

# Reconsidering Darfur Conflict As A Case Study For Complex Emergencies With Public Health Impact

*Halk Sağlığında Karmaşık Aciller Konusuna Bir Olgu Örneği Olarak Darfur Meselesine Yeniden Bakış*

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Bu derlemede, Darfur kargaşası, halk sağlığı ve insani yardım açısından bir olgu olarak sunulurken, gelecekte de; değişen iklim sonucu dünyanın başka bölgelerinde ortaya çıkabilecek, iç savaş, kıtlık, felaket ve soykırımlara bir örnek olarak incelenecektir.

**Anahtar Sözcükler:** *Darfur, insani yardım, felaket, kıtlık, soykırım*

On this review, the foreseen approach Darfur conflict as a public health and humanitarian emergency will be reviewed as a case study for similar situations that may arise in other parts of the world in the future as a result of changing climate which may further cause civil wars, famines, disasters and even genocides and wars

**Key Words:** *Darfur, humanitarian aid, disaster, famine, genoci*

The Darfur conflict has reached its 6th year since its onset in February, 2003 with 450,000 people killed and 3,000,000 displaced (1,2 ). Even though there is still controversy over whether the conflict involves genocide or not (3-5), the emergency situation is believed to have arisen as a result of combination of decades of drought, desertification and overpopulation with nomads attacking farming communities in searches for water and fertile lands. The spreading ethnic violence and doubts of genocide brought an international response where United Nations (UN) and the International Criminal Court (ICC) are taking part. In a recent press conference the UN Secretary General Ban-Ki Moon declared that, the solution to the Darfur conflict lies in the remediation plans which involve cease fire, a multilateral peace agreement and development assistance in addition to the humanitarian assistance currently being supplied (6).

On making a reference search, it will be found that, several reports have been sent from the region since the onset of the conflict concerning deteriorating health and humanitarian situation

(7-11). On this review, the foreseen approach to this public health and humanitarian emergency will be reviewed as a case study for similar situations that may arise in other parts of the world in the future as a result of changing climate which may further cause civil wars, famines, disasters and even genocides and wars (12).

The conflict related disasters, or complex emergencies are the result of inter-related social, economic and political problems and almost always involve armed confrontation. In these increasingly common and often prolonged disasters, there is typically extensive destruction of social and public infrastructure, large scale population displacement, epidemic disease and food shortages.

International humanitarian law in many conflicts today is unknown or disregarded and human rights abuses are common. As a result, in some disasters, violence may be direct and the primary cause of morbidity and mortality especially in cases of ethnic cleansing.

Areas needing increased focus in complex emergencies are mental health,

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women's health issues and coping with chronic medical conditions.

There are multitude of technical and logistical issues involved in providing life sustaining services to large populations. However, it should be noted that, events may not progress in a linear fashion but rather, public health needs often evolve substantially. For example; priorities for refugees who have just arrived in a location –usually, shelter, food, water, basic medical care—are different from what this population may need a few months after camp has been established, such as family planning, medical care for more chronic problems and rehabilitation.

Because complex emergencies are the result of many years of deeply rooted social problems, effectively dealing with them requires the relief efforts to be closely integrated with political, social, economic, military, cultural and other activities.

Let us start reviewing the Darfur case with the situation of forcibly and internally displaced people (IDPs) (13-20). Sometimes it is said that, the displaced people within countries have less access to resources and services supported by the international community and are usually at higher risk of violence perpetrated by the state or other powerful actors than those that have been displaced across borders until they reach an established IDP camp to be offered usually by international organizations. There, although refugee numbers are typically assessed in order to plan and provide relief, relatively little attention may be devoted to developing the most appropriate methods for establishing the precise composition of refugees and IDP populations whether in terms of age, sex, religion, local geographic origin or ethnicity. This imposes constraints given the differing needs and roles of groups within populations and make it easier for the more complex issues of dealing with gender, equity and ongoing intergroup rivalry. During the placement of IDPs in small settle-

ments, the most outstanding issues of concern are shelter and environment. Ideally, the size of camps should be limited to 20,000 residents for reasons of security and ease of administration. Such camps for the purpose of service delivery should be further divided into sections of 5,000 persons. The covered area provided per person should be 3.5-4.5 m<sup>2</sup> and in warm and humid climates shelters should have optimal ventilation and protection from sunlight. When refugee camps are unavoidable proximity to safe water services need to be recognized. Minimum standard for water quantity is 15 lt. of clean water per person per day (21). Adequate sanitation is also essential element in diarrheal disease prevention and critical component of relief program (22). The quantity and quality of food rations is one of the most critical determinants of health outcomes in emergency affected populations. General food rations should contain at least 2,100 kcal of energy per person per day as well as the other nutrients.

As in other cases the main health problems faced at the IDP camps in Darfur/Sudan were reported as; basic health, women's health, mental health (7), maternal and child health (22) and nutrition (23-25).

It is important to note that, the number of agencies operating in these complex settings is estimated by several hundreds with several thousands of foreign medical personnel working under media, intergovernmental and humanitarian responses. On the other hand, new NGOs established in response to specific conflict may be short-lived, inexperienced and unable to cope with the challenges they face in providing services in complex political environments. Ensuring one does more good than harm must underlie all interventions.

The direct public health impact of war may be subdivided to the broad headings of morbidity, mortality, disability in addition to physical impacts, sexual violence and human rights abuses.

As in the case of Darfur conflict (26-28), measuring the hidden costs of conflict is complex in post-conflict emergencies for a variety of reasons that include methodological and theoretical shortcomings, inconsistencies in definitions and terms, restricted access to areas of conflict and sources of information, the rapid evolution of many emergencies, political manipulation of data, resource constraints and the hidden or indirect nature of impact. Many countries lack reliable health information and vital registration systems, the absence of which increases the difficulties of determining the conflict-associated costs in terms of morbidity, mortality and disability. Furthermore, complex emergencies (Ces) may themselves seriously disrupt surveillance and information systems. To be useful, surveillance systems must be relevant, where time and resources are frequently in short supply. Trends in content of Health Information Systems in Ces involve the crude mortality remaining as an important feature of surveillance throughout the emergency phase and beyond. Health information systems should collect morbidity data on commonly occurring diseases and on diseases of epidemic potential. In addition, at least two health programs, treatment of malnutrition and vaccination need to be regularly monitored.

The numbers of war disabled and their types of disability are not well known as only a few countries have attempted censuses of war-related disability. There are tens of thousands of civilians, including children, who had limbs hacked off by attackers.

Rape is increasingly recognized as a feature of internal wars but has been present in many different types of conflicts. In some conflicts, rape has been systematically used as an attempt to undermine opposing groups. Rape, sexual violence and exploitation may also be widespread in refugee camps although the extent of their recognition is limited and widely varying estimates of the number of victims have been reported.

In addition to long lasting mental health disorders, rapes have resulted in transmission of Human Immunodeficiency Virus (HIV) as well as other sexually transmitted infections (STIs).

War predisposes to STI and HIV transmission in various ways such as the following;

- widespread population movement
- increased crowding
- separation of women from partners who normally provide a degree of protection
- abuses and sexual demands by military personnel and others in positions of power
- weakened social structures, thereby reducing inhibitions on aggressive behaviour and violence against women

Aside from these additional exposures, access to barrier contraceptives, to treatment of STIs, to the prerequisites for maintaining personal hygiene and to health promotion advice are all compromised in conflict situations.

Women who are on their own may find it more difficult to assure their safety and that of their children and become targets of violence from the opposing army, the armed forces within the country to which they have fled and sometimes from their own community.

Women's utilization of health care facilities may be severely reduced if males dominate service provision.

Unfortunately, there are many occasions in which rape and violence against women was reported from Darfur since the onset of the conflict (29,30).

Coming to the issues of human rights; Article 25 of the Universal Declaration of Human Rights proclaimed by resolution 217 A (III) of the United Nations General assembly on 10 December 1948, states clearly that 'everyone has right to a standard of living

adequate for the health and well-being of himself and his family including food, clothing, housing and medical care'. In times of war, this declaration and other laws, covenants, declarations and treaties that constitute the body of human rights law are complemented with international humanitarian law. The latter is a set of rules aimed at limiting violence and protecting the fundamental rights of the individual in times of armed conflict. These rules are intended to govern the conduct of war by banning the use of certain weapons and by minimizing the effects of armed conflicts whether international or internal, on non-combatants. The protection of the rights of non-combatants in wartime is based primarily on the Geneva Conventions of 1949 (31) and the two Additional Protocols of 1977. Yet, despite the existence of both of these bodies of international law, there are consistently associated with serious infringements of the dignity of individuals and more specifically with a major impact on the health status of affected individuals and populations.

General practices that can be considered to be clear violations of international humanitarian law include the international targeting of civilian non-combatants, medical personnel and civilian health facilities. Protection is also conferred upon prisoners of war, wounded and ill combatants and military medical installations.

The consequences of wartime human rights violations can be enduring. The physical and psychological consequences of bodily harm to individuals do not end with the cessation of hostilities. Most societies require years of reconstruction and redevelopment in order to restore viable and effective health systems to serve the surviving populations.

Although violations in human rights law and international humanitarian law are crimes, the legal system for punishing the perpetrators and compensating the victims are grossly inadequate.

Reporting and responding to reports of human rights violations pose major problems as few of the agencies and individuals are trained in the recognition of human rights violations or know where and how to report them.

Massive Abuses of Human Rights and **International Humanitarian Law in Darfur** have been reported in many occasions (32,33).

Coming to the indirect public health impact of civil conflict; as a consequence of armed conflict, there is usually a phased evolution of public health effects as a country or region moves from political disturbances, economic deterioration and civil strife through armed conflict, population migration, food shortages and collapse of governance and physical infrastructure.

As political disturbances evolve in a country, there is generally a significant effect on national and local economies. In some cases, an economical crisis may initiate political turmoil where there have been underlying tensions between political factions, ethnic and religious groups or disadvantaged geographic areas. Under such scenarios, in low-income countries, one of the first health effects is undernutrition in vulnerable groups caused by food scarcity. This has been the case in Darfur (34-36). Local farmers do not plant crops due to uncertainty. The cost of seeds and fertilizers increase. The government agricultural extension services may be disrupted and distribution and marketing systems are adversely affected.

In full scale armed conflict, the fighting may damage irrigation systems, crops may be intentionally destroyed, distribution systems may be collapsed and widespread theft and looting of food stores might have occurred.

When food aid programs are established, there may be inequitable distribution. The resulting food shortages may cause prolonged hunger and eventually drive families from their homes in search of relief.

Another issue of concern is the destruction of public utilities. Wars often involve the intentional or accidental destruction of public utilities, such as water and sewage systems, electricity sources and distribution grids and fuel supplies. Lack of electricity adversely affects urban health services, in particular, hospital and clinic curative services. During a conflict hospital generators are often able to supply only operating rooms and emergency rooms thus further promoting concentration on services in the area of trauma management. Sanctions and blockades have similar effect on public utilities without physical destruction. As such, aid expulsions have left a huge gap in Darfur's health services (37-39).

The impact of conflict on health facilities and services depends on their prior availability, distribution and utilization patterns. Utilization is determined by geographic, economic and social access all of which may be disrupted in CEs.

Conflict may seriously disrupt links between services operating at different levels. Referrals will be disrupted by logistical and communication constraints as well as physical and military barriers to access.

Health services may be affected in a variety of ways. For example; systems within conflict areas may shift away from primary to community based care to secondary-hospital based services emphasizing care and rehabilitation for war injuries in directly de-emphasizing longer term health development and community based activities including those focusing on disease control. Direct targeting of clinics, hospitals and ambulances may be against international humanitarian law but has frequently been experienced in latter-day conflicts. Access to medicines and supplies is typically disrupted during conflicts. Additionally, drug donations if poorly coordinated and standardized may lead to large number of expired and inappropriate drugs being off-landed in countries experiencing CEs.

In addition to the health budgetary im-

pact of war, the human resources of home health workforce due to injury, killing, kidnapping and exodus may be under risk. In many cases, community leaders and social structures are also targeted and local systems of democracy and accountability are also seriously disrupted and involvement in community affairs discouraged. Violent political conflict undermines the capacity to make decisions rationally and accountably with wide range of actors operating and the confused lines of accountability. The policy framework within which providers and purchasers of health services operate may be compromised or non-existent, leading to inability to control and coordinate services e avenues for provision.

During conflicts, due to scarcity of resources and governmental difficulties in accessing populations under the control of insurgents, NGOs usually fill part of the vacuum left by public sector. Health related peace building initiatives may provide avenues for reconnecting people and social structures, lives and livelihoods.

In developing appropriate responses to disruption of normal health care service activity, response by at least three different sets of services will have impact.

- Services provision in the country affected by the CEs
- Services provision in countries to which refugees have fled
- Services provision by multilateral agencies and NGOs

Additionally, in refuge and displaced person settings, the selection and training of refugee health workers has been considered as one key mechanisms by which health programs can work more closely with affected communities.

The major reported causes of death among refugees and displaced populations have been diarrheal diseases, measles, acute respiratory infections, malaria and exacerbated high rates of

malnutrition. These diseases consistently account for between 60-95% of all reported cases.

So, the refugee health workers will be kept busy;

- identifying sick and malnourished community members and assisting them in obtaining assistance,
- collecting and reporting demographic data such as births and deaths,
- providing first aid and basic primary care such as oral rehydration for children with diarrhea,
- assisting in mass vaccination campaigns and disease control programs,
- ensuring that the needs and perspectives of refugees taken on board in development of health programs.

Specific approaches to women's and children's health care services, reproductive health including initial service packages and post emergency reproductive health programs, communicable disease control in the cases of measles, diarrhea, malaria, meningitis and tuberculosis may be reviewed elsewhere (40).

Certainly, all these conditions may be respected as a result of deficiencies in economic development. Thus, the alleviation of these overall casual symptoms may be based on application of rules of development economics.

**Development economics** is a branch of economics which deals with economic aspects of the development process in low-income countries. Its focus is not only on methods of promoting economic growth and structural change but also on improving the potential for the mass of the population, for example, through health and education and workplace conditions, whether through public or private channels. Thus, development economics involves the creation of theories and methods that aid in the determination of types of policies and practices and can be implemented at either the do-



mestic or international level. This may involve restructuring market incentives or using mathematical methods like inter-temporal optimization for project analysis, or it may involve a mixture of quantitative and qualitative methods. Unlike in many other fields of economics, approaches in development economics may incorporate social and political factors to devise particular plans. Different approaches may consider the factors that contribute to economic or non-convergence convergence across households, regions, and countries.

Theories of development economics are; Mercantilism, Economic nationalism, Post-WWII theories, Linear-stages-of-growth model, Structural-change theory, International dependence theory, Neoclassical theory (41)

It may be important for the local academicians to review these concepts on and on to bring the country out of economical crises to achieve proper economic development in the region.

As a conclusion; the prevention of post-conflict health and humanitarian deterioration is primarily the preven-

tion of the conflicts that cause them. The task is largely political. In general, even though the international community has had little success in resolving internal conflicts, efforts to prevent and mitigate their impacts on populations must rely on accurate and timely information to be effective. Given the enormous cost of military intervention and major relief and rehabilitation programs, it is surprising that so little has been invested and early warning, emergency detection, preparedness and mitigation projects. The vast and complex array of organizations involved in the various stages of humanitarian emergency preparedness and responses reflect the complexity of the international community itself. It is hard to imagine any other situation that attracts such a range of players: heads of states, diplomats, bilateral foreign assistance agencies, UN, political, social, economic and technical organizations, military forces, and a broad variety of non-governmental organizations including number of commercial interests.

As in Darfur, all humanitarian organizations need to be active to rehabilitate,

repatriate and assist the recovery of those humanitarian situations with specific concern on public health. The consequences are wide ranging and their effects on populations are long lasting. Knowledge and experience from many health disciplines is needed for effective response. Such skills include epidemiology, community health and primary care, environmental science, communicable diseases control and international health. Research is needed to develop standardized and valid assessment tools, reliable surveillance programs, low technology environmental health interventions and more effective intervention strategies.

Unfortunately, the reality today is that of many relief workers in health sector, though well-intentioned are often recruited and deployed on short notice with little public health preparation and training. Schools of public health must continue to expand their training in the emergency skills that practitioners will need to deal with the public health needs of post-conflict populations if we are to meet the challenges as in Darfur.

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