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The Public Health Dimensions of Disasters

In recent years, increasing attention has been given to natural disasters and to their consequences for human beings. There are a number of reasons for this. First, major disasters involving international aid are reported several times a year; as a result of better reporting by the mass media, they appear to occur more frequently, and they become more devastating as the population density in disaster-prone areas increases. Second, there is a strong feeling that today, disasters should be amenable to some kind of management to prevent them, to mitigate their impact, or at least to improve rescue and relief. It is quite appropriate, therefore, that the General Assembly of the United Nations has designated the years 1990 to 1999 as the International Decade for the Reduction of Natural Disasters [1].

Definition

There are many definitions of disasters. For health purposes, an operational definition has been proposed: "A disaster is a disruption of the human ecology that the affected community cannot absorb with its own resources" [2]. This definition encompasses a number of situations, from natural disasters, such as floods, cyclones, or earthquakes, to man-made technological disasters, collapse of dams, or large-scale chemical poisoning. It includes massive displacement of populations, whatever the causes.

What makes a disaster is not so much the size of the physical event as the capacity of the stricken community to absorb or not to absorb it within its proper set of constraints and values. Consequently, what might constitute a disaster for one community might not necessarily be one for another. In fact, some populations with high exposure to disasters develop a kind of social adaptation that has been described as "disaster culture." This was the case of towns subjected to frequent mining disasters in the Europe of the Industrial Revolution, and it is true today of Pacific atoll populations repeatedly exposed to typhoons [3].

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