

## Complex Humanitarian Emergencies in Africa

### Abstract

The concept of Epidemiological Surveillance in a Complex Humanitarian Emergency would depend upon the emergency itself and where it is taking place. The history of epidemiology goes back to the eighteenth century when a disease was finally tracked to its origins and therefore the treatment involved the removal of the causative agents. The study of epidemiology expanded in the recent turn of the century when newer diseases, infectious and nutritional were studied prospectively and retrospectively. The study even went on to traumatology where similar models were used to find the cause and prevention. Natural disasters and epidemiological case models were used to build an infrastructure of investigation, mitigation, prevention and treatment [1].

### Introduction

CHE in Africa became the role model for epidemiological surveillance in developing countries for the rest of the world. It is important because one finds clear indicators of health in countries that have come out of CHE and are in the path of recovery and those that are still involved in the CHE. Countries like Rwanda and Liberia have come out of CHE and are in the path towards healthy socioeconomic progress coupled with epidemiologic surveillance indicators that show higher standards of health than before.

Its importance lies in the fact that humanity has always learned from their past mistakes and documentation of CHE in detail is kept to use in the future for deployment. However I understand that the CHEs of 1994 would never be the same as possible CHEs in the future and might even involve developed countries therefore with newer emerging diseases, changing patterns of diseases known, changes in the behavioral patterns due to rapid globalization and the rush for a *grab of outer space* by developed countries,

### Short Communication

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the epidemiological models that I have discussed in length might not agree to futuristic patterns of life and living.

Complicated Humanitarian Disasters and therefore its broad-based epidemiology is characterized by

- specific vulnerabilities of refugees
- specific vulnerability of Internally Displaced Person (IDP)
- Age and Gender studies which vary with different models

Populations are known to flee the violence of their countries. The fleeing population has a different morbidity and mortality rate which is understandably higher than the ones who are in the safety of refugee camps. Therefore internally displaced persons (IDP) and those who are exposed to violence show the highest death rate especially minors experiencing death rates 800 times higher than the baseline [2].

## Summary

Developing Country Model, Angola, Somalia, Liberia, Mozambique and Congo, Public Health Disasters. Under 5 deaths are the maximum due to vulnerability to starvation and diseases

Smoldering or Chronic Country Model, Sudan and Haiti, Chronic Malnutrition and Stunted Growth, Under 5 mortality is joined with adult mortality because of violent crimes

Developed Country Model - Yugoslavia, Iraq, Chechnya high crude deaths in adults due to weapons, Low under 5 deaths. Deaths in Elderly because of reluctance to move

Each of these three models has different epidemiological indicators and their response depends on these indicators [1].

### Overlap of complex emergencies and epidemics

Although epidemics do not commonly follow large-scale natural disasters, when large-scale epidemics do occur, they often occur during CEs of any magnitude and to a lesser extent following natural disasters. One-third of the 30 largest epidemics during the last decade occurred on their own; 47% occurred during at least one CE, 30% following at least one natural disaster and 10% with both events [3].

### Mortality and morbidity

Mortality is often the highest in the first weeks post emergency. The rapid reduction of excess mortality is the primary objective of Humanitarian assistance. Measures include

- The crude mortality rate (CMR) which is the total number of deaths per 10,000 persons/day
- The under 5 mortality rate (U5MR) and the proportional mortality or number of deaths attributed to a given risk factor.

These indicators do not reflect the norms as suggested in a CHE. Humanity in a war-torn environment which is directly related to mass violence, disturbed ecology and a collapsed social structure, an epidemiological surveillance model would portray far higher numbers of morbidity and mortality including maternal, infant and child mortality scales.

## Prevention

- Primary Prevention – Stopping the violence
- Secondary Prevention
- Early detection
- Contingency Planning – Inadequate resources in Rwanda
- Personnel Training – Indigenous Health Workers in Conflict zones
- Tertiary Prevention – Prevention of excess Mortality and Morbidity after disaster
- Relief Measures
- Adequate Food Rations- 2000 kilocalories of energy per person per day
- Epidemic Preparedness
- Maternal and Child health care

## Conclusion

Rwanda, an African country though now developed has gone through all Complex Humanitarian Emergencies starting from Hutu / Tutsi violence and its aftermath of deaths due to injuries, food scarcity and diseases. This article is an attempt to bring the horrors of humanitarian emergencies starting with interpersonal violence. The world is horrified at the unfolding of a Complex Humanitarian Emergency in Gaza where humane values are lost at the expense of death of more than twenty eight thousand Gazans, seventy-five percent of whom are women and children. The entire world is a silent spectator to this extreme horror and probable genocide. CHE doesn't really stop. It has to be stopped by people and nations [4,5].

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