

Nutrition and care of young children during emergencies

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Abstract

Emergencies are not only sudden events with natural causes that can be ameliorated with resources from outside. The causes and consequences of emergencies with sudden or slow onset, those that are complex and involve conflict, or are permanent emergencies are all deeply rooted in the vulnerability of people to hazards and their incapacity to recover. This will have implications for care behaviours and practices in the feeding, health, hygiene, and psychosocial areas. Families react to slow-onset emergencies by managing a declining resource with inevitable negative impacts on child care. Food intake declines. At the extreme of destitution, families may migrate to refugee camps where children face health crises as large displaced populations congregate around contaminated water sources. Breastfeeding may cease. In war situations, children face extreme psychosocial stresses. The importance of care for young children is given insufficient attention by those providing assistance from outside. Care interventions should improve the effectiveness of health, food, and psychosocial support

Introduction

UNICEF makes the distinction between "loud" and "silent" emergencies [1]. The loud emergency relates to loss of life and injury as the result of a catastrophic event such as an earthquake, famine, or war, and receives lots of international publicity, whereas the silent type refers to the constant and generally unpublicized loss of life in situations associated with levels of extreme poverty. Silent emergencies probably affect more people. This is a useful distinction and has endured the recent reappraisal of the definition and concept of an emergency, which puts people's vulnerability to hazards as central.

Many say that an emergency reflects "development in crisis"; similarly, sociologists refer to disasters as "social crisis periods" [2]. A well-known definition is that of the Harvard International Relief and Development Project [3]: "Disasters can be defined as crises that overwhelm, at least for a time, people's capacity to manage and cope." UNICEF uses the following definition: "a situation of hardship and human suffering arising from events which cause physical loss or damage, social and/or economic disruption from which the country or community is unable to fully cope alone" [1]. The definitions point to people becoming destitute, having crossed a threshold where their behaviour becomes structurally different as a result of losing household and community. This requires responses from outsiders [4]. The existing literature on nutrition and thresholds [5] lends

support to the concept of behavioural change as a key component of disasters or emergencies.

However, these new definitions would place many parts of the world in emergencies both silent and loud: places where infant and maternal mortality rates are high, where there are large numbers of landless, indebted people without access to clean water, satisfactory diets, and adequate housing. People are continually passing over the threshold of disempowerment, for reasons such as disease or severe malnutrition. However, relief may not be organized for them by outsiders because of differing definitions of emergencies.

This situation has prompted a wider definition encompassing loud and silent emergencies to focus on "shocks" categorized as [6]: natural (drought, pests, diseases such as AIDS), pertaining to the state (reduction in services, asset redistribution), market (currency devaluation), community (breakdowns in sharing mechanisms), or conflict (war, theft). These have been refined to four different types of emergencies requiring outside interventions [6]: sudden onset (such as earthquakes), slow onset (such as famine), complex (involving conflict), and permanent (large problem of structural poverty). Many loud emergencies are rooted in poverty, so that silent emergencies must be tackled if loud emergencies are to be avoided. Thus, readers reviewing information about care, nutrition, and emergencies should always see care in the wider context of "shocks."

It is important to briefly review this re-definition for two reasons: first, to be up to date, and, second, to help show the links between this article and others in this issue. Household and community resource constraints and caregiver behaviours under stress identified in other articles will be exacerbated in an emergency. Also, care behaviours and practices will be similar for children in both loud and silent emergencies.

Reappraisal also points out that affected people should not be seen as helpless victims [3]; they have capacities as well as vulnerabilities. In response to external threats, people continue to allocate their scarce resources and modify their behaviours. This will have profound implications for child care. Factors that influence care behaviours will be affected significantly: resources of food, water, sanitation, and health and education services will be reduced or eliminated. The time and resources that caregivers can allocate to the child will also be reduced. The caregiver may become separated from the child, perhaps permanently. Home and community conditions may disintegrate.

Young children (even those as young as two years of age) suffer direct trauma from the loss of personal security and aspects relating to their wider social needs, such as relocation to a new and perhaps hostile environment. The category of "complex, involving conflict" often includes traumatic experiences during conflict and lack of protection leading to abuse, even murder.

In an emergency, therefore, care and nutrition of the young child must take on a much wider definition than in normal times. In its emergency programmes, UNICEF's conceptual framework for nutrition is redefined so that child survival and development outcomes include protection against injury and death from the external threat. The

importance of care and protection of the child in emergencies is highlighted in the Convention of the Rights of the Child in Articles 19 (Protection from abuse and neglect), 20 (Protection of a child without a family), 22 (Refugee children), and 38 (Armed conflicts).

The number of people now caught up in an emergency has increased substantially over the last few years. About half of these people are children. The number of refugees in Africa, including both those displaced internally and those who have crossed a national boundary, is at an all-time high of 20 million, the size of a large nation. Also, political instability is becoming a more common global feature. The number of ongoing wars has increased steadily, from 10 in 1960 to about 50 today. Each year more wars have started than have ended, and wars are also lasting longer [7]. In 1993, there were 26 UN-designated "complex emergencies" affecting 59 million people, all, apart from Haiti, in the African-Eurasian zone. Also, the nature of violence has changed, becoming a significant element in economic and political survival. In the past, violence was usually linked to state formation; now it is associated with state disintegration that causes higher levels of insecurity and population displacement. Therefore a very significant number of children are caught in an emergency of some kind.

To limit the discussion, this article will focus on the problems of providing good care and nutrition for children living under three types of emergency situations: slow-onset emergencies, especially famines in Africa; refugee camps; and war. The research on which this review is based is limited for obvious reasons: carrying out investigative studies in such conditions is difficult. However, there are important observations to be made about care behaviours and practices in the psychosocial, health, feeding, and hygiene areas.

Care and nutrition during slow-onset emergencies

New understanding of the causes of famine has led to the conceptual re-appraisal of emergencies as processes of human and community vulnerability. Previously, famine was seen as caused by a natural event such as drought that reduced food supplies, causing deaths by starvation. This could then be ameliorated by food aid from outside. The whole process was monitored using indicators of child nutrition status. Now it is understood that chronic vulnerability to food insecurity predisposes to famine. It is a long-term process, not an event, and short-term food aid may not be the most appropriate means of reducing mortality. Also, nutrition status data for children have proved very ambiguous indicators about the timing and intensity of the food crisis [8].

Responses to these slow-onset emergency stresses have been mostly studied during famines. This research is known as the coping mechanism literature [9-13]. These coping strategies involve a number of well-defined activities in three stages.

The first stage involves insurance mechanisms or nonerosive coping: changes in cropping and planting practices; reduction of dietary intake; switching to cheaper, less desirable, and maybe less nutritious foods; reduction of the number and size of meals eaten; sale of

small stock; collection and consumption of wild food (consumed usually without sauces and relishes); and migration in search of employment. As stress becomes prolonged, children start to suffer a "crisis of care" as caregivers spend more time searching for income, water, and food. There is evidence from Sudan that food intake is reduced for all family members, including children, early in the crisis rather than later [8], although in Bosnia the food intake of children was protected in the early stages of the conflict [13]. Water will be in short supply, so food preparation may be inadequate and food contamination may be greater. The young child may be faced with eating unusual foods. Further evidence from Sudan indicates that families protect assets and livelihoods as often as they do lives [14]. Thus children are faced with a food crisis as well as a care crisis.

At the second stage, the care crisis deepens, and food continues to be rationed within the family. This stage is one of disposal of productive assets or erosive coping. Families sell livestock, agricultural tools, and land. Food prices rise and the prices of commodities being sold by families fall. They continue to search and scavenge for food.

Stage three is that of destitution or non-coping. Families become entirely dependent on charity, with distress migration by entire family units to relief camps. Other distress and destitution activities include prostitution and selling off and abandoning children. Some families will be close to starvation and child malnutrition rates will continue to be high. One reference reviews socio-psychological behaviour during a famine emergency [15]. Social responses have been categorized into three phases of reaction: alarm (with general hyperactivation, anxiety-related, increasing appetite for social interaction); then resistance (energy-conserving, family bonds remain intact but individuals drop friends); and finally exhaustion (failure to cope, only personal survival remains important, elderly may be pushed out, starving children form foraging and bandit gangs).

Care and nutrition in refugee camps

Children arriving in a refugee camp will have suffered from reduced food availability for a greater or lesser time (depending on the nature of the emergency) and will be physically weak and highly vulnerable to infection. At a camp with feeding points, the crisis for children changes from being one of care and food to one of care and health. Food becomes available, but the large number of people in unsanitary conditions leads to outbreaks of communicable disease.

The nutrition of children in refugee camps has focused mostly on food availability in terms of ration size and the organization of feeding (issues of targeting, registration, etc). There are several manuals on how to make available a ration with a specific nutrient content [1, 16-19]. In addition, recognizing that large aggregations of weak people in unsanitary conditions can trigger epidemics, refugee camps, especially those responding to the acute phase of an emergency, provide health-care facilities and immunization for children. However, these activities are oriented to mechanically deliver food, immunizations, or water. Services provided to children in camps will vary with factors such as resource availability and physical access to the camps, and also the stage in the

emergency that determines priorities: whether the refugees are newly displaced, entirely dependent on external assistance, or in long-term camps where people have developed some degree of independence. In the former, lives are in danger of being lost; in the latter, resources should be used to develop and strengthen livelihoods [20].

The food provided in the ration may be unfamiliar and unpalatable by local standards. Generally, African refugees receive only a cereal and infrequent supplies of pulses and a fat source. Other items such as dried fish, salt, and sugar are more rarely provided [21]. Thus, refugees spend time and effort seeking to diversify their diet, especially for greens, animal products, and condiments to accompany the starchy staple. Emotional stress, combined with unpalatable food, compounds the effect on appetite, leading to withdrawal. The need for suitable care behaviours from caregivers is even more crucial but can rarely be met. Refugees will try to obtain supplementary and other essential foods through a variety of employment and trade with very low returns, further reducing the time they can devote to their children's needs. Many refugees are obliged to sell or barter part of the ration to meet essential non-food needs such as clothing, soap, grinding of foods, firewood, and protection.

Attention to care behaviours will reduce the high mortality rates seen in young children in refugee camps, as it does in normal situations. There has been some speculation as to the causes of high mortality rates seen in young children in refugee camps and to what extent they are linked to adequacy of the ration or health care [22]. It has been emphasized that it is not the type of infection that causes excess mortality among refugees but its greater severity and intensity [23]. Improved care behaviours would help here.

Factors other than technical and humanitarian ones may play important roles in making decisions about ration adequacy despite knowledge and agency guidelines, high death rates after emergencies, and other severe nutritional problems that persist in refugee populations [23].

Children will suffer the psychosocial trauma of leaving their community and possibly their family. Also, they may suffer the further trauma of fleeing from violence, even seeing family and friends murdered. They may have suffered physical wounds and feel insecure within the camp. Refugee children's psychosocial well-being is as important as their physical health, but in practice these needs do not receive the degree of attention provided for physical health and food needs. Protecting and promoting the psychosocial well-being of children has two aspects [20]: as a preventive measure, as compensatory care enhancing all those factors that promote well-being [24], and ensuring that children who have been harmed or who have special needs are provided assistance so that they can recover fully.

Even if the family has remained intact, the adults will still have suffered greatly, influencing their ability to provide care for their children. This can lead to child abuse, abandonment, family strife, and other forms of family disintegration, which may continue within the refugee camp. Children continue to miss out on essentials such as play and

school. Extended residence in a camp may cause extremes of behaviour in children. Those young children living in camps as orphans will have special needs [25].

In camps people often sit around listlessly, exhausted and demoralized. Many visitors remark on the lack of support for family feeding units and how infrequently children laugh and play, and wonder why they are not encouraged. Feeding points may mean that families do not eat together. In large, unfamiliar camps young children can become cut off from their families. Mothers cannot or will not give malnourished children adequate stimulation. Where special efforts have been taken to teach and encourage mothers to play with and stimulate children as part of a programme of supplemental food assistance, good results are reported [26].

Care and protection for children in war

Different types of conflict have different impacts on the location and mobility of affected populations. Factors influencing the impact of conflict on communities are inter alia ethnicity, geographical location, and nature of asset holdings. For example, some families are able to continue subsistence activities in their villages through periods of conflict, whereas others have to leave home and community [27]. Urban families often have different experiences than those living in rural areas. In some cases families have the opportunity to prepare for oncoming conflict, which means they may be able to organize their livelihoods and use services such as schools and health centres. In Bosnia, families consolidated to pool resources and create a source of trusted child care [13].

The impact of armed conflicts on children can be grouped into nine categories, all related directly or indirectly to care: 1) loss of and threat to life; 2) injury, illness, malnutrition, and disability; 3) torture, abuse, imprisonment, and recruitment; 4) separation from family; 5) psychosocial distress; 6) displacement; 7) poverty; 8) education disruption; 9) social and cultural disruption, and distortion of values [27]. Conflict threatens family food supply, creates obstructions to the delivery of health services, and increases the need for health services. Often conflict is compounded by another shock such as drought or currency devaluation.

In terms of food supply, conflict can destroy crops, seeds, and tools; farm labour can be murdered or conscripted. Workers may be afraid of working in the fields, and markets can disintegrate. At a national level, agricultural services can stop functioning. Prices escalate. Thus, families are abruptly forced from their coping strategies into destitution. Maintaining a stable food supply during a conflict places extra stresses on caregivers; families migrate further into the bush or head for urban areas, creating new environmental health problems.

In all conflicts, the delivery of health services to children is disrupted. Health staff leave their posts, supplies are not delivered, and facilities are ransacked. Health budgets are sacrificed for military and other needs. Existing services are requisitioned for treatment of war injuries. Displacement linked to conflict increases health risks to children [27].

Psychosocial distress of children and war-related experiences may be just as injurious and disabling as physical wounds [28, 29]. Distressed children show a number of symptoms: withdrawal, psychosomatic complaints, weight loss, failure to thrive, and loss of energy and appetite; all are related to nutrition. The food-health-nutrition interventions used in relief programmes cannot be regarded as effective if they do not take these symptoms into account.

Breastfeeding

During an emergency, breastfeeding and the use of complementary foods are disrupted. The result can be feeding difficulties, or, alternatively, women may decide to breastfeed for longer. In one case in Ethiopia, mothers who had already weaned their infants reverted to breastfeeding [30]. Breastfeeding, virtually always desirable, is even more important in emergencies, as it may be the only sustainable form of food for the child [31-33]. Breastfeeding is of special importance in refugee emergency situations, because the risks of diarrhoea and other infections usually increase dramatically due to poor hygiene and crowding, complementary feeding is likely to be inadequate and contaminated, and bonding and care, always essential components of breastfeeding, are enhanced [31]. Often, however, support for women to breastfeed their children in a refugee camp falls away. Women may have walked long distances and already be very weak and exhausted; they may be without the support and advice of their own mothers. In some instances women may have been raped or find breastfeeding shameful. Within the camp they may have to perform tasks that are incompatible with breastfeeding because they require long periods away from the child, such as water-carrying. There may be many disruptive elements in the new environment. As part of emergency relief, breastmilk substitutes may be promoted that can create extra health risks as water sources become more contaminated.

Conclusions

Care is important to meet the needs of the increasing number of children in destitution as a result of war or other emergencies. In such situations, children have lost some or all of the family and community structures that previously gave them some psychosocial and economic security and provided food and health resources. In fact, care is of greater importance in emergencies than in normal circumstances. Shocks can take many different forms, with equally damaging direct and indirect effects.

The standard outsider's response to emergencies has been that providing families and children with food solves their problems. Families face not only a food crisis but a health crisis caused by living in unhealthy conditions. Thus, medical aid, usually in the form of immunization, is also provided to refugees and other displaced people. Rethinking the way relief programmes are implemented, not just focusing on the delivery of a ration with specific calories or immunizations with specific vaccines, could play a significant role in countering psychosocial stresses. However, little thought has been given to whether children also are suffering a "care crisis," and thus care for children in an emergency has been focused on treating war-related trauma. But a wider view is needed.

If the breakdown of family and community structures can be prevented, then food and health crises might not happen or at least might be less serious. This will, of course, depend on the circumstances of each emergency or shock.

What interventions are needed to avoid a care crisis? Lack of space does not allow a proper discussion, but programmes that maintain the structure of the family and community are important. The most important is the school, which indirectly benefits the young child by keeping the family and the community together. UNICEF projects to maintain schools in conflict situations in Somalia and Bosnia have been successful. If children stay in school, an air of normality is maintained for all family members.

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