### Media reports on IFE in relation to Cyclone Nargis and the Wenchuan earthquake: an analysis

This analysis was carried out by Karleen Gribble, on behalf of the Emergency Nutrition Network (ENN) and IFE Core Group as a follow-up to a regional workshop on infant and young child feeding in emergencies (IFE) held in Bali, March 2008 and funded by the UNICEF-led Inter-Agency Standing Committee (IASC) Nutrition Cluster.

Contact: ENN, 32 Leopold Street, Oxford, OX4 1TW, UK Tel/fax: +44 (0)1865 324996/324997 email: <u>marie@ennonline.net</u> www.ennonline.net/ife

#### Summary

An analysis of Internet-based media reports after Cyclone Nargis in Myanmar and the Wenchuan earthquake in China revealed that messages about infant and young child feeding in emergencies (IFE) 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 in media reports were: babies are vulnerable; that 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: that artificial feeding commonly leads to diarrhoea and death in emergencies and that breastfeeding is a sign of resilience and protects infants in emergencies. This analysis suggests that current reporting patterns of the media may encourage the inappropriate donation and distribution of infant formula and powdered milk in emergencies leading to increased morbidity and mortality in infants and young children.

The following recommendations for those involved in emergency response are made:

- All players in the provision of aid should use the media's interest in babies and knowledge of the vulnerability of babies in emergencies to educate the public about IFE and reduce harmful aid.
- Aid organisations should provide the media and their supporters with good information on IFE including the protective role of breastfeeding; the dangers of artificial feeding and unsolicited donations of milk products and the need to support breastfeeding women, target the distribution of infant formula and support the carers of artificially fed babies. Adjusting promotion of aid provided to babies from one that is product driven to one that does not primarily involve the provision of goods is necessary. Aid agencies should avoid presenting themselves as saviours of infants but instead present mothers as partners in provision of aid to infants and young children.
- The media should be encouraged via press releases and other educative opportunities to report that artificially fed infants are particularly vulnerable to diarrhoea and death in emergencies and that breastfeeding is protective against illness. They should also be encouraged to present breastfeeding as a sign of

strength not vulnerability and breastfeeding mothers as resilient and with the capacity to protect their infants if provided with support.

- Press releases from aid organisations should emphasise the support being provided to breastfeeding mothers. Any mention of aid to support artificially fed infants should also mention the risk associated with artificial feeding and describe the package of aid required to assist these infants. It should be explicated stated that donations of infant formula are not needed and are unhelpful but that monetary donations will assist aid agencies to maximise the survival of infants.
- In order to prevent unsolicited donations and poorly targeted distributions of infant formula and other milk products joint statements on IFE should be developed as a part of emergency preparedness and released immediately an emergency occurs.
- In seeking to attract media attention to IFE, the dramatic and emotive stories of identified individuals should be used. Such stories should emphasise the bravery and resilience of mothers who continue breastfeeding their infants in exceptional circumstance and the tragedy of mothers whose babies have suffered because of donations of infant formula.

#### Introduction

When emergencies occur, infants and young children are the most vulnerable segment of the population (Khan and Munshi 1983; Centers for Disease Control 1991; Yip and Sharp 1993). It is therefore a priority to direct aid to support their wellbeing. However, over the last decade, it has been recognised that it is common for aid in the form of poorly targeted distribution of infant formula or milk products, to undermine the health of children (Borrel, Taylor et al. 2001). Such distributions increase the rates of artificial feeding resulting in increased morbidity and mortality, particularly due to diarrhoea (Adhisivam, Srinivasan et al. 2006; Maclaine and Corbett 2006; Creek, Kim et al. 2007). Often concomitant with the poorly targeted distribution of infant formula or milk products is a lack of support for exclusive breastfeeding and measures to reduce the risks of artificial feeding (Maclaine and Corbett 2006). It is accepted that there is a need to improve the delivery of aid to infants and young children in emergencies.

It has long been recognised that the media plays a critical role in emergency response via alerting the public to the emergency and mobilising funds and assistance (Habayeb, Bolton et al. 2005). However, it is also understood that the media can perpetuate misinformation, promoting ideas known to be false (Tierney, Bevc et al. 2006). The phrase "disaster myths" has been coined to describe beliefs that arise from inaccurate media reporting of emergencies (Wenger and Friedman 1986; Bennett and Daniel 2002). Previously identified disaster myths include the helplessness of those affected by emergencies and that widespread looting inevitably follows a disaster (Bennett and Daniel 2002). Disaster myths can cause harm because of the influence they can have on organizational, governmental and public responses during emergencies (Tierney, Bevc et al. 2006). It may be helpful to understand the misinformation about IFE that appears in media reports as a type of disaster myth that might harm infants and their mothers.

For example, it was noted in Sri Lanka after the Indian Ocean Tsunami (2004) 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).

In March 2008 a regional workshop on Infant and Young Child Feeding in Emergencies (IFE) was held in Bali, Indonesia. This workshop aimed to raise awareness of IFE and promote preparedness and improved practice in future emergencies in Asia. An attempt to sensitise participants to the important role that the media plays in emergency responses was a part of the workshop. Participants at the meeting were encouraged to engage the media in their work when next an emergency occurred. Since the IFE meeting in Bali two major emergencies have occurred in Asia.

Cyclone Nargis made landfall in Myanmar on May 2<sup>nd</sup> 2008 severely affected 2.4 million people, killing an estimated 140 000 (United Nations Office for the Coordination of Humanitarian Affairs 2008). The Wenchuan earthquake occurred in Sichuan in the People's Republic of China on May 12<sup>th</sup> 2008 and affected 45 million people, killing at least 69 000 and injuring more than 367 000 (United Nations Office for the Coordination of Humanitarian Affairs 2008). Substantial aid responses were mobilised in both of these emergencies and media interest was significant. Cyclone Nargis and the Wenchuan earthquake provided an opportunity to formally examine the content of media reports in relation to IFE and to see if participants at the Bali meeting had any success in engaging the media in these emergencies. Thus, this study aimed to analyse media reports of these two emergencies, to identify how the needs of infants and young children, particularly their needs in relation to feeding, were represented. The efforts of those who had been participants at the IFE regional meeting in Bali to engage the media in these emergencies was also canvassed.

#### Methods

Searches of internet news reports were carried out from May 2<sup>nd</sup> to October 20<sup>th</sup> in relation to Cyclone Nargis and May 12<sup>th</sup> to October 20<sup>th</sup> in relation to the Wenchuan earthquake. The Google News Alerts service was used to identify news reports on these emergencies that contained text on anything to do with infant feeding. Google News Alerts provides, on a daily basis, emails containing links to news articles that contain specified search terms. In this study, the search terms included combinations of cyclone, Nargis or earthquake with baby food, breast fed/breastfed, breast feed/breastfeed; breast feeding/breastfeeding, babies, baby, children, formula, infant, lactate, lactating or milk. Google News Alerts include both articles from online news services and press releases from services such as ReliefNet. Once identified these news reports were read, their country of origin ascertained, where possible, and analysed to identify text relevant to IFE. News reports analysed were confined to those written in English and available without subscription. Contact was also made with relevant individuals involved in IFE-related aid responses and the actions they had taken and success, or otherwise, discussed.

#### Results

Two hundred and thirty six reports that contained text relevant to IFE 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 interest of the media in the infants and young children affected by Cyclone Nargis and the Wenchuan Earthquake was confirmed by the analysis. There was an awareness amongst the media, and aid organisations that produced press releases, that children are vulnerable in emergencies and that issues concerning the feeding of infants in emergencies is newsworthy, as shown in 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/concern for child health	4	12
Children vulnerable to diarrhoea/ reports of	0	50
diarrhoea in children		
Milk products/baby food is needed or reports of	26	13
babies being without food		
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

The 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." (UNICEF Press Release 2008)

"Diarrhea can be especially dangerous for infants and young children" (New York Times 2008)

"The combination of malnutrition and communicable diseases creates the potential for a significant public health problem, particularly in infants and children." (World Health Organisation 2008)

#### 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 breastmilk) 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 to be reported in the media. In relation to the Wenchuan earthquake it also resulted in reports that the government had reduced import duty on infant formula because increased quantities were needed in earthquake

relief areas. Examples of news articles describing the need for baby foods are shown below.

""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)

"We will try to do our best to send milk powder to parents and ensure children don't go hungry, "Wen said on Tuesday after learning some infants were running short of food." (Anonymous 2008)

"The quake hit area is currently in dire need of tents, mattress, milk powders and medicines, said the NGO." (Anonymous 2008)

"There is an urgent need of water, milk bottles, milk powder and other babycare equipment" (Anonymous 2008)

"Tariffs on baby food will be lowered to 5 percent from 10-15 percent...revisions mainly target quake-relief efforts in Sichuan...the reduction of tariffs will help imports of commodities that are badly needed in Sichuan." (Xin 2008)

Breastfeeding women are vulnerable

There were also many descriptions of babies being fed amongst news articles, 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 s/he saw however, in some cases the mention of women breastfeeding was used as a tool 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 2008)

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

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 in including infant formula, other milk products, baby food and feeding bottles as shown in 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 donations	Number of reports	
	WenChuan Earthquake	Cyclone Nargis
Industry	14	1
Military	0	4
Government	7	8

NGO	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	
NGO	14	4	
Ad hoc	4	1	
Not identified	2	1	
Total	22	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, NGOs and individuals on an ad hoc basis. The many reports of industry donations of infant formula and milk products in China is notable. It is also significant that journalists perceived these donations as helpful thus providing the companies involved with positive public relations opportunities. Companies receiving positive publicity for their donations include: Maliban, New Hope Group, Wyeth, Yili, PBM Nutritionals, Abbott Laboratories, American Dairy and Bristol-Myers Squibb. Reports of industry donations were generally published soon after the beginning of the emergency, from as early as 24 hours after the emergency began. The exception to positive presentation of industry donations were articles about the donation of US\$1.25 million of infant formula by SanLu that were published after it was revealed that their products were contaminated with melamine. However, these articles were only negative in terms of the contamination of the products and 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 2008)

"Shanghai people from all walks of life are lending a hand to those suffering after the massive earthquake in Sichuan province....Wyeth Pharmaceutical Co announced it will donate a million yuan in formula milk."

Donations of infant formula and milk products by governments including the USA, Brazil, Vietnam, Saudi Arabia, Egypt, Qatar and Indonesia were also perceived positively. For example,

"In the wake of the death and destruction caused by the Sichuan earthquake, the international community continues to deliver assistance and relief to devastated

areas....relief donations from Saudi Arabia arrived in Chengdu Tuesday afternoon....the goods include...milk powder for children and rescue tools." (Anonymous 2008)

Reports of donations of infant formula and milk products were from a variety of NGOs including: Caritas Sri Lanka, Thai Red Cross, Turkish Red Cross, United Sikhs, and Maltester International. For example,

"The Red Cross earlier sent 12 tonnes of... necessities to Myanmar. The organisation has already prepared a new shipment of assistance which includes food...medicines, powdered and infant milk." (Anonymous 2008)

Ad hoc donations were generally reported by media outlets local to those making the donation and emphasised the good will involved. Such efforts provided a "local angle" on the emergency. For example,

"Jigsaw students give all they can to Myanmar cyclone victims...In total Jigsaw Primary School collected 46 sacks of rice...100 packets of Milo and milk powder...Ms Thinzar speaking on behalf of the people of Myanmar thanked the community in the Sultanate for their generosity." (Kon 2008)

#### <u>Distribution of infant formula, milk powder or other feeding items</u> NOGs 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 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 example,

"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)

NGOs reported as being involved in the distribution of infant formula, milk products or baby food included: Oxfam Hong Kong, Mercy Corps, Red Cross of China, Myanmar Red Cross, Amity Foundation, Action by Churches Together, Global Aid Network and Save the Children Alliance. 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 carefully target 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 ask whether they were aware of the guidelines for distributing infant formula contained within the Operation Guidance on IFE. It was found that they were not. They were also unaware of the risks associated with artificial feeding in emergencies and that the needs of artificially fed babies were greater than just providing their carers with infant formula. After being alerted to the package of care required to support artificial feeding Amity indicated that they would not longer distribute infant formula. Amity stated that media reports indicating that infant formula distributions were needed in the earthquake affected area had been the impetus for their infant formula distribution activities.

#### Other aspects of IFE

A number of other aspects of IFE 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; reports that stress was preventing breastfeeding; reports of the distribution of educational resources about breastfeeding and supplementary foods for lactating women as shown in Table 4.

Table 4. Frequency of reports of wet nursing, stress or trauma inhibiting breastfeeding and issues associated with donation 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	19***	5
breastfeed		
Donations of infant formula a problem	0	3
Donations of infant formula/milk products	0	1
will not be accepted		
There are risks associated with artificial	1	3
feeding in emergencies		
Link between artificial feeding and	0	1
diarrhoea		
Importance of breastfeeding for child	1	4
survival		
Breastfeeding counselling being provided	0	1
Breastfeeding counselling should be	0	1
provided		
Donations of infant formula/powdered milk	0	1
should be reported to authorities		
Production of educational resources on IFE	0	5
Therapeutic foods distributed to	0	5
breastfeeding women		

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

\*\*45 of these instances were in reference to a wet nursing police officer

\*\*\* 17 of these instances were in relation to the reason why a police officer was wet nursing babies

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

In contrast to the large number of reports in media articles describing 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 expressing concern about the donation or distribution of infant formula or other milk products or the risks associated with artificial feeding.

Amongst those few news reports that indicated a concern about the donation baby foods was a situation report from UNICEF and WHO in Myanmar published on ReliefWeb. However, the mention was brief and within a large report. For example,

# *"WHO, UNICEF, IFRC and ICRC have ... expressed concerns about milk powder and milk formula being distributed in shelters in the affected areas."* (World Health Organization 2008)

These situation reports did not result in other news articles reporting that the distribution of or donation of milk products in Myanmar was of concern. There were no news report 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 also made a link between use of infant formula and diarrhoea and urged members of the public to report inappropriate distribution of milk products to authorities. This article focused entirely on IFE and contained information about the importance of breastfeeding, relactation and wet nursing and the robust nature of breastfeeding in stressful circumstances. The doctor quoted in the article, below, attended the Bali meeting.

"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 member 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 about the importance of breastfeeding in emergencies, the risks associated with formula feeding and the need to support women to breastfeed. These articles were published to coincide with World Breastfeeding Week, two months after the start of the emergency.

#### Wet nursing

Wet nursing was described in many media reports, most of which were 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 police officer supported IFE recommendations in that they presented wet nursing as a viable alternative to artificial feeding for infants separated from their mothers. However, in many of these reports it also stated that the some of the infants being wet nursed had mothers but that these

mothers could not breastfeed their babies because they were 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 29year-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)

"Officer Jiang Xiaojuan, 29, the mother of a 6-month-old boy, responded to the call of duty and the instincts of motherhood when the magnitude 7.9 quake struck on May 12. 'I am breastfeeding so I can feed babies. I didn't think of it much,' she said. 'It's a mother's reaction, and a basic duty as a police officer to help.' The death toll in the earthquake jumped Thursday to more than 51 000, and more than 29 000 are missing. according to government figures. Thousands of children have been orphaned; many others have mothers who simply cannot feed them. At one point Jiang was feeding nine babies. 'Some of the moms were injured, their fathers were dead...five of them were orphans. They've gone away to an orphanage now,' she said. She still feeds two babies, including Zhao Lyuyang, son of a woman who survived the quake but whose breast milk stopped flowing because of the traumatic conditions. 'We walked out of the mountains for a long time. I hadn't eaten in days when I got here and my milk was not enough,' said that mother, Zhao Zong Jun. 'She saved my baby. I thank her so much, I can't express how I feel." Li Rong, another mother whose breastmilk stopped in the trauma, was awed by Jiang's kindness. 'I am so touched because she has her own baby, but she fed the disaster babies first,' Liu said. 'If she hadn't fed my son he wouldn't have had enough to eat." (Riminton 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 2008)

Wet nursing was mentioned in only two articles in relation to Cyclone Nargis, one of which was the comprehensive article in the Myanmar Times already described. The other article 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." "

Conversations with a Save the Children representative revealed that Mr 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 calling the radio station involved offering to donate their expressed breastmilk for the babies. Stress, trauma or lack of food preventing breastfeeding

In addition to articles associated with the wet nursing police officer, stress, trauma or lack of food preventing breastfeeding or inhibiting breastfeeding was reported in several other articles in both China and Myanmar (Table 4). For example,

"Due to the food shortages, many nursing mothers there cannot produce enough breast milk. Meanwhile baby food, like milk powder, is rarely available. Many infants are suffering from hunger." (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 2008)

The perception that stress dries up milk can directly lead to the unsolicited donation of infant formula as shown in the following example,

"Another big problem is the provision of children and babies. "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 a second cargo with medicines....feeding bottles, milk powder."

Educational resources on IFE and distribution of supplementary foods to breastfeeding women

Reports of production of, or distribution of, educational materials on IFE including Joint Statements, the Operational Guidance on IFE and other materials in relation to cyclone Nargis 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)

The UN Joint Logistics Centre also outlined its position on transporting milk products in one situation report,

"The Logistics Cluster will not accept milk powder or infant formula into its warehouses or deliver it as cargo with it 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 of these reports were sourced from press releases from the NGO MSF.

#### Challenges to engaging the media on IFE

Discussions with those involved in the relief effort in revealed that there were some challenges faced by those wishing to engage the media on IFE. For instance, a joint statement on IFE was not released in China, apparently because it was felt by some that donations of infant formula were needed and that they should not be prevented. WHO in China put an article based on the IFE Core Group publication "Protecting infants in emergencies: a guide for the media" on their website. However, since it was not released via usual press release channels it was not captured in the news searches conducted for this study and this likely also limited its accessibility to journalists. Finally, one aid worker involved in IFE in Myanmar found that it was very challenging to sensitise communications staff on IFE issues because communications staff in the country were turned over every couple of weeks. The issue of timeliness of media reports on IFE was evident in that media reports. Donations of infant formula and the need for milk products in the emergency areas were produced within hours to days of the emergency whereas the few reports containing good information about IFE appeared much later, often months after the beginning of the emergency. Sensitising and educating the media must therefore occur either pre-emergency or within the first hours to days of the emergency.

#### Discussion

#### Messages in the media

Analysis of media reports from Cyclone Nargis and the Wenchuan earthquake revealed that messages about IFE were commonly being communicated via the media. Many of these reports were significant both in terms of what they included and what they did not include. Some of the common and pertinent messages were: babies are vulnerable; that 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: that artificial feeding commonly leads to death and diarrhoea in emergencies and that 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 related to 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. However, this interest was not generally accompanied by knowledge about the needs of infants in emergencies and how to protect them. Diarrhoea is the most common killer of infants in emergency situations and artificially fed babies are up to 50 times more likely to develop diarrhoea than babies that are breastfed (Creek, Kim et al. 2007). However, while in Myanmar, the media demonstrated an awareness of the vulnerability of babies, particularly to diarrhoea, there was no link made to the role that breastfeeding plays in preventing diarrhoea or artificial feeding plays in causing diarrhoea.

Response: NGOs and other players in the provision of aid should take advantage of the media's interest in babies and knowledge of the vulnerability of babies in emergencies to use the media to educate the public about IFE and reduce harmful aid. Thus, any mention of the risk of diarrhoea to children in press releases should also mention the risk that artificially fed infants are faced with and that breastfeeding is protective.

## Women breastfeed but no link 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. However, they did not make a link that in breastfeeding their babies that these women were protecting their babies and exhibiting resilience. They did not recognise that a breastfeeding woman is in a position of strength in being able to feed and protect her child in the midst of a catastrophe. Rather, some appeared to use the fact that women were breastfeeding as a tool to represent vulnerability or weakness.

Response: Presentation of breastfeeding as a weakness and lack of recognition of women's capacity to protect their children via breastfeeding is against the Red Cross Code of Conduct for the representation of aid recipients (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. Those involved in the provision of aid should encourage the media to represent breastfeeding as a sign of strength not vulnerability and present breastfeeding mothers as resilient and with the capacity to protect their infants if provided with support.

#### Providing infant formula will save babies

News articles reflected an awareness that it was important to ensure 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 of, and 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, the need to carefully target the distribution of infant formula and to provide support to the carers of babies needing these foods. They also contained no information that would suggest that breastfeeding women needed support. Infant formula, and those providing the formula, are presented as saving babies. The story of the starving baby needing food and the hero (an outsider) who brings is a recognised "folk narrative" of disasters (Benthall 1993). This narrative is one which is misleading and demeaning to mothers and should be actively discouraged. Rather it should be recognised that in the overwhelming majority of situations, most babies are breastfed and therefore most babies are protected by the mothers- an alternative narrative that should be promoted is one which presents the mother as the saviour of her baby with aid organisations as partners who supports her in doing this. The mother-aid organisation partnership should be presented as central to any aid provided to babies.

There were some notable differences in the reports of the need for baby food and in the donation and distribution of infant formula, other milk products, baby food and bottles between media articles on Cyclone Nargis and the Wenchuan earthquake. There were more reports of food for babies being needed, more reports of the donation of infant formula and other milk products, particularly by industry, and more reports of the distribution of infant formula and other milk products, particularly by NGOs, in China than in Myanmar. There are several possible reasons for these differences. Firstly, the greater number of reports of industry donations in China is likely 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 their marketing activities in China in recent years and would have seen the earthquake as a opportunity to receive positive media attention and thus promotion. Secondly, rates of artificial feeding pre-emergency were higher in China than in Myanmar (UNICEF 2008) and it is therefore likely that the need for infant formula in the emergency response in China was genuinely greater. However, it is important 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 to both breastfed and artificially fed infants and that they detract from the aid effort. For example in Kosovo during the Balkans conflict, 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 Kosovo is that since donations are not specifically purchased for a particular situation they are often not of the type required, the quantity required and in the location where required. In Kosovo management of donations was difficult and costly (Borrel, Taylor et al. 2001). They were often distributed to the carers of artificially fed babies without the other the support required and also to breastfeeding mothers. Thus, even in an environment where rates of artificial feeding are high, donations of infant formula should be actively discouraged. Finally, the absence of a joint statement on IFE or policy decisions to prevent the inappropriate distribution of donations in China may have contributed to the greater number of reports of distribution of milk products in China. This may be an indication that joint statements providing IFE 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. Given that a direct link between media reports of a need for infant formula in aid and arrival of unsolicited donations of infant formula has been observed, media reports of a need for baby food should be discouraged. Aid organisations should be proactive in educating the public that donations of infant formula are unhelpful. In addition, where aid organisations are involved in IFE programs supporting artificial feeding the risks associated with artificial feeding and the measures required to reduce these risks should be emphasised; no report should be released simply indicating that x amount of infant formula has been distributed because this gives the impression that this is all that is required.

Response: Aid agencies should avoid presenting themselves as saviours of infants in media releases but instead present mothers as partners in provision of aid to infants and young children. The support being provided to breastfeeding mothers should be emphasised. Any mention of aid to support artificially fed infants should also mention the risk associated with artificial feeding and describe the package of aid required to assist these infants. It should be explicated stated that donations of infant formula are not needed and are unhelpful but that monetary donations will assist aid agencies to maximise the survival of infants.

#### The involvement of aid agencies in influencing media content

Reporting on emergencies is difficult for journalists; the situation is often complex and access difficult. Journalists rely on aid agencies to provide them with information to construct their stories (Habayeb et al 2005). In fact the print media has been noted as commonly using materials given to them by aid agencies almost verbatim (Bennett and Daniel 2002). It was clear from the analysis of the media reports from Cyclone Nargis and the Wenchuan earthquake that aid agencies were an important source of information for journalists in these emergencies. Many of the reports of the need for and distribution of infant formula and milk powder came direct from aid agency press releases. However, information about the protective role of breastfeeding; the need to support breastfeeding women, target the distribution of infant formula and support the carers of artificially fed babies in media reports was absent in the press releases of NGOs and therefore absent from news articles. The media cannot be blamed for promoting poor practice on IFE if NGOs and others are not providing them with good information.

The question then is, why are NGOs and others providing the media with poor or no information about IFE? There are several possible reasons for this. Some aid agencies are themselves unaware of IFE guidelines. It can be surmised that those NGOs who promote their donation or distribution of infant formula or other milk products believe that they are demonstrating their helpfulness to those affected by the emergency in doing so. This reflects not only that the aid agency believes that these products are helpful but that they believe that members of the public who read about these donations/distributions will understand these actions as helpful. Dealing with this problem requires that education on IFE become a priority between and within NGOs and in the wider community.

In addition, organisations may be aware of IFE guidelines but may not be supportive of them. The situation in China in which organisations determined that they did not want to use a joint statement to dissuade unsolicited donations is an example of this. Such decisions suggest that individuals within these organisations believed that unsolicited donations of infant formula can assist artificially fed babies and that this assistance is greater than the harm caused by these donations. However, as already discussed, previous emergencies have demonstrated that this is not the case. We have yet to learn the ramifications of unsolicited donations and poorly targeted and supported distributions in China. However, there is some evidence that at the very least they increased rates of artificial feeding. For example an NGO blog described how an infant formula company supplied 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 and babies were starving; the inference being that stress had preventing milk production (Zhang 2008). It can be concluded that this donation (which also breached the International Code of Marketing of Breastmilk Substitutes) 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 is also difficult to ascertain; media reports describing these distributions did not mention any other support provided with them. The NGO contacted in relation to their distribution of infant formula was not providing any physical, educational or medical support with the infant formula they distributed. The magnitude of the harm caused by this lack of support requires investigation. The distribution in aid of melamine-contaminated infant formula produced by Sanlu highlights how critical it is for those distributing infant formula to take responsibility for the consequences of their aid and provide appropriate medical supervision. The Sanlu company donation amounted to perhaps 125 tonnes of infant formula (enough to exclusively artificially feed 40 000 babies for 1 month) and donations of Sanlu formula also came from other sources. If organisations that

facilitated the distribution of Sanlu iinfant formula did not keep records of to whom the formula was distributed and provide ongoing medical support to those babies they have failed in their duty of care to those infants and their families. The guidelines on IFE have been developed over a variety of emergencies over a significant period of time. They are necessary because what seems like a sensible thing to do with regards IFE actually causes harms. They can be relied upon and regardless of the differences in rates of artificial feeding the principles of IFE are the same. The solution to dealing with high rates of artificial feeding in an emergency context is not for unsolicited donations to be encouraged or allowed but for appropriate and comprehensive aid which includes infant formula, access to clean water, educational support and medical supervision to be specifically targeted to those infants who cannot be breastfed. As discussed organisations providing such aid should emphasise the risks associated with artificial feeding and the measures required to reduce these risks in their media interactions.

A second reason why aid agencies may not include good information about IFE 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 wish to use the media to promote their organisation and wish to receive publicity that will increase their profile and encourage the public to support their work. NGOs may consider it risky to provide information to the media which 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 emergency and from further harm, discrimination and rights violations (Chunkath, Della et al. 2005). Organisations that are aware of the guidelines on IFE and are silent when they see inappropriate aid being encouraged and children being harmed could be considered complicit in this harm. Organisations aware of IFE guidelines have a responsibility to use their media influence to discourage inappropriate aid and promote beneficial aid. 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. However, challenging the erroneous beliefs of the public in relation to emergencies is a part of the job of humanitarian agencies (Cate 1996). Organisations have been able to challenge beliefs in other areas to discourage poor practice. For example, after Cyclone Nargis, NGOs were proactive with the media in discouraging the building of orphanages to house children who had been separated from their parents (MacKinnon 2008). This was in spite of public opinion generally being that orphanages are necessary and beneficial. It should also be considered that if provided with good information that members of the public will adjust their ideas of what will assist babies. Thus, the response to Andrew Kirkwood's statement on US radio that the aid needed by motherless babies was to find wet nurses for them was not offence, but for women to offer expressed breastmilk. While this response indicates an ignorance of how aid works it also demonstrates a willingness to assimilate new information and a strong desire assist infants affected by emergencies. Had such women been offered the opportunity to assist by donating money to support programs to find wet nurses for motherless babies they may have been only too willing to do so. Members of the public are keenly aware that infants are vulnerable in emergencies however, currently the only 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 provided to babies must be of a specific type

to be helpful and that supporting and empowering mothers to exclusively breastfeed is an effective and worthwhile type of aid.

The promotion of IFE activities also poses some challenges for organisations in terms of the type of aid involved. NGOs are often very "product driven" in promotion of their activities, that is they promote how much physical goods, food, water etc they have delivered to those affected by the emergency. This is a problem for IFE because it is only the mother or carer who can protect the baby by breastfeeding and even the support needed by carers of artificially fed infants is not easily quantified. The essential support that aid agencies provide in protecting and supporting mothers 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 from Save the Children in China. Save the Children was providing breastfeeding support and IFE education to mothers but did not mention this in press releases or other publicity. Rather they publicised their distribution of "baby foods," which usually means infant formula, but was in this case 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 publicising their activities in relation to such things as child protection that do not involve the provision of goods. They need to similarly adapt their messaging around IFE.

Messages that aid organisations might consider targeting to the media are as follows:

- 1. Babies are vulnerable in emergencies
- 2. Artificially fed babies are particularly vulnerable in emergencies
- 3. Breastfeeding babies are protected in emergencies
- 4. Breastfeeding women are protecting their babies, breastfeeding is a sign of strength and resilience
- 5. The way to help babies survive is to help their mothers to continue breastfeeding
- 6. The carers of artificially fed babies need support
- 7. Aid agencies need help from the media immediately after the emergency starts to prevent the arrival of donation of infant formula and other milk products

Response: Aid agencies have a responsibility to act in an educative role on IFE to the media and their supporters. Organisations aware of IFE guidance and who remain silent on harmful infant feeding activities are complicit in the resultant harm. Aid organisations would provide the media and their supporters with good information on IFE including the protective role of breastfeeding; the dangers of artificial feeding and unsolicited donations of milk products and the need to support breastfeeding women, target the distribution of infant formula and support the carers of artificially fed babies. Adjusting promotion of aid provided to babies from one that is product driven to one that does not primarily involve the provision of goods is necessary. Aid organisations must also respond to media coverage; "excellent media coverage should be recognized and used to help improve other reporting. Inaccuracies or misperceptions should be corrected through direct contact with the media and reporters involved, letters to the editor, guest columns, counter information and other means"(Cate 1996).

#### The timing of media reports

This analysis revealed some important information about the timing of media reports concerning IFE. Reports of the need for food for babies and reports 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 start of the emergency. In contrast, the few articles that described the risks associated with artificial feeding and the importance of promoting breastfeeding were published months after the start of the emergency. The relatively late appearance of these media reports would have 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 the past decade or more. It is therefore not unreasonable to assume when an emergency occurs that there is a high probability that this will be an issue.

Response: The media should be used to help avoid unsolicited donations of infant formula and other milk products. To achieve this end, joint statements on IFE should be made and agreed in on as a part of emergency preparedness so that they can be released immediately an emergency occurs. Press releases seeking to discourage unsolicited donations and poorly targeted distributions of infant formula and other milk products should be released as soon as possible after the emergency occurs.

#### Increasing media interest in IFE

The large amount of publicity given to one IFE story, that of the wet nursing police officer, provides an example of the type of story likely gather the greatest amount of media interest. Both Myanmar and China are countries in which wet nursing is traditionally practiced and is therefore 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 that might assist those seeking to engage the media on IFE issues. Firstly, 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 and was feeding the babies of others. She could be presented in media articles as brave and self-sacrificing. The mothers of babies she wet nursed were available to provide interviews and say that their infants would have suffered without her assistance. Media attention is given to the unusual and dramatic rather than that which is perceived as ordinary or normal (Tierney 2006). It is also given to stories that evoke strong emotions (Bennett 2000- check). This story contained all of these elements. Secondly, 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 they could use with the story. Stories that have striking pictures associated with them and that include personal details about the people involved receive more media attention than those without images and that deal with anonymous individuals or groups of people.

The story of the wet nursing police officer was long lived, with news outlets publishing different angles on the same story over weeks. It is worth noting organisations can also provide new information to add to pre-existing stories to the media. In this instance, perhaps debunking the myth that stress dries up breastmilk or highlighting that it is recommended that wet nursing be sought for motherless babies in preference to supporting artificially feeding in emergency situations.

Response: In seeking to attract media attention to IFE, stories of identified individuals should be used. Presenting a dramatic angle on such personal accounts, emphasising how remarkable these people are and accompanying their story with images that can be used by journalists will increase the probability of a press release or story conveyed to a journalist being given wide a hearing. Thus, instead of presenting anonymous breastfeeding mothers as carrying on as usual, press releases should frame the situation in a way more likely to be attractive to the media. This would involve presenting the stories of individual mothers emphasising their bravery and resilience, how exceptional they are to be able to continue feeding their infants despite the dreadful circumstances and how their organisation is supporting them to continue to be able to do this. 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 appropriately framed but detail is required. The personal story can act as a hook on which to hang accurate information about IFE.

#### Conclusion

The analysis of news articles on Cyclone Nargis and the Wenchuan earthquake indicated that poor information about IFE remains a problem. Media reports that encourage the perception that the donation of and free widespread distribution of infant formula and other milk products is necessary and helpful in relief efforts are overwhelming. Out of more than 200 news articles containing information related to feeding babies in these emergencies there were only four articles that contained accurate information on IFE in any detail. In order to protect infants and mother affected by emergencies from harmful aid, aid organisations must engage and educate the media and the public on how to protect infants in emergencies via properly delivered, appropriate aid.

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