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Supporting the Most Vulnerable Through Appropriate Infant and Young Child Feeding in Emergencies

Karleen Gribble, BRurSc(Hons), PhD[1]

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The past decade or so has seen a growing awareness among those involved in supporting breastfeeding that emergencies place infants and young children at particular risk. Increasingly, experts in infant feeding in nonemergency contexts have sought to be involved in advocating for and supporting the needs of infants and young children in emergency situations. With this growing interest, as well as greater frequency of emergencies throughout the world, there is a need for increased knowledge among International Board Certified Lactation Consultants (IBCLCs) and others about what helps, and what doesn't, in infant and young child feeding in emergencies (IYCF-E).

Karleen Gribble, BRurSc(Hons), PhD

What Is IYCF-E and Why Is It Important?

IYCF-E concerns the support of the nutritional needs of children from birth until 2 years of age in any emergency situation. Emergencies include natural disaster, war, famine, or disease outbreak—essentially, any situation in which there is widespread threat to life and health. Emergencies can happen anywhere and can rapidly change a highly developed and safe environment for infants into one that is extremely dangerous.

There are three components to IYCF-E. First, IYCF-E involves supporting breastfeeding, including supporting early initiation of breastfeeding, exclusive breastfeeding for the first 6 months of life, and continued breastfeeding until 2 years of age. It may also include assisting mothers and caregivers to move from mixed feeding to exclusive breastfeeding, supporting relactation, and facilitating wet nursing.

Second, IYCF-E involves supporting nonbreastfed infants through enabling access to breastfeeding or human milk wherever possible and through the provision of support and resources for formula feeding wherever breastfeeding is not possible. Support and resources for formula feeding include access to infant formula; feeding, preparation, and washing implements; fuel; safe water; education; and health monitoring and care.

Third, IYCF-E involves supporting complementary feeding through ensuring that older infants and young children have access to appropriate complementary foods. This includes making sure that complementary foods are of acceptable quality, varied, and provided in an appropriate amount and that caregivers are provided with the resources needed to hygienically prepare meals and with support to responsively feed.

Supporting IYCF-E is important because infants and young children are a particularly vulnerable group in any emergency. Their high susceptibility to infection, their inability to care for themselves and their extremely specific food and fluid needs mean that they need special attention. The greatest risks to infants and young children in emergencies are posed by diarrhea, respiratory tract infections, and malnutrition (Carothers & Gribble, 2014). Even in previously well-nourished populations, an emergency can quickly place the health and lives of large numbers of infants in jeopardy (e.g., Yip & Sharp, 1993).

Emergencies by nature create unhygienic environments in which clean water and food are often in short supply and healthcare, to treat conditions like diarrhea or respiratory tract infections, is scarce. Infants who are exclusively breastfed have

[1]School of Nursing and Midwifery, Western Sydney University, Penrith, NSW, Australia

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Corresponding Author:
Karleen Gribble, BRurSc(Hons), PhD, School of Nursing and Midwifery, Western Sydney University, Locked Bag 1797, Penrith, NSW 2751, Australia.
Email: k.gribble@westernsydney.edu.au

access to a secure, safe source of water and fuel and antimicrobial, antiviral, and antiprotozoal factors that help to fight infection (Gribble, 2011). In contrast, infants who are artificially fed often experience food insecurity and are easily exposed to infectious agents via water used to reconstitute infant formula or to clean feeding implements. Even when properly prepared or provided in the form of a sterile ready-to-use product, infant formula helps to facilitate and maintain infection through the impact on the intestinal environment and because infants may be fully or partially deprived of the anti-infective agents in human milk (Gribble, 2011). A flood emergency in Botswana in 2005-2006 provided a stark illustration of the protection afforded by breastfeeding and the vulnerability of formula-fed infants. In this emergency, more than 500 children younger than 2 years died from diarrhea; nonbreastfed children were 30 times more likely to require medical treatment, and of a cohort of 33 children who died in hospital, 32 were not breastfed (Creek et al., 2010). It is imperative that breastfeeding is supported in emergencies and that nonbreastfed infants receive intensive support.

Unfortunately, breastfeeding rates commonly decline in emergencies. This occurs because the disruption and trauma of an emergency make it difficult to provide for all aspects of child care, mothers often believe that stress or poor diet has adversely impacted their milk production or quality, and needed support for breastfeeding is lacking. Furthermore, infant formula is commonly efficiently and widely distributed in aid, increasing rates of artificial feeding (e.g., Hipgrave, Assefa, Winoto, & Sukotjo, 2012).

Although it is frequently believed that mothers or caregivers would not request or use infant formula in an emergency if it were not really needed, this is not the case. Families often request and use infant formula because of the erroneous belief that stress or lack of food can impact milk production or quality, meaning that women cannot or should not breastfeed. In addition, unethical marketing of infant formula results in individuals aspiring to formula feed and believing that infant formula is good for the health of infants. Finally, individuals want to obtain infant formula because it is a product of inherently high value and because the culture supports formula feeding (Gribble, 2014).

Guidance for IYCF-E

It is clearly very important that aid be properly provided to infants and young children in emergencies. The international interagency collaboration, the Infant and Young Child Feeding in Emergencies Core Group (IFE Core Group), is the organization responsible for developing policy guidance on IYCF-E. The *Operational Guidance on Infant and Young Child Feeding in Emergencies* (OG-IFE) is the main publication of the IFE Core Group. It covers the whole range of emergency preparedness and response in relation to IYCF-E including detailed guidance on how to protect the health and well-being of breastfed and nonbreastfed infants and young children. The OG-IFE was endorsed by the World Health Assembly, in resolution 63.23, in 2010. In September 2017, a new version of the OG-IFE was published (IFE Core Group, 2017). This new version takes into account the experiences of the previous decade in the provision of aid to infants and young children. The OG-IFE is essential reading for any individual or organization involved in emergency response.

Emergency Preparedness Is Essential for an Appropriate IYCF-E Response

Despite the increasing prevalence of emergencies and the clear vulnerability of infants and young children to the adverse consequences of emergencies, many countries do not have IYCF-E plans in place. This was highlighted by the World Breastfeeding Trends Initiative's (WBTi) evaluation of the infant feeding environment of 83 countries. Of all of the indicators, the IYCF-E preparedness indicator has the lowest average score with only six countries (Sri Lanka, Philippines, Bangladesh, Indonesia, Nepal, and Cuba) having scores of 9 out of 10 or greater (Gupta & Suri, 2016). In contrast, 23 countries (including those where emergencies are regularly experienced such as India, Cambodia, Fiji, Brazil, and the United States) have a score of 0, meaning that their level of emergency preparedness for IYCF-E is extremely poor.

The value of emergency preparedness plans is evident in IYCF-E response. For example, Nepal is a low income country with low levels of development. However, when an earthquake emergency occurred in 2015, the country had preexisting programs in place to support infant and young child feeding and established IYCF-E preparedness plans. Nepal was well placed to provide an effective IYCF-E response. Among other IYCF-E actions, authorities were able to quickly train and deploy 15,000 individuals to support nutrition screening and infant feeding counseling, which reached 90% of mothers of children younger than 2 years (Aguayo, Sharma, & Subedi, 2015). Such an achievement in a country with very limited resources and difficult geography is incredibly impressive and reflective of the work that went into preparing for an emergency.

In contrast, without IYCF-E emergency preparedness plans, the emergency response is often poor. Countries are unable to prevent the unsolicited donations of infant formula and other milks that are quickly sent by other nations, manufacturers, organizations, and individuals, and it often takes months to plan for, recruit, and deploy infant feeding counselors. In such circumstances, unsolicited donations are distributed and used, breastfeeding rates decline, and rates of artificial feeding increase (e.g., Hipgrave et al., 2012). It is unfortunately the case that what seems like a good idea in supporting infants in emergencies is often harmful, and lack of IYCF-E preparedness plans facilitates much well-intentioned harm. The attendant result in terms of infant morbidity and mortality can be tragic.

Governments, nongovernmental organizations, and individuals can be complacent about IYCF-E, thinking that there will not ever be a large-scale humanitarian emergency in their context that would require a coordinated IYCF-E response. However, this is not the case. Emergencies can and do occur anywhere. This was illustrated in the European refugee crisis of 2015-2016 in which more than a million refugees, including large numbers of pregnant women, infants, and young children, arrived in Europe (United Nations High Commission for Refugees, United Nations Population Fund, & Women's Refugee Commission, 2015). Countries were totally unprepared to provide infant feeding support to these individuals (Palmquist & Gribble, in press). Similarly, the United States, Australia, New Zealand, and Japan have all experienced natural disasters in recent years for which they were unprepared in terms of IYCF-E.

Surprisingly, in developed countries, there is a lack of awareness of infants as a vulnerable group, and emergency preparedness and response plans do not adequately account for the needs of infants and young children. A Save the Children audit of emergency preparedness in Australia identified that there is more preparedness for the needs of pets than there is for children (Save the Children Australia, 2013). Similarly, in the United Kingdom, there are plans in place for dealing with circus and zoo animals but no IYCF-E plan (WBTi Steering and Core Groups, 2016).

Expertise in Infant Feeding Is Valuable in Emergencies

Identifying individuals who are able to provide infant feeding counseling has been a challenge in many emergencies. Links between humanitarian organizations and local mother-to-mother breastfeeding support organizations and lactation consultant organizations (where they are present) have often not existed or have been weak. In addition, breastfeeding counselors and IBCLCs have not felt that they had the skills to be involved in emergency work. This has meant that the expertise of such individuals has been underutilized in emergencies. For this to change, those with infant feeding expertise need to, first, appreciate that their infant feeding counseling skills are transferable to the emergency context and, second, know how to adjust their practice to the emergency context.

Mothers Have the Same Concerns and Needs in Emergencies

When individuals first work in the emergency context, they are often surprised by how similar mothers' and caregivers' concerns and needs are to what they have observed in the nonemergency context. In emergencies, mothers and caregivers worry about their baby getting enough milk. They feed their babies other foods because they think their milk is not good enough, they believe they don't have enough milk, or they are attempting to solve problems they face (such as needing to be separated from their infant in order to work or carry out essential activities). Marketing of infant foods can influence their feeding behaviors, as can cultural influences. They are often overwhelmed and anxious about their child's health and development.

The sort of response that mothers and caregivers need from IYCF-E workers is also the same as in the nonemergency context, that is, skilled infant feeding counseling. Infant feeding counseling enables mothers and caregivers to explore their feelings and desires without fear of rejection, condemnation, or disapproval. The counselor exhibits empathic understanding, provides appropriate information and reassurance, and assists the mother or caregiver in developing a plan. The vast majority of breastfeeding problems that present in emergencies are related to perceived insufficient milk supply, and breastfeeding counseling can be extremely successful in enabling women to exclusively breastfeed (Roseli & Sukotjo, 2008). Bringing mothers together in safe spaces (called mother–baby areas) assists women in emergencies just as it does in nonemergency situations (De Brabandere, David, & Dozio, 2014). Therefore, individuals with infant feeding counseling skills are well placed to be involved in the face-to-face aspect of IYCF-E.

Adjusting Practice for the Emergency Context

However, individuals new to IYCF-E may also face challenges in the emergency context such as those associated with differences in resource availability and risk, the issue of maternal choice in IYCF-E, working from pregnancy through to early childhood, supporting formula feeding, working cross-culturally, working in the humanitarian context, and working with traumatized people and ensuring self-care.

Resource availability and risk. One of the biggest challenges for new emergency workers is the change in practice that is necessitated by the absence of resources to which they are accustomed. Emergency environments often lack clean water, electricity, and sanitation. This means that, unless individuals are working in a clinic (with easy access to hot water), tools such as breastfeeding supplementers, breast pumps, feeding bottles, and nipple creams cannot be used because they are unsafe, and when it is necessary for an infant to be formula fed, feeding methods such as cup feeding are likely to be needed. Lack of resources means that individuals may have to consider how to counsel on complementary feeding when there are no suitable foods or how to formula feed when there is no clean water. Finally, mothers and caregivers may lack basic resources for living, which can directly impact infant feeding, and workers need to identify these issues; for example, lack of toilets can result in women limiting their water intake, causing dehydration and low milk supply. IYCF-E workers may also encounter more seriously ill and failure-to-thrive or malnourished infants than they are used to seeing in their work but also lack

avenues for referral for more intensive healthcare. This means that workers may be required to move into levels of care to which they are unaccustomed.

In addition, because of the lack of resources, the level of risk to which the mother and infant are exposed in an emergency is likely to be much higher than that to which the worker is familiar. The importance of exclusive and continued breastfeeding and the risks of formula feeding (or feeding other foods to infants) are greatly increased in emergencies. There is an imperative to support infants to be exclusively breastfed whenever possible. Thus, options such as relactation and wet nursing, with which the worker may not have much experience, are more likely to be applicable, and greater effort must be placed into supporting exclusive breastfeeding and avoiding formula feeding. Workers may be placed in a situation in which the safest option for HIV-positive women is to breastfeed, even though the national recommendation is to replacement feed when antiretrovirals are unavailable. Workers also need to consider the long-term safety of feeding methods. For example, the immediate situation may be assessed as one in which formula feeding may be moderately safe, however, the volatile nature of emergencies means that this can quickly change to an environment in which a formula-dependent infant will be at extremely high risk.

Maternal choice in IYCF-E. In the nonemergency context, whether an infant is breastfed or formula fed is generally a decision that solely belongs to the family. However, in an emergency, infant formula may be available only through organizations providing aid, and such supply should not be uncontrolled (IFE Core Group, 2017). The extent to which the supply is restricted and the criteria under which it is distributed vary between contexts. In small-scale emergencies in developed countries, a maternal request for infant formula, after assessment and counseling, may be sufficient for infant formula to be supplied. In large-scale emergencies and in developing country contexts, this is not the case, and it is routine for infant formula to be distributed only in cases in which it is not possible for an infant to be breastfed (e.g., Ayoya et al., 2013). This can be extremely challenging for individuals who have worked in environments in which it is believed that maternal choice (autonomy) in infant feeding should always be supported.

Placing distribution of infant formula within a public health ethics framework can assist in understanding why infant feeding should be supported differently in an emergency context. Public health ethics involves considering the principle of autonomy alongside the principles of nonmaleficence (do no harm), beneficence (providing benefit), health maximization (maximizing the health of the population), efficiency (using scarce resources effectively), and justice (fairness) (Schröder-Back, Duncan, Sherlaw, Brall, & Czabanowska, 2014). In an emergency, applying the principles of nonmaleficence, beneficence, and health maximization generally shifts the balance against supporting artificial feeding unless there is no other option. This is because providing infant formula in a situation in which children would otherwise be breastfed substantially increases the probability that they will become seriously ill or die. Furthermore, the principles of health efficiency and justice shift the balance against artificial feeding as a choice, as the difficulty associated with providing the necessary support makes it a very costly exercise. Thus, scarce aid dollars channeled to support a choice to formula feed likely means that other individuals will not receive aid that they absolutely require. When working in IYCF-E, it can be useful to consider infant formula less as a food than as a medicine.

Supporting formula feeding. Nonbreastfed infants need support in emergencies, but those whose background is mainly in breastfeeding support may not have very much experience in supporting formula feeding. Such individuals can be encouraged by knowing that the skills of breastfeeding counseling can be easily transferred to situations in which a caregiver is formula feeding an infant. In addition, the knowledge base needed to support formula feeding at an individual level is relatively small and easily acquired. However, some may have a reluctance to develop their knowledge and apply their skills to supporting formula feeding, and this very much limits their usefulness in the emergency context. Anyone who wishes to be involved in IYCF-E should understand the necessity of supporting nonbreastfed infants, be willing to learn how to support formula feeding, and be willing to be involved in such support.

Working from pregnancy to early childhood. IYCF-E involves supporting women from when their children are in utero, through newborn, exclusive breastfeeding, and introduction of complementary foods to 2 years of age. IBCLCs who have a background as mother-to-mother breastfeeding counselors or as community-based IBCLCs (in private practice or family and child health nursing) tend to be best placed to provide the sort of support that is needed. This is simply because they have experience with working with infants across a wide age range and because the sort of breastfeeding challenges that mothers face in emergencies is similar to what they regularly see in their day-to-day work. Hospital-based IBCLCs and midwife IBCLCs can find it difficult to work with non-newborns and may need to consider undertaking further training or actively seek experience in working with older babies and young children before being involved in IYCF-E.

Working cross-culturally. The emergency environment often requires individuals to work cross-culturally. Since infant feeding is a highly culturally determined practice, individuals who are working with mothers and caregivers need to be self-aware concerning their beliefs and attitudes about infant and young child feeding and alert to understanding and respecting those of the population. For example, all cultures

have beliefs about what constitutes a suitable complementary food, and parents and caregivers will be reluctant to feed their children foods that they do not believe are appropriate. Therefore, it is important that those working with the emergency-affected population identify which foods are deemed culturally suitable and seek to supply foods that are acceptable to parents and caregivers. Similarly, the traditional galactogogues of the population affected by the emergency may be different from those of the individual providing IYCF-E support. Therefore, it is largely futile for those providing support to involve their own traditional galactogogues, but it may be useful to employ those of the affected population. Finally, many cultures have beliefs that reject colostrum for newborns, and only understanding the underlying basis of those beliefs will allow for counseling to support early initiation of breastfeeding (e.g., in Haiti; Dörnemann & Kelly, 2013). Other aspects of infant feeding that are commonly culturally determined include who makes decisions about how a baby is fed, what foods a lactating woman can and cannot eat, when infants should be introduced to other foods or cease breastfeeding, if breastfeeding and sex or pregnancy can coexist, whether wet nursing creates a familial relationship, and if breastfeeding in public is appropriate. It may be necessary to communicate with mothers and caregivers via a translator in emergencies. In such circumstances, language and cultural barriers increase the importance of verbal and nonverbal expressions of empathy.

Working in the humanitarian context. The emergency environment can be disorientating. Normal expectations of life in terms of resources, social structures, social positioning, and behavior may be very different from what emergency workers have experienced. This can sometimes result in individuals having difficulty in applying their ethical framework. However, anyone involved in IYCF-E needs to understand and apply the four humanitarian principles of humanity, neutrality, impartiality, and independence (United Nations Office for the Coordination of Humanitarian Affairs, 2012). This means, for example, that they must recognize their own position of power and the vulnerability of the people with whom they are working and must treat people with great respect and care. Thus, in working with families, they would not touch or hold a child unless it is necessary and would not do so without asking for permission. In addition, they would place those they are assisting central in their actions and would consider what is truly helpful for individuals rather than what makes themselves feel good (e.g., would parents want you to carry their child or their luggage?). Furthermore, they would not engage in activities such as taking photographs of the emergency-affected people for their own satisfaction or notoriety. Finally, they would keep their views about any political aspect of the situation to themselves and not discriminate in providing care on the basis of factors such as race or religion or seek to impose their own beliefs on people. Workers need to be aware that whatever context they are working in, those most affected by the emergency are the most socially disadvantaged in the population (Reid, 2013).

Working with traumatized people and ensuring self-care. The emergency context can be an emotionally challenging environment in which to work. The situation of those affected by the emergency is often extremely difficult and the needs of the people can appear bottomless. Workers often do not have the resources or the time to provide the care that people need. This can be distressing, especially in IYCF-E as infant feeding counseling requires the counselor to be empathic. It is also important to appreciate that mothers and caregivers often have competing priorities and may not be willing or able to take actions that infant feeding workers see as important. Furthermore, individuals need to ensure that they do not attempt to meet every need and that they look after their own physical and emotional well-being as they engage in IYCF-E. Undertaking training in psychological first aid will assist in meeting the needs of both those impacted by the emergency and those individuals providing aid.

Advocacy and the Media in IYCF-E

Individuals who cannot go to an emergency but want to do something to help can do so via advocacy and in encouraging appropriate IYCF-E via traditional and social media. Advocacy with aid organizations and governments before and during emergencies can support the development of appropriate preparedness plans and the implementation of an appropriate IYCF-E response.

The traditional media is extremely influential in emergencies and often drives the donations of infant formula, other milks, and bottles that harm infants and young children. However, the media can also help prevent such donations and encourage the delivery of appropriate aid and so play a protective role (Gribble, 2013). Similarly, social media can play a powerful role in supporting or undermining appropriate IYCF-E.

In advocating with journalists and via social media, the following points should be considered in messaging:

- Avoid anything that suggests that donations of infant formula or other baby feeding items would be helpful; this includes direct calls for donations but also any communications suggesting that stress, trauma, or lack of food inhibits milk production or prevents breastfeeding.
- Avoid messages that are purely breastfeeding promotion and do not provide assistance to those affected by the emergency. For example, a message that simply states that breastfeeding provides protection in an emergency without also providing helpful information will be viewed as exploitative. Helpful

information might include referring to a helpline or face-to-face service (such as a mother–baby area) that can provide assistance or stating that others should help mothers with other tasks so they can breastfeed.
- Do not ignore the needs of nonbreastfed infants; it should be emphasized that nonbreastfed infants are at great risk in emergencies due to their susceptibility to infection and that they require targeted support that includes infant formula and all the resources needed to formula feed with acceptable safety.
- Emphasize the protection provided by breastfeeding and the need to support mothers and caregivers to continue to breastfeed.
- Emphasize the risk posed by donations of infant formula, other milk products, bottles, and breast pumps to both breastfed and nonbreastfed infants via increasing rates of infection and explain why and how donations cause harm.

Finally, it is important not to seek to use the emergency for self-promotion or for an unrelated cause, for example, advertising for milk bank donors when the donor milk will not be used in aid.

Being Involved in IYCF-E

Perhaps this article has instigated a desire to be involved in IYCF-E. If this is the case, the following suggestions may provide avenues for action.

Education and training are the place to start for anyone wanting to support IYCF-E. The OG-IFE is freely available for download from the Emergency Nutrition Network website (http://www.ennonline.net), and there are a number of online courses available to assist in gaining knowledge about IYCF-E (e.g., http://lessons.ennonline.net/; https://www.nutritionworks.cornell.edu/UNICEF/about). There is also an abundance of resources on IYCF-E, including the Save the Children IYCF-E toolkit, on the Emergency Nutrition Network website. Generalized emergency training is also valuable; such training is often available through organizations such as the Red Cross. More in-depth training is available via undergraduate and postgraduate university degrees.

For those organizations and individuals who wish to be involved in local emergency responses, it is vital to preemptively develop relationships with local emergency management organizations, as this will enable involvement in IYCF-E. If no approach is made until an emergency occurs, there is a high probability that infant feeding expertise may not be recognized and involvement will be rejected. Sometimes, emergency management organizations require volunteers in emergency response to have undertaken specific training before being deployed. Identifying if this is the case before the emergency enables training to be undertaken and participation in the emergency to occur.

It can be difficult for aid organizations to obtain funding for IYCF-E, so everyone can be involved in supporting organizations that support appropriate IYCF-E through providing financial support.

Conclusion

The well-being of infants and young children in emergencies can be safeguarded only when mothers and caregivers are provided with skilled support to ensure appropriate feeding. IBCLCs and others with infant feeding expertise can play an important role in provision of this support. Those wishing to be involved in IYCF-E need to be familiar with the OG-IFE, have undertaken appropriate training, and have prepared themselves for the adjustments of practice necessary for the emergency context. Advocacy with governments, aid organizations, and the media and financially supporting organizations providing appropriate IYCF-E are further ways in which individuals and infant feeding organizations can support infants and young children in emergencies.

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