Life Threatening Conditions in a Crisis

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Introduction

The cycle of war, intimidation, hunger, migration, and death that has affected millions of civilians in several continents during recent years, poses one of the greatest contemporary public health challenges. Since 1980, approximately 130 armed conflicts have occurred worldwide; 32 have each caused more than 1,000 battlefield deaths (Cobey et al, 1993). Most have occurred in Asia, Africa, and Latin America; however, since 1990, three European conflicts--in the former Yugoslavia, Azerbaijan, and Georgia--have caused at least 250,000 deaths. Armed conflicts have increasingly targeted civilian populations, illustrated by UNICEF's estimate that 1.5 million children have been killed in wars during this period (UNICEF, 1992).

Public Health Consequences of War

1. Direct

The direct public health consequences of war include death, injury, disability, sexual assault, and psychological stress. Particularly high civilian death rates have been reported in wars in Angola, Ethiopia, Liberia, Mozambique, Somalia, Southern Sudan, El Salvador, Guatemala, Afghanistan, Cambodia, Tajikistan, and Bosnia and Herzegovina (Zwi and Ugalde, 1991; Toole et al, 1993). Modern warfare has not discriminated between urban and rural populations; in the past 2 years, an estimated 60,000 people have died in just three war-stricken cities--Mogadishu, Sarajevo, and Cuito (Angola).

Tens of millions of mines have been laid by various armed factions in Afghanistan, Angola, Cambodia, El Salvador, Iraq, Mozambique, Somalia, and other war zones, resulting in a global epidemic of deaths, injuries, and disabilities. Approximately one in 360 Cambodians is an amputee, largely due to land mine injuries (Stover and McGrath, 1991).

Systematic sexual violence directed primarily against women has been documented in many modern wars, notably during the war of independence of Bangladesh, and more recently in the former Yugoslavia, resulting in high incidence of severe psychological trauma, unwanted pregnancies, and sexually transmitted diseases (Swiss and Giller, 1993).

2. Indirect

The indirect public health consequences of war have been mediated by mass migration, food shortages, hunger, and the destruction of health services, and have been especially severe in developing

countries where basic services and food reserves were already inadequate prior to war. Between 1980 and 1993, the global number of refugees fleeing war increased from approximately 5 million to almost 19 million today. In addition, there are an estimated 25 million internally displaced persons worldwide (US Committee for Refugees, 1993).

Prior to 1990, extremely high death rates were documented among refugees during the early phase of the influx in Thailand (1979), Somalia (1980), and Sudan (1985). Since 1990, there has been some improvement; nevertheless, crude death rates (CDR) among refugees in Kenya, Ethiopia, Nepal, Bangladesh, Malawi, and Zimbabwe ranged between 5-12 times the death rates in their countries of origin. Most deaths occurred among children under five years of age, and the most common causes of death have been preventable conditions, such as measles, malnutrition, diarrheal diseases, pneumonia, and malaria (Centers for Disease Control and Prevention [CDC], 1993).

The situation among internally displaced populations has generally been worse. For example, since 1990, crude death rates among internally displaced persons in Liberia, northern Iraq, Somalia, and Sudan have been 6-25 times baseline rates. In 1992, widespread looting and banditry deprived millions of Somalis of much-needed food aid. Malnutrition rates were markedly elevated in certain areas of southern Somalia, and by November, death rates among displaced persons in the town of Baidoa had reached 25 times baseline rates (Moore et al, 1993). The intentional use of food deprivation as a weapon has become increasingly common (MacCrae and Zwi, 1992). For example, armed factions on all sides have obstructed food aid deliveries in Southern Sudan, resulting in mass hunger and--during 1993--death rates up to 15 times those reported in non-famine times (CDC, 1992).

In Bosnia-Herzegovina, the indirect public health impact has been less severe than in comparable settings in the Third World. While diarrheal disease and hepatitis rates have increased seven-to-tenfold in Sarajevo, Tuzla, and Zenica, these rates are still relatively low (CDC, unpublished data, 1993). Nevertheless, perinatal and infant mortality rates have more than doubled in Bosnia since the beginning of the war.

Physical destruction of health facilities, the burden of treating war wounded, and the high costs of maintaining military forces have caused disruption in basic health services in most war-affected countries. In the Bosnian province of Zenica, for example, the proportion of surgical cases related to war injuries rose from 22% to 78% between April and November 1993, resulting in the cessation of almost all preventive health services (Toole et al, 1993).

International response

The most critical needs of populations affected by public health emergencies are shelter, food, water, and sanitation. In addition, focused public health programs, including measles immunization, basic treatment for the most common, life-threatening conditions (especially oral rehydration therapy for diarrhea), and a simple, timely health information system are essential interventions. During the past few years, most progress that has been achieved has been limited to the care of those people clearly meeting the traditional international definition of refugees. Nevertheless, the integration of technically sound program content with routine relief management procedures has not always succeeded. Complex emergencies in countries such as Ethiopia and Sudan require experienced and competent managers. The global supply of these individuals is rapidly being exhausted; training programs in emergency management should be a high priority for international and non-government agencies.

Although there is a consensus on the minimum quantity and quality of food required by these populations to survive, the timely provision of adequate food supplies remains a critical issue in many parts of the world, especially in Africa. Despite numerous plans and proposals, few regional reserve stocks of essential relief supplies, such as food, medicines, and vaccines, have been created in disaster-prone regions of the world.

The most critical problems relate to the internally displaced, whose numbers have increased rapidly in recent years. The international community's responsibility for their protection and assistance has not been as clearly defined as it has been for refugees. The creation of a U.N. Division of Humanitarian Assistance (DHA) to oversee international assistance to people affected by all manner of disasters, including war and displacement, may address this situation.

Assessments are often requested too late in the evolution of disasters, when death rates are already high. It would be preferable to establish early warning systems that could detect early indicators of deterioration in the public health situation. The greatest risks to civilian populations--both direct and indirect--remain clearly linked to insecurity; hence, military intervention in humanitarian crises has become an increasingly favored option. On the Turkey-Iraq border in 1991, impressive logistics and highly motivated personnel saved many Kurdish lives; however, the absence of a clearly designated lead agency in the early weeks of the operation led to poor coordination of relief efforts, and a failure to focus adequately on the main health problem which was diarrheal disease linked to poor water and sanitation.

In Somalia, the intervention came at a time when the public health impact of the disaster had already peaked. Relief efforts during most of 1992 were quantitatively inadequate, poorly coordinated, unfocused, and lacked a strong lead U.N. agency presence. Most deaths were caused by measles and diarrhea; however, most efforts went into the provision of food alone. In Bosnia, a massive show of force without the authority to use that force has had limited benefits, and has not shortened the war.

In conclusion, the public health consequences of complex emergencies have been extensively documented, and the most critical relief priorities have been well defined. Some improvement in the quality of relief programs has occurred, particularly in refugee camps assisted by UNHCR. However, the scope of the problem appears to be growing and its geographic impact spreading. The challenge now is to develop more specific guidelines on the circumstances that will trigger a consistent response by the international community. Early intervention needs to include diplomatic initiatives to end the violence as well as the provision of humanitarian relief if these programs are to be sustainable. Relief programs and aid agencies need to be held more accountable for the impact of their interventions in preventing deaths rather than merely the quantity of aid delivered. Resolution of these issues has moved beyond the mandate of technicians; consistent responses will only be assured when the international community and its leaders commit to a greater level of responsibility.

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