

Media messages and the needs of infants and young children after Cyclone Nargis and the WenChuan Earthquake

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Infants and young children are vulnerable in emergencies. The media plays an important role in aid delivery and has a positive impact when reports are accurate. However, the media has been implicated in encouraging harmful aid in the form of donations of infant formula and other milk products. Internet-based media reports were collected after Cyclone Nargis in Myanmar and the WenChuan Earthquake in China (2008) and examined for content related to infant and young child feeding. Common messages identified included that: babies are vulnerable; stress prevents breastfeeding; and providing infant formula saves lives. Messages rarely reported included that: artificial feeding is dangerous; and breastfeeding protects infants. This analysis suggests that current patterns of media reporting may encourage harmful aid and increase child morbidity and mortality. Aid organisations should encourage the media to report accurately on the needs of infant and young children in emergencies so as to improve aid delivery.

Keywords: breastfeeding, emergencies, humanitarian aid, infant formula, media communications

Introduction

When emergencies occur, infants and young children are the most vulnerable segment of the population (Khan and Munshi, 1983; Centers for Disease Control and Prevention, 1991; Yip and Sharp, 1993). It is a priority therefore to direct aid to support their well-being. Over the past decade, however, it has been common for aid, in the form of poorly targeted distribution of infant formula or other milk products, to undermine the health of children (FAO, 2000; World Health Organization et al., 2000; Borrel et al., 2001; Office of the Iraq Programme, 2002; International Study Team, 2003; Carballo and Heal, 2005; Arts, 2006; United Nations Children's Fund, 2008a; IRIN, 2009). Such distributions increase the rates of artificial feeding, resulting in increased morbidity and mortality in children, particularly due to diarrhoea (World Health Organization et al., 2001; World Health Organization, 2004, 2006; Adhisivam et al., 2006; Maclaine and Corbett, 2006; Creek et al., 2007; Harutyunyan, 2008). Often concomitant with the poorly targeted distribution of infant formula or other milk products is a lack of support for exclusive breastfeeding and measures to reduce the risks of artificial feeding (Borrel et al., 2001; Maclaine and Corbett, 2006; IRIN, 2009). It is accepted that there is a need to improve the

delivery of aid to infants and young children in emergencies, especially in relation to infant and young child feeding in emergencies (IYCF-E).

The international inter-agency collaboration, the Infant and Young Child Feeding in Emergencies Core Group (IFE Core Group), was formed to improve practice by developing capacity to protect and support appropriate infant and young child feeding in emergencies (IFE Core Group, 2007). It developed the *Operational Guidance for Emergency Relief Staff and Programme Managers* to provide concise, practical guidance on how to ensure appropriate infant and young child feeding in emergencies (IFE Core Group, 2007). This includes supporting women in breastfeeding exclusively and carefully controlling and targeting the distribution of infant formula so that it is only supplied to the caregivers of infants who cannot be breastfed. In addition, no milk products should be distributed as part of general rations (IFE Core Group, 2007). The IFE Core Group has produced training materials and related resources to support the application of the *Operational Guidance*.

While such direction is available to the providers of aid, as discussed, this *Guidance* often is not followed. Moreover, the media may play a role in this poor delivery of aid. It was noted in Sri Lanka after the Indian Ocean tsunami of 2004, for instance, that the media had encouraged the supply of inappropriate aid to infants:

The mass media was very keen on feeding babies so made a public appeal to supply artificial milk and feeding bottles. . . . The Ministry of Health faced many challenges to ensure that breastfeeding mothers continued to do so and did not swap to unsustainable and potentially dangerous infant formula (Jayathilaka, 2005).

It has long been recognised that the media plays a critical part in emergency response by alerting the public to the emergency and mobilising funds and assistance (Habayeb et al., 2005). It is understood as well, though, that the media can perpetuate misinformation, promoting ideas known to be false (Tierney et al., 2006). The phrase ‘disaster myths’ has been coined to describe beliefs that arise from inaccurate reporting of emergencies (Wenger and Friedman, 1986; Bennett and Daniel, 2002). Previously identified disaster myths include: the helplessness of those affected by emergencies; that the presence of unburied bodies is a disease risk; and that widespread looting inevitably follows a disaster (de Goyet, 2000; Bennett and Daniel, 2002). Disaster myths cause harm because of the influence they have on organisational, governmental, and public responses during emergencies (Tierney et al., 2006). It may be helpful to understand misinformation about IYCF-E as a type of disaster myth that might harm infants and their mothers (IFE Core Group, 2008). However, a systematic analysis of media reporting in relation to the needs of infants and young children in emergencies has not been carried out previously.

This study examined media reporting in relation to IYCF-E for two different emergencies: Cyclone Nargis and the WenChuan Earthquake. Cyclone Nargis made landfall in Myanmar on 2 May 2008, severely affecting some 2.4 million people and claiming the lives of an estimated 140,000 individuals (United Nations Office for the Coordination of Humanitarian Affairs, 2008a). The WenChuan Earthquake occurred in Sichuan Province, China, on 12 May 2008, impacting on some 45 million

people and killing at least 69,000 and injuring more than 367,000 others (United Nations Office for the Coordination of Humanitarian Affairs, 2008b). Substantial aid responses were mobilised in both emergencies and media interest was significant. Media reports from these two emergencies were analysed in order to identify how the needs of infants and young children, particularly in relation to feeding, were represented. In addition, the study provides some recommendations for aid and media organisations involved in emergency work as to how issues surrounding IYCF-E might be presented best.

Methods

Searches of internet news reports about Cyclone Nargis and the WenChuan Earthquake were conducted between 2 May and 20 October and between 12 May and 20 October, respectively. The Google News Alerts service was used to identify news reports on these emergencies with information on anything to do with infant feeding. It issues daily e-mails with links to news articles that contain specified search terms (Anonymous, 2010), and has articles from online news services as well as press releases from entities such as ReliefWeb.

The search terms employed in this study included combinations of cyclone, Nargis or earthquake and baby, babies, baby food, breast fed/breastfed, breast feed/breastfeed, breast feeding/breastfeeding, children, formula, infant, lactate, lactating or milk. Once identified, these news reports were read and their country of origin ascertained (where possible), and were assessed to pinpoint text relevant to IYCF-E. News reports analysed were confined to those written in English and available without subscription. In addition, contact was made with individuals known to the author who were involved in IYCF-E-related aid responses in China and Myanmar, and the actions they had taken and the successes, or otherwise, were explored.

Thematic analysis was used to extract major themes from the articles (Liamputtong, 2009). News reports were read, reread, and initially coded. Codes were then grouped into themes and sub-themes. Themes were developed by frequently examining the data and revising codes and categories as further data emerged.

Results

Two hundred and thirty six reports containing IYCF-E-relevant text were located within 131 different news organisations based in 30 countries. They are arranged below according to the themes identified.

Vulnerability of infants and need to ensure that they are fed

The analysis unearthed media interest in the infants and young children affected by Cyclone Nargis and the WenChuan Earthquake. There was awareness among the media, as well as aid organisations, that children are vulnerable in emergencies and that issues concerning the feeding of infants are newsworthy (see Table 1).

Table 1 Frequency of reports of the vulnerability of children or the need for food for infants*

Type of report	Number of reports	
	China	Myanmar
Children vulnerable/general concern for child health	4	12
Children vulnerable to diarrhoea/ reports of diarrhoea in children	0	50
Milk products/baby food is needed or reports of babies being without food	26	13
Incidental report of mother breastfeeding	8	10
Incidental report of bottle feeding	1	1

* Each report represents a single occurrence; multiple reports from a single article are possible.

Babies are vulnerable

Awareness that babies and children are vulnerable was particularly evident in relation to Cyclone Nargis where the risk posed by diarrhoea to infants and children was repeatedly identified in text, as shown in Table 1. For example:

Of all those affected by the cyclone and its aftermath, children are the most vulnerable. Children are at increasing risk of diarrhoea and water-borne diseases (United Nations Children’s Fund, 2008b).

Diarrhea can be especially dangerous for infants and young children (Anonymous, 2008a).

Babies need to be fed

An appreciation of the need to ensure that infants were being adequately fed was also reflected in the news reports, as shown in Table 1. Numerous articles described how food for infants (infant formula or breast-milk) was in short supply. This perceived shortage of food for babies resulted in calls for or promises to send infant formula or milk powder to emergency areas. For instance:

‘Presently milk powder is not available here . . . my baby is suffering!’. . . Many infants are experiencing similar suffering in quake hit areas around Sichuan province (Li, 2008).

There is an urgent need of water, milk bottles, milk powder and other baby care equipment (Anonymous, 2008f).

Breastfeeding women are vulnerable

Among the news articles there were also many descriptions of babies being fed, as shown in Table 1, and overwhelmingly the child in question was being breastfed. In most of these instances the journalist appeared to be simply describing what she/he saw, however. In some cases the mention of women breastfeeding was used to emphasise the vulnerability of women and their babies. For example:

But along the road leading to Dedaye, thousands of people—breastfeeding mothers, children, elderly men and women—wait under the tropical sun and daily monsoon showers, hoping for someone to give them food or clean drinking water (Anonymous, 2008c).

Breast-feeding mothers hold their children in one arm—and stretch out the other to beg (Anonymous, 2008e).

Donation and distribution of milk products, infant formula, baby food, and feeding bottles

As well as describing a perceived need for food for babies, media reports commonly described the donation and distribution of products associated with feeding babies, including infant formula, other milk products, baby food and feeding bottles (see Tables 2 and 3).

Table 2. Frequency of reports of donations of milk products, infant formula, baby food or feeding bottles according to source of donation*

Source of donation	Number of reports	
	WenChuan Earthquake	Cyclone Nargis
Industry	14	1
Military	0	4
Government	7	8
Non-governmental organisation	2	7
Ad hoc	2	5
Not identified	1	3
Total	26	28

* Each report represents a single media article.

Table 3. Frequency of reports of distribution of milk products, infant formula, baby food or feeding bottles according to distribution source*

Distributed via	Number of reports	
	WenChuan Earthquake	Cyclone Nargis
Industry	0	0
Military	1	1
Government	2	4
Non-governmental organisation	14	4
Ad hoc	4	1
Not identified	2	1
Total	23	11

* Each report represents a single media article.

Donations of infant formula, milk powder, or other feeding items

The source of donations of infant formula, milk powder, and other feeding items included the infant formula/milk product industry, the military, governments, non-governmental organisations (NGOs), and individuals on an ad hoc basis. The many reports of industry donations of infant formula and milk products in China are notable. It is also significant that journalists perceived these donations as helpful, thereby providing the companies involved with positive publicity. Reports of industry donations were generally published soon after the beginning of the emergency, from as early as 24 hours after the event. The exception to positive presentation of industry donations were articles about the donation of USD 1.25 million of infant formula by the SanLu Company that were published after it was revealed that its products were contaminated with melamine. However, these articles were only negative in terms of the contamination of the products; they did not question the merit of infant formula donations in general. Examples of representations of donations by industry include:

The Beijing Olympic sponsors have given sufficient support after the deadly May 12 earthquake . . . Yili Group delivery two tons of milk within two hours after the quake (Anonymous, 2008h).

Shanghai people from all walks of life are lending a hand . . . Wyeth Pharmaceutical Co. announced it will donate a million yuan in formula milk (Anonymous, 2008b).

Donations of infant formula and milk products by governments and NGOs were also perceived positively. For instance:

The international community continues to deliver assistance and relief . . . relief donations from Saudi Arabia arrived in Chengdu Tuesday afternoon . . . the goods include . . . milk powder for children (Anonymous, 2008k).

The Red Cross earlier sent 12 tonnes of . . . necessities to Myanmar . . . a new shipment of assistance includes . . . powdered and infant milk (Anonymous, 2008i).

Distribution of infant formula, milk powder, or other feeding items

NGOs were the most common distribution vector of infant formula and milk products reported and often publicised their distributions of these products via press releases. There were many more reports of NGO distribution in China than in Myanmar. In China, some such distributions were on a large scale and were systematic. For example:

Packaged milk is also being supplied . . . with a priority for children, women and the elderly. . . . Howard Liu, the director of Oxfam's China unit said Oxfam is distributing over 250,000 packets of milk in a dozen or so areas of Sichuan (Wong, 2008).

In contrast, reports of distribution of infant formula or other milk products by NGOs in Myanmar suggested small-scale operations. For instance:

We passed one village en route that had a small Red Cross shack with many people waiting outside . . . they were distributing a very small amount of rice and milk to the villagers (Goldkorn, 2008).

Absence of any mention of risk in articles describing the donation or distribution of infant formula, milk powder, or other feeding items

No article describing the donation or distribution of infant formula, milk products, baby food, or bottles mentioned the risks associated with artificial feeding, the need to target carefully the distribution of these products, the need to support breastfeeding women, or the need to provide support to minimise the risks of artificial feeding. One of the organisations distributing infant formula, the Amity Foundation, was contacted to determine whether it was aware of the guidelines for distributing infant formula contained within the *Operational Guidance* on IYCF-E. It was found that it was not. Furthermore, it was unaware of the risks associated with artificial feeding in emergencies and that the needs of artificially fed babies were greater than just providing their caregivers with infant formula. After being alerted to the package of care required to support artificial feeding, the Amity Foundation indicated that it would no longer distribute infant formula. It stated that media reports indicating that infant formula distributions were needed in the earthquake-affected area had been the impetus for its infant formula distribution activities.

Other aspects of IYCF-E

A number of other aspects of IYCF-E were reported in the media, including: concerns about the donation and distribution of infant formula; reports about the importance of breastfeeding; reports of wet nursing (a woman breastfeeding a child who is not her own); reports that stress was preventing breastfeeding; and reports of the distribution of educational resources about breastfeeding and supplementary foods for lactating women (see Table 4).

Concern about donations or distribution of infant formula or powdered milk and the importance of breastfeeding

In contrast to the large number of reports in media articles depicting the vulnerability of infants and children, expressing the need for food for babies and describing the donation and distribution of infant formula, other milk products, bottles, and baby food, there were very few articles conveying concern about the donation or distribution of infant formula or other milk products or the risks associated with artificial feeding. Among the few news reports that indicated a concern about the donation of baby foods were Situation Reports by the United Nations Children's Fund (UNICEF) and the World Health Organization (WHO) in Myanmar, published on ReliefWeb. The mentions were brief, within large reports, and did not result in other news articles. There were no news reports of any kind indicating that donation or distribution of infant formula or other milk products was a concern in China.

Apart from the previously mentioned Situation Reports, a single article, from the *Myanmar Times*, stated that donations of infant formula were a problem. This article

Table 4. Frequency of reports of wet nursing, stress, or trauma inhibiting breastfeeding and issues associated with milk donations and the importance of breastfeeding*

Type of report	Number of reports	
	WenChuan Earthquake	Cyclone Nargis
Wet nursing	47**	2
Women too traumatised or malnourished to breastfeed	19***	5
Donations of infant formula a problem	0	3
Donations of infant formula/milk products will not be accepted	0	1
There are risks associated with artificial feeding in emergencies	1	3
Link between artificial feeding and diarrhoea	0	1
Importance of breastfeeding for child survival	1	4
Breastfeeding counselling being provided	0	1
Breastfeeding counselling should be provided	0	1
Donations of infant formula/powdered milk should be reported to authorities	0	1
Production of educational resources on IYCF-E	0	5
Therapeutic foods distributed to breastfeeding women	0	5

* Each report represents a single occurrence; multiple reports from a single article are possible.

** Forty-five of these instances were in reference to a wet nursing police officer.

*** Seventeen of these instances were in relation to the reason why a police officer was wet nursing babies.

also established a link between the use of infant formula and diarrhoea and urged members of the public to report inappropriate distribution of milk products to the authorities. It focused entirely on IYCF-E and contained information on the importance of breastfeeding, relactation, and wet nursing and the robust nature of breastfeeding in stressful circumstances.

Dr Kyaw Win Sein, the nutrition officer for UNICEF, said infant formula and other powdered milk products donated during the emergency increased the risk of infectious diseases, malnutrition and death. He stressed that even women who were physically and emotionally under stress were still about to produce enough milk for their babies. He said the authorities should arrange wet-nursing for orphaned infants allowing the use of infant formula only if there was no chance of breastfeeding. Baby bottles should never be used because of the risk of contamination due to the difficulty of effectively cleaning them, he said, suggesting that a cup and spoon be used instead. Dr Kyaw Win Sein urged members of the public who knew that powdered milk was being distributed inappropriately to report this to the authorities (Myat, 2008).

Unfortunately, this article was not published until September, four months after the beginning of the emergency. Another two articles, both produced by UNICEF, contained information on the importance of breastfeeding in emergencies, the risks associated with formula feeding, and the need to support women in breastfeeding. These articles were published to coincide with World Breastfeeding Week, two months after the onset of the emergency.

Wet nursing

Wet nursing was described in many media reports, primarily in relation to a single wet nurse, a police officer, who breastfed several babies after the WenChuan Earthquake. The reports of babies being fed by this woman supported IYCF-E recommendations that presented wet nursing as a viable alternative to artificial feeding for infants separated from their mothers. Many of these reports, though, also stated that some of the infants being wet nursed had mothers but that these mothers could not breastfeed their babies because they were either traumatised or malnourished. For example:

A policewoman is contributing to the relief effort in a very personal way—by breastfeeding eight babies. A newspaper in Chengdu devoted a special page to the 29-year-old woman, calling her a hero. The woman, from Jiangyou, had just had a child herself. . . . She is nursing the children of three women who were left homeless and are too traumatised to give milk, as well as five orphans (Buckley, 2008).

Another example of wet nursing in China received just a single mention:

A mother who recently gave birth in a camp after losing everything, has been breastfeeding other infants who have lost their parents (Anonymous, 2008j).

Wet nursing was mentioned in only two articles in relation to Cyclone Nargis, one of which was the comprehensive piece in the *Myanmar Times* cited above. The other was an interview with Save the Children's Myanmar Director, Andrew Kirkwood, in which it was made clear that finding wet nurses for motherless babies was a priority:

'In every community we go to there are children, young infants who have separated from their mothers and who are not being breastfed at the moment,' Mr Kirkwood said. 'And we know that if we don't find other women to breastfeed these kids soon, that they are likely not to survive the next few months' (Percy, 2008).

Conversations with a Save the Children representative revealed that Kirkwood had given other interviews in which the importance of breastfeeding and finding wet nurses for motherless babies had been discussed. In one instance, this resulted in women in the United States calling the radio station involved and offering to donate their expressed breast-milk for the babies.

Stress, trauma, or lack of food preventing breastfeeding

In addition to articles pertaining to the wet nursing police officer, stress, trauma, or lack of food preventing breastfeeding or inhibiting breastfeeding were reported in several other articles in China and Myanmar (see Table 4). For instance:

Due to the food shortages, many nursing mothers there cannot produce enough breast milk. Meanwhile baby food, like milk powder, is rarely available (Li, 2008).

Mothers who stop breastfeeding, children who can't smile. . . . These are just some of the symptoms of trauma that Myanmar cyclone survivors are showing, say aid agencies (Anonymous, 2008d).

Neither breast-milk production nor quality is adversely affected by stress or moderate malnutrition (Prentice et al., 1983; Hill et al., 2005). However, the erroneous perception that stress dries up milk can directly lead to the unsolicited donation of infant formula, as shown in the following example:

As a reaction to the horrible events, many of the breastfeeding women don't have milk for their babies. This endangers first of all the youngest ones who therefore urgently need help . . . already yesterday Malteser international sent . . . feeding bottles, milk powder (Anonymous, 2008g).

Educational resources on IYCF-E and the distribution of supplementary foods to breastfeeding women

References to the production or the distribution of educational materials on IYCF-E, including a joint statement on IYCF-E and the *Operational Guidance* on IYCF-E, were made via reports or press releases published on ReliefWeb. For example:

WHO, UNICEF, IFRC and ICRC have issued a joint statement on appropriate feeding for infants and young children, cautioning about unnecessary use of milk products, to promote appropriate child feeding practices (World Health Organization, 2008).

In a Situation Report, the United Nations (UN) Joint Logistics Centre in Myanmar also outlined its position on transporting milk products:

The Logistics Cluster will not accept milk powder or infant formula into its warehouses or deliver it as cargo with its assets (trucks, boats, planes and helicopters) if it is not part of Nutrition Cluster supplementary feeding programs. This is in line with international policy as agreed among WHO, UNICEF, UNHCR and major NGOs (United Nations Joint Logistics Centre, 2008).

Five reports of the distribution of supplementary food to pregnant and lactating mothers were identified in relation to Cyclone Nargis. All were sourced from press releases from the NGO Médecins Sans Frontières (MSF).

Discussion

Messages in the media

Analysis of media reports from Cyclone Nargis and the WenChuan Earthquake revealed that messages about IYCF-E were commonly communicated via the media. These reports were significant both in terms of what they included and what they

did not include. Some of the common and pertinent messages reported were: babies are vulnerable; women breastfeed in emergencies but breastfeeding is a sign of weakness; and providing infant formula will save babies. Messages rarely reported in the media included: artificial feeding commonly leads to diarrhoea and death in emergencies; infant formula or any other milk product should not be donated; and breastfeeding is a sign of resilience and protects infants in emergencies.

Vulnerable babies but no link made between diarrhoea and artificial feeding

This analysis of the media reports on Cyclone Nargis and the WenChuan Earthquake confirmed that the needs of babies and young children in emergencies are of interest to journalists and aid organisations. But this interest was not generally accompanied by knowledge of the needs of infants in emergencies and how to protect them. Diarrhoea is a common killer of infants in emergency situations (Khan and Munshi, 1983; Toole and Waldman, 1988; Yip and Sharp, 1993) and artificially fed babies are up to 50 times more likely to develop diarrhoea than babies who are breastfed (Creek et al., 2007). The mechanisms by which the use of infant formula or other milk products causes diarrhoea in infants are well documented (Gribble, 2011). However, while in Myanmar in particular, the media demonstrated an awareness of the vulnerability of babies to diarrhoea, but no link was made to the role that breastfeeding or artificial feeding, respectively, play in preventing or causing diarrhoea.

Women breastfeed but no mention made that breastfeeding protects babies; breastfeeding used to show weakness

Journalists in China and Myanmar saw women breastfeeding and they mentioned this in their articles. Yet they did not make the connection that in breastfeeding their babies, women were protecting them and exhibiting resilience. Rather, some appeared to use the fact that women were breastfeeding as a tool to represent vulnerability. Such presentation of breastfeeding as a weakness and a lack of recognition of women's strength in protecting their children via breastfeeding could be interpreted as being against the 1995 *Code of Conduct for the International Red Cross and Red Crescent Movement and NGOs in Disaster Relief* (International Federation of Red Cross and Red Crescent Societies and International Committee of the Red Cross, 1995). It may also encourage the perception that breastfeeding itself is fragile and unreliable and that therefore infant formula is needed.

Providing infant formula will save babies but no mention of the risks of artificial feeding

News articles reflected an awareness of the importance that babies were fed, but the universally posed solution was to provide infant formula. The myth that stress causes milk to dry up or otherwise prevents breastfeeding was frequently repeated in articles. Reports of donations and the distribution of infant formula, milk products, baby food, or feeding bottles were common. Such reports contained no indication of the risks associated with artificial feeding in emergencies and the need to target carefully

the distribution of infant formula and to provide support to the caregivers of babies requiring these foods. In addition, they contained no information that would suggest that breastfeeding women needed support. Infant formula, and those supplying it, were presented as saving babies. The story of the starving baby needing food and the hero (an outsider) who brings it is a recognised 'folk narrative' of disasters (Benthall, 1993). This narrative is misleading and demeaning to mothers. One should recognise that, in the overwhelming majority of situations, most babies are breastfed and hence most babies are protected by their mothers. An alternative, and more accurate, narrative is one that presents the mother as the saviour of her baby with aid organisations acting as partners, supporting her in doing this; the mother-aid organisation partnership being central to any aid provided to babies.

There were some notable differences in the Cyclone Nargis and the WenChuan Earthquake media articles on the need for baby food and the donation and distribution of infant formula, other milk products, baby food, and bottles. There were more reports of the need for food for babies, the donation of infant formula and other milk products (particularly by industry), and the distribution of infant formula and other milk products (particularly by NGOs) in China than in Myanmar. There are three possible reasons for these differences:

- First, the greater number of reports of industry donations in China is probably partially an indication of the level of promotion of infant formula in China as compared to Myanmar. The infant formula industry has been very aggressive in its marketing activities in China in recent years and would have seen the earthquake and the provision of donations as an opportunity to receive positive publicity and promote its products (IBFAN-ICDC, 2009).
- Second, rates of artificial feeding pre-emergency were higher in China than in Myanmar (United Nations Children's Fund, 2008c) and it is likely therefore that the need for infant formula in the emergency response in China was genuinely greater. It is important, though, not to confuse a genuine need for infant formula in the emergency response with a need for *donations* of infant formula. The evidence from past emergencies is that unsolicited donations are harmful both to breastfed and artificially fed infants and that they detract from the aid effort. In Kosovo and Macedonia during the Balkans conflict of the 1990s, for instance, the situation was not very different to that in China in that there were high rates of artificial feeding and large amounts of donations. What was found in the Balkans, however, was that since donations were not specifically purchased for particular situations, they were often not of the type required, the quantity required, and in the location required (Borrel et al., 2001). In the Balkans, management of donations was difficult and costly (Borrel et al., 2001). Donated milk was frequently distributed to the caregivers of artificially fed babies, without any other support, and to breastfeeding mothers (Stojanoska et al., 1999; Borrel et al., 2001). Thus, even in environments where rates of artificial feeding are high, donations of infant formula should be actively discouraged and promotion of a need for donations in the media cannot be justified (IFE Core Group, 2007).

- Third, the absence of a joint statement on IYCF-E or policy decisions to prevent the inappropriate donation and distribution of donations in China may have contributed to the greater number of reports of the donation and distribution of milk products in that country. This may be an indication that publicity, such as that provided by joint statements on IYCF-E guidelines, and policy decisions, such as that made by the Logistics Cluster in Myanmar not to store or transfer unapproved milk products, have an impact.

The involvement of aid organisations in influencing media content

Reporting on emergencies is difficult for journalists; the situation often is complex and access difficult. Journalists rely on aid organisations to supply them with information on which to construct their stories (Habayeb et al., 2005). In fact, the print media has been noted as commonly using materials provided by aid organisations almost verbatim (Bennett and Daniel, 2002). It was clear from the analysis of the media reports on Cyclone Nargis and the WenChuan Earthquake that aid organisations were an important source of information for journalists. Many of the reports of the need for and the distribution of infant formula and milk powder came direct from aid organisation press releases. However, information on the protective role of breastfeeding, the need to support breastfeeding women, avoid the donation of milk products, target the distribution of infant formula, and support the caregivers of artificially fed babies was almost entirely absent in the press releases of aid organisations, and therefore absent from news articles. The media cannot be held responsible for promoting poor IYCF-E practice if aid organisations and others are not offering good information on which to base stories.

The question is, then, why are those involved in the provision of aid providing the media with poor or no information on IYCF-E? There are several possible reasons for this. First, it appears that some aid organisations are themselves unaware of IYCF-E guidelines. It can be surmised that those organisations that promote their donations or distributions of infant formula or other milk products think that they are demonstrating their helpfulness to those affected by the emergency in doing so. This reflects not only that the aid organisation believes that these products are helpful, but also that members of the public who read about these donations/distributions will see them as such. Dealing with this problem requires that education on IYCF-E becomes a priority between and within aid organisations and in the wider community.

In addition, organisations may be aware of IYCF-E guidelines but may not be supportive of them, suggesting that they believe that unsolicited donations of infant formula can assist artificially fed babies and that this assistance is greater than the harm caused by these donations. As discussed, though, previous emergencies have demonstrated that this is not the case. The ramifications of unsolicited donations and poorly targeted and supported distributions in China have not been revealed. However, there is some evidence that, at the very least, they increased rates of artificial feeding. For example, an NGO blog described how a company supplied infant formula direct to a maternity hospital in the earthquake-affected area. It was reported

that the formula was needed because the mothers of newborns in this hospital were unable to make milk (because of stress) and hence babies were starving (Zhang, 2008). Since stress does not affect milk production, it can be concluded that this donation, which also breached the *International Code of Marketing of Breast-milk Substitutes* (World Health Organization, 1981), would have resulted in unnecessary artificial feeding of newborns in this hospital. The degree of support associated with the distributions of infant formula in China also is difficult to ascertain; media reports describing these distributions did not mention any other support provided with them. The NGO contacted with regard to its distribution of infant formula was not offering any physical, educational, or medical support with the infant formula that it distributed. The magnitude of the harm caused by this lack of support requires investigation.

The distribution of melamine-contaminated infant formula produced by the Sanlu Company highlights how critical it is for those distributing infant formula to take responsibility for the consequences of their aid and to provide appropriate medical supervision. The Sanlu donation amounted to perhaps 125 tonnes of infant formula (enough to artificially feed exclusively 40,000 babies for one month). If organisations that facilitated the distribution of the Sanlu infant formula did not keep records of to whom the formula was distributed and provide ongoing medical support to those babies they could be considered as having failed in their duty of care to those infants and their families.

The examples discussed here underline the importance of organisations following appropriate procedures such as those outlined in the *Operational Guidance on IYCF-E*. It is worth noting that the guidelines on IYCF-E have been developed after a variety of emergencies over a significant period of time. Such guidance is necessary because what seems like a sensible thing to do to address IYCF-E can cause harm. The solution to dealing with high rates of artificial feeding in an emergency context is not encouraging or allowing unsolicited donations, but rather, specifically targeting appropriate and comprehensive assistance, including infant formula, access to clean water, educational support, and medical supervision, to those infants who cannot be breastfed. Organisations supplying such aid need to emphasise the risks associated with artificial feeding and the measures required to reduce these risks in their media interactions so as to prevent unsolicited donations.

A second reason why organisations providing aid may not include accurate information about IYCF-E in their press releases is because they are reluctant to go against what appears to be the public opinion that large donations and widespread distribution of infant formula and powdered milk are helpful in emergency situations. NGOs, in particular, wish to use the media to promote their organisation and to receive publicity that will increase their profile and encourage the public to support their work (Bennett and Kottasz, 2000). NGOs may consider it risky to provide information to the media that conflicts with prevailing beliefs. However, those involved in the provision of aid have the obligation to protect those affected by the emergency from the avoidable consequences of the event and from further harm,

discrimination, and rights violations (Chunkath et al., 2005). Organisations that are aware of the guidelines on IYCF-E, and are silent when they see inappropriate aid being encouraged and children being harmed, could be considered complicit in this harm. Organisations have a responsibility to use their media influence to discourage inappropriate aid and promote beneficial aid (Cate, 1996).

In the short term, members of the public may find it disconcerting to have their beliefs challenged, but with time, such messages will change the public perception of the type of aid that assists babies. Thus, the response to Kirkwood's statement that the aid needed by motherless babies was to find wet nurses for them was not to take offence, but for women to offer expressed breast-milk. While this response is naive, it demonstrates a willingness to assimilate new information and a strong desire to assist infants affected by emergencies. Had such women been offered the opportunity to assist by donating money to support programmes to find wet nurses for motherless babies, they may have been only too willing to do so.

Members of the public are aware, however, that infants are vulnerable in emergencies, as this analysis of media reports discovered. Currently, the overwhelmingly predominant option presented to them in terms of helping babies is to support donations of infant formula. This must change in order for members of the public to learn that aid for babies must be of a specific type to be helpful and that supporting and empowering mothers to breastfeed exclusively is an effective and worthwhile type of aid.

The promotion of IYCF-E activities also poses some challenges for organisations with respect to the type of aid involved. NGOs often are very 'product driven' in the promotion of their activities—that is, they flag the level of delivery of physical goods, food, and water, inter alia. The essential support that aid organisations provide in terms of protecting and supporting the caregivers of infants and young children is not as concrete as goods. An example of the difficulty that NGOs seem to have in this area was seen in a press release by Save the Children in China. Save the Children was supplying breastfeeding support and IYCF-E education to mothers but did not mention this in press releases or other publicity. Rather, it publicised its distribution of 'baby foods', which usually means infant formula, but in this case was complementary foods. Thus, an opportunity to publicise aid that was genuinely helpful to babies was missed and a misconception that 'baby food' is a helpful form of aid was reinforced. Aid organisations have been able to adapt the publicising of their actions in relation to other activities that do not involve the provision of goods such as child protection. They need to adapt similarly their messaging concerning IYCF-E. Below are some suggested messages for aid organisations to include in media communications:

- babies are vulnerable in emergencies;
- babies fed anything other than breast-milk are particularly vulnerable in emergencies;
- use of infant formula or other milk products is dangerous in emergencies and should be avoided;

- breastfed babies are protected in emergencies;
- breastfeeding women are providing protection to their babies by breastfeeding;
- breastfeeding is a sign of strength and resilience;
- the way to help babies survive an emergency is to help their mothers continue breastfeeding;
- the caregivers of artificially fed babies need intensive support;
- donations of infant formula are not needed and are unhelpful;
- aid organisations need help from the media immediately after the start of the emergency to prevent the arrival of donations of infant formula and other milk products; and
- monetary donations will assist aid organisations in maximising the survival of infants.

Increasing media interest in IYCF-E

The publicity accorded to the report of the wet nursing police officer after the WenChuan earthquake is evidence of the type of IYCF-E story likely to attract the greatest amount of media interest. Both China and Myanmar are countries in which wet nursing is a traditional practice and is socially acceptable. It is likely that there were very many infants being wet nursed in both emergencies. However, only the case of the wet nursing police officer received significant media attention. There are elements in this story that explain its newsworthiness and might assist those seeking to engage the media on IYCF-E issues. First, there was novelty and drama in the story. The woman who was wet nursing was a police officer who was separated from her own baby. She could be presented in media articles as brave and self-sacrificing. Media organisations focus on the unusual and the dramatic rather than on that perceived as ordinary or normal (Tierney et al., 2006). The media also is attracted to stories that evoke strong emotions (Bennett and Daniel, 2002). This story contained all of those elements.

Second, the police officer was identifiable and accessible to the media and was happy to be photographed, filmed, and interviewed while breastfeeding in her uniform, providing the media with images that could accompany the report. Stories that have striking pictures and that include personal details about the people involved receive more media attention than those without images and those that deal with anonymous individuals or groups of people.

Aid organisations that wish to engage with the media on IYCF-E can use such dramatic stories as a 'hook' on which to hang accurate information about IYCF-E. Presenting a dramatic angle to such personal accounts, emphasising the bravery and resilience of individual mothers in dreadful circumstances, for example, and accompanying their story with images that can be used by journalists will increase the probability of a press release being widely used. Stories of mothers whose babies have suffered because of donations of infant formula, stories of relactation, or stories of wet nursing all contain emotion and drama if framed appropriately, but detail is required. The efforts of aid organisations to help babies by assisting their caregivers and more general information on IYCF-E can be embedded within these stories.

The timing of media reports

This analysis revealed some important information on the timing of media commentary concerning IYCF-E. Reports of the need for food for babies and of donations of infant formula and powdered milk started appearing in articles within 24 hours of the start of the emergency and were concentrated in the first few weeks after the event. In contrast, the few articles that described the risks associated with artificial feeding and the importance of promoting breastfeeding were published months after the disaster. Their relatively late appearance limited their usefulness in promoting appropriate aid and preventing harmful aid.

Unsolicited donations and the inappropriate distribution of infant formula and other milk products have been a problem in emergencies for more than a decade. It is not unreasonable to assume therefore that, when an emergency occurs (particularly a sudden, natural disaster), there is a high probability that this will be an issue. Thus, press releases seeking to discourage unsolicited donations and poorly targeted distributions of infant formula and other milk products should be distributed as soon as possible after the event. As the emergency proceeds, follow-up press releases can strengthen the impact.

Limitations

This study analysed only a sample of media reports after Cyclone Nargis and the WenChuan Earthquake—that is, those reports in English and published on the internet. It is possible that media reports published elsewhere—in print or on radio or television—could have had a different emphasis and content. It is possible also that reports published in languages other than English, particularly those in Chinese or Myanma Bhasa, and originating in China or Myanmar may have had a different focus. Investigation of media reports local to emergencies would be a worthwhile future endeavour.

Conclusion

The analysis of news articles on Cyclone Nargis and the WenChuan Earthquake indicated that poor information in the media on IYCF-E remains a problem. Media reports that encourage the perception that the donation and widespread distribution of infant formula and other milk products is necessary and helpful in relief efforts are overwhelming. Of more than 200 news articles containing information on feeding babies in these emergencies, only four contained accurate information on IYCF-E in any detail.

To protect infants and mothers affected by emergencies from harmful assistance, aid organisations must engage with the media and the public on how to safeguard infants in emergencies via properly delivered, appropriate aid. The belief that stress prevents breastfeeding and that donations of infant formula or powdered milk are helpful after an emergency should be recognised as a ‘disaster myth’ to be debunked.

Acknowledgements

This paper was written on behalf of the IFE Core Group with support from the UNICEF-led Inter-Agency Standing Committee (IASC) Nutrition Cluster, as part of an effort to address the role of the media in infant and young child feeding in emergencies. The research was funded in part by the IASC Nutrition Cluster.

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