COMMUNITY RESPONSES TO DISASTERS

E.L. Quarantelli, Ph.D.
Russell A. Dynes, Ph.D.

Introduction

How do communities respond to disasters? What implications do these responses have for the mental health of the impacted population?

How one answers the first question depends, in part, upon one's formulation of a "community." The second question has yet to be systematically explored by disaster researchers.

In this paper, we present findings from research on community responses to disaster events and, where possible, draw relevant inferences about possible links between these responses and the mental health of affected residents. First, however, some discussion of conceptions of community structure and functioning seems warranted.

Conceptions of Community Functioning and Structure

Despite the voluminous literature on community studies, there is no consensus among sociologists as to what constitutes a community (Bell and Newby 1972; Poplin 1979). There are, in fact, conflicting definitions of the term (Sutton and Munson 1976; Willis 1977).

Currently, the literature presents a variety of models of everyday community structure and functioning. Out of this variety we will note only two. One is the model explicitly used by Warren (1972) but also employed widely by others. Warren defines a community as ". . . the combination of social units and systems which perform the major social functions having locality reference" (p. 9). In other words, a community can be thought of as the social system or the organization of special activities which ". . afford people daily local access to those broad areas of activity which are necessary in day-to-day living" (ibid.). This kind of formulation leads to a focus on functions, especially these five: (1) production-distribution-consumption; (2) socialization; (3) social control; (4) social participation; (5) mutual support.

This formulation has been employed in disaster studies. Dynes (1974) used it in his theoretical discussion of organized behavior in disasters, and the formulation was concretely applied long ago in the Disaster Research Center (DRC) monograph on

Community Functions Under Disaster Conditions (Wenger and Parr 1969, see especially chapter 2). The possible use of this conception of community structure and functions in a disaster context is therefore not an issue.

While this functional approach is useful for research purposes, it may not be the best for operational personnel attempting to assess the needs of disaster victims. They might find it more useful to focus on structure rather than function. Structure, in the case of community analysis, can be thought of as the totality of the different institutions or social groups that carry out different functions. Such social entities are more easily identifiable than functions. While there is no total consensus on the matter (as can be documented by reviewing texts dealing with the community), some institutions are traditionally listed as important (see Poplin 1979, p. 174); these include the family, educational, economic, political, and religious institutions. Less traditionally discussed are those institutions focused on health, welfare, mass communication, recreation, and others that might be deemed relevant to community functioning in terms of mental health needs. Thus, in some respects, it might be possible to assess which institutions were affected and in what ways by a disaster occasion.

The structured approach probably would be more meaningful in cases where the population effect was central rather than peripheral to the community. For example, if this approach had been used in the Indianapolis Coliseum explosion, it would have been a poor indicator of community impact; the social institutions of the community were affected only marginally by a very focused and localized disaster that involved many victims peripheral to the major area. In all likelihood, it would have been a poor measure for the Beverly Hills night club fire, although we are not fully certain of the residential location of those victims. On the other hand, the approach would probably have worked well in such disaster occasions as the Wilkes-Barre and the Teton Dam floods. In fact, in noting this contrast, a question is raised as to whether disaster occasions that involve transients or peripheral victim populations really have much of a direct impact on the communities in which they physically occur. The question seems relevant, for example, to plane crashes where all direct victims are from outside the impacted locality and where, possibly, only some first responders or organized helpers could be thought of as indirect victims, as was seemingly the case in the San Diego crash a few years ago. Here we are forced to consider what a disaster is, an issue discussed in part I of this publication.

Yet, in terms of mental health impacts, the peripheral disasters may be most disruptive. For example, there is some evidence that plane crash survivors and first responders to crashes would rank high on measures of vulnerability to mental health effects (Quarantelli 1980). However, by almost any criteria, the typical

such disaster occasion would almost certainly be ranked low in terms of disruptive impact on the community or its service system. The Big Thompson flash flood, although not as clear a case, probably would rank relatively high also for possible mental health effects on victims but relatively low for community disruption. With a little imagination, it is possible to speculate that a reverse occasion might occur; that is, high community disruption and low mental health effects. Several blizzard disaster occasions studied by DRC appeared to show such a pattern. A Buffalo, New York, blizzard and a massive snowstorm/cold spell in certain Ohio cities were explored specifically for mental health effects; major disruption of community services was very high and mental health effects—at least immediate ones—were very low. In fact, along certain lines, some of these occasions generated more of a carnival spirit than anything else, even though they were disaster occasions by almost all definitions.

Community Responses to Disaster

There is a tendency to think of disasters primarily in terms of loss or damage. However, one aspect of disasters suggested by our research on blizzards, and by many other studies, is that disasters generate balancing or neutralizing factors that affect the total context of the occasion. Thus, to think of disasters as purely disruptive of community functioning is, in our view, one-sided and misleading.

Dynes (1974) in his book on organized behavior in disasters, discusses the paradoxical changes that occur in community structure. As he notes:

> One starting point for an overall view is to deal with a paradox, glimpses of which have been seen previously. It is paradoxical that the effects of disaster impact on a community are both disorganizing and integrative. The more popular accounts, especially those of the mass media, emphasize the disorganizing effects. . . . A different view clearly shows the integrative consequences . . . when the notions of the development of an emergency consensus and the emergence of norms encouraging altruistic behavior [are] introduced. Such a paradox is resolved only by understanding why both consequences are true (p. 204).

Using ideas from the 1950's disaster field studies (such as those of the National Opinion Research Center and the National Academy of Sciences), Dynes proceeds to show that ". . . both consequences --the disorganizing and the integrative--are not consistent, if they are seen as dual aspects of the process of adaptation a community experiences when coping with disaster" (ibid.). In its daily existence, a community is not structured to cope with disasters, even

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if it plans for and has previous experience with disasters. "Consequently, a community has to be disorganized before it can develop a new structure capable of coping with the new and often overwhelming demands made upon it" (ibid.). Given the creation of a new structure capable of coping with the crisis, the community undergoes a new integration. A similar idea was earlier advanced about organizations by Thompson and Hawkes (1962); they noted that old pre-impact structures are replaced by new structures more capable of coping with the disaster occasion.

If one accepts this view of how communities respond to disasters, there are certain important implications. Among other things, the view suggests community disruptions are always mediated by new social aspects which emerge in the course of moving from the so-called disorganized to the integrative phase. Several such aspects have long been pointed out in community studies of disasters (e.g., Fritz 1961). One is the development of an emergency consensus. More specifically, a priority system emerges because certain values are more critical than others to the community's survival. Second, the problematic state of resources necessitates making a choice in allocating available time and energy to the more salient community values. In addition, certain norms become more crucial; behavior not directly related to higher priority values is considered inappropriate.

Research does point to several typical community responses to disasters that reflect priority values. These involve: (1) care for victims; (2) restoration and maintenance of services; (3) maintenance of public order; and (4) sustaining public morale. Dynes summarizes well what study after study has shown on these four issues and, thus, will be quoted extensively.

Care for Victims

Care for victims is apparently an almost universal core value in the emergency consensus. In fact, behavior following impact suggests that care for victims is:

> . . . the value which receives the highest priority . . . .
> Providing first aid and transporting the injured to sources of medical attention are given the most immediate attention. This is done in the context of immediate rescue activities, such as extricating trapped individuals or evacuating individuals from dangerous areas. After obvious victims are given medical attention or rescued, the impacted area is searched for unknown victims.
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> Next, attention is given to procuring and distributing basic necessities for those in the impact area: shelters are often provided on a temporary basis by opening large public buildings, such as schools, auditoriums, churches, etc.; food is provided by local voluntary agencies; clothing supplies are also often provided. Special less crucial medical attention is often given, and particular attention is frequently shown to

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the needs of babies and small children. Basic necessities are usually provided at gratis to those in need (Dynes 1974, pp. 86-87).

Restoration and Maintenance of Essential Community Services

Restoring and maintaining essential services is also a sanctioned core activity following a disaster. Dynes indicates that:

If the impact has disrupted utilities, transportation arteries, and communication facilities, the restoration of these to some functioning level is given high priority. Community-oriented facilities most directly related to the preservation of life are given the most immediate attention. Restoration of electric or telephone facilities to hospitals, fire, and police departments or command centers takes precedence over private concerns.

In order to restore and to facilitate care for the injured, all relevant community resources, both public and private, are given attention. Often private property is used in the process of restoration to such an extent that, on one hand, individual use of private property is considered inappropriate if such property is needed by the larger community and, on the other hand, almost regardless of the wishes of the owner, private property is seen as a possible resource to be used for the total community (p. 87).

Maintenance of Public Order

The maintenance of public order, again to cite Dynes, is:

. . . considered necessary by community officials to accomplish the tasks involved in the preservation of life and the immediate restoration of essential tasks which facilitate the preservation of life and the restoration of services—e.g., guarding property, patrolling danger areas, and directing traffic near the impact area.

The focus of activity seems to be not only the protection of property but also the attempts to see that community resources, both public and private, are used for common community ends, not for individual ones. For example, in most disaster studies, there exists a common paradox that community officials, particularly those charged with problems of the public order, such as the police, become concerned with the prevention of looting while careful studies in disaster situations indicate that looting is infrequent, if not nonexistent, in disaster situations. What seems to happen is that the community redefines almost all property as "communal," in the sense that the community has first claim on the use of any resource. Looting is considered the appropriation of communal property for private use and, hence, as extremely threatening to the community. Even those individuals who sift through the wreckage to salvage their own property may be accused of looting (pp. 87-88).

Sustaining Public Morale

Another major set of activities revolves around the sustaining of public morale. As Dynes notes:

> . . . the mass media play a leading part in describing and interpreting the disaster event. Since many radio stations have auxiliary power sources and since transistor radios are widely diffused throughout many populations, radio stations often provide a continual stream of information concerning the extent of the disaster, on-going counter-measures, and often they enumerate which activities the public should avoid or engage in during this phase. Community agencies release information about their activities to the mass media. Political officials often appear on radio or TV with a description of what has happened and instructions as to what to expect in the future. A major theme in these appearances is that: first, "we" acted heroically during the disaster, and second, "we" will rebuild and go on to a better future.
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> A major activity supporting public morale during the early stages of a disaster is reuniting families separated by the disaster, and providing information which reassures family members of the safety of other relatives. This activity often extends outside the immediate community. Inquiries come into the community from distant communities, and local people attempt to send messages to reassure relatives and friends of their safety. The task of information clearance is one which usually has not been institutionalized within a community and often several organizations assume this task; as a result, conflict and confusion ensue. Mass media often provide such information initially until it becomes the definite responsibility of a specific organization.
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> In general, tasks of maintaining public morale fall to the mass media. Radio (in particular), television, and newspapers provide channels for information and specific directions to members of the disaster-stricken community. In addition to information activities, there are constant references to the community in a collective sense; collective pronouns such as "we," "us," and "our" are used in mass media discourse in order to reassure community members, to provide a sense of unity, and to suggest a sense of future purpose for the community as a whole (p. 88).

In addition to the core responses just discussed, there are also many changes in the five locality-relevant functions of a community mentioned earlier (as drawn from Warren 1972 and applied by Wenger and Parr 1969). In a major disaster, these are some of the things that happen:

(1)   Production-Distribution-Consumption

Almost always there are drastic alterations in community functions. Production units are closed down. There is a reduction in the normal volume of distribution and marketing because much food, clothing, and other

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supplies are distributed at no cost. Other goods, materials, and pieces of equipment are either volunteered or requisitioned without permission or authority.

(2)   Socialization

Those socialization activities associated with formal groups, such as schools, are reduced if not stopped completely. Their resources are used to shelter and feed disaster victims and helpers.

(3)   Social Control

After disasters, some formal norms, such as violations of parking regulations, are set aside; however, other violations, such as appropriation of private property for private use, are severely condemned. Court cases are postponed. Actions of bureaucrats that would normally require assent of elected officials are approved after the fact. Elected political officials often provide reassurance and interpretation to community members and assume integrative roles which may have little to do with their formal job duties and responsibilities.

(4)   Social Participation

Many voluntary associations assume disaster-relevant activities; however, most clubs and social associations suspend their normal operations and many major cultural events are cancelled.

(5)   Mutual Support

There is a tremendous increase in interaction, the development of widely shared disaster-related jokes and humor (which often appear to be of a "gallows humor" type to outsiders) and the appearance of a "we" vocabulary is applied to all those who have experienced the emergency.

A notable aspect of all these activities is that they seldom involve conflict, disagreement, or dispute; they are clearly matters of high community consensus. (They may become points of controversy after the emergency is over, but that, in itself, is a sign that the community situation is returning to normal.) It is fairly clear that almost all community functions can be visualized in "service" terms, whether in a broad sense (such as religious services), or in a narrower sense (such as check cashing services).

In addition to the emergency consensus, norms that encourage altruistic behavior develop (at least in American society; the cross-societal evidence on this is less clear). Barton (1970) advances specific hypotheses that attempt to characterize not only the nature of the altruistic behavior which emerges in disasters but also the disaster-relevant factors that might explain why such events evoke more altruism toward the unfortunate and the suffering than do other occasions. In his analysis, Barton suggests that empirical evidence from early disaster studies (mostly pre-1965) indicates the importance of taking into account the

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number of victims, the way in which sufferers are used as a reference or identification group, the feelings--especially of relative deprivation among those affected--and the opportunities that exist for helping victims. He attempts to show how these factors influence the proportion of community members who feel an obligation to help, why some perceive a strong norm to "help victims," and what accounts for those who actually provide some assistance to community victims. In general, Barton assumes that a substantial proportion of the community does not become a part of the victim population. The situation is far more complicated when the proportion of victims is extremely high in a given community, as it was in the Xenia tornado and the Wilkes-Barre flood. In these cases, as some DRC work suggests, all pre-impact community residents could be considered disaster victims (Taylor et al. 1976).

Some Implications

We have summarized briefly some of the major research findings on the development of an emergency consensus and the emergence of altruistic norms. We think the discussion is sufficient to indicate some implications for serious consideration of community disruption that results from a disaster. The first point we wish to reemphasize is that many of the things noted clearly balance, neutralize, or otherwise soften the impacts of disaster occasions. Two communities, for example, may suffer the same physical damage, have roughly equal numbers and kinds of casualties, and have initially the same kinds of interruptions or cessations of normal community routines; however, because of rather different emergent patterns of the kind discussed, they may experience markedly different disaster occasions, with all that implies for mental health effects. Researchers with much field experience in a wide variety of disasters--whether correctly or not--sometimes think they can "sense" what are essentially qualitative differences. Thus, Hurricane Betsy in New Orleans "seemed" to us in the field a much worse disaster occasion than the Alaskan earthquake at comparable chronological times in the emergency period. The point is that two disasters relatively similar in physical terms can be worlds apart psychologically, with rather different mental health consequences for those who have experienced them.

A second but related point relevant to major disasters is the tendency toward a dropping off or lessening of demands for certain community services, at least for limited periods. It is not crucial that children return to school the day after impact; bars, movie houses, and other recreational centers need not reopen immediately. Even demands for ordinary everyday emergency services will wane in the aftermath of a major community

disaster. Typically, there are fewer requests to fire departments to respond to small wastepaper basket or garage can blazes or to cats caught in trees; police departments receive fewer telephone complaints (e.g., about "noisy kids in the street" or bickering neighbors). Far fewer patients or clients walk into hospitals or mental health clinics for treatment of what they consider to be minor problems. Although all such reduction or postponement of services could have serious mental health ramifications in the long run if relevant services are not restored or provided, there are fewer short-term demands for a variety of community ser7ices. In many respects, people exposed to a disaster are far less demanding than they are in ordinary times; a service disruption that would be highly stressful or unacceptable in routine times is borne with understanding and forebearance during the emergency period of a disaster.

However, as indicated, certain priorities emerge in a disaster, and considerable psychological stress may be engendered if there is a perception that community effort is not being appropriately expended to meet them. Often the perception is more important than the actuality. For example, part of the priority given to care for victims involves the importance of quickly finding and individually identifying the dead. If community authorities are seen as lagging in this effort or as handling it inappropriately, survivors may react in a very negative way. In DRC's field studies of hundreds of disasters, almost the only unruly crowd behavior noted occurred during the rare occasions when community officials were perceived as stopping attempts to identify individual bodies and/or as suggesting a mass burial of those unidentified. As we have written elsewhere, there are very powerful social and psychological reasons for the insistence that dead bodies be turned back into persons (Blanshan and Quarantelli 1981); survivors expect the community to help in that effort. All matters of high priority, if not dealt with well, can have both short- and long-term negative psychological consequences.

Overall, it is important to take into account community structure and functioning in times of disasters. Almost always, an emergency consensus develops and altruistic norms emerge. Nonetheless, because there can be considerable variation in these phenomena, there may be substantial differences in community responses. Furthermore, not all disruption of community services necessarily results in psychological dysfunction. Negative mental health consequences are probably most likely when community priorities are not met in the aftermath of disaster.

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