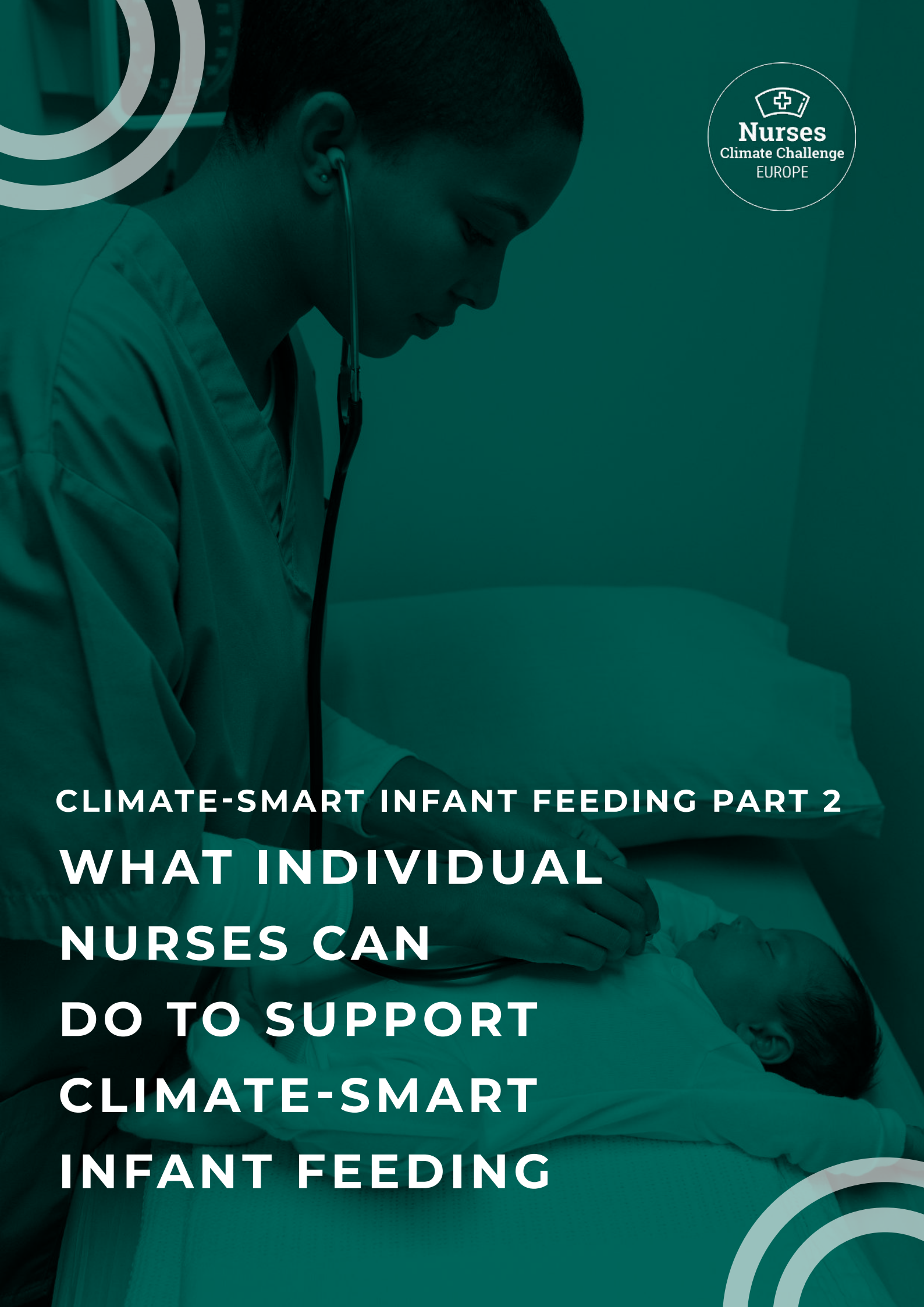

Nurses
Climate Challenge
EUROPE

CLIMATE-SMART INFANT FEEDING PART 2

WHAT INDIVIDUAL NURSES CAN DO TO SUPPORT CLIMATE-SMART INFANT FEEDING

CONTENTS

TERMINOLOGY USED IN THIS DOCUMENT

This document uses the word 'mother' to describe parents who are breastfeeding. We acknowledge that there are breastfeeding parents who may have a gender identity other than female and may use terms other than 'mother' to describe themselves. We also know that some parents may prefer 'chest feeding' to 'breastfeeding'. We are clear that all parents should be treated with dignity and respect when accessing support. When we are asked to use pronouns, terms, and descriptors other than those in this document we will use the preferred words as part of individualised care. We also acknowledge that breastfeeding may not be possible for all mothers and infants. We emphasise that parents should discuss different infant feeding options with a healthcare professional, who can provide advice and counselling to select the best method for both mother and infant.

INTRODUCTION

Infant feeding is greatly influenced by environmental factors and different infant feeding methods have various implications for the health and safety of baby and mother. As reviewed in the NCC resource **Climate-smart infant feeding [Part 1]**, breastfeeding is the most environmentally beneficial and also the healthiest option.

As a nurse or a midwife, you are the first and most trusted source of information for expectant and new parents that are searching for advice. This guide will give you practical ideas on how to support climate-resilient infant nutrition and how to reduce the environmental impact of infant feeding in your daily work.

1. PROMOTE AND SUSTAIN EXCLUSIVE BREASTFEEDING

To support the health of infants and young children and to reduce the environmental impact of alternative infant-feeding, breastfeeding should be supported. Compared to formula, breastfeeding does not require intensive dairy farming, extraction of freshwater, the production of plastic bottles, storage, or transport. Breastfeeding is not wasteful - supply equals demand – and it provides a source of natural protection from infection.[1]

Exclusive breastfeeding is encouraged by the WHO and the UNICEF **Baby Friendly Initiative**. To support uptake, nurses and midwives need to support parents, especially when breastfeeding is being established.

Midwives or nurses should provide information (in line with WHO guidelines),[2] during the antenatal period so that parents can make a fully informed decision for their approach to infant-feeding.

WHO GUIDELINES ON BREASTFEEDING

Support for exclusive breastfeeding may include the following:

- When possible, mothers should experience immediate skin to skin contact at birth - this is the best start to breastfeeding.
    - For premature or unwell newborns, this should be facilitated at birth or as soon as the health of the infant allows.
- Midwives or nurses should support mothers to initiate breastfeeding.
- The first feed should ideally take place as early as possible, preferably within an hour of birth.
- Frequent feeding should be encouraged - this starts to build the mother's milk supply.
- Supplementary feeding should be avoided where possible, instead mothers should be supported to hand express and feed infants via a cup or spoon - avoid using bottles.
- Concerning reluctant feeders and high-risk infants, e.g. those who are born to diabetic mothers or late preterm infants, maternity service policies should promote exclusive breastfeeding with minimum intervention and limit the use of formula.

Breastfeeding is not established until four-six weeks after birth. During this time there can be challenges for both mother and baby.[3] When facing difficulties breastfeeding, formula should be avoided whenever possible, instead nurses and midwives should encourage hand expressing. By reducing the need for breast pumps and associated equipment, such as bottles and disposable teats, hand expressing is the most environmentally friendly alternative. It also helps to protect the mother's milk supply. Supplementing breast milk with formula early in an infants' development reduces mothers' confidence and may end breastfeeding prematurely.[4]

When expressing breastmilk or supplementary milk is necessary, infants should be fed via a cup or spoon instead of a bottle, pacifiers should also be avoided.[5,6] Midwives, nurses, or health visitors can educate mothers on how to do this safely. This approach will increase the likelihood of returning to or sustaining exclusive breastfeeding.

2. SUPPORT FULLY INFORMED DECISION MAKING

Parents require clear, accurate, and up to date information to make a fully informed decision about how to feed their baby. Health professionals should only provide parents with evidence-based resources developed from standardised best practice. They should be non-commercial and free from advertising.[7]

Working in a *Baby Friendly Accredited* healthcare provider requires implementation adherence to the International Code of marketing of Breast Milk Substitutes. This is an internationally recognised framework to regulate marketing of formula milk and to protect breastfeeding. Published by the WHO in 1982, it is a voluntary code of practice. The code is fully or partially implemented in some countries or not at all. Health professionals in different countries therefore apply different criteria.[8]

The code requires health professionals to provide factual and scientific information to families. It was developed in response to formula milk companies'

Credit: Adele Hosie, Infant Feeding Peer Support Coordinator, NHS Grampian

advertising and a general decline in breastfeeding,[8] *"recognising that inappropriate feeding practices lead to infant malnutrition, morbidity and mortality in all countries, and that improper practices in the marketing of breast-milk substitutes and related products can contribute to these major public health problems."* [9]

The code does not restrict support for formula feeding. Families who are using formula will be provided with the same evidence-based and unbiased information about formula milk. Nurses and midwives must never recommend one formula over another but must advocate for the use of first stage formula for the first year and then the introduction of cow's milk. There has been a proliferation of formula milks which are marketed for specific issues, such as reflux or colic. Nurses and midwives should advise families that these should not be purchased without a feeding assessment by a health professional and that they are rarely appropriate.[8]

3. CHOOSING BREASTFEEDING EQUIPMENT

Breastfeeding equipment such as breast pumps, pads, specialist breastfeeding clothes, or cushions have a high carbon and environmental footprint. Midwives and nurses can educate mothers that these items are rarely necessary and that environmentally-friendly options are often available. When needed, nurses and midwives should encourage parents to follow circular economy principles and avoid single-use products, instead choosing second-hand items where appropriate or reusable products such as using washable breast pads. Parents can also simply use existing household items, e.g. a regular cushion in place of a "breastfeeding cushion".

Nurses and midwives should advise pregnant women that they do not need to purchase equipment for breastfeeding in the antenatal period. The commercialisation of breastfeeding, including marketing practises encouraging women to buy breastfeeding equipment during pregnancy should be challenged. These are often unnecessary and unused, creating emissions and waste.[10]

If a mother returning to work requires a breast pump to maintain breastfeeding this can be purchased at the time of need. Many mothers, however, continue to hand express - though this depends on the type of work, hours worked, and distance from the childcare premises. Mothers who are returning to work once their baby has begun to eat solids may also find that expressing milk is not necessary as her baby may simply breastfeed with her and eat other food when away from her; her milk supply will naturally adjust to this new regime.

Hand expressing is an option which requires no equipment and is a skill that is easily taught to mothers. Teaching mothers to hand express is a requirement of the UNICEF Baby Friendly curricula.[6] Some breastfeeding mothers may express breastmilk and use baby bottles. These should ideally be made of glass instead of plastic to prevent toxic chemicals leaching into the milk.

4. PROMOTE CONTINUED BREASTFEEDING

The WHO recommends that breastfeeding should continue alongside the introduction of solid food until the age of two and beyond.[11] Continuing to breastfeed beyond six months means that infants do not need formula at all.

Parents should be supported to continue to breastfeed for as long as they wish to and to combine this with returning to work if need be. This may require the mother to express breastmilk for her own comfort or to feed her child in her absence. Again, health professionals should promote hand expressing as a low-impact method. If required, manual pumps are a more environmentally sustainable and robust choice, as they do not need electricity to work. Additionally, the production of manual pumps has a lower environmental impact than electric pumps, as they require fewer materials.

Parents should be advised that it is not necessary to introduce a bottle after the age of six months. At this age, infants can typically drink from a free-flow feeder cup. Dentists recommend that all babies, even those that have been exclusively bottle-fed, should stop using bottles by one year of age, due to the risk of tooth decay.[12]

5. REUSABLE BREASTFEEDING AND MENSTRUAL PRODUCTS

Breast pads prevent the leaking of breast milk from reaching the nursing bra or shirt and are used during late pregnancy and throughout breastfeeding. Encouraging mothers to use reusable, washable breast pads supports a circular economy and reduces waste.

Healthcare professionals can advise mothers that breastfeeding typically means that their periods are slower to return – this may be considered a positive aspect of breastfeeding.[13] This can also mean a reduction in disposable tampons and pads and a reduced environmental impact both in terms of production emissions and waste. The mass production of single-use menstrual products uses cotton fibres,

polyethylene plastics, and contaminants.[15] When disposed of, evidence suggests that non-organic menstrual pads can take 500–800 years to break down.[14] Single-use menstrual pads can also expose women to hormone disrupting, toxic chemicals.[15]

When considering the return of their period, mothers can also be advised about washable and reusable menstrual pads or menstrual underwear. Once recovered from the birth, they can also consider menstrual cups, helping to reduce the number of menstrual products used. Once the adjustment is made, these could be easy, minor changes, but with significant potential to reduce negative environmental impacts and even save money.

6. A CIRCULAR ECONOMY APPROACH IN MATERNITY WARDS

Nurses and midwives working in hospital settings should promote and support the introduction of safe reusable items in infant feeding and maternity food services in their ward. To protect both vulnerable patients and the environment, single-use and plastic items should be avoided as much as possible. Healthcare professionals can get involved in procurement decisions by advocating for more sustainable and healthier alternatives.[16, 17]

Many European hospitals are successfully reducing supply chain emissions, waste, and harmful exposures from plastic food contact materials.

- **Reducing pregnant women and young children's exposure to plastic** (France)
- **Using glass bottles in the milk bank, maternity, and neonatal departments** (Spain)
- **Developing Frameworks for Evaluation and Mitigation of the Environmental Impact of Infant Feeding Decisions on Healthcare and Society** (Ireland)

7. EDUCATION AND TRAINING FOR HEALTH PROFESSIONALS

Individual nurses and midwives caring for breastfeeding families develop positive therapeutic relationships based on mutual trust. Health professionals are aware of the health benefits of breastfeeding, but perhaps not yet aware of the reduced environmental footprint that breastfeeding can offer and they may need training to address this knowledge gap.

Education and training about the connection between breastfeeding and the environment should be provided to nurses, midwives, and health or social care providers who care for pregnant women and new mothers. Educators and nursing students can advocate for the environmental considerations of infant feeding to be included in nursing and midwifery courses.

Nurses and midwives who have learned about the connection between infant feeding and the environment can educate their colleagues on this topic and support the integration into teaching curricula and practical education.

As families become more aware of environmental issues, health professionals can engage in discussions about the positive contribution breastfeeding can make to climate change. They should be able to facilitate a conversation with mothers and advise on how they can help support the initiation and continuation of breastfeeding. The development of a local network of breastfeeding supporters can reduce the need for transport and increase the likelihood of mothers choosing to breastfeed.[18]

CONCLUSION

As a nurse or midwife you can support parents to choose the best options for their family and protecting their child from environmental harm. Mothers and their infants benefit greatly from the support and informed advice of a nurse or midwife. Some barriers to breastfeeding, however, are not in your or the family's hands and can only be addressed with advocacy for systemic change.

The Climate-smart infant feeding series continues with **Advocacy for climate-smart infant feeding** - learn how you can build breastfeeding-friendly communities and services that protect both public health and our environment.

AUTHORS

- Dr Elizabeth Smith – Breastfeeding Advocacy Lead for Scotland - Scottish Government
- Anna Fuhrmann - Climate Officer - HCWH Europe

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eur.nursesclimatechallenge.org
ncceurope@hcwh.org