in Europe – they are responsible for over 70% of death and disability in the Region – and it is increasingly clear that taking action to improve early nutrition (before or during pregnancy and during infancy) can play an important role in addressing this disease burden. Breastfeeding is a vital element, and as the knowledge base about the links between breastfeeding and NCDs expands, it is essential that the Region becomes more effective in promoting, supporting and protecting breastfeeding.

A number of topics are proposed for exploration during the conference:

- the links between early nutrition and later NCDs;
- sharing of good practice and learning lessons from one another's experience;
- the role of the health sector;
- showcasing of innovative actions (30 poster presentations);
- agreement on conclusions in a short statement of conference conclusions.

Setting the scene

Improving nutrition from the start to achieve the SDGs

Dr João Breda set the scene, explaining the challenges facing the WHO European Region and the task of strengthening the evidence base on the links between early nutrition and later NCDs.

It is clear that nutrition is vital for success in achieving the SDGs – it is linked to success in the majority of the SDGs, not only those that explicitly relate to nutrition or NCDs. A good early start in life is an absolutely key component. It is for this reason that a life-course approach – ensuring good nutrition pre-conception, during pregnancy, in early childhood and later in life – is of central importance to policy and programming and that these issues are very high on WHO's agenda.

Maternal nutrition is an important issue; poor maternal nutrition status can induce short-term and lasting changes in the size, body composition and metabolic responsiveness of the offspring.[1] Maternal overweight and obesity, excessive gestational weight gain, gestational diabetes and multiple micronutrient deficiencies trigger detrimental effects *in utero*. Dietary diversity during pregnancy is linked to a lower risk of maternal anaemia, preterm delivery and low birth weight. This is an area where Member States request support in order to update existing policies, provide guidance to health professionals and reach vulnerable groups.

WHO recommends exclusive breastfeeding for the first six months of life for optimal growth, health and development. It is known that interventions to improve breastfeeding practices are cost-effective and that boosting rates of exclusive breastfeeding for infants under 6 months cuts treatment costs. Breastfeeding also contributes to the health and well-being of mothers.

Two previous WHO systematic reviews, in 2007 and 2013,[2,3] examined the long-term effects of breastfeeding. These identified effects on blood pressure, serum cholesterol, overweight and obesity, and type 2 diabetes. An updated search was conducted in September–October 2018 using the same criteria and methodology to find publications from September 2011 to October 2018. According to these latest papers, there seems to be an association between breastfeeding and lower systolic blood pressure, and 33 out of 36 studies suggest a protective effect on serum cholesterol. All major studies (120) suggest a protective effect of breastfeeding for overweight and obesity, while 11 out of 12 studies suggest the same for type 2 diabetes (particularly in adolescents). Furthermore, 23 out of 24 studies found a positive association between breastfeeding and higher intellectual performance. In short, the evidence strongly suggests that breastfeeding can play a critical role in addressing the challenge of NCDs in the WHO European Region.

Overview of the situation in Europe related to healthy pregnancy, breastfeeding and complementary feeding

Dr Ivo Rakovac, WHO Regional Office for Europe, and Amirhossein Yarparvar, UNICEF, presented an overview of the current situation in the WHO European Region.

Child and maternal malnutrition is a major contributor to the burden of disease in children under 5 years, accounting for 47% of the burden in central Europe, eastern Europe and central Asia and for 29% in western Europe. In addition, some countries in Europe and central Asia face the double burden of malnutrition with a high prevalence of stunting (although prevalence is declining in the Region) at the same time as childhood overweight and obesity. Europe has the highest prevalence of childhood

overweight, globally, and prevalence in eastern Europe and central Asia grew faster than anywhere else in the world between 2000 and 2017.

In relation to infant and young child feeding (IYCF) practices, globally 42% of mothers start breastfeeding within one hour of birth and 41% breastfeed exclusively for the first six months. In eastern Europe and central Asia early initiation rates are higher (56%) than the global average (although still only just over half), but the percentage breastfeeding exclusively for six months (32%) is the lowest in the world. This average hides some huge variations between countries – from 59% in Turkmenistan to 2% in Bulgaria according to preliminary data.

In eastern Europe and central Asia, 63% of babies are still being breastfed at 12–15 months. This is compared to the global average of 71%. At 2 years, the rate is 29% in the European Region, compared to 45% globally.

In relation to enabling factors for breastfeeding, 50% of countries in the Region have some type of national breastfeeding committee. However, the majority of these committees are known to be non-functional and need to be revitalized. There is widespread implementation of the Baby-Friendly Hospital Initiative (BFHI), but this also needs to be upgraded and strengthened. Implementation of the International Code of Marketing of Breast-milk Substitutes ("the Code") is poor in the Region – most countries have only brought a few of the Code's provisions into law and these laws are not well enforced.

The highest exclusive breastfeeding rates are found only in countries with supportive legislation, suggesting that having a national law is important for achievement of higher rates. Existence of national laws, however, does not guarantee good results, and effective enforcement is vital. The picture is the same for continued breastfeeding, where all the countries with the highest rates have national laws in place but some countries with national laws also have low rates of continued breastfeeding. There are some encouraging examples in the Region, with trend data showing increasing breastfeeding rates. There are also, however, countries in the Region where breastfeeding rates have continued to fall over the last 10 years.

There is also room for improvement in provision of specific dietary recommendations and nutrition counselling to women of reproductive age and pregnant women. Less than half of countries (43%) said that they provide specific dietary recommendations and some degree of additional nutrition counselling for at-risk groups. A total of 20 countries (38%) have specific recommendations for pregnant women who need a special diet (for example, women suffering from gestational diabetes or vegetarians) and 24 countries (45%) said they provide nutrition counselling. Just over a third of countries (36%) have recommendations for overweight and obese pregnant women, and 40% provide counselling. In 12 countries (23%) there are recommendations for pregnant women who are underweight, and there is counselling provision for these women in 18 countries (34%). Under a third (30%) of countries have recommendations for all women of reproductive age and 25% provide counselling. Six countries (11%) reported neither having recommendations nor providing specific services for at-risk groups.

In conclusion, the WHO European Region, including central Asia, is the poorest globally in terms of exclusive breastfeeding, although it is the second best in terms of early initiation of breastfeeding. This situation deserves urgent and strategic programming. Many countries do not have up-to-date figures on breastfeeding indicators; few countries have strong national legislation, and even when laws are present, enforcement is poor. Evidence shows that laws are essential to facilitate better

breastfeeding trends, but the existence of laws alone is not enough to guarantee improvements. There is also an important role of behaviour change communication.

Snapshot of healthy pregnancy and breastfeeding trends in the Russian Federation

Dr Elena Baibarina, Ministry of Health of the Russian Federation, presented an overview of the situation in the Russian Federation.

The birth rate has been dropping in the Russian Federation since 2013, so a national project is due to be launched in 2019 to try and tackle this issue. Infant mortality and maternal mortality are both declining in the country.

In 2012 a new document to regulate obstetrics was introduced by the Ministry of Health, which sets out recommendations for a healthy pregnancy, including folic acid and iodine supplementation.[4] It also sets out recommendations for maternity units that include joint mother and child wards, early breastfeeding and prioritization of breastfeeding.

There are also recommendations on nutrition for pregnant women and nursing mothers. The norms for nutrient and energy needs for different groups were set out in 1991, and recommended levels of consumption of food and biologically active substances were outlined in 2004. In 2008 an Order of the Ministry of Health set out new recommended intakes for women of childbearing age and pregnant women in the second and third trimesters.[5]

In relation to health services, 53 of 89 Russian regions participate in BFHI. In October 2018, 305 obstetric hospitals were awarded the title “Baby-Friendly Hospital”, covering 21% of the births in the country per year. Antenatal clinics (152) and children’s polyclinics (201) also joined the initiative.

Prevalence of breastfeeding among children aged 6–12 months in the Russian Federation is still only around 40%, but the proportion of infants breastfed at 12 months has doubled since 1999. There are variations between the regions, and prevalence rates have increased in several regions that have been actively introducing BFHI. In the Republic of Kalmykia, for example, breastfeeding among babies of 6–12 months increased from 56.7% in 1999 to 83.7% in 2017. Similarly, increases were observed in the Republic of Bashkortostan, Astrakhan region, Volgograd region and Krasnoyarsk region.

The Association of Breastfeeding Consultants (AKEV) was established in 2004 and brings together more than 300 members in various cities of the Russian Federation. Since 2011, 11 members of AKEV have received the international title “Certified Breastfeeding Consultant”, and there are now 12 internationally recognized lactation consultants in the Russian Federation. One interesting new initiative is an “SMS-to-Mum” system which provides useful information to pregnant women and young mothers on how to care for their baby and take care of their health; it is given in the form of several short weekly text messages and is free from advertising.

Nutrition and weight gain during preconception, pregnancy, postpartum and lactation

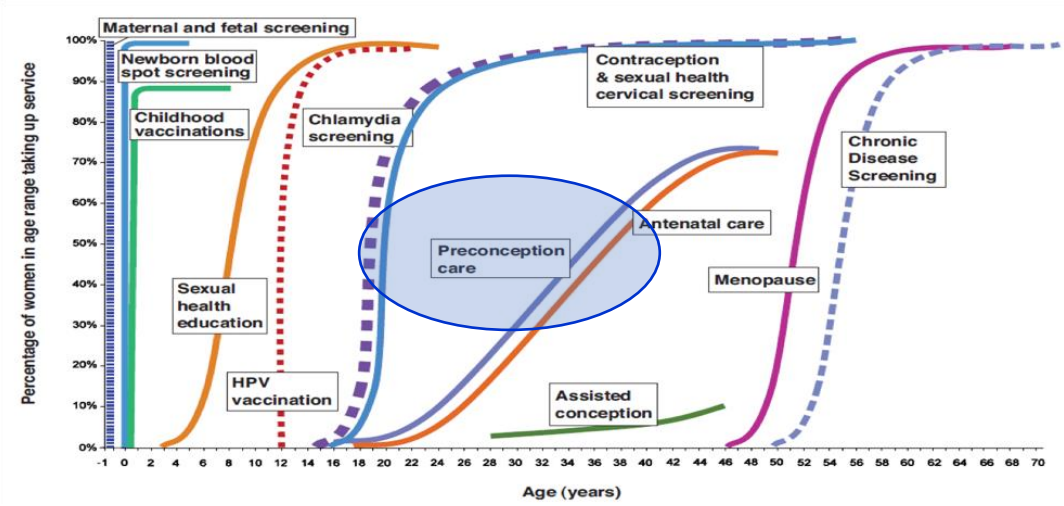
Dr Melita Vujnovic chaired a session on nutrition and weight gain before, during and after pregnancy. It is important to remember that breastfeeding confers health benefits on mothers as well as on their offspring. Maternal obesity is a growing problem, and this poses serious health risks to pregnant women. It is important to identify solutions to enable and support women.

Nutrition during preconception, pregnancy and lactation periods

Dr Nino Berdzuli, WHO Regional Office for Europe, presented an overview of guidance relating to maternal nutrition.

There is growing epidemiological and experimental evidence suggesting that a predisposition to obesity and other diet-related NCDs may be programmed before and during pregnancy and infancy. A life-course approach to population health needs is based on the understanding that a person progresses through life encountering risk factors that affect health outcomes later in life. Fig. 1 shows health interventions throughout the life course and highlights that preconception and antenatal care are very important.

Fig. 1. Life-course view of population health needs



Source: adapted from Stephenson et al. (2011)[6]

Maternal malnutrition (inadequate energy and micronutrient intakes) before and during pregnancy is recognized as a risk factor for poor perinatal outcomes and health conditions later in life. Affected health outcomes can include low birth weight, neural tube defects and other congenital anomalies, micronutrient deficiencies, overweight/obesity, underweight and NCDs. Maternal obesity also increases the risk of a wide range of conditions including gestational diabetes, pre-eclampsia, congenital malformations, preterm birth, macrosomia and stillbirth.

The prevalence of anaemia in women of reproductive age is still a problem throughout the European Region; the main cause is iron deficiency, which is preventable. Around 10 countries in the Region also have a problem with insufficient iodine intakes; this is also preventable. There is tremendous variation between Member States in the percentage of households consuming adequately iodized salt.

All countries in the Region are working towards achieving, by 2025, the global targets to improve maternal, infant and young child nutrition. WHO has a regional framework and clear mandate for taking action on maternal, infant and young child nutrition through policy documents on health policy, obesity, NCDs, food and nutrition, physical activity and the life-course approach. In addition, the regional Action Plan for Sexual and Reproductive Health includes an objective to eliminate avoidable maternal and perinatal mortality and morbidity.[7] The plan refers to "using the preconception, antenatal and breastfeeding periods to ensure a life-course approach to health care delivery"; it also talks of "providing quality preconception information and services, including timely diagnosis of noncommunicable and communicable diseases and information on the effects of tobacco, alcohol and illicit drugs on health outcomes for pregnant women and infants". The report *Good maternal nutrition: the best start in life* from the WHO Regional Office emphasizes the need for clear guidance for women and future parents.[1]

The range of interventions to improve pre-pregnancy health have been set out in the WHO manual *Preconception care to reduce maternal and childhood mortality and morbidity*.[8] Some of these interventions are essential interventions that should be provided to all women regardless of Member States' resource levels, while others are part of an extended package. The other important guidance document is *WHO recommendations on antenatal care for a positive pregnancy experience*.[9] This lists important interventions on nutrition for mothers in relation to dietary advice, physical activity advice, assessment of micronutrient status, appropriate gestational weight gain, and appropriate education of future parents. To improve the health of postpartum women, recommended interventions include dietary advice, physical activity advice, weight optimization advice, support for exclusive breastfeeding for the first six months, and assessment of micronutrient status.

Both guidance and commitments, therefore, are already in place, and it is now time to act. There are plentiful opportunities for further action across the European Region, because there are still many gaps in Member States' policies and recommendations on nutrition, physical activity, and weight gain for pregnant and lactating women. Finally, another important area for action – one that will require a considerable cultural shift in some countries – is to engage men in antenatal care and deliveries across the Region.

Maternal obesity prevalence, risks and interventions

Dr Nicola Heslehurst, Newcastle University, United Kingdom, presented an overview of the data on maternal obesity and outlined the associated risks and interventions.

Although there is a lack of specific data on maternal obesity (which refers to women with a body mass index (BMI) above 30 before pregnancy), the prevalence of obesity among women suggests that maternal obesity is increasing. It is also strongly associated with socioeconomic inequalities.

The risks of maternal obesity (as listed in the previous section) increase as the degree of obesity rises, and maternal obesity is also linked to child obesity. Pregnancy is an opportunity to intervene, and there are a number of public health and clinical reasons to consider provision of weight management interventions in pregnancy. Such interventions include:

- supporting women in achieving healthy diet and physical activity behaviours;
- minimizing excessive gestational weight gain;
- facilitating longer-term public health gain for both mothers and their children;

- preventing pregnancy risks associated with obesity and excessive gestational weight gain.

Many trials have now been published on dietary interventions during pregnancy, and a meta-analysis has found these to be effective in reducing gestational weight gain.[10] So far, however, these data are not showing statistically significant results for many other health outcomes. There is a need to better understand why these interventions are not working or why the research is not showing results.

In addition, there is a need for more focus on the many opportunities to target women of reproductive age during phases of the preconception period; this is an area that needs further research.

Breastfeeding and appropriate feeding of infants and young children

Amirhossein Yarparvar chaired a session on breastfeeding and appropriate IYCF, exploring WHO policies on IYCF, commercial foods for babies and toddlers currently marketed in the WHO European Region, and socioeconomic determinants.

Resolution WHA71.9: what it says and why it matters

Dr Laurence Grummer-Strawn, WHO Department of Nutrition for Health and Development, presented an overview of the latest World Health Assembly resolution on breastfeeding and IYCF.

Resolution WHA 71.9 was drafted by Ecuador, submitted by the Russian Federation, and negotiated and passed by consensus on 26 May 2018; it urges Member States – in accordance with national context and international obligations – to take a number of actions relating to infant feeding.

Increase investment

Resolution WHA 71.9 urges Member States to increase investment in development, implementation, monitoring and evaluation of policies and programmes to protect, promote and support breastfeeding. The investment case for breastfeeding is clear: not breastfeeding is associated with lower intelligence and economic losses amounting to an estimated US$ 302 billion annually. It is estimated that every dollar invested in enabling a mother to breastfeed generates US$ 35 in economic returns. Yet donor funding for breastfeeding remains low – of 125 low-income countries receiving aid, only 31 received more than US$ 2 per birth for breastfeeding support.

Reinvigorate BFHI

In 2017 WHO brought out a new guideline on protecting, promoting and supporting breastfeeding in maternity facilities;[11] and in April 2018 it issued new implementation guidance for BFHI.[12] The language of the Ten Steps to Successful Breastfeeding has been amended to reflect the science as closely as possible, and the steps have been split into critical management procedures and key clinical practices (see box). The guidance also envisages that BFHI, which has been a voluntary process, should now be an obligation on every maternity facility and that BFHI should be integrated into standards of care.

International Code of Marketing of Breast-milk Substitutes

The WHA resolution urges Member States to implement or strengthen measures giving effect to the International Code of Marketing of Breast-milk Substitutes, as well as other WHO evidence-based recommendations.

WHO has issued a number of documents and tools to help Member States implement and enforce the Code, including an online training course, a set of answers to frequently asked questions, a legislative status report, and the NetCode toolkit and protocols to monitor and assess the marketing of breast-milk substitutes.

Ten Steps to Successful Breastfeeding (revised 2018)

Critical management procedures

1a Comply fully with the International Code of Marketing of Breast-milk Substitutes and relevant World Health Assembly resolutions.

1b Have a written infant feeding policy that is routinely communicated to staff and parents.

1c Establish ongoing monitoring and data-management systems.

2 Ensure that staff have sufficient knowledge, competence and skills to support breastfeeding.

Key clinical practices

3 Discuss the importance and management of breastfeeding with pregnant women and their families.

4 Facilitate immediate and uninterrupted skin-to-skin contact and support mothers to initiate breastfeeding as soon as possible after birth.

5 Support mothers to initiate and maintain breastfeeding and manage common difficulties.

6 Do not provide breastfed newborns any food or fluids other than breast milk, unless medically indicated.

7 Enable mothers and their infants to remain together and to practise rooming-in 24 hours a day.

8 Support mothers to recognize and respond to their infants' cues for feeding.

9 Counsel mothers on the use and risks of feeding bottles, teats and pacifiers.

10 Coordinate discharge so that parents and their infants have timely access to ongoing support and care.

Promote timely and adequate complementary feeding

Guiding principles for complementary feeding of the breastfed child remains the WHO's guidance for complementary feeding of infants and young children;[13] the resolution calls on countries to promote complementary feeding in accordance with these principles.

End inappropriate promotion of foods for infants and young children

In 2016, the World Health Assembly approved guidance on ending the inappropriate promotion of foods for infants and young children.[14] In 2017, a step-by-step implementation manual was issued to help countries put this guidance into practice.[15] In 2018, resolution WHA 71.9 urged countries to continue taking all necessary measures in the interests of public health to implement the recommendations.

Improve IYCF during emergencies

The resolution called on Member States to take all necessary measures to ensure evidence-based and appropriate IYCF during emergencies, including through preparedness plans, capacity-building of personnel working in emergency situations, and coordination of intersectoral operations. In 2017, a

revised version of *Infant and young child feeding in emergencies* was published; this provides new operational guidance on disaster preparedness and recovery.[16]

Celebrate World Breastfeeding Week

The resolution urged Member States to celebrate World Breastfeeding Week as a valuable means to promote breastfeeding. This is the first acknowledgement of World Breastfeeding Week in a World Health Assembly resolution. WHO has created infographics for Member States to use and disseminate to promote breastfeeding.[17]

Do we need to find ways to improve commercial baby foods in the WHO European Region?

Dr João Breda shared some preliminary research findings about the quality of commercial baby foods on the market in the WHO European Region.

Complementary feeding should be timely (from 6 months of age onwards), adequate, safe and appropriate. To meet a child's nutritional needs, it is important to consider the amount, frequency, consistency and variety of foods that are provided. Children should be given foods that are of an appropriate texture for their age and a responsive feeding approach should be applied. Responsive feeding means that the parent observes, interprets accurately and responds appropriately to the signs that a baby gives to communicate hunger and satiety. It is important that babies are exposed to different tastes, textures and colours. The diversity of the diet is critical, and this affects dietary diversity in later life. Families today are confronted with a very diverse range of commercial complementary foods, and the information associated with these foods is not always accurate. The challenge for parents today is to make healthy feeding choices in an environment where commercial complementary foods are aggressively promoted.

The *Guidance on ending the inappropriate promotion of foods for infants and young children* is clear.[15] Messages on foods for infants and young child should:

- include a statement on need for breastfeeding until 2 years and no complementary foods before 6 months;
- state recommended age of introduction;
- be easily understood.

Messages on such products, however, should not:

- suggest use before 6 months;
- discourage breastfeeding or imply equivalence to breast milk;
- promote bottle feeding;
- convey endorsements.

In addition, the guidance proposes some restrictions on certain complementary foods. Promotion should only be permitted for foods that meet all the relevant national, regional and global standards for composition, safety, quality and nutrient levels and are in line with national dietary guidelines. It is suggested that Member States develop nutrient profile models to guide decisions and to identify foods that have high levels of salt, sugars, saturated fat and trans fats.

The WHO Regional Office for Europe has developed a methodology for assessing commercial complementary foods on the market in European countries. This has been used in a handful of countries and preliminary results show that many products do not adhere to public health dietary recommendations. Many are marketed as being suitable from 4 months onwards, while WHO clearly recommends that they should not be marketed as suitable for babies under 6 months of age. The products predominantly have sweet flavours, while the flavours of vegetables are often masked with fruit. Fruit purées are popular, and these have high free sugar and total sugar contents. Many foods are puréed to the extent that they can be fed directly from a pouch, through a spout, which minimizes the child's opportunity to learn about new foods by engaging with the way that the foods look and feel. In addition, there are examples of misleading product names and use of emotive and misleading marketing packages and messages.

Marketing of foods and drinks to children is also a key issue. The WHO Regional Office has evaluated implementation in the Region of the *Set of recommendations on the marketing of foods and non-alcoholic beverages to children* and has highlighted the particular challenges of tackling this issue in the digital world.[18] It is also important to consider digital marketing to mothers of commercial foods for infants and young children.

There is a need, therefore, for action by Member States, with the support of the WHO Regional Office for Europe, to implement WHO's guidance in order to:

- protect and promote breastfeeding;
- comply with the Code;
- prevent inappropriate promotion of products high in fats, salt and/or free sugars; and
- ensure labelling and packaging are clear and not misleading.

A nutrient profile model with nutrient thresholds for nutritionally appropriate foods for infants and young children should inform national and regional discussions on legislation and policies relating to these products. Sugar, concentrated fruit juice and other sweetening agents should not be added to foods for infants and young children. In addition, there is a need to improve labelling of foods for infants and young children and guidance for complementary feeding.

Socioeconomic determinants of maternal nutrition, breastfeeding and appropriate feeding of infants and young children

Dr Anne Bærug, Norwegian National Advisory Unit on Breastfeeding, Oslo University Hospital, Norway, presented an overview of socioeconomic determinants of maternal, infant and young child nutrition.

Equity in relation to breastfeeding is particularly important because reduction of socioeconomic inequalities is a top public health priority and most strategies to reduce inequalities stress the importance of action in early life.

Breastfeeding and intergenerational social mobility have been explored. Two United Kingdom cohorts, for example, found that breastfeeding was associated with upward social mobility and with reduced odds of downward social mobility.[19] A cohort with 30-year follow-up in Brazil found that breastfeeding was associated with improved performance in intelligence tests and might have an important real-life effect by increasing educational attainment and income in adulthood.[20]

There is a socioeconomic gradient to breastfeeding practices. In Norway, the proportion of babies that are exclusively breastfed increases with the mother's level of education.[21] There are also socioeconomic inequalities in young child feeding, but these vary according to the country context. In countries with a high human development index, parental education is associated with a healthier diet in children, whereas in countries with a medium human development index no association between parental income or education and child diet was found.[22]

Socioeconomic differences in maternal nutrition have also been identified. Maternal BMI and pre-pregnancy overweight, maternal pre-gestational and gestational diabetes, and poor maternal diet were all inversely associated with socioeconomic position, depending on country income level.[23]

In order to help understand health inequalities, four engines driving disparities have been identified: social stratification (leading to unequal opportunities); differential exposure (to environmental and behavioural causes of ill health); differential vulnerability (to the health effects of these causes); and differential consequences (of ill health).[24, 25]

A Norwegian study exploring the reasons for socioeconomic inequality in exclusive breastfeeding found that socioeconomic inequalities were largely explained by sociodemographic factors (for example, maternal age, parity, job status), but also by modifiable factors such as smoking habits and breastfeeding difficulties.[21] This raises the possibility of reducing socioeconomic inequalities by giving support to women with these various characteristics.

There are many policy areas that may influence breastfeeding rates. Thus, interventions are needed at all levels and at all stages in the causal chain (structural, settings-related and individual determinants of early initiation, exclusive breastfeeding and continued breastfeeding). The role of health services is extremely important and improved BFHI implementation may help to reduce socioeconomic inequalities in breastfeeding. The tools exist; it is a challenge that deserves society's full and focused attention.

Health services and breastfeeding promotion

Dr Nino Berdzuli chaired a session exploring the role of health services in promoting breastfeeding. It is important to recognize the potential barriers to, and opportunities for, promoting breastfeeding within health services. It is time to implement good maternity practices that contribute to facilitating breastfeeding and its promotion and to strengthen the role of primary health care services in supporting continuation of breastfeeding.

Operationalization of the new BFHI guidance and regional progress in country implementation

Amirhossein Yarparvar presented an overview of the status of BFHI implementation in the WHO European Region and examined the challenges and ways forward.

The new BFHI guidance aims to ensure universal coverage of BFHI across health facilities; it states that appropriate care is the responsibility of every facility and specifies that private facilities cannot be exempt. In order to ensure that the system is sustainable, it must be fully integrated into the health system. The recently revised Ten Steps to Successful Breastfeeding have been well received.

The key points in the updated guidance are as follows:

(1) BFHI should be the responsibility of every facility providing maternity and newborn care (private and public, large and small);

(2) there should be national standards of care based on the updated Ten Steps;

(3) BFHI should be integrated with other mother and child health services and combined with health care improvement, health systems strengthening and quality assurance initiatives;

(4) health care providers must have the competencies to implement BFHI (pre-service training; in-service training);

(5) incentives (public recognition and other) should be developed;

(6) regular internal monitoring is crucial;

(7) external assessments should be streamlined (and manageable within existing resources).

In 2017, Europe had the highest rate of BFHI coverage of all WHO regions, but this still means that 64% of births in the Region did not take place in facilities currently designated as baby-friendly. Those Member States in the UNICEF Europe and Central Asia Region that have high rates of early initiation of breastfeeding also have high rates of BFHI implementation. Similarly, Member States with higher rates of exclusive breastfeeding also tend to have higher BFHI implementation.

Work is already in progress within the Region to implement the new BFHI guidance. A 2018 mapping exercise found that work to introduce the new guidance is ongoing in Croatia, the Republic of Moldova, Bosnia and Herzegovina, Serbia, Turkey and Turkmenistan. Countries reported on how they intend to address the challenges previously encountered in BFHI implementation using the new guidance. Six of the nine responding countries have a monitoring system in place. Four of the nine countries report that there are incentives in place to encourage facilities to adhere to BFHI; these include, for example, scenarios in which facilities cannot get accreditation unless they have integrated BFHI standards. Countries reported a number of persistent challenges in relation to introduction and implementation of the new guidance. Seven of the nine countries see challenges; these include:

- difficulties/uncertainty in defining a coordination body and external assessment (accreditation) facility;
- shifting from voluntary to mandatory BFHI;
- ensuring quality of BFHI implementation, given diverse ways of working in different facilities;
- persistent threat of formula marketing, targeting early initiation in maternity units;
- early initiation and exclusive breastfeeding for newborns in neonatal intensive care units (NICUs);
- lack of demand from parents.

Countries identified a number of areas where support is needed. The way forward should include more exchange of experience at the regional level so that good examples can be replicated, as well as regional capacity-building on the new guidance. UNICEF plans to organize a joint BFHI/Code meeting in 2019. Mechanisms are also needed to enhance collection of data from the whole of Europe and central Asia. Finally, strong advocacy for investment in BFHI implementation is essential, and lack of resources needs to be addressed through financing and, possibly, insurance schemes, specifically for recurrent costs.

Enhancing breastfeeding promotion and support in health services: challenges and opportunities

Dr Sonia Semenic, Ingram School of Nursing, McGill University, Canada, outlined some of the barriers to, and facilitators of, health service support for breastfeeding and the challenge of how to implement practice improvements in health services.

Some pointers may be provided by the growing field of implementation science, which is the study of methods to promote the systematic uptake of clinical research findings and other evidence-based practices into routine care.[*] This field aims to address the persistent gap between evidence and practice in health care (the "know–do" gap) – it can take from eight to 30 years for research evidence to be adopted into clinical practice.

There are some key evidence-based practices for direct care providers to promote and support breastfeeding:

- educate families about breastfeeding;
- initiate skin-to-skin contact and breastfeeding at birth;
- teach/assess effective positioning and latch;
- promote exclusive and sustained breastfeeding;
- intervene to enhance milk production (for example, in the case of preterm infants);
- provide technical and emotional support for breastfeeding difficulties;
- refer to breastfeeding resources (lactation consultants, community groups, peer mentors).

There are, however, a wide variety of barriers to implementation of these practices, and these are reflected in low breastfeeding rates. There are barriers related to the nature of the practice (for

[*] The key journal for this field is *Implementation science* (open access).

example, concerns about infant safety); characteristics of care providers (for example, staff not trained, resistance from particular professional groups); and characteristics of the care environment (for example, cramped/cold conditions, lack of nurses to monitor infants).

There are some key steps to bear in mind for sustainable implementation of evidence-based practices:

- identify and prioritize the specific practices to be implemented/improved (engage direct care workers in the plans for change; use evidence-based synthesized resources;[11, 26, 27] adapt practices to local context; prioritize and/or sequence desired change to maximize synergy/impact);
- assess local barriers to, and facilitators of, implementation (systematically assess challenges to, and supports for, practice changes; tailor implementation strategies to the local context);[28]
- develop a feasible and tailored strategic plan for practice change (get buy-in from all relevant stakeholders; address the organizational culture; set realistic timeframes and ensure adequate resources (money, time, people) for both start-up and sustainability; involve role models, champions and mentors);
- establish monitoring and reward systems (establish mechanisms for ongoing monitoring and feedback of practice change; promote accountability for provision of evidence-based breastfeeding practices; create rewards for improved practice and minimize disincentives to practice change).

The COM-B model is important in implementation science; it synthesizes 19 behaviour change frameworks and focuses on three interacting components: capability, opportunity and motivation. The Behaviour Change Wheel website provides useful resources.[29]

In conclusion, it is important to recognize the numerous factors influencing breastfeeding promotion and support in health services; to systematically plan for practice improvements; and to learn from the fields of implementation science and quality improvement.

Q and A panel session on early nutrition

Dr Victoria Madyanova, WHO Collaborating Centre on Training and Education of Health Policy-makers in the Prevention and Control of NCDs, Russian Federation, chaired a discussion on early nutrition. Panel members were João Breda and Laurence Grummer-Strawn from WHO and Amirhossein Yarparvar from UNICEF.

It was pointed out that, when using the term "behaviour change" in this context, it is important to specify that we are talking about behaviour change at various levels – within complex systems, in institutions or organizations within those systems, among professionals and front-line workers in the system, among women and parents. In the past there has often been too much focus on changing women's behaviour and neglect of the other levels where behaviour change is required. In other words, in the case of infant feeding, there has been too great a focus on changing the "demand" side and not enough attention on "supply side" factors (for example, supply and promotion of breast-milk substitutes) and understanding the barriers and systemic issues. The most successful initiatives have achieved the right balance between legislation and incentives to stimulate change at all levels. Awareness of these different levels, and particularly of the complex overall systems, is very important because, without tackling systems, it will not be possible to achieve equity. It is vital, however, not to be paralysed by the degree of complexity. Evidence-based actions that are feasible need to be implemented at different levels, and the right combination of different types of measures and interventions, which are appropriate to the context, needs to be implemented.

There was some discussion of variations in practice relating to micronutrient supplementation for pregnant women. There is WHO guidance on folic acid and iron, and Member State practice is relatively well harmonized. It is key, however, to promote access to healthy diets before and during pregnancy, with an emphasis on increasing intakes of fruit and vegetables and limiting fats, sugars and salt. Healthy diets are the most important part of the solution, and supplementation should only be considered where and when needed, and in line with WHO guidance. There is concern about marketing of particular "milks for mothers" by breast-milk substitute manufacturers, because these products are not needed and may be cross-promoting breast-milk substitutes. Specifically in relation to iodine, universal salt iodization is recommended for all Member States, and this needs to be maintained. Member States were reminded that one of the Ten Steps to Successful Breastfeeding is to have a national policy on IYCF and that it is also useful to establish a national policy on nutrition during pregnancy.

There was concern about the research findings on the quality of commercial complementary foods and discussion of the challenges involved in improving the products on the market across the Region, especially for small Member States with very limited resources. Code-implementing legislation provides a good starting point. There is a role for WHO, UNICEF and Member States to work together to establish standards for nutrition and marketing of these foods and to have greater harmonization of guidelines on complementary feeding. Member States were reminded that follow-on formula is within the scope of the Code.

The important role of passionate advocates for breastfeeding was acknowledged. There was resistance to the term "breast-milk substitutes" because, although this is a recognized term, there is no effective substitute for breast milk. Another point in relation to terminology was that Member States come up against resistance when their texts include reference to "protection" of breastfeeding. While the concept of protection is clearly important and terminology matters, it was noted that the

area of breastfeeding policy is not short of strong rhetoric. The much bigger problem is that actions rarely live up to the rhetoric.

There was discussion of the challenges associated with regulating breast-milk substitutes and the practices of the private sector. The private sector has tended to threaten legal action, but Member States clearly have the right to protect the health of their populations. WHO is due to issue new guidance on interpretation of World Trade Organization rules to help Member States on such issues.

In relation to promoting behaviour change among mothers, examples included a scheme that incorporated financial incentives and social support, as well as awareness campaigns.

It was suggested that an 11th step could be added to the Ten Steps and that, given that breastfeeding is also important for mothers' health, the initiative could be renamed "Baby and Mother-Friendly Hospital Initiative". There was clarification that Member States are free to extend the Ten Steps and name the initiative whatever is most suitable to the local context. Formal adoption of the term "Mother and Baby-Friendly" had been rejected globally because, in order to really protect mothers' health, the initiative would have had to have a much broader scope (i.e. covering all maternal health issues).

Countries that have shown notable increases in breastfeeding rates, such as Tajikistan and Turkmenistan, are to be congratulated on their progress and invited to share their experience and lessons learned.

There is an urgent need to improve monitoring and surveillance. Member States lack data on surveillance and on the extent of violations and enforcement actions relating to their laws. Sustainable, light surveillance systems to monitor violations of the law are needed.

Country-level implementation of recommendations to promote maternal nutrition and breastfeeding

Professor Gunta Lazdane, Riga Stradins University, Latvia, chaired a session looking at country-level implementation and how it can be scaled up.

Scaling up breastfeeding programmes in five world regions: process and lessons learned

Dr Rafael Pérez-Escamilla, Yale School of Public Health, USA, examined the challenges associated with scaling up action to increase breastfeeding and presented an overview of the Becoming Breastfeeding Friendly (BBF) initiative.

Despite the fact that knowledge about what works and lactation support skills exist, these have not been translated into widescale practice. New approaches are required, therefore, to allow faster, better scaling-up of efforts and to track progress in this area.

The BBF initiative is intended to help support countries to scale up breastfeeding programmes through step-by-step evidence-based criteria. The vision of BBF is to create an evidence-based toolbox to help guide development and tracking of large-scale, well-coordinated, multisectoral, national breastfeeding promotion programmes. BBF aims to empower countries to assess their current readiness for scale-up, to identify key areas for improvement, to act upon these areas using an evidence-based approach, and to monitor progress of scaling up breastfeeding protection, promotion and support programmes.

Examination of the experience of countries that have been successful in increasing breastfeeding rates allowed identification of 22 enabling factors and 15 barriers. These were then classified into three categories: international context; political support; and development and sustainability. The breastfeeding gear model incorporates these aspects and is designed to be easily interpretable for policy-makers (Fig. 2). This robust framework incorporates eight "gears", with benchmarks to measure each gear, and now serves as the foundation for the BBF initiative.

Fig. 2. The breastfeeding gear model

Advocacy gear. Community-driven advocacy is key, and in all Member States where scale-up has been successful, it started with a small group of concerned citizens armed with evidence. There are four benchmarks related to public attention to breastfeeding, champions of the cause and social mobilization.

Political will gear. Three benchmarks for this gear evaluate the degree of high-level political leaders' spoken and public support towards breastfeeding.

Legislation and policies gear. This gear relates to implementation and enforcement of policies to protect, promote and support breastfeeding (for example, national breastfeeding policy, BFHI/Ten Steps, the Code, maternity protection legislation, integration into the health care system, and enforcement). There are 10 benchmarks to assess the quality and coverage of these policies and legislation.

Funding and resources gear. There are four benchmarks to evaluate specific breastfeeding programme funding.

Training and programme delivery gear. Seven benchmarks are designed to measure the presence, quality and adequacy of both pre-service and in-service breastfeeding training for health care providers. There are a further seven benchmarks to measure the presence, quality and adequacy of both facility- and community-based programme delivery.

Promotion gear. Three benchmarks have been defined to assess existence and coverage of national promotion strategies and level of awareness raised by government and/or civil society.

Research and evaluation gear. There are 10 benchmarks to measure availability, integration and monitoring of key breastfeeding practices and implementation of essential scaling-up of breastfeeding activities.

Coordination, goals and monitoring gear. The gear at the centre is the master gear, which helps coordination and communication between the different gears, sectors and levels.

The BBF methodology has been developed and pretested.[30] Each Member State needs a committee of 10–12 members, with expertise in different fields, and there is a defined process, with five meetings over a period of 8–10 months, which results in clear BBF results and recommendations to decision-makers.

Application of the BBF model in five countries has shown that it is feasible to use this methodology; Member States found the process useful and key recommendations were formulated. Following the process in Mexico, for example, the country's Academy of Medicine issued a position statement on the need to scale up breastfeeding protection, promotion and support. A national breastfeeding strategy was then released by the government in 2017, and studies are underway to investigate the costs of expanding maternity leave for women working in the formal economy sector and of introducing maternity leave cash transfer benefits for women in the informal sector.

Future work with BBF will include development of a user-friendly costing process and development of more sophisticated stakeholder analysis methodology.

Regional Nutrition Capacity Development and Partnership Platform in central Asia and the Caucasus

Amirhossein Yarparvar, UNICEF, presented an overview of an initiative in central Asia and the Caucasus to address the capacity gaps in national leadership and governance in nutrition.

There are considerable gaps in the capacity for nutrition governance and leadership in central Asia and the Caucasus. Nutrition needs sustained investment but, in general, a very small proportion of national budgets is dedicated to food and nutrition systems, and the subregion lacks nutrition faculties or recognition of nutrition as a specialty. In addition, there is very little collaboration with other agencies in the area of nutrition, and there is a real lack of up-to-date data.

At the Regional Symposium "Sustainable Food Systems for Healthy Diets in Europe and Central Asia", held in Budapest, Hungary, in 2017, the idea of a Regional Nutrition Capacity Development and Partnership Platform emerged, with a view to improving nutrition governance in the region and recognizing that there is value in a regional approach.

The proposed platform brings together relevant ministers, national and regional nutrition academies, relevant development partners and development banks, communities and the private sector. It was launched in July 2018 with the support of four United Nations agencies (UNICEF, the Food and Agriculture Organization, WHO and the World Food Programme); it has a rotating regional secretariat and is chaired by the Government of Kazakhstan for the first two years.

The platform aims to build capacity for nutrition governance by:

(1) raising the profile of nutrition within the national development and SDG agenda;

(2) empowering the system building blocks of nutrition governance;

(3) strengthening the (skill and competency) capacity of the workforce;

(4) defining and positioning nutrition services in primary health care and in preventive care;

(5) generating coordinated multi-country evidence for better impact;

(6) producing coordinated multi-country guidelines and policy recommendations;

(7) working intersectorally and promoting collaboration within and across countries/ sectors/organizations (vertical and horizontal).

A two-year work plan was signed with the Kazakh National Centre for Public Health and Nutrition in October 2018. The main headings are:

- To design and operationalize a tailor-made Caucasus and Central Asia Nutrition Leadership Programme for mid- and high-level managers in nutrition and food systems
- To organize a policy advocacy meeting to sensitize the ministries of finance, parliamentarians and managers on the importance of investment in children's nutrition
- To facilitate a policy advocacy process with Eurasian Customs Union's headquarters to tackle the barriers related to large-scale food fortification
- To design and operationalize an executive course on food and nutrition policy and programming for mid- and high-level managers in nutrition and food systems
- To undertake a summer school on prevention of childhood obesity and the role of food-based dietary guidelines (FBDGs) in prevention of obesity
- To define the skills and competency gaps for the nutrition workforce and to develop a set of regional recommendations on the minimum essential nutrition workforce for prevention of the double burden of malnutrition

- Phase 1 of establishment of an international/regional faculty of nutrition including: partnership building with international schools, identifying opportunities, and developing the programme for an in-service education
- To develop evidence-based FBDGs for central Asia with a focus on the needs of children and adolescents
- To support an innovation lab in Kazakhstan for a nutrition-sensitive intervention on obesity prevention
- Development and activation of a digital platform for the sharing of resources, news, plans and achievements.

In this way, it is hoped that the platform will plant the seed from which capacity for nutrition governance and leadership in the region will grow.

Country-level action to protect, promote and support breastfeeding

Dr Laurence Grummer-Strawn provided an overview of implementation of country-level action in the European Region.

The Global Breastfeeding Collective, comprising 27 organizations and led by WHO and UNICEF, has set out seven policy actions to achieve the 2025 breastfeeding target, which comes from the WHO Global Nutrition Targets 2025 and aims to increase the rate of exclusive breastfeeding in the first six months up to at least 50%. Implementation of some of these can be measured against existing indicators, and the recommendations from a recent assessment of 16 Member States in the WHO European Region are described below.

*Fully implement the **International Code of Marketing of Breast-milk Substitutes and relevant WHA resolutions**, through strong legal measures that are enforced and independently monitored by organizations free from conflicts of interest*

Across Europe most countries have taken action to implement the Code to some degree, but in the majority of cases they have only implemented a few of the Code's provisions. Very few of the countries assessed included complementary foods within the scope of their legislation. Similarly, very few countries have national laws specifying that manufacturers or distributors of breast-milk substitutes should not advertise breast-milk substitutes to the public and that there should be no sales incentives, no free samples or gifts, and no sponsorship of professional meetings. It is time, therefore, that Member States improve their legislation and fully implement all the Code's provisions, ensuring that all relevant products fall within the scope of the legislation.

***Enact paid family leave and workplace breastfeeding policies,** building on the International Labour Organization (ILO)'s maternity protection guidelines as a minimum requirement, including provisions for the informal sector*

The majority of countries in the European Region have legislation that complies with the ILO maternity leave recommendations by providing for a minimum of 18 weeks' maternity leave paid for with public funds. Some countries in the Region, however, only meet the recommendations for length of maternity leave (with no public funding), while others only make basic provisions.

Implement the Ten Steps to Successful Breastfeeding in maternity facilities, *including providing breast milk for sick and vulnerable newborns*

BFHI coverage is better in the European Region than elsewhere, with some countries having the highest rates of coverage worldwide (for example, Azerbaijan, 81%; Turkmenistan, 87%). However, coverage is highly variable, and some Member States have little or no coverage. There is much work to be done across the Region to improve coverage and ensure that every baby has appropriate care at the start of its life.

Strengthen monitoring systems that track the progress of policies, *programmes, and funding towards achieving both national and global breastfeeding targets*

Very few countries have put in place monitoring systems, such as the World Breastfeeding Trends Initiative (WBTi) or the BBF model. Most countries are unable to report on exclusive breastfeeding rates in the last five years, either because there is no system in place or because they do not have internationally comparable data. There is much room for progress in this area.

There are clear gaps in the data – with no data on the other policy action areas (coverage of breastfeeding counselling, community-funded programmes and level of funding) and a lack of data on breastfeeding practices. The rates of breastfeeding in the European Region are not high enough and further action is clearly needed.

Discussion

There was discussion about the role of subregional economic groupings, such as the European Union (EU) and the Eurasian Customs Union. The impact of these unions will depend on a country's starting point – in some cases, countries will need to raise standards, while in others common standards may cause a relaxation of standards. It is important to try and work with the coordination mechanisms of these groupings and to advocate from within for a stronger legislative position.

There was some discussion of the data presented on national implementation and how it may differ from Member State representatives' own data. The data presented were all drawn from global systems, which are only as good as the data that are reported to them. To assess Code implementation, national laws are translated and reviewed by an expert in Code-related legislation. All Member States are encouraged to report any mistakes in the global systems data.

There is a need for more systematic reporting of breastfeeding indicators, and it was suggested that these should be integrated into government health statistics. Development of a joint regional breastfeeding report was proposed.

There was discussion of the need for indicators on community engagement and provision of counselling. It is important to note that these take place largely in the nongovernmental sector, so indicators need to be developed to take them into account. WHO recognizes that measurement of community support for breastfeeding is one of the weakest indicators. One indicator is based on the UNIDASH survey, and data exist for around 100 Member States. Similarly, there is a need to develop new tools to measure breastfeeding counselling and to incorporate these into health, demographic and health systems surveys. There is clearly a need for WHO to do more work on developing these indicators and to work with countries to review the existing data.

There was recognition that some of the policy areas for action can only be addressed by local government.

There was clarification that teams involved in the BFF initiative received training provided by Yale University, and technical support on all aspects was provided from the outset. There are also clear user-friendly web-based tools, and these are updated to reflect user feedback. The development of online web-based training has also started. There was also clarification that the BFF process has elevated the WBTi process where it was in place, with the new system becoming part of a governmental process.

Clinical perspectives

Dr Laurence Grummer-Strawn chaired a session exploring different aspects of the challenge of promoting breastfeeding in a clinical setting.

Breastfeeding of premature and sick newborns

Dr Irina Ryumina, National Medical Research Centre for Obstetrics, Gynaecology and Perinatology named after Academician V.I. Kulakov, Russian Federation, presented an overview of the issues surrounding breastfeeding of premature and sick newborns.

There are a number of potential barriers to breastfeeding, including severe maternal condition after childbirth or severe maternal chronic illness, the need for drug therapy, malformations, congenital metabolic diseases, premature birth, HIV infection, pain syndrome, overdiagnosis and polypragmasia, and child abandonment.

The expanded Ten Steps to Successful Breastfeeding, revised in 2018, apply to facilities caring for sick or preterm babies. More detailed guidance in relation to sick and preterm babies is provided in the Neo-BFHI for neonatal wards, which sets out three guiding principles.

(1) Staff attitudes towards the mother must focus on the individual mother and her situation.
(2) The facility must provide family-centred care, supported by the environment.
(3) The health care system must ensure continuity of care from pregnancy to after the infant's discharge.[31]

Implementation can be more challenging in these contexts, but there are potential solutions to help overcome some of the barriers. These include:

- breastfeeding counselling to families with sick or preterm babies in a crisis situation (it is important to train doctors to talk to families in a clear and transparent way in such situations);
- provision of reliable, evidence-based information for parents;
- initiation of lactation in mothers whose children are in NICUs;
- enabling efficient and comfortable breast-milk expression (comfortable chair, lighting, music, provision of pumps, etc.);
- special technologies (stimulation of lactation, assessment of volume of milk, assessment of milk composition, fortifiers, use of special bottles, devices, etc.);
- specialist support (consultant for breastfeeding, counselling perinatal psychologist, speech therapist);
- support for mothers after discharge.

The Russian neonatologists' association has adopted and adapted the clinical recommendations of the Intergrowth-21st Project on evidence-based nutritional care of preterm infants. The overall goal set by Intergrowth-21st is to promote exclusive breastfeeding for preterm infants at hospital discharge. The order of preference for what to feed infants is: mother's own milk from the breast; mother's expressed breast milk; donor human milk, fortified for preterms < 32 weeks' gestation; preterm formula (< 32 weeks' gestation) according to recommended intakes. Intergrowth-21st has also

developed preterm postnatal growth standards. Dr Ryumina described how these recommendations and standards are put into practice in Russian clinics.

Breastfeeding support approaches for healthy and sick children – clinical aspects

Dr Olga Lukoyanova, National Medical Research Centre for Children's Health, Russian Federation, provided an overview of the issues surrounding use of supplementary foods and feeding with expressed or donor human milk.

Possible indicators for introducing supplementary foods include delayed lactation; primary glandular deficiency and mammary pathology in the mother; and, in the child, signs of dehydration or pathological weight loss (5–6% a day after birth, 7–8% after two days and 9–10% after three days, more than 10% on the fifth day after birth, or below the 75th percentile starting from birth). The principal criterion in determining the need to introduce supplementary feeding is weight gain. The approach adopted during the first month of life is to assess weight gain, and – if weight gain is less than the norm of 600 g per month (no less than 26–30 g daily and no less than 180 g over a week), but more than 400 g per month – supplementary feeding is not prescribed and recommendations on how to stimulate lactation are given. When supplementary foods are introduced, an algorithm is used to calculate the amounts, the mother expresses breast milk to stimulate lactation, and weight is monitored every 2–4 days.

The Academy of Breastfeeding Medicine (ABM) has developed a clinical protocol on supplementary feedings in the healthy term breastfed neonate.[32] If it is absolutely essential to separate the mother and child for a while, it is important to teach the mother to express her milk either manually or using an electric breast pump; and it is important that this process starts within the first hour after birth. The priority for a premature baby is colostrum, because putting a few drops on the buccal mucosa during the first hours of life reduces the frequency of late-onset neonatal sepsis, shortens the duration of antibacterial therapy, prevents contamination of the intestines with pathogenic flora, and reduces the risk of necrotizing enterocolitis. The reality in the Russian Federation is that women establish individual stores of breast milk because they often return to work very soon after childbirth. The ABM has established a protocol, revised in 2017, for the storage of breast milk for home use, which sets out the required temperatures and maximum storage time at room temperature, in the fridge and in the freezer for expressed milk.[33]

Feeding with donor milk is a controversial issue in the Russian Federation. Informal breast-milk sharing is a growing phenomenon, and there are risks associated with this. Breast milk purchased on the internet, for example, could contain human T-cell leukaemia virus, cytomegalovirus, HIV, or hepatitis A, B or C. The ABM issued a position statement on informal breast-milk sharing, stating that "internet-based milk sharing is not recommended under any circumstances". Informal breast-milk sharing is also opposed by WHO, national regulatory authorities, and human milk bank associations in North America and Europe. There are guidelines for doctors and health care workers to educate parents on the rules for use of donor milk.

Human breast-milk banks are an effective technology for supporting breastfeeding; Europe has over 220 breast-milk banks. In the Russian Federation, the first breast-milk bank was established at the National Medical Research Centre for Children's Health in Moscow in 2014, in conjunction with the newborns unit and the healthy and sick child nutrition laboratory. A second breast-milk bank was established at the Republican Children's Clinical Hospital in Bashkortostan in 2017. Government support will be key for further development. In 2015, the World Association of Perinatal Medicine

recommended that establishing donor milk banks should be comprehensively protected and supported by the state in order to continuously steer the course of supporting and promoting breastfeeding.

Discussion

It is clear that there are many areas where WHO could update or provide more guidance on clinical aspects (particularly on supplementary feeding and on breast-milk banks) in the future. The ABM resources are very valuable in relation to all clinical aspects.

Clinical aspects of breastfeeding, solid-food introduction and maternal diets

Dr Svetlana Makarova, National Medical Research Centre for Children's Health, Russian Federation, presented an overview of the clinical aspects related to solid-food introduction and maternal diets.

In relation to the question whether there a link between a mother's diet and allergy prevention, there is some evidence of links between a mother's diet and allergies. There are some allergens (such as beta-lactoglobulin) in breast milk, but much less than in cow's milk. Scientific bodies do not recommend, however, that women restrict what they eat during pregnancy and lactation to limit allergens in their diet. The best advice is for mothers to consume a diverse, complete and healthy diet and to exclusively breastfeed their children in order to prevent allergies.

In the Russian Federation, clinicians treating food allergies in children use the following recommendation: for mothers whose children have an intolerance to cow's milk protein, the child should be breastfed; a diet for the mother that is entirely free of dairy (including all foods containing milk proteins, as well as beef and veal) is the safest and most effective approach.

On the question of how and when to introduce complementary (including "allergenic") foods, WHO recommends that complementary foods are introduced at 6 months of age. The European Society for Paediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN) Committee on Nutrition has taken a different view; it recommends that complementary foods should not be introduced before 4 months but should not be postponed beyond 6 months, on the basis that there may be a tolerance window which is the optimal period to introduce foods. Scientific bodies recommend that introduction of allergenic foods should not be delayed (for the general population and for high-risk children). The National Programme for Optimizing the Feeding of Children under One Year of Age in the Russian Federation is being revised and will recommend that complementary foods are introduced at 4–6 months.

There is debate within the scientific community on the role of vegetarian or vegan diets in the case of children. While some scientific bodies consider that a well-planned vegan diet can support adequate nutrition in the growing child, WHO's guiding principles on complementary feeding state that vegetarian diets cannot meet nutrient needs at this age unless nutrient supplements or fortified products are used. Different types of vegetarian diets entail different deficiency risks; ESPGHAN concluded in 2017 that "vegan diets should only be used under appropriate medical or dietetic supervision", but that "vegan diet with appropriate supplements can support normal growth and development".[34] Breastfeeding rates tend to be high among vegetarian families, and the National Medical Research Centre for Children's Health has been investigating nutritional status of breastfed children of vegetarian mothers. Preliminary data from a small sample suggest some issues with iron deficiency, iron deficiency anaemia and vitamin B12 deficiency.

Discussion

There was clarification that WHO's policy has not changed and that, on the basis of evidence on a wide range of health outcomes, exclusive breastfeeding is recommended for the first six months. The literature on allergies, mothers' diets and complementary feeding is highly complex. It is very clear, nonetheless, that it is important to promote healthy, diverse and complete diets before and during pregnancy and lactation.

International best practices related to the promotion and protection of breastfeeding and IYCF

Ms Olga Zhiteneva and Dr Julianne Williams, WHO European Office for the Prevention and Control of NCDs, Moscow, chaired a session to share expertise and exchange best practices from various countries and regions of the Russian Federation.

Strategy for the protection of breastfeeding and sensible nutrition for mothers and children living in the Arctic and the Far North

Dr Uliana Lebedeva, North-Eastern Federal University named after M. Ammosov, Republic of Sakha (Yakutia), Russian Federation, presented a regional strategy for breastfeeding and maternal, infant and young child nutrition in a far-northern region of extreme climate.

The percentage of children who were breastfed from 3–6 months increased from 47.9% in 2012 to 81.5% in the first nine months of 2018. In 2015 the Government of the Republic of Sakha introduced a resolution "On the Procedure for Providing Adequate Nutrition for Pregnant Women, Nursing Mothers and Children under the Age of 3 Years in the Republic of Sakha". A breastfeeding committee was established and BFHI implemented. Since 2006, social protection has been provided to mothers with children under 3 years of age. Experience has shown that initiatives to promote breastfeeding need to extend beyond the medical dimension, and work with civil society organizations is very important. Since 2012, World Breastfeeding Week has been widely celebrated. There has been methodical and practical work, and promoters have been trained. Beyond breastfeeding, the Republic has also implemented a range of actions on nutrition for preschool and school age children and adolescents. In addition, a regional automated nutrition monitoring system has been established in the Republic's educational institutions.

Praskovya Borisova spoke on behalf of Mothers of Russia about experience in implementing peer support programmes for mothers. Mothers of Russia has created branches in 36 municipalities to do outreach and awareness-raising work, with a focus on breastfeeding. Young women (non-medical) are appointed as outreach workers to visit mothers at home, observe breastfeeding practices, and record their observations in a diary devised by Mothers of Russia. These workers, many of whom are volunteers, form a link between mothers and hospitals, and provide support and recognition to mothers.

The Volgograd region: 20 years working with the WHO/UNICEF Baby-Friendly Hospital Initiative

Dr Tatyana Verovskaya, State Budgetary Healthcare Institution, Volgograd Region, Russian Federation, described the region's 20-year implementation of BFHI and explained how the region had achieved a rate of 77% children exclusively breastfed for six months.

In 1996 the Ministry of Health issued guidance on protecting, promoting and supporting breastfeeding practices in the Russian Federation. At that time, the Russian Federation was going through difficult times, with a declining population and poor indicators on infant morbidity and mortality from external causes linked to feeding deficiencies. Only 35% of children under the age of 1 year were breastfed for at least six months.[35,36]

The objective of the guidance was to decrease infant morbidity and mortality from feeding-related causes by:

- retraining personnel in accordance with BFHI guidelines;
- reorganizing obstetric hospitals in accordance with BFHI guidelines;
- developing the regulatory framework;
- setting up monitoring of the feeding of newborns and children under 1 year old at paediatric clinics and in neonatal pathology units;
- implementing BFHI principles in other maternal and child health care institutions.

This initiative was driven by two passionate officials in the Volgograd region, who were committed to implementation of the Ten Steps. It was also important that the regional governor was supportive.

The first priority was mass retraining of medical personnel working in obstetrics and child health care and reorienting them towards the conscious practice of BFHI principles. This was done through a group of national instructors who held two interregional seminars, a 40-hour breastfeeding counselling course for key specialists, a regional seminar and short course for hospital administrators and management, as well as an interregional seminar on training national BFHI experts and instructors. As a result, BFHI principles were actively introduced in virtually all maternity hospitals in the region.

Between 1996 and 2000 BFHI was introduced into obstetric hospitals, and in early 2000 the Centre for Protecting the Health of the Mother and the Child was established at the regional clinical maternity hospital. Most hospitals were improved, and over the first five years of BFHI implementation the number of infant hospital-acquired infections dropped dramatically. By 2009 over 29 000 deliveries had taken place in 26 BFHI-certified hospitals in the region. Between 2000 and 2005 BFHI principles were introduced to children's outpatient clinics, prenatal clinics, rural health care facilities, and hospitals for newborns and infants. Daily monitoring of infant feeding was introduced in BFHI-certified maternity hospitals, and a system of routine certification of health care facilities and reconfirmation was introduced. Since 2005 Volgograd has been developing BFHI in municipal districts, and two administrative districts were certified in 2007. Between 2005 and 2013 a system of auditing, monitoring and recertifying prenatal clinics, children's outpatient clinics, hospitals for newborns and children under 1 year old, and rural health care institutions was established. Since 2009 state-of-the-art perinatal technologies have been introduced in obstetric and children's hospitals, and the second Volgograd Regional Clinic Prenatal Centre has opened. In the last few years there has been development of the policy for protecting, promoting and supporting breastfeeding, as well as BFHI certification and development of protocols for feeding ill and premature babies. A number of regulatory documents have been issued relating to protecting and supporting breastfeeding (for example, on marketing of breast-milk substitutes, assigning Baby-Friendly Territory status, and developing a breastfeeding support system).

In October 2018 there were 72 BFHI-certified health care institutions in the Volgograd region. The percentage of children in the region breastfed between 6 and 12 months (as a percentage of the number of 1-year old children) has increased from 39.6% in 1997 to 77.5% in 2017. Infant mortality in the region has fallen from 19.1 per 1000 births to 4.2. Attitudes towards breastfeeding have also changed.[35, 36]

Remaining challenges include the shortage of paediatricians in the region and their inadequate knowledge of breastfeeding and infant feeding. It is important that the entire system of antenatal and perinatal care encourages breastfeeding and that breastfeeding is not just imposed.

Support and protection for breastfeeding in Turkmenistan

Dr Gyularam Jorayeva, Clinical Research Centre for Maternal and Child Health, Republic of Turkmenistan, described efforts to support and protect breastfeeding.

Turkmenistan benefits from political support for breastfeeding at the very highest level. The National Programme on the Protection and Support of Breastfeeding in Turkmenistan was introduced in 1998, and laws relating to protection and promotion of breastfeeding and the requirements for baby food were introduced in 2009 and 2016. The National Programme for the Feeding of Infants and Young Children was introduced in 2017.

The 2016 law represents an improvement on the 2009 version. It covers state regulation and control of promotion and support for breastfeeding and sets out the main requirements for the packaging, labelling and sale of designated products.

The National Leadership and Action Plan for Infant and Young Child Feeding in Turkmenistan for 2018–2025 recommends the following key activities:

(1) to ensure interagency coordination of work on the introduction of the Law of Turkmenistan "On the Promotion and Support of Breastfeeding", 2016;
(2) to ensure children's rights to breastfeeding;
(3) to ensure working women's rights to breastfeed;
(4) to implement the International Code of Marketing of Breast-milk Substitutes;
(5) to ensure fully fledged and safe IYCF in accordance with international recommendations;
(6) to intensify and expand activities to introduce BFHI with the use of updated WHO and UNICEF materials on BFHI;
(7) to improve the skills of health care workers to provide appropriate support for IYCF using updated WHO and UNICEF training materials;
(8) to strengthen community support for IYCF;
(9) to integrate support measures for IYCF;
(10) to prevent mother-to-child transmission of HIV through IYCF;
(11) to introduce IYCF in emergency situations;
(12) to introduce supplementary feeding for infants and young children;
(13) to observe general requirements for safe preparation, storage, and handling of dry infant formula;
(14) to give instruction on how to properly prepare a feeding formula from a cup at home.

Breastfeeding initiation rates were very high (around 97% in maternity facilities), but breastfeeding among women tended to drop as women left the facilities. A 2007 investigation into why rates were not higher included a survey of mothers; barriers that were identified included advice/encouragement from family doctors and from family members to stop breastfeeding. A need was identified, therefore, to provide training to primary care professionals, and a large number of family doctors were trained over a short period. UNICEF support enabled awareness-raising activities among mothers and families. Implementation of a national breastfeeding programme has included some research papers, development of teaching aids and brochures and memos. An important research study addressed concerns about breastfeeding in extremely hot climates and showed that exclusively breastfed babies do not suffer from dehydration even in the hottest months of the year.

Turkmenistan now has 66 hospitals that are certified as baby-friendly (93% of all obstetric hospitals in the country) and certification is currently envisaged for health centres (clinics). The rate of exclusive breastfeeding from birth to 6 months in Turkmenistan has increased from 11.2% in 2006 to 58.9% in 2016.

Experience of Armenia in the field of breastfeeding promotion

Dr Karine Saribekyan, Department of Mother and Child Health, Ministry of Health of the Republic of Armenia, presented the Armenian experience of promoting breastfeeding.

Mother and child health has been a priority issue for the Republic of Armenia and a number of policy documents have been introduced; it will continue to be a priority for the new government. There was a breakthrough with the 1994 WHO/UNICEF conference on breastfeeding. At that time, Armenia was recovering from the 1988 earthquake and conflict, and there had been a dramatic decline in breastfeeding. Two government deputy health ministers then became very passionate advocates for breastfeeding promotion, and their political will was very important in everything that followed.

Most recently, in 2016, the Strategy for Improving the Health of Children and Adolescents and Action Plan 2015–2020 was introduced. Specifically in relation to breastfeeding, the National Programme on Promotion of Breastfeeding and Action Plan 2016–2020 was introduced in 2015. In 2014, a law on support for breastfeeding and marketing of breast-milk substitutes was adopted by the Armenian parliament, and various regulations from the law have been issued. A multisectoral approach has been adopted, including introduction of an e-based child nutrition surveillance system to collect and analyse routine data, integrating nutrition counselling into home visiting, development of parental education and an online information platform for health providers and parents.

Exclusive breastfeeding rates at 0–5 months increased from 35% in 2010 to 45% in 2015–16. More than three-quarters (80%) of children are exclusively breastfed within their first month, and 35% of infants were still being breastfed at 1 year. There have, therefore, been important increases, although there remains room for further improvement, and there is a need to conduct advocacy within the general population to raise support for breastfeeding.

Stunting rates have been more than halved in recent years (from 19% in 2010 to 9% in 2015–16). However, the prevalence of child overweight and obesity has increased, and there is still a high prevalence of micronutrient deficiency among pregnant women – insufficient attention has been given to maternal nutrition.

Further steps that are planned include: adapting the new BFHI implementation guidance; organizing training in hospitals and for primary health care professionals; providing specially trained breastfeeding counsellors; improving mechanisms for monitoring violations of the law; developing a home visiting system; developing a national action plan on child obesity and a national strategy on nutrition of school-age children; and strengthening nutrition surveillance and intersectoral collaboration.

International best practices related to the promotion and protection of breastfeeding and IYCF: Norway

Dr Gry Hay, Norwegian Directorate of Health, Oslo, presented an overview of the experience in Norway.

BFHI was implemented in Norway in 1993. Hospitals are reassessed regularly on the basis of mothers' reports through a web-based questionnaire. In 2017, 40 out of 46 birthing units were certified, serving more than 90% of births in Norway. BFHI has been adapted for NICUs; the 20 NICUs in Norway conducted a self-assessment in 2017, together with NICUs in 35 other countries.[37] BFHI has been adapted for community health services and has been shown to be effective in increasing exclusive breastfeeding.[38] In 2018, 110 out of 428 community health services were certified, serving more than 50% of infants and children in Norway.

Currently, 80% of infants are breastfed at 4 months, 70% at 6 months, and 35% at 12 months. Exclusive breastfeeding is 44% at 4 months, but this falls to 17% by 5.5 months. Using the WHO methodology, the rate of exclusive breastfeeding to 6 months is 61%. Trend data show that in the 1950s and 1960s there was a steep decline in breastfeeding, reflecting ideas about infant care at that time and the appearance of breast-milk substitutes on the market. Then rates increased as health services began to promote breastfeeding.

Unfortunately, rates have declined in recent years, and forthcoming new data are likely to show a further decline. Possible reasons include: a reduction in paid maternal leave after birth (paid leave for fathers has increased); shorter hospital stays after delivery and failure to provide the recommended home visits; confusing advice on the optimal duration of exclusive breastfeeding from health personnel; and promotion of junior milks and complementary feeding via social media, etc.

A new Norwegian Action Plan for a Healthier Diet 2017–2021 includes targets for breastfeeding: exclusive breastfeeding to 4 months – increase from 44% to 60%; exclusive breastfeeding to 6 months – increase from 17% to 25%; breastfeeding to 12 months – increase from 35% to 50%.

There has been a decrease in the introduction of solid foods before 4 months (down from 21% in 1998 to 7% in 2013). A new national guideline on infant nutrition was issued in 2016, which emphasizes the need for breastfeeding until at least 12 months of age, with exclusive breastfeeding for 6 months if child and mother are thriving.

Policies and legislation relating to infant formula and follow-on formula are fully harmonized with EU legislation. The present regulation in Norway includes follow-on formula in the articles relating to marketing of infant formula, resulting in the same restrictive regulations for all breast-milk substitutes up until 1 year of age. As a result, there is no marketing of any of these products to consumers in Norway. However, follow-on formula is not included in this way in new EU regulations that will apply in Norway from 2020, following a transition period. In order to compensate for this and counteract the increased promotion of follow-on formulas, the Norwegian Food Authority has decided that Article 10 (1) of the EU Regulation ("The labelling, presentation and advertising of infant formula and follow-on formula shall be designed so as not to discourage breastfeeding") will be interpreted and applied in a restrictive way. Norwegian legislation on "junior milks" or "growing-up formula" is less strict and these products are widely marketed on social media, potentially strengthening bonds between companies and consumers and leading to cross-promotion of breast-milk substitutes.

Finally, when a child is introduced to solids, it should be given foods with various flavours and textures because children who are used to eating different foods from an early age are more tolerant towards new foods later on. The new guideline on infant nutrition, therefore, emphasizes this issue, along with the importance of enjoyment of meals and foods.

Protecting, promoting and supporting breastfeeding in Uzbekistan: a priority in protecting the health of mothers and children

Dr Kamola Salikhova, Republican Specialized Scientific Practical Medical Centre for Paediatrics of the Ministry of Health of the Republic of Uzbekistan, presented an overview of efforts to protect, promote and support breastfeeding.

The Republic has drafted a new law on protecting and promoting breastfeeding and the requirements for baby foods. Getting this law drafted has been a very challenging process and has faced considerable opposition. It is hoped that parliament will approve the law in the near future.

The Ministry of Health and UNICEF have worked closely together to implement training of coaches to support breastfeeding, with over 5000 health care workers having undergone training between 2012 and 2015.

There has been an increase in exclusive breastfeeding, with the percentage of babies under the age of 6 months who are exclusively breastfed rising from 26.4% in 2006 to 61.7% in 2017.

The Ministry of Health and the Republican Specialized Scientific Practical Medical Centre for Paediatrics actively support BFHI and, according to official statistics, 96 health care institutions in Uzbekistan are BFHI-certified. In implementing the Ten Steps, it was decided to add an 11th step with an indicator for outpatient facilities.

Other measures that have been implemented or are planned include: a First 1000 Days in the Life of a Child educational programme for health professionals; celebration of World Breastfeeding Week; nutrition education for the general population; and further steps to instil well-balanced nutritional habits.

Promotion of breastfeeding in the Republic of Moldova

Tatiana Caraus, Mother and Child Health Institute, Republic of Moldova, outlined policies related to nutrition and maternal health and breastfeeding promotion in the country.

According to the 2012 Multiple Indicator Cluster Survey (MICS) in the Republic of Moldova, 97% of children born during the previous two years had been breastfed; the proportion of children aged 0–5 months who were exclusively breastfed was 36% (40% in rural areas and 30% in urban areas).

In 1994 there was strong political will to tackle infant feeding and marketing of infant foods. A number of relevant laws and regulations were introduced, including, in 2011, regulations on infant formulas and follow-on formulas for infants and young children. The government approved the National Alimentation and Nutrition Programme 2014–2020, in which there are a number of specific objectives including to increase, by 2020, the proportion of infants exclusively breastfed in the first 6 months to 60% and the median duration of breastfeeding to at least 4 months.

BFHI was supported by the Ministry of Health; it was introduced in 1994, and 27 maternity hospitals had been certified as baby-friendly by 2004. However, in recent years (up until 2018), no hospitals had been designated or reassessed as baby-friendly. Between August and September 2018, 20 maternity hospitals (responsible for over 500 births) were evaluated. It is recommended that existing national legislation is amended to include all the Code requirements and World Health Assembly resolutions and to introduce BFHI and Code requirements as part of the standard accreditation of hospitals.

There is a need to support human resources with materials, guidelines and protocols, as well as through provision of training and workshops. A new guideline on nutrition for pregnant women and breastfeeding women has been issued. Standards for antenatal care include screening all pregnant women for diabetes. Standards for paediatric and prenatal care include one nurse visit during the last trimester and provision of breastfeeding counselling. The country faces a major challenge with the high degree of outward migration and the lack of human resources, particularly midwives and paediatricians.

Messages to support breastfeeding are promoted through information campaigns, by peer mother-to-mother support and through social networks.

Future steps that are planned include: a law on the protection and promotion of breastfeeding and regulation of breast-milk substitutes; a review of the protocols and clinical guidelines for child care and breastfeeding (including the updated BFHI guidance); a review of statistical indicators; and inclusion of BFHI steps in the accreditation criteria for medical institutions and human milk banks.

Concluding remarks

Amirhossein Yarparvar gave some concluding remarks on behalf of UNICEF and extended thanks to WHO and the Russian Federation for organizing the event. The discussions had been very constructive and the exchange of experience was extremely valuable. The key take-home message is that the priorities remain to fully implement the Code in national legislation and/or to better enforce existing legislation; to implement the new BFHI guidance (UNICEF is planning to provide more training on both the Code and BFHI implementation); and to make further improvements to data collection and monitoring of infant and young child nutrition indicators.

Laurence Grummer-Strawn thanked all participants for their efforts on behalf of WHO headquarters and summarized some key messages. It is important to "think big" and consider the opportunities for action at the next level up (for instance, at the institutional or political level). Secondly, it is vital to work together – collective action and learning from one another's experience is important, whether across countries, within countries, within institutions or across sectors. It is exciting to see examples where positive action has resulted in higher exclusive breastfeeding rates. The many case studies shared throughout the conference have demonstrated that increasing breastfeeding is both possible and feasible.

João Breda gave some concluding remarks and summarized discussions on a draft of the conference conclusions, indicating that these had been taken into account in the final version (Annex 1).

Following extensive discussion of the Code and BFHI, it is clear that these instruments are as relevant as ever and the necessary tools and guidance exist to support their implementation. The priority now is to incorporate them into national statutory provisions. It is also important to foster support for Code implementation and BFHI within civil society, and this requires a programme of engagement with nongovernmental organizations, etc.

The conference recognized that the WHO European Region is off track to achieve all the commonly agreed goals on nutrition and NCDs; participants reaffirmed their commitment to promote, protect and support breastfeeding and appropriate feeding of infants and young children, as well as to improve maternal nutrition status, through the following actions:

I. **Invest in nutrition** at the earliest possible stage, before and during pregnancy, including protecting, promoting, supporting and addressing barriers to adequate breastfeeding, while also providing support for appropriate complementary feeding.

II. **Increase measures that support appropriate breastfeeding** and complementary feeding practices; these include policies and standards addressed by multiple sectors, such as maternity leave and return-to-work legislation that protects exclusive breastfeeding for the first six months, such as paid maternity leave and workplace breastfeeding policies.

III. **Strengthen the capacity of health providers and services:**

- to support expectant and new mothers in maintaining a healthy diet and body weight;
- to provide consistent advice, effective individualized counselling and support for optimal child feeding from early initiation, to exclusive breastfeeding, and on to first foods.

IV. **Promote a healthy diet and nutrition** before conception, during and after pregnancy, and for infants and young children.

V. **Reinvigorate the Baby-Friendly Hospital Initiative,** including through establishment of new standards of care and practice, appropriate training, and routine monitoring and evaluation of its use and implementation.

VI. **Adjust national legislation to fully support implementation of the International Code of Marketing of Breast-milk Substitutes** through stronger legal measures that are enforced; and ensure comprehensive monitoring through organizations that are free from conflicts of interest.

VII. **End inappropriate promotion of foods** for infants and young children, and prevent children's exposure to marketing of foods and non-alcoholic beverages.

VIII. **Increase and improve monitoring and surveillance activities** for breastfeeding and complementary feeding practices, to strengthen the evidence base and inform appropriate and timely policies. There is a need to identify and use an internationally harmonized approach to assessing breastfeeding rates.

Member State and regional representatives were clear that there is a need for substantial technical support to implement effective measures to increase breastfeeding and improve maternal, infant and young child nutrition. The specific needs identified included, for example, more guidance from WHO on issues such as complementary feeding, clinical aspects related to feeding of sick babies, and issues around breast-milk banks. Particular support to tackle inappropriate promotion of commercial complementary foods was requested, especially for smaller countries. More generally, ongoing support needs were identified for capacity-building, training, help for operationalization of existing tools and resource mobilization. There was clearly widespread interest in learning from further exchanges of good practice and encouraging examples of progress in this important field.

Dr Breda then thanked the Ministry of Health of the Russian Federation for its support of the conference, on behalf of WHO and UNICEF. He also thanked UNICEF for co-organizing the event with WHO and, finally, all colleagues at WHO for the meeting preparation and organization. Finally, he conveyed many thanks to Sechenov University for hosting the event and to all participants for their enthusiastic participation; he then brought the conference to a close.

Annex 1. Conference conclusions

MOSCOW STATEMENT ON MATERNAL, INFANT AND YOUNG CHILD NUTRITION IN EUROPE: ENSURING THE BEST START IN LIFE

(1) We, the participants of the Conference, including Member States of the WHO European Region, together with health experts and civil society organizations, have gathered in Moscow, Russian Federation,[*] to share good practice examples and discuss opportunities to accelerate progress in promoting healthy maternal nutrition, providing support and protection to breastfeeding, and ensuring optimal feeding of infants and young children as an essential contribution to ensure appropriate growth and development, as well as to reduce the risk of developing noncommunicable diseases (NCDs) in both mothers and children across the life course.

(2) We recognize that there is unequivocal evidence that healthy maternal nutrition, exclusive breastfeeding and optimal feeding practices for infants and young children are critical to ensure appropriate growth and development. Moreover, breastfeeding has been recognized as one of the most effective – and cost-effective – ways to improve the lives of children everywhere, yielding lifelong health benefits for infants and their mothers, particularly for the prevention of NCDs. This is of high importance to the WHO European Region, as NCDs are the leading cause of death and disability and pose major challenges for the sustainable development of our societies.

(3) WHO and UNICEF recommend exclusive breastfeeding for the first six months of life, continued breastfeeding up to 2 years of age or beyond, and timely introduction of appropriate and safe complementary foods from 6 months of age.[†] Although some countries are well advanced in this area, of the six WHO regions, the European Region has the lowest rates of exclusive breastfeeding at 6 months of age. Fewer than one in five infants are breastfed for 12 months, inappropriate complementary feeding practices are widespread, and dietary quality is far from meeting recommendations. At the same time, in different countries there are different criteria (statistical approaches) for assessing the prevalence of breastfeeding, which makes it difficult to get an objective picture of the current practice of feeding children in the first year of life.

(4) Overweight and obesity are widely prevalent among women of reproductive age in the European Region. It has been well established that maternal obesity can adversely affect the child's development *in utero*, as well as increase the risk of congenital anomalies and obstetric complications. Similarly, children of overweight or obese mothers are at increased risk of becoming obese themselves. In addition, studies have found that obese women tend to breastfeed for a shorter period than women of normal weight and are less likely to initiate breastfeeding. Overweight and obesity are also highly prevalent in children and adolescents. Raised BMI is a major risk factor for NCDs such as cardiovascular diseases, diabetes and some cancers. Childhood obesity is associated with a higher chance of obesity, premature death and disability in adulthood.

[*] In the context of the conference "The Best Start in Life – Breastfeeding for the prevention of noncommunicable diseases and the achievement of the Sustainable Development Goals in the WHO European Region", 7–8 November 2018.

[†] For a prioritization of alternative feeding options in special cases, refer to the section "Exercising other feeding options" in *Global strategy for infant and young child feeding* (Geneva: World Health Organization; 2003).

(5) Furthermore, recommendations and practices with respect to maternal nutrition, breastfeeding and complementary feeding vary between Member States of the European Region. Efforts are needed to ensure that national recommendations align with the best available evidence and respond to the specific challenges that families and individuals experience today.

(6) We acknowledge that environmental conditions do not always support exclusive breastfeeding. Some countries have made great advances by integrating breastfeeding support into standards of care in health facilities, encouraging widespread uptake of baby-friendly practices and monitoring implementation. However, major gaps remain. For example, the Baby-Friendly Hospital Initiative (BFHI) is only implemented in around half of the countries in the Region, while the International Code of Marketing of Breast-milk Substitutes ("the Code") is rarely implemented in full, with major loopholes that allow continuing promotion of products.

(7) At the same time, new challenges have emerged. In particular, there is the practice of providing infants with specially formulated milks (so-called "follow-on milks"), which are not necessary for their development and are often marketed in a way that may cause confusion and have a negative impact on breastfeeding practices. In addition, a growing number of commercial complementary foods are available on the market, often taking the place of homemade foods and being promoted for early introduction. These tend to contain predominantly sweet flavours, do not adhere to nutrition recommendations,[*] and carry emotive and misleading claims.

(8) We recognize the challenges that governments across the Region face, such as insufficient funding, shortage of capacity, and the marketing activities of multinational corporations. We call for a collective effort to ensure a comprehensive response.

(9) The importance of a robust response has been widely recognized, and maternal, infant and young child nutrition is at the forefront of the Sustainable Development Goal (SDG) agenda.[†] Breastfeeding is linked to many of the SDGs: Goals 1, 2, 3, 4, 5, 8 and 10. Most notably, SDGs 2 and 3 highlight the importance of a life-course approach to addressing all forms of malnutrition, promoting good health and well-being, and responding to the nutritional needs of adolescent girls and pregnant and lactating women.

(10) At the Seventy-first World Health Assembly (2018), a resolution was adopted that restated previous commitments to support appropriate infant and young child feeding (IYCF) and urged Member States to increase investment to protect and promote breastfeeding, reinvigorate BFHI, strengthen measures to give effect to the Code, promote timely and adequate complementary feeding, end inappropriate promotion of foods for infants and young children, ensure appropriate child feeding during emergencies, and more.

(11) In 2012, Resolution WHA65.6 endorsed the Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition, which specified six global nutrition targets for 2025. These include increasing the rate of exclusive breastfeeding in the first 6 months up to at least 50%. Member States in the WHO European Region have committed to reach this goal and in 2015 adopted the European Food and Nutrition Action Plan 2015–2020. In

[*] Referring to WHO's *Guideline: sugars intake for adults and children* (Geneva: World Health Organization; 2015).

[†] For further details on how breastfeeding contributes to the SDGs, refer to the factsheet prepared by UNICEF, *Breastfeeding and the Sustainable Development Goals* (New York (NY): UNICEF; 2016).

line with Health 2020 priorities, they agreed to invest in nutrition at the earliest possible stage, before and during pregnancy, including protecting, promoting, supporting and addressing barriers to adequate breastfeeding, while also providing support for appropriate complementary feeding.

(12) The Action Plan for the Prevention and Control of Noncommunicable Diseases in the WHO European Region 2016–2025 calls upon all Member States to protect, promote and support breastfeeding in the workplace. Moreover, healthy maternal nutrition and breastfeeding are key actions highlighted in the Action Plan for Sexual and Reproductive Health: Towards Achieving the 2030 Agenda for Sustainable Development in Europe and Investing in Children: the European Child and Adolescent Health Strategy 2015–2020.

(13) As a region, we are well off track to achieve our commonly agreed goals and acknowledge that attaining them will require renewed effort and commitment. Therefore, we hereby reaffirm our commitment to promote, protect and support breastfeeding and appropriate feeding of infants and young children, as well as to improve maternal nutrition status, through the following actions:

I. **Invest in nutrition** at the earliest possible stage, before and during pregnancy, including protecting, promoting, supporting and addressing barriers to adequate breastfeeding, while also providing support for appropriate complementary feeding.

II. **Increase measures that support appropriate breastfeeding** and complementary feeding practices; these include policies and standards addressed by multiple sectors, such as maternity leave and return-to-work legislation that protects exclusive breastfeeding for the first six months, such as paid maternity leave and workplace breastfeeding policies.

III. **Strengthen the capacity of health providers and services:**

- to support expectant and new mothers in maintaining a healthy diet and body weight;
- to provide consistent advice, effective individualized counselling and support for optimal child feeding from early initiation, to exclusive breastfeeding, and on to first foods.

IV. **Promote a healthy diet and nutrition** before conception, during and after pregnancy, and for infants and young children.

V. **Reinvigorate the Baby-Friendly Hospital Initiative,** including through establishment of new standards of care and practice, appropriate training, and routine monitoring and evaluation of its use and implementation.

VI. **Adjust national legislation to fully support implementation of the International Code of Marketing of Breast-milk Substitutes** through stronger legal measures that are enforced; and ensure comprehensive monitoring through organizations that are free from conflicts of interest.

VII. **End inappropriate promotion of foods** for infants and young children, and prevent children's exposure to marketing of foods and non-alcoholic beverages.

VIII. **Increase and improve monitoring and surveillance activities** for breastfeeding and complementary feeding practices, to strengthen the evidence base and inform appropriate and timely policies. There is a need to identify and use an internationally harmonized approach to assessing breastfeeding rates.

(14) We, the participants of this conference, call upon European leaders to recognize the central role and importance of healthy maternal nutrition, breastfeeding and appropriate feeding of infants and young children to tackle the growing rates of NCDs and to prioritize and pursue the proposed policy directions.

Annex 2. List of participants

Member States

Armenia

Dr Karine Saribekyan
Head of the Department of Maternal and Child Health Care of the Ministry of Health of the Republic of Armenia; Associate Professor, Department of Public Health and Health Organization of Yerevan Medical University

Azerbaijan

Dr Inara Makayeva
Head of the Public Health Monitoring and Analysis Department, Ministry of Health of Azerbaijan

Dr Shahla Mirzazade
Head of Policy and Reform Department, Centre for Public Health and Reforms, Ministry of Health of Azerbaijan

Dr Nushaba Panakhov
Assistant at the Department of Children's Diseases, Azerbaijan Medical University

Dr Nailya Rakhimova
Deputy Director for Research, Scientific Research Institute of Paediatrics; Associate Professor

Belarus

Dr Irina Vinokurova
Junior Researcher, Laboratory of Health Problems among Children and Adolescents, Republican Scientific and Practical Centre "Mother and Child"

Bosnia and Herzegovina

Dr Aida Filipovic-Hadziomeragic
Chief of Hygiene and Health Ecology Department, Institute of Public Health, Federation of Bosnia and Herzegovina

Dr Dragana Stojisavljevi
Chief of Hygiene and Health Ecology Department, Institute of Public Health, Republika Srpska

Bulgaria

Dr Irina Kovacheva
State Expert, Ministry of Health

Professor Vesselka Duleva
Head of the Department of Foods and Nutrition, National Centre of Public Health and Analyses, Sofia

Estonia

Dr Sille Pihlak
Chief Specialist, Public Health Department, Ministry of Social Affairs

Finland

Dr Riikka Ikonen
Senior Researcher, National Breastfeeding Coordinator, National Institute for Health and Welfare

Kyrgyzstan

Dr Zhyldyzgan Artykbayeva
National Programme Coordinator, Baby-Friendly Hospital Initiative, National Centre for Motherhood and Childhood

Dr Chinara Kazakbaeva
President of Kyrgyz Alliance of Midwives

Latvia

Ms Ieva Garanča
Senior Health Promotion Coordinator, Health Promotion Department, Disease Prevention Division, Centre for Disease Prevention and Control of Latvia

Lithuania

Dr Daiva Sniukaite-Adner
Chairperson, Lactation Consultant and Educator, Lithuanian Lactation and Breastfeeding Consultants Association

Montenegro

Dr Dusica Gojkovic
Paediatrician, Primary Healthcare Centre, Podgorica

Dr Verica Osmanovic
Social Medicine Specialist, Institute of Public Health of Montenegro, Podgorica

Dr Milica Dukic
Independent consultant, Ministry of Health of Montenegro
Senior Medical Nurse

Dr Edita Basovic
Paediatrician, Public Health Centre, Podgorica

North Macedonia

Assistant Professor Ana Daneva Markova
Expert in obstetrics and gynaecology; Chief of the Obstetrics Operative Block, University Clinic of Gynaecology and Obstetrics, Skopje

Dr Mica Kimovska-Hristova
Assistant Professor in Paediatrics, University Children's Clinic, Skopje
Paediatrician, Intensivist

Norway

Dr Gry Hay
Senior Advisor, Department of Child and Adolescent Health, Division of Prevention and Public Health, Norwegian Directorate of Health

Poland

Ms Anna Trzewik
Senior specialist, Mother and Child Department, Ministry of Health

Republic of Moldova

Dr Tatiana Caraus
Medical Doctor, Neonatologist, Researcher, Scientific Perinatology Department, Mother and Child Institute, Chisinau

Serbia

Dr Vesna Knjeginjic
Assistant Minister, Sector for Public Health and Health Care Programmes, Ministry of Health of Republic of Serbia

Turkmenistan

Dr Gyularam Jorayeva
Head of the Scientific Organizational and Methodological Department, Scientific and Clinical Centre for Maternal and Child Health

Uzbekistan

Dr Kamola Salikhova
Deputy Director of the Republican Research Medical Centre for Paediatrics

Tajikistan

Ms Gulbahor Ashurova
Member of Parliament, Social Protection Issues

Dr Sherali Rahmatulaev
Head of the Department of Organization of Medical Services for Mothers, Children and Family Planning, Ministry of Health

Representatives of the Russian Federation

Dr Igor Kagramanyan
First Deputy Chairman of the Committee on Social Policy, Federation Council of the Federal Assembly of the Russian Federation

Dr Elena Baibarina
Director, Department of Medical Care for Children and Maternity, Ministry of Health of the Russian Federation

Mr Sergey Muraviev
Head of the Department of International Cooperation and Public Relations, Ministry of Health of the Russian Federation

Dr Peter Glybochko
Rector of the First Moscow State Medical University named after I.M. Sechenov, Ministry of Health of the Russian Federation

Dr Victoria Madyanova
Head, WHO Collaborating Centre on Training and Education of Health Policy-makers in the Prevention and Control of NCDs

Dr Stella Ousdenova
Chairman of the Health Committee of the Youth Public Chamber

Ms Natalia Moshkina
Adviser, Department of International Cooperation and Public Relations, Ministry of Health of the Russian Federation

Representatives of the regions of the Russian Federation

Arkhangelsk Region

Dr Irina Pastbina
Senior Consultant, Department of Medical Care for Children and Obstetric Services, Ministry of Health of the Arkhangelsk Region

Dr Victoria Karamyan
Chief Doctor, Arkhangelsk Clinical Maternity Hospital named after K. Samoilova

Dr Ekaterina Olfert
Head of the Perinatal Centre, Deputy Chief Physician, Arkhangelsk Regional Clinical Hospital

Astrakhan Region

Dr N. Klyueva
Head of the Centre for Support and Promotion of Breastfeeding, Children's City Polyclinic No. 4

Kaluga Region

Dr Irina Sakulina
Deputy Head of Department of Medical Care for Children and Obstetric Services, Ministry of Health of the Kaluga Region

Dr Raisa Avilkina
Paediatrician at the Central District Hospital, Lyudinovskiy District

Dr Valentina Antonova
Head of the Maternity Ward of the Central District Hospital, Borovskiy District

Dr Larisa Galenkova
Head of the Outpatient Department of Paediatric Care of the Central District Hospital, Borovskiy District

Khanty-Mansiysk Autonomous Okrug-Ugra

Dr Lyubov Reznik
Head of the Paediatric Department at the Children's Hospital

Komi Republic

Dr Glera Khosnetdinova
Senior Midwife, Cardiological Dispensary

Dr Victoria Andrusova
Chief Physician, a.i., Obstetrician-Gynaecologist, Ukhta Interregional Maternity Hospital

Dr Irina Babayeva
Head of the Department of Pathology of Newborns and Preterm Babies; Neonatologist

Kostroma Region

Dr Elena Makarova
District Doctor; Paediatrician, Galich District Hospital

Dr Antonina Nechaeva
Neonatologist, Galich District Hospital

Krasnoyarsk Kray

Dr Vladimir Furtsev
Associate Professor, Department of Polyclinic Paediatrics, Krasnoyarsk State Medical University; Chief Specialist in Infant Nutrition of the Ministry of Health of the Krasnoyarsk Kray; Scientific Director, Krasnoyarsk Breastfeeding Centre

Kursk Region

Dr Elena Lascheva
Head, Department of Newborns, Regional Perinatal Centre

Dr Svetlana Kirichenko
Neonatologist; Head, Department of Newborns, Regional Perinatal Centre

Dr Natalia Kashirtseva
Senior Nurse, Department of Pathology of Newborns and Preterm Babies, Kursk Regional Children's Hospital No. 2

Moscow

Dr Boris Nikityuk
Director, Federal Research Centre for Nutrition and Biotechnologies

Dr Victor Tutelyan
Scientific Director, Federal Research Centre for Nutrition and Biotechnologies

Dr Maria Gmoshinskaya
Leading Researcher, Laboratory of Age-based Nutrition, Federal Research Centre for Nutrition and Biotechnologies

Dr Drapkina Oksana
Director, National Medical Research Centre for Preventive Medicine

Dr Irina Ryumina
Head, 1st Department of the Pathology of Newborns and Preterm Babies, National Medical Research Centre for Obstetrics, Gynaecology and Perinatology named after Academician V.I. Kulakov

Dr Olga Lukoyanova
Leading Researcher, Laboratory of Nutrition for Healthy and Sick Children, National Medical Research Centre for Children's Health

Dr Svetlana Makarova
Head, Department of Preventive Paediatrics, National Medical Research Centre for Children's Health; Chief Non-staff Children's Specialist of the Ministry of Health of the Russian Federation on Preventive Medicine in the Central Federal District

Dr Irina Zakharova
Head, Department of Paediatrics, Russian Academy of Medical Education; Chief Paediatrician, Central Federal District of the Russian Federation; Doctor of Medical Sciences, Professor, Russian Medical Academy of Postgraduate Education of the Ministry of Health of the Russian Federation

Dr Olga Komarova
Deputy Director for International Relations, National Medical Research Centre for Children's Health

Dr Tatyana Borovik
Leading Researcher, Healthy and Sick Child Nutrition Laboratory, National Medical Research Centre for Children's Health

Dr Vera Skvortsova
Leading Researcher, Healthy and Sick Child Nutrition Laboratory, National Medical Research Centre for Children's Health

Dr Anton Olenev
Non-staff Chief Obstetrician-Gynaecologist, Department of Health of the City of Moscow

Professor Marina Sekacheva
Vice-rector for Research, First Moscow State Medical University named after I.M. Sechenov

Dr Lyubov Abolyan
Chief Specialist, Department of Public Health, First Moscow State Medical University named after I.M. Sechenov

Dr Tatiana Tatarinova
Assistant, Institute of Leadership and Health Management, First Moscow State Medical University named after I.M. Sechenov

Dr Dina Zelinskaya
Head of Department, a.i., Department of Polyclinic and Social Paediatrics, Russian National Research Medical University named after N.I. Pirogov

Dr Olga Kachalova
Head of Department, Clinical State Hospital named after Mukhina; Associate Professor, Department of Hospital Paediatrics, Russian National Research Medical University named after N.I. Pirogov

Dr Anastasia Turchinskaya
Assistant, Department of Propaedeutics of Children's Diseases of the Paediatric Faculty, Russian National Research Medical University named after N.I. Pirogov; Breastfeeding Consultant

Dr Lidiya Ilyenko
Dean of the Paediatric Faculty, Russian National Research Medical University named after N.I. Pirogov

Dr Irina Cherniyenko
Head, Perinatal Centre

Dr Olga Rudneva
Specialist in breastfeeding, City Clinical Hospital No. 29

Dr Olga Ladodo
Neonatologist, independent expert

Dr Svetlana Pavlova
Children's City Polyclinic No. 39, Moscow City Health Department

Dr Arina Chak
Obstetrician, NGO "Akusherstvo PRO"

Dr Vladimir Gorev
Freelance Chief Neonatologist, Moscow Department of Health

Moscow Region

Dr Lyudmila Malyutina
Associate Professor, Department of Neonatology, Moscow Regional Research Clinical Institute named after M. Vladimirsky

Dr Svetlana Buvalova
Head of the Children's Department, Moscow Regional Perinatal Centre

Dr Elena Naumova
Head of the Neonatal Department, Moscow Regional Centre for the Protection of Motherhood and Childhood

Nizhny Novgorod Region

Professor Yelena Lukushkina
Head of the Department of Faculty and Polyclinic Paediatrics, Volga Research Medical University

Professor Ekaterina Novopoltseva
Department of Paediatrics and Neonatology, Volga Research Medical University

Dr Olga Guseva
Department of Obstetrics and Gynaecology, Volga Research Medical University

Dr Olga Krepysheva
Neonatologist, Dzerzhinsky Perinatal Centre

Dr Elena Subbotina
Head of the Paediatric Department, Paediatrician at the Children's City Polyclinic No. 19, Kanovinskiy District

Novosibirsk Region

Olga Bykadorova
Chief Non-staff Neonatologist

Republic of Altai

Dr Elena Shaltaeva
Chief Freelance Paediatrician of the Ministry of Health of the Republic of Altai

Republic of Buryatia

Dr Tuyana Budaeva
Head, Department of Specialized Medical Care for Children and Maternity Services, Ministry of Health of the Republic of Buryatia

Republic of Dagestan

Dr Zamiyat Aliyeva
Paediatrician at the Department for Newborns, Children's Republican Clinical Hospital named after N. Kuraev

Dr Aykhanum Minatulaeva
Deputy Chief Physician for Clinical Work, Children's Clinical Hospital No. 1

Republic of Ingushetia

Dr Hadishat Nalgieva
Chief Physician, Republican Children's Polyclinic

Dr Pyatimat Yevloyeva
Deputy Chief Doctor, Mother and Child Health Care Centre

Dr Lyalya Yevloyeva
Paediatrician

Republic of Mordovia

Dr Natalia Yudina
Deputy Minister of Health of the Republic of Mordovia

Dr Lyudmila Ledyaykina
Chief Non-staff Neonatologist of the Republic of Mordovia

Republic of Sakha (Yakutia)

Dr Uliana Lebedeva
Head of the Centre for Nutrition Health Research Institute, North-Eastern Federal University named after M. Ammosov; Chief Nutritionist of the Ministry of Health of the Republic of Sakha (Yakutia) and the Far Eastern Federal District; Chair of the Yakutsk Regional Branch of the Russian Union of Nutritionists, Dietitians and Food Industry Professionals

Ms Praskovya Borisova
Chair of the Yakut Regional Chapter of the All-Russian Community-based Organization "Mothers of Russia"

Republic of Tatarstan

Dr Tatyana Shigabutdinova
Chief Obstetrician-Gynaecologist of the Republic of Tatarstan

Professor Elmira Mingazova
Advisor to the Head of the Research Institute named after N. Semashko

Rostov Region

Dr Tatyana Lebedeva
Specialist in Breastfeeding, Perinatal Centre

Ryazan Region

Dr Inna Lebedeva
Chief Doctor, Regional Clinical Hospital named after N.V. Dmitriev; Chief Non-staff Paediatrician of the Ministry of Health of the Ryazan Region

Dr Anastasia Kholodkova
Obstetrician-Gynaecologist, Obstetrics Department, Regional Clinical Perinatal Centre

Dr Albertina Panteleeva
Senior Nurse, Neonatal Department, Regional Clinical Perinatal Centre

Saint Petersburg

Professor Elena Bulatova
Head of the Department of Propedeutics of Children's Diseases; Chief Paediatrician of the Ministry of Health of the Russian Federation in the North-West Federal District; Chief Specialist on Infant Nutrition of the Health Committee of the Saint Petersburg Government

Sakhalin Region

Ms Gulnur Minkova
Assistant to the Deputy of the City Council of the city of Yuzhno-Sakhalinsk; Head of the Sakhalin Regional Community-based Organization for the Support and Protection of Paternity, Motherhood and Childhood "Family Alphabet"

Samara Region

Dr Marina Tarasova
Neonatologist, Department of Pathology of Newborns and Preterm Babies, Samara Regional Clinical Hospital named after V. Seredavin

Dr Yulia Yustyagina
Anaesthesiologist, Intensivist at the Intensive Care Unit for Newborns and Preterm Babies, Samara Regional Clinical Hospital named after V. Seredavin

Dr Tatyana Zubareva
Neonatologist, Department of Pathology of Newborns and Preterm Babies, Samara Regional Clinical Hospital named after N. Ivanov

Sverdlovsk Region

Dr Lena Novikova
Director, City Centre for Medical Prevention, Yekaterinburg

Dr Irina Borodina
Nutritionist, City Centre for Medical Prevention, Yekaterinburg

Tomsk Region

Dr Svetlana Stankevich
Head of the Centre for Breastfeeding and Appropriate Feeding; Support Paediatrician, Centre for Medical Prevention

Tver Region

Dr Irina Esartiya
Clinical Paediatrician, Clinical Children's Hospital No. 2, Tver City

Udmurtia Region

Dr Liniza Kandedeva
Neonatologist, Neonatal Pathology Department, Republican Children's Clinical Hospital of the Ministry of Health of the Udmurt Republic

Volgograd Region

Dr Tatyana Verovskaya
Chief Physician of the Volgograd Regional Clinical Perinatal Centre No. 2; Chief Non-staff Obstetrician-Gynaecologist of the Healthcare Committee of the Volgograd Region

Dr A. Khvorostova
Chief Non-staff Children's Specialist in Preventive Medicine; Methodologist, Department of Integrated Programmes for Infants, Volgograd Regional Centre for Medical Prevention

Dr T. Berdikova
Methodologist, Volgograd Regional Clinical Perinatal Centre No. 2

Voronezh Region

Dr Margarita Kinshina
Head of the Department for the Provision of Medical and Preventive Care for Mothers and Children, Health Department of the Voronezh Region

Dr Tatyana Chistotinova
Head of the Department of Newborns, Voronezh City Hospital No. 1

Dr Julia Savelieva
Paediatrician, Regional Centre for the Promotion and Support of Breastfeeding, Voronezh City Hospital No. 1

Yaroslavl Region

Dr Larisa Stroeva
Associate Professor, Department of Paediatrics, Yaroslavl State Medical University

Dr Marina Pisareva
Chief Doctor, Regional Children's Clinical Hospital; Chief Paediatrician of Health Department

Temporary Advisors

Dr Nicola Heslehurst
Lecturer in Maternal Nutrition, Institute of Health and Society, Newcastle University, Newcastle upon Tyne, United Kingdom

Dr Anne Bærug
Leader, Norwegian National Advisory Unit on Breastfeeding, Oslo University Hospital, Norway

Dr Sonia Semenic
Associate Professor, Ingram School of Nursing, McGill University; Nurse Scientist, McGill University Health Centre Montreal, Canada

Dr Gunta Lazdane
Professor of Reproductive Health; Director, Institute of Public Health, Riga Stradins University, Latvia

Dr Rafael Pérez-Escamilla
Professor of Epidemiology and Public Health; Director, Office of Public Health Practice; Director, Global Health Concentration, Yale School of Public Health, USA

World Health Organization

WHO headquarters

Dr Laurence Grummer-Strawn
Technical Officer, Nutrition for Health and Development

WHO Regional Office for Europe

Dr João Breda
Head, WHO European Office for the Prevention and Control of Noncommunicable Diseases

Dr Luigi Migliorini
Senior Advisor, WHO European Office for the Prevention and Control of Noncommunicable Diseases

Dr Carina Ferreira Borges
Programme Manager, Alcohol and Illicit Drugs Programme, WHO European Office for the Prevention and Control of Noncommunicable Diseases

Dr Nino Berdzuli
Programme Manager, Sexual and Reproductive Health

Dr Aigul Kuttumuratova
Technical Officer, Child and Adolescent Health and Development

Dr Ivo Rakovac
Technical Officer, WHO European Office for the Prevention and Control of Noncommunicable Diseases

Mr Stephen Whiting
Technical Officer, WHO European Office for the Prevention and Control of Noncommunicable Diseases

Ms Olga Zhiteneva
Technical Officer, WHO European Office for the Prevention and Control of Noncommunicable Diseases

Dr Julianne Williams
Technical Officer, WHO European Office for the Prevention and Control of Noncommunicable Diseases

Ms Lea Samanta Nash Castro
Consultant, WHO Regional Office for Europe

Ms Natalia Konovalova
Programme Assistant, WHO European Office for the Prevention and Control of Noncommunicable Diseases

Ms Anna Mezentseva
Programme Assistant, WHO European Office for the Prevention and Control of Noncommunicable Diseases

Ms Maria Neufeld
Consultant, WHO European Office for the Prevention and Control of Noncommunicable Diseases

Dr Pi Hogberg
Consultant, WHO European Office for the Prevention and Control of Noncommunicable Diseases

Ms Emilia Janca
Intern, WHO European Office for the Prevention and Control of Noncommunicable Diseases

Ms Olga Oleinik
Consultant, WHO European Office for the Prevention and Control of Noncommunicable Diseases

Ms Alina Milovanova
Consultant, WHO European Office for the Prevention and Control of Noncommunicable Diseases

Ms Marina Bykova
Communications Consultant, WHO European Office for the Prevention and Control of Noncommunicable Diseases

Ms Anna Polunina
Communications Consultant, WHO European Office for the Prevention and Control of Noncommunicable Diseases

Mr Sergey Bychkov
Consultant, WHO European Office for the Prevention and Control of Noncommunicable Diseases

Ms Natalia Fedkina
Consultant, WHO European Office for the Prevention and Control of Noncommunicable Diseases

Dr Enrique Loyola
Consultant, WHO European Office for the Prevention and Control of Noncommunicable Diseases

Ms Amelie Schmitt
Consultant, WHO European Office for the Prevention and Control of Noncommunicable Diseases

Ms Alena Stepanova
Programme Assistant, WHO European Office for the Prevention and Control of Noncommunicable Diseases

WHO Country Office in the Russian Federation

Dr Melita Vujnovic
WHO Representative to the Russian Federation

Dr Elena Yurasova
NCD Programme Coordinator

Ms Olga Manukhina
National Professional Officer

WHO Country Office in Tajikistan

Dr Khadicha Boymatova
National Professional Officer, Nutrition

United Nations Children's Fund (UNICEF)

Mr Amirhossein Yarparvar
UNICEF Regional Health and Nutrition Specialist for Europe and Central Asia

Ms Malohat Shabanova
Nutrition Officer, United Nations Children's Fund, Dushanbe

Ms Bermet Sydygalieva
Health and Nutrition Officer, United Nations Children's Fund, Bishkek

Food and Agriculture Organization of the United Nations (FAO)

Mr Aghasi Harutyunyan
Liaison Officer, Liaison Office with the Russian Federation

Observers

Dr Natalia Komarova
Executive Director, Centre for Health Economics and Management in Healthcare, SKOLKOVO Healthcare Development Centre, Moscow School of Management SKOLKOVO

Mr Yuri Krestinsky
Director of the Centre for Health Economics and Management in Healthcare, SKOLKOVO Healthcare Development Centre, Moscow School of Management SKOLKOVO

Dr Tatyana Butskaya
Paediatrician, blogger

Mr Pavel Savchuk
Chairman of the All-Russian Community-Based Movement "Volunteers-Physicians"; Deputy Director of the Federal Centre for Volunteer Support for Health Care under the Russian Ministry of Health

Rapporteur

Ms Karen McColl

Interpreters

Mr Vladimir Ilyukhin

Ms Inna Bashina

Ms Elena Labtsova

References*

[1] Good maternal nutrition: the best start in life. Copenhagen: WHO Regional Office for Europe; 2016 (http://www.euro.who.int/__data/assets/pdf_file/0008/313667/Good-maternal-nutrition-The-best-start-in-life.pdf).

[2] Horta BL, Bahl R, Martines JC, Victora CG. Evidence on the long-term effects of breastfeeding: systematic reviews and meta-analyses. Geneva: World Health Organization; 2007 (https://apps.who.int/iris/bitstream/handle/10665/43623/9789241595230_eng.pdf).

[3] Horta BL, Victora CG. Long-term effects of breastfeeding: a systematic review. Geneva: World Health Organization; 2013 (https://apps.who.int/iris/bitstream/handle/10665/79198/9789241505307_eng.pdf).

[4] Order of 1 November 2012 N572N on Approval of the Order of Medical Assistance Provision on the Profile "Obstetrics and Gynaecology (except for the use of auxiliary reproductive technologies)".

[5] Norms of physiological needs for energy and nutrients intake for different groups of the population of the Russian Federation. MR 2.3.1.2432-08. Moscow: Ministry of Health of the Russian Federation; 2008.

[6] Stephenson J, Kuh D, Shawe JA, Lawlor D, Sattar NA, Rich-Edwards J et al. Why should we consider a life course approach to women's health care? Scientific Impact Paper No. 27. London: Royal College of Obstetricians and Gynaecologists; 2011.

[7] Action plan for sexual and reproductive health: towards achieving the 2030 Agenda for Sustainable Development in Europe – leaving no one behind. Copenhagen: WHO Regional Office for Europe; 2016 (http://www.euro.who.int/__data/assets/pdf_file/0003/322275/Action-plan-sexual-reproductive-health.pdf).

[8] Preconception care to reduce maternal and childhood mortality and morbidity. Meeting report. Geneva: World Health Organization; 2013 (https://apps.who.int/iris/bitstream/handle/10665/78067/9789241505000_eng.pdf).

[9] WHO recommendations on antenatal care for a positive pregnancy experience. Geneva: World Health Organization; 2016 (https://apps.who.int/iris/bitstream/handle/10665/250796/9789241549912-eng.pdf).

[10] Stephenson J, Heslehurst N, Hall J, Schoenaker DAJM, Hutchinson J, Cade JE et al. Before the beginning: nutrition and lifestyle in the preconception period and its importance for future health. Lancet. 2018;391(10132):1830–41.

[11] Guideline: protecting, promoting and supporting breastfeeding in facilities providing maternity and newborn services. Geneva: World Health Organization; 2017 (https://apps.who.int/iris/bitstream/handle/10665/259386/9789241550086-eng.pdf).

[12] Protecting, promoting and supporting breastfeeding in facilities providing maternity and newborn services: the revised Baby-Friendly Hospital Initiative. Implementation guidance. Geneva: World Health Organization; 2018 (https://apps.who.int/iris/bitstream/handle/10665/272943/9789241513807-eng.pdf).

[13] Guiding principles for complementary feeding of the breastfed child. Washington (DC): Pan American Health Organization; 2003 (https://www.who.int/nutrition/publications/guiding_principles_compfeeding_breastfed.pdf).

[14] Resolution WHA 69.9. Ending inappropriate promotion of foods for infants and young children. In: Sixty-ninth World Health Assembly, Geneva, 28 May 2016. Geneva: World Health Organization; 2016 (http://apps.who.int/gb/ebwha/pdf_files/wha69/a69_r9-en.pdf).

[15] Guidance on ending the inappropriate promotion of foods for infants and young children: implementation manual. Geneva: World Health Organization; 2017 (https://apps.who.int/iris/bitstream/handle/10665/260137/9789241513470-eng.pdf).

[16] IFE Core Group. Infant and young child feeding in emergencies: operational guidance for emergency relief staff and programme managers. Version 3.0. Oxford: Emergency Nutrition Network; 2017 (https://www.ennonline.net/attachments/3127/Ops-G_English_04Mar2019_WEB.pdf).

[17] Breastfeeding infographics [downloadable posters, etc.]. Geneva: World Health Organization (https://www.who.int/topics/breastfeeding/infographics/en).

[18] Set of recommendations on the marketing of foods and non-alcoholic beverages to children. Geneva: World Health Organization; 2010 (https://www.who.int/dietphysicalactivity/publications/recsmarketing/en).

[19] Sacker A, Kelly Y, Iacovou M, Cable N, Bartley M. Breast feeding and intergenerational social mobility: what are the mechanisms? Arch Dis Child. 2013;98(9):666–71.

[20] Victora CG, Horta BL, Loret de Mola C, Quevedo L, Pinheiro RT, Gigante DP et al. Association between breastfeeding and intelligence, educational attainment, and income at 30 years of age: a prospective birth cohort study from Brazil. Lancet Glob Health. 2015;3(4):e199–205.

* Unless otherwise stated, all websites mentioned in the References were accessed on 3 April 2019.

[21] Bærug A, Laake P, Løland BF, Tylleskär T, Tufte E, Fretheim A. Explaining socioeconomic inequalities in exclusive breast feeding in Norway. Arch Dis Child. 2017;102(8):708–14.

[22] Hinnig PF, Monteiro JS, de Assis MAA, Levy RB, Peres MA, Perazi FM et al. Dietary patterns of children and adolescents from high, medium and low human development countries and associated socioeconomic factors: a systematic review. Nutrients. 2018;10(4).pii:E436.

[23] Cameron AJ, Spence AC, Laws R, Hesketh KD, Lioret S, Campbell KJ. A review of the relationship between socioeconomic position and early-life predictors of obesity. Curr Obes Rep. 2015;4(3):350–62.

[24] Diderichsen F. Health inequality: determinants and policies. Scand J Public Health. 2012;40:12–105.

[25] Diderichsen F, Scheele CE, Little IG. Tackling health inequalities locally: the Scandinavian experience. Copenhagen: University of Copenhagen; 2015 (https://www.sst.dk/da/planlaegning/ulighed/nordisk-konference/rapporten-tackling-health-inequalities-locally-the-scandinavian-experience).

[26] Neo-BFHI: the Baby-Friendly Hospital Initiative for neonatal wards [web portal]. Raleigh (NC): International Lactation Consultant Association (http://www.ilca.org/main/learning/resources/neo-bfhi).

[27] Promoting and supporting the initiation, exclusivity, and continuation of breastfeeding for newborns, infants, and young children. 3rd edition. Toronto: Registered Nurses' Association of Ontario; 2018 (https://rnao.ca/sites/rnao-ca/files/bpg/Breastfeeding_BPG_2018.pdf).

[28] See, for example, Castiglione SA, Ritchie JA. Moving into action: we know what practices we want to change, now what? An implementation guide for health care practitioners. Ottawa: Canadian Institutes of Health Research; 2012 (http://www.cihr-irsc.gc.ca/e/documents/lm_moving_into_action-en.pdf); and Flottorp SA, Oxman AD, Krause J, Musila NR, Wensing M, Godycki-Cwirko M et al. A checklist for identifying determinants of practice: a systematic review and synthesis of frameworks and taxonomies of factors that prevent or enable improvements in healthcare professional practice. Implement Sci. 2013;8:35.

[29] The Behaviour Change Wheel [website] (http://www.behaviourchangewheel.com).

[30] Hromi-Fielder AJ, Dos Santos Buccini G, Gubert MB, Doucet K, Pérez-Escamilla R. Development and pretesting of "Becoming Breastfeeding Friendly": empowering governments for global scaling up of breastfeeding programmes. Matern Child Nutr. 2018;e12659.

[31] Nyqvist KH, Maastrup R, Hansen MN, Haggkvist AP, Hannula L, Ezeonodo A et al. Neo-BFHI – the Baby-Friendly Hospital Initiative for neonatal wards: three guiding principles and ten steps to protect, promote and support breastfeeding. Nordic and Quebec Working Group; 2015.

[32] Kellams A, Harrel C, Omage S, Gregory C, Rosen-Carole C. ABM Clinical Protocol #3: Supplementary feedings in the healthy term breastfed neonate, revised 2017. Breastfeed Med. 2017;12:188–98.

[33] Eglash A, Simon L; Academy of Breastfeeding Medicine. ABM Clinical Protocol #8: Human milk storage information for home use for full-term infants, revised 2017. Breastfeed Med. 2017;12(7):390–5.

[34] Fewtrell M, Bronsky J, Campoy C, Domellöf M, Embleton N, Fidler Mis N et al. Complementary feeding: a position paper by the European Society for Paediatric Gastroenterology, Hepatology, and Nutrition (ESPGHAN) Committee on Nutrition. J Pediatr Gastroenterol Nutr. 2017;64(1):119–32.

[35] Statistical collection of the Regional Health Committee of the Volgograd Region.

[36] Polkatilov AB, Sarvanova SV, Khrvorostovoa AV. WHO/UNICEF BFHI initiative in the Volgograd region – 20 years. Chief Doctor of South Russia [medical journal]. 2018:4(63):30–3.

[37] Maastrup R, Haiek LN, Neo-BFHI Survey Group. Compliance with the "Baby-friendly Hospital Initiative for Neonatal Wards" in 36 countries. Matern Child Nutr. 2019;15(2):e12690.

[38] Bærug A, Langsrud Ø, Løland BF, Tufte E, Tylleskär T, Fretheim A. Effectiveness of Baby-friendly community health services on exclusive breastfeeding and maternal satisfaction: a pragmatic trial. Matern Child Nutr. 2016;12(3):428–39.

The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

Member States

Albania
Andorra
Armenia
Austria
Azerbaijan
Belarus
Belgium
Bosnia and Herzegovina
Bulgaria
Croatia
Cyprus
Czechia
Denmark
Estonia
Finland
France
Georgia
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy
Kazakhstan
Kyrgyzstan
Latvia
Lithuania
Luxembourg
Malta
Monaco
Montenegro
Netherlands
North Macedonia
Norway
Poland
Portugal
Republic of Moldova
Romania
Russian Federation
San Marino
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Tajikistan
Turkey
Turkmenistan
Ukraine
United Kingdom
Uzbekistan

WHO European Office for the Prevention and Control of Noncommunicable Diseases

9 Leontyevsky Pereulok
125009 Moscow, Russian Federation

Tel.: +7 495 787 21 68

Email: NCDoffice@who.int