

Invited paper

Nutrition in humanitarian crises

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SUMMARY It is anticipated that humanitarian crisis situations will continue to occur in countries of the Eastern Mediterranean Region affecting large segments of vulnerable populations. Subsequently the magnitude and effectiveness of the humanitarian response, particularly for food and nutrition, must be based on best practices and sound information of affected populations. To bridge the burgeoning gap between the food and nutrition needs of affected populations and the available resources, four key areas need to be addressed by the humanitarian agencies: adequate knowledge and skills in public health nutrition; effective coordination between humanitarian organizations when conducting nutritional assessments and interventions; efficient and appropriate delivery of services; communication, awareness and advocacy. This paper discusses approaches to how these may be improved.

Introduction

The purpose of this paper is to synthesize experiences and observations in food and nutrition interventions, gathered over the past several years as part of engagement in a number of humanitarian crisis situations afflicting the countries of the World Health Organization (WHO) Eastern Mediterranean Region. These include the recent crisis in Darfur and the war in Iraq, as well as chronic situations such as those in Somalia and Palestine. We do not purport to address all the food and nutrition-related issues that may arise in any major humanitarian crisis situations, but only focus on four key technical and programmatic food and nutrition interventions – adequate knowledge and skills in public health nutrition; effective coordination between humanitarian organizations for nutrition assessment; efficient and appropriate delivery of services; communication, awareness and advocacy – and provide some suggestions for improvement.

We recognize the significant role that the national and international humanitarian relief organizations play in alleviating the suffering of affected populations in any humanitarian crisis. Their services are often delivered against serious security constraints and amidst very trying environmental conditions and we are deeply appreciative of the exceptional work they do.

Background

In recent years, humanitarian crisis situations have been characterized by political instability, armed conflicts, large population displacements, food shortages, social disruption and collapse of the public health infrastructure [1–3], and have resulted in increases in mortality above the usual levels due to a combination of disease, malnutrition and aggression [1]. In such situations, often referred to as emergencies or crises,

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serious disruption in the functioning of a society and its basic social services prevents the affected population from coping on its own [4].

With the recent security and political developments in the world and the growing vulnerability of populations, it is unlikely that there will be a reduction in the frequency of humanitarian emergencies in the coming years. Therefore, countries and organizations need increasingly to gear themselves to addressing effectively the major health challenges that arise from crises situations [1,4].

Technical expertise

The knowledge, skills and experience of staff from the humanitarian relief organizations that provide nutrition services are often a key factor in implementing technically sound programmes [4].

For many reasons, humanitarian organizations often experience a rapid turnover of their technical staff in the field, hence challenging the sustainability of programmes and interventions. Additionally there is a dwindling number of qualified nutrition experts interested in working in humanitarian crisis situations. The global rise and magnitude of humanitarian crises with the corresponding demand for nutritionists, together with insecure and/or poorly-supported working environments have also contributed to the oft-encountered situation where important technical decisions on nutritional requirements are taken by agencies or organizations working within the crisis setting with very little coordination and collaboration (unpublished reports, 2003–2005).

In the foreseeable future, public health nutrition experts will continue to be required during the initial phase of any humanitarian crisis as nutritional status is an

appropriate indicator of the severity of the crisis. Subsequently, the humanitarian relief community should make every effort to ensure that a pool of trained national staff from the relevant ministries of the affected country is prepared in the basic principles and practices of public health nutrition. This will ensure that a cost-effective and sustainable back-up system will be in existence. It will also develop the national capacity to respond, albeit partially, to similar humanitarian crises in the future. Sustaining local capacity so that standards are applied for nutritional assessments, monitoring and health activities in a crisis setting requires the commitment and willingness of all stakeholders prior to the onset of a crisis.

Assessments

A valuable indicator of a population's health during the emergency phase of a humanitarian crisis is the crude mortality rate [5]. Other important public health indicators for use in humanitarian emergencies are the under-five mortality rate and acute malnutrition rate among children under the age of five years, since children in this age group are the most important vulnerable group during emergencies [1,6]. Although food scarcity remains the major cause of malnutrition during most emergencies, concurrent illnesses – especially chronic or recurrent diarrhoea, and micronutrient deficiencies, such as scurvy, xerophthalmia, pellagra and beriberi – may also contribute to significant morbidity and mortality [7–9].

The purpose and need for undertaking assessments is to enable humanitarian aid agencies both to identify and monitor health needs of affected populations during a crisis and to assess the effectiveness of interventions. Experience has taught us that

agencies and organizations in the past have not adhered to similar protocols thus jeopardizing comparability and accurate assessment of the severity of the situation.

Two screening procedures – measurement of mid-upper arm circumference and determination of weight-for-height – are recommended to identify malnourished children and refer them for appropriate feeding interventions [6,10].

Several authors have suggested that humanitarian agencies also take cognizance of the nutrition needs of other population groups, such as pregnant and lactating women, that are equally susceptible to acute malnutrition [6,9,11,12]. Some cut-off measures to identify adult males and females for routine food supplementation or special feeding regimens have also been proposed [13], while other authors [14] have pointed out the lack of uniformity and representativeness of the different anthropometric indicators used to classify adolescents and adults into various grades of under-nutrition.

For decision-making, weight-for-height remains the most accurate indicator for data collection and assessment of the nutrition situation [6] and has been accepted at the international level. Yet, a plethora of methods and indicators continue to be used to assess the nutritional status of affected populations in humanitarian crisis situations. Although information gathered from such assessments is often available in abundance, it does not provide any precise immediate or prospective time-trend understanding of the overall crisis situation because of the diversity of the methods used to collect data.

To avoid these practices, it is important that at the outset of any humanitarian crisis, where the nutrition status of the population has been compromised, members of the international and national humanitarian

aid community immediately assist the national nutrition authority to establish a standardized protocol for all nutrition assessments, interventions and monitoring of their impact.

Coordination of actors

In the early phase of any humanitarian crisis, a number of international and national organizations arrive, mandated and equipped to provide humanitarian assistance of varied amount and quality. Food delivery begins at the early stages, but the assessment of the population's nutrition status, and monitoring of the evolving situation and impact of the interventions progress at a much slower pace, often complicated by the lack of coordination between all the stakeholders.

To ensure that valuable time and resources are not squandered, it is essential that at the very beginning of any humanitarian crisis, adequate support be provided to the national authorities (including the national nutrition/humanitarian authority) to establish a coordination mechanism. This mechanism will ascertain the interventions, the agencies that will undertake them and the indicators that will be used to assess the impact and effectiveness of the interventions, thus preventing duplication of efforts and gaps emerging.

For the mechanism to be effective and sustainable, a lead agency and relevant ministry should serve as the coordinators of information and actions. In any major humanitarian crisis, food and nutrition interventions and their sustainability remain well beyond the capability or capacity of a single international organization. Interaction and coordination with other sectors and agencies is essential. It is usually the national authority with the support of international organizations that has the potential reach,

capacity and longevity to ensure effective food and nutrition interventions in humanitarian crises. Therefore, all stakeholders should work collectively to provide an enabling environment where information and actions are coordinated with the aim of getting sufficient and appropriate assistance to those most in need.

Nutrition interventions

The conventional nutrition interventions recommended by WHO in any humanitarian crisis consist of inpatient therapeutic centres for severe malnutrition cases and outpatient supplementary feeding centres for moderate malnutrition cases. WHO regards severe malnutrition as a life-threatening emergency that requires immediate and urgent medical care and supervised inpatient feeding for the first week or so of treatment [15].

In recent years, several nongovernmental organizations have reported that the community-based therapeutic care (CTC) approach, where community members report the occurrence of malnutrition early, results in patients with malnutrition presenting earlier and are hence easier to treat. It is important to note that CTC is complementary to therapeutic feeding centres and includes three modes of treatment – dry take-home supplementary care for people with moderate, uncomplicated malnutrition, outpatient therapeutic care for those with uncomplicated severe malnutrition and inpatient care for those with severe or moderate malnutrition with complications or life-threatening illnesses [16–18].

The concept of CTC in its entirety has strong merit and logical applicability in emergency situations. However, our recent experience has shown that organizations providing care to malnourished populations tend to focus on providing ready-to-eat

therapeutic food supplements to severely malnourished children on an outpatient basis without due attention to their follow-up or to the maintenance of suitable inpatient care for those with severe malnutrition (unpublished reports, 2003–2005).

This partial approach, probably adapted to the capacity of the organization delivering such services and for convenience, is inappropriate. Management of severe malnutrition is a medical emergency and cannot be approached in an *ad hoc* fashion. We must emphasize that unless an organization is prepared to cover the three aspects of CRC, including appropriate follow-up of outpatient and inpatient malnutrition cases, it should not be involved in the management of malnutrition in children.

As regards the actual food aid that is often provided to the affected populations in a humanitarian crisis, it is necessary to pay due attention to the introduction of food aid as well as to its timely withdrawal. A common criticism of food aid is that it encourages changes in food patterns, towards imported food and away from locally produced foods, and undermines to some extent traditional coping mechanisms [19–21]. In areas that are prone to drought, farmers and rural communities have, over time, developed sophisticated coping strategies that are characterized by considerable resilience and accumulated skills, including knowledge of wild foods and kinship networks [22]. It is important that such skills are not lost.

The occurrence of micronutrient deficiencies and the persistence of underweight among populations in humanitarian crises, raises questions about the quality of relief food, especially when food aid is a mainstay or the only supply and relief programmes last for years. In many instances, the procedures for establishing the food needs of vulnerable populations or the de-

gree of food security – an indicator for determining when food aid could be phased out – lack reliable methods or guidelines [4,19,23–25].

Other nutrition-related issues concerning food aid are the appropriateness and safety of the food items for human consumption at the point of purchase, during transit and storage, and at the point of actual consumption on arrival in the recipient countries [19]. The cultural acceptability of the food is also an issue as is its palatability.

Appropriate monitoring of food aid to the beneficiaries remains a problem in most humanitarian crises. Organizations involved in food aid often lack the operational capacity to run a monitoring system with their own personnel and there is heavy reliance on locally recruited staff or prominent members of the affected population, a practice that is fraught with irregularities and lack of transparency. Furthermore, an organization's concept of its monitoring system may be weak as such institutions tend to be more interested in the delivery of food supplies and in the food distribution process than the access to and use of such food items by the beneficiaries.

Communication, awareness and advocacy

It has been our experience that in countries encountering humanitarian crisis situations, the prevalence of different forms of malnutrition was at a higher level even before the onset of the crisis. Any subsequent increase in the different forms of malnutrition due to the deteriorating humanitarian situation may not draw the required response from either the national authority or the international community. When nutrition is not perceived as a priority [4], it will

not receive the prominence needed to galvanize action to tackle the situation. It is essential therefore to promote, support and advance the cause of nutrition.

An effective communication channel between the national nutrition/humanitarian relief authorities and the national health authority/policy-makers needs to remain open at all times [4]. Humanitarian organizations can provide the necessary technical support and resources to these technical bodies to ensure that policy-makers at the national level and the international community are regularly provided with easily understood assessments of the situation and recommendations that can be implemented.

Conclusion

The primary objective of humanitarian aid agencies and organizations is to alleviate the suffering of those most affected in a crisis situation. This objective can only be truly achieved if all partners work in harmony towards common goals with similar tools, standards and guidelines. This entails using the best practices and lessons learnt from previous crisis situations to ensure effectiveness and appropriateness of relief interventions. The area of food and nutrition provides an ideal opportunity for relevant organizations to streamline strategies in assessment, coordination and delivery of services to meet objectives. As humanitarians, it is our responsibility to learn from previous experiences, and apply the knowledge gained to anticipate and prepare for future emergencies so as to aid better suffering populations who require assistance. We must maximize cooperation and harness all appropriate tools and strategies to deal effectively with the immediate crisis while at the same time working towards a speedy and long-lasting recovery.

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Through its years of experience in responding to major disasters, WHO has developed a set of core health commitments to be addressed and upheld during a disaster. Two of these relate to nutrition, namely:

1. Establishment of epidemic and nutritional surveillance by strengthening national health surveillance systems and integrating information from external partners so that the earliest possible action can be taken against communicable diseases, common childhood illnesses, malnutrition, conditions related to childbirth and damage to mental health.
2. Prevention and treatment of malnutrition by ensuring actions taken by all partners to support nutrition during an emergency are technically sound, guided by international standards and well evaluated.

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