Global Health on the Edge – The Humanitarian Tipping Point

Jason W. Nickerson, RRT

ABSTRACT

Major disasters pose significant threats to population health: rapid-onset crises can result in a massive loss of life, while protracted emergencies can result in both direct and indirect adverse effects to population health and livelihoods. In many cases, windows of opportunity present themselves to mitigate the effects of emergencies, but these opportunities must be seized and acted upon. Regrettably, current models of international development and global public health are frequently reactive, rather than preventive, with regard to major emergencies; major humanitarian responses frequently occur only once select indicators have reached or breached established emergency thresholds, which are late indicators of a population's health. In order to avoid these predictable late responses, current models of international development and their relationship to emergency humanitarian responses need to be placed under the microscope. The public health community must serve as strong advocates for interventions to address worsening public health situations before they tip into crisis, and should be advocates for the reconceptualization and reform of priority setting in international development. The failure to do so quite clearly comes at the expense of some of the world's most vulnerable populations.

KEY WORDS: Disasters; relief work; international cooperation; malnutrition; public health; emergencies

La traduction du résumé se trouve à la fin de l'article.

Can J Public Health 2013;104(3):e267-e269.

On July 20, 2011, the United Nations officially declared that in two regions of Somalia (Bakool and Lower Shabelle), food security had deteriorated so significantly that the regions were in a famine situation.¹ Famine was subsequently declared in three additional regions of the country (Middle Shabelle, the Afgooye Corridor, and parts of Mogadishu), stark evidence of the worsening humanitarian crisis afoot.² The implications of these declarations ought to be of great importance to the public health community, as these criteria strongly rely on field epidemiologic data to support them. Strict reliance on these criteria, however, may not provide the full picture of an unfolding emergency.

The declaration of famine in Somalia represented two notable points for the global humanitarian community. First, it represented a tipping point signifying that the humanitarian crisis had deteriorated well beyond internationally accepted emergency thresholds for mortality and malnutrition, necessitating massive international humanitarian intervention. Second, that the health and security of the population in the region had deteriorated so significantly is evidence of the inability of global international assistance and development agencies to curb such a crisis without broad support from donor governments and perhaps most importantly, their constituents.

To many in the humanitarian aid community, the declaration of famine in Somalia was confirmation of what had been witnessed on the ground and summarized in public health and nutrition technical reports for some time. A famine declaration focuses largely

on two indicators common to population health assessments in crises: crude mortality rate (CMR) and global acute malnutrition (GAM), both of which are late indicators of the health of a population.³ In Somalia, assessments during the initial stages of the famine (in July 2011) demonstrated that across various regions of the country, mortality in children under 5 years of age ranged from a low of 4.1 to a high of 20.3 deaths/10,000 people/day, and GAM exceeded the famine threshold of 30% in 11 of 15 zones surveyed, with a range of 39-55%.⁴ The internationally accepted emergency threshold for the under-5 mortality rate is 2 deaths/10,000 people/day or a doubling of baseline mortality rates, while the GAM emergency threshold is 15%;⁵ simply put, all surveyed regions of the country had mortality and malnutrition rates in excess of the threshold at which a humanitarian emergency is declared, and had been at that stage for some time, even if they had not all breached the threshold for declaring a famine. Warnings of the impending famine had been sounded by the United Nations' Famine Early Warning System (FEWS) for months,⁶ yet until malnutrition and mortality rose to the point where Somalia tipped into a famine, few took notice and a relatively modest humanitarian intervention had been mounted.

Author Affiliations

Institute of Population Health, University of Ottawa, 1 Stewart St., Ottawa, ON K1N 6N5, Tel: 613-562-5800, ext. 2339, Fax: 613-562-5659, E-mail: Jason.Nickerson@uottawa.ca

Acknowledgements: Jason Nickerson is supported by an Ontario Graduate Scholarship from the Ontario Ministry of Training, Colleges and Universities.

Conflict of Interest: None to declare.

The food crisis in the Horn of Africa is the latest emergency for which humanitarian assistance and intervention have been both insufficient and too late. Three years ago, a relatively similar situation played out in Haiti, a country with a long history of poverty and underdevelopment, when a devastating earthquake struck just outside of the capital of Port-au-Prince destroying huge amounts of the country's health and social infrastructure, and leaving thousands dead. While the earthquake itself was unanticipated, the catastrophic effects could almost inevitably have been mitigated had the international community addressed the underdevelopment of the country's most basic infrastructure and provided assistance that addressed the fundamental problems facing the country, such as poverty, a weak political system, and the virtual absence of a functioning public health care system.

The failure to intervene before a situation tips into an emergency or crisis has become a hallmark of virtually all recent humanitarian emergencies.⁷ Despite all of the warnings of precarious health situations, the global health community inevitably arrives at the all-too-predictable position of attempting to provide humanitarian assistance in a rapidly worsening crisis, having missed multiple opportunities to intervene as the situation deteriorated before our eyes. The famine in Somalia was not unpredictable, nor unnoticed – over the previous year, local cereal prices had risen 240% in some regions of the country,⁸ for example – yet, aid fell short of what was required, and the situation continued to deteriorate.

Severe drought in the Horn of Africa is a recurrent phenomenon: between 2001 and 2011, there were only two years in which no region was affected by drought.⁹ In the short term, flexible funding is essential for allowing existing development programs to change course and respond to acute needs by scaling up existing activities and establishing emergency programming; in the long term, however, funding must be allocated to regional strategies and interventions which address the causes of poverty and vulnerability.¹⁰ While many humanitarian agencies recognize this need, donor funding can be inflexible and focuses heavily on quantifiable outputs of effectiveness, rather than difficult-to-measure complex outcomes such as reducing poverty or vulnerability.

Early warning systems generally use easily-quantified indicators of public health. These indicators must be systematically linked to early response mechanisms, yet this has infrequently occurred for several important reasons. First, the visibility and the intensity of media coverage of the emergency to constituents of donor countries undoubtedly plays a role in driving donor governments' response to emergencies – less visibility yields less pressure to intervene.¹¹ While malnutrition is undoubtedly recognized as problematic, famine sells newspapers and thus draws donors. Other factors, such as the degree of political interest of donor countries and the strength of humanitarian agencies present in the affected area, are also integral constraints that may affect an early response. Donors may be unwilling to make funds available until there is evidence that a humanitarian disaster is occurring, while a lack of operational readiness by humanitarian agencies to implement programs in complex emergencies can limit the impact of an early response.¹⁰

Fundamentally, early warning systems and the public health indicators that inform them are only effective if they are linked to an early response to mitigate those emergencies that they identify. These warning systems (often funded by international donors)

must be inextricably linked to flexible humanitarian funding to support affected governments and aid agencies operating in the region to enact short-term emergency relief and long-term development interventions. Yet, it appears that current international development programs are not functioning as they should, and greater transparency is needed for understanding how priorities for foreign assistance are being established. Reforms to both humanitarian and development assistance are not new concepts, though they continue to struggle in their growth toward increased accountability, particularly as they relate to health.

To more effectively target international development assistance resources in Canada, for example, the Canadian International Development Agency (CIDA) maintains a program established in 2009 as part of the Agency's Aid Effectiveness Agenda that targets 80% of bilateral resources to 20 countries of focus,¹² while still maintaining funding available for humanitarian emergency response. The countries included are geographically, socially and economically diverse, and the intention of the program is to closely target scarce resources to ensure consistency in the programs they fund.

Establishing a list of priority countries presents challenges inherent in international assistance and development, where resources are scarce and interventions are often complex and costly. Within this matrix, some – be they lives, countries, or economies – are judged to be of more value or more worthy of aid than others. There exists little reason to suspect that decisions of international development resource allocation occur devoid of a political context or influence, nor are they exclusively reflective of an overall burden of need – the crisis in Somalia serves as a stark reminder of this.

The international development system that so perilously relies on bad situations tipping into catastrophe before a major humanitarian response is mounted needs to be placed under the microscope. Two of the largest humanitarian crises in history have both fallen into the same trap of waiting for a health situation to deteriorate so significantly as to garner the attention and finances of the global community, with the resultant effect of thousands of unnecessary and predictable deaths.

There is no endless supply of resources from any one country to address all of the world's problems. Prioritizing aid, however, requires an equitable and transparent system that not only provides development assistance to struggling nations, but also is adaptable and capable of intervening to prevent situations from tipping into crisis. This is achievable within existing infrastructure, though priority setting must engage international health and development stakeholders, and separate the process from political and economic interests of donor nations.

The public health community must serve as strong advocates for the scaling up of interventions to address worsening public health situations in low- and middle-income countries before they tip into crisis. The experiences of Haiti and the Horn of Africa provide stark evidence of how earlier investments and interventions in health systems and food security, among others, could have potentially mitigated the health effects of two different catastrophic events. International development needs to be reconceptualized and reformed. The failure to do so quite clearly comes at the expense of some of the world's most vulnerable populations.

REFERENCES

1. Office of the United Nations Resident & Humanitarian Coordinator for Somalia. The UN Declares Famine in Somalia, 2011. Available at: http://reliefweb.int/sites/reliefweb.int/files/resources/Full%20Report_66.pdf (Accessed October 25, 2012).
2. Office of the United Nations Resident & Humanitarian Coordinator for Somalia. Famine Spreads to More Areas in Southern Somalia, 2011. Available at: http://reliefweb.int/sites/reliefweb.int/files/resources/110803_Press%20Statement%20Famine%20Spreads%20to%20more%20areas%20in%20Southern%20Somalia.pdf (Accessed October 25, 2012).
3. Assefa F, Jabarkhil MZ, Salama P, Spiegel P. Malnutrition and mortality in Kohistan District, Afghanistan, April 2001. *JAMA* 2001;286(21):2723-28.
4. Centers for Disease Control and Prevention. Notes from the field: Malnutrition and mortality – Southern Somalia, July 2011. *MMWR* 2011;60:1026-27.
5. The Sphere Project. *Humanitarian Charter and Minimum Standards in Humanitarian Response*. United Kingdom: Practical Action Publishing, 2011.
6. Famine Early Warning Systems Network. East Africa Food Security Alert: Below-average March to May Rains Forecast in the Eastern Horn – Current Crisis Likely to Worsen. 2011. Available at: http://v4.fews.net/docs/Publications/East_Regional_Alert_03_15_2011.pdf (Accessed October 25, 2012).
7. Editorial. Growth of aid and the decline of humanitarianism. *The Lancet* 2010;375:253.
8. Famine Early Warning Systems Network. Somalia Food Security Alert: Extremely High Cereal Prices Across Southern Somalia Exacerbate Ongoing Emergency, 2011. Available at: http://v4.fews.net/docs/Publications/SO_alert_2011_06_062711.pdf (Accessed October 25, 2012).
9. ECB/ACAPS. Secondary Data Review: Horn of Africa. 2011. Available at: <http://reliefweb.int/report/somalia/secondary-data-review-horn-africa> (Accessed January 30, 2013).
10. ALNAP. Humanitarian action in Drought-related Emergencies. 2011. Available at: <http://www.alnap.org/pool/files/alnap-lessons-drought.pdf> (Accessed January 30, 2013).
11. Olsen GR, Carstensen N, Høyen K. Humanitarian crises: What determines the level of emergency assistance? Media coverage, donor interests and the aid business. *Disasters* 2003;27(2):109-26.
12. Canadian International Development Agency. Countries of Focus, 2011. Available at: <http://www.acdi-cida.gc.ca/acdi-cida/ACDI-CIDA.nsf/En/JUD-51895926-JEP> (Accessed October 25, 2012).

Received: October 25, 2012

Accepted: February 15, 2013

RÉSUMÉ

Les grandes catastrophes constituent une menace importante pour la santé des populations : les crises soudaines peuvent entraîner de lourdes pertes en vies humaines, tandis que les urgences prolongées peuvent avoir des effets indésirables, directs et indirects, sur la santé et les moyens de subsistance des populations. Dans de nombreux cas, il se présente des occasions d'atténuer les effets des urgences, mais il faut les saisir et agir. Regrettablement, les modèles actuels du développement international et de la santé publique mondiale sont fréquemment réactifs plutôt que préventifs en ce qui concerne les urgences majeures; la riposte aux grandes crises humanitaires ne s'enclenche souvent que lorsque certains indicateurs atteignent ou dépassent les seuils d'urgence établis, mais ce sont des indicateurs tardifs de la santé d'une population. Pour éviter les délais prévisibles dans la riposte, il faut scruter au microscope les modèles actuels du développement international et leurs liens avec les interventions humanitaires d'urgence. La communauté de la santé publique doit promulguer vigoureusement les interventions qui empêchent les problèmes de santé publique de s'aggraver jusqu'à devenir des crises, et elle doit promulguer la reconceptualisation et la réforme de l'établissement des priorités en matière de développement international. L'inaction à ce chapitre pose clairement un risque pour certaines des populations les plus vulnérables du monde.

MOTS CLÉS : catastrophes; secours; coopération internationale; malnutrition; santé publique; urgences