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Disaster Crisis Management*

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DISASTER CRISIS MANAGEMENT

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ABSTRACT

The crisis management of disasters does not follow automatically from
disaster planning. Research has shown that successful disaster management
results primarily from the activities of emergency organizations.   In
particular, there are management problems with respect to the communication
process, the exercise of authority, and the development of coordination.
There are at least five different areas of difficulties in the communica-
tion process, namely in intra-organizational behaviors, between organiza-
tions, from organizations to the public, from the public to organizations,
and with systems of organizations. Exercise of authority difficulties stem
from losses of higher echelon personnel because of overwork, conflict
regarding authority over new disaster tasks, clashes over organizational
jurisdictional differences. Coordination difficulties come from lack of
consensus among organizations working on common but new disaster related
tasks, and difficulties in achieving overall coordination in any community
disaster that is of any magnitude. Prior planning can limit these manage-
ment difficulties but cannot completely eliminate all of them.

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It is very easy to assume that if there has been disaster planning there
will be successful crisis or emergency management. After all, that would
seem to be the ultimate purpose of planning.

Unfortunately, however, research has shown that is far from being the
case--there often is a big gap between what was planned and what actually
happens in a major emergency. There is in fact a relatively low correla-
tion between the undertaking of planning and the successful or good manage-
ment of disasters.

The reason for this is twofold. One is that the planning can be poor in the
first place. Thus, if disaster planning is agent specific rather than
generic, if planning is too segmented or segregated rather than involving
the largest social unit that is most relevant to the situation, or if the
planning demands artificial or far-from-everyday activities, there will be
implementation of that kind of poor planning in actual disaster situations.

Poor planning can only encourage poor management activities. This is the
more obvious of the two major reasons why successful crisis management does
not automatically follow from disaster planning.

Given that, we would rather take the time we have here to discuss the other
reason, namely that there are principles of crisis management that are
different from the principles of disaster planning. That planning is not
management should be recognized, but studies of disaster have demonstrated
that there is sometimes a failure to distinguish between the two processes
or activities, with consequent negative results.

Perhaps if we draw a parallel we can make our last point even more dis-
tinct. The military draws a distinction between strategy and tactic--in

fact, they teach and try to implement the differences between the two.

Strategy, in general, has reference to the overall approach to a problem or objective. But there are always situational factors or other contingencies which require particular adjustments to attain a specific goal if the overall objective is to be attained.

This is the area of tactics. In somewhat parallel terms, good disaster planning involves the general strategies to be followed in preparing for a sudden community emergency. Good crisis management involves using particular tactics to handle the specific situational contingencies which are present or arise during the course of a mass emergency.

Clearly, it is usually impossible ahead of time to spell out in detail the particular tactics which have to be used because almost by definition they will be relatively specific to the actual situation encountered. Good crisis management to a considerable extent is the application of tactics which are relevant to the situational contingencies of a given disaster.

However, just as the military finds it possible to teach tactical principles as well as strategical principles, disaster researchers can point to some of the tactical considerations which are involved in effective and efficient crisis management.

We shall do this in the rest of our remarks by indicating what research has ascertained as the major management problems in community disasters.

Before turning to that, we should indicate that, contrary to some popular images, the major source of problems in disasters are not the victims themselves. Apart from the disaster agent itself, in some, but not all, cases the major source of problems in all disasters are to be found in the organizations responding to the disaster.

If there is to be improvement in disaster planning and disaster crisis management, it will have to come in changing the behavior of the relevant emergency organizations. Research has shown that successful disaster management results from emergency organizations coping well with certain problematical areas.

In particular, there tends to be in the typical disaster management problems with respect to:

> the communication process,
> the exercise of authority, and
> the development of coordination.

We will now discuss each of these in some detail.

1.   The Communication Process

The term "communication process" is used deliberately to emphasize that this problem generally involves **what** is communicated rather than **how** communication occurs. In most cases, although admittedly not all, communication problems do not necessarily arise from equipment scarcity, damaged facilities, or other forms of destruction that result in

rendering the equipment inoperable. Occasionally during community disasters, the existing means of communication are limited. But such problems frequently are directly attributable to predisaster equipment scarcity rather than to a disaster-related loss. In the majority of cases, problems related to the means of communication are far less than those arising from the process of communication. That is, some physical mode of communication will exist. However, resultant problems arise from the improper use of existing equipment or decisions are more the result of human or social error than equipment failure.

Organizational problems associated with the communication process are evident in at least five different categories of organizational behavior:

Intra-organizational;

Between organizations;

From organizations to the public;

From the public to organizations; and,

Within systems of organizations.

The discussion that follows examines both the mythological beliefs and the real problems of organizations in community disasters and indicates how false assumptions about organizational behavior underlie, and thus invalidate, disaster preparedness planning.

A.   Intra-Organizational Communication

Organizations have to communicate internally and constantly exchange information among group members. Under normal conditions, the communication system is designed to process and exchange predetermined types and quantities of information. However, during a disaster, the number of staff using the communication system increases greatly. This is created in part by internal staffing changes undertaken by the organization to meet the demands of the crisis situation. For example, double shifts may be required or volunteers may be incorporated into the work force. Often, the exisitng communication system cannot accommodate the volume of information required by system users. When the extra demands upon the internal communication system exceed its capability, this results in "overload," the net result of which causes either system failure or results in the loss or delay of information to, from, and among staff members.

Communications are supposed to go through certain channels. In non-crisis situations, the flow of information follows the organizational chain-of-command. Thus, system user information needs, conditions under which information is to be exchanged, and the flow of information from the top to the bottom and vice versa, are clearly defined. However, during a disaser, the channeling of information throughout the organization becomes more complex. For example, it is not unusual for: (1) several individuals to

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occupy a position previously held by one person; (2) officials to assume non-routine tasks; and/or, (3) officials to be re-assigned to work in temporary emergency positions within the organization. These and other factors can lead to the creation of situations where the normal channels of communication are insufficient to insure that all relevant information will reach those group members who should be informed of organizational activities.

B.   Communication Between Organizations

Difficulties may develop along a second dimension--that of com-munication between organizations. The reasons for the occurence of potential problems in this area are two-fold. First, in noncrisis situations, normal routine contacts between organiza-tions proceed on an informal basis. Officials often communicate with persons with whom they are familiar, for example, acquain-tances and/or friends. When a disaster occurs, changes in the organizational structure are created which call for the estab-lishment of different types of relationships among organizations. These changes, when coupled with other factors, do not support an informal system of communication. New contacts must often be established and maintained with new individuals who occupy positions of authority within organizations where there had pre-viously been no contact. Community emergencies typically preci-pitate new relationships among different organizations. This often requires staff members of some organizations to develop contacts with members of other organizations that were not re-quired prior to the disaster. Given the pressures of the disaster situation, this is often difficult to accomplish. Com-munication between organizations will frequently not proceed well under such circumstances.

C.   Communication From Organizations to the General Public

A third category of problems are those associated with communica-tion from organizations to the general public. One major source of difficulty is the inability of organizational personnel to clearly communicate life-saving information to the general public during crisis situations. Often, this results from the organiza-tion's inability to understand that what is meaningful informa-tion to organizational personnel is often not necessarily meaningful to persons in the endangered area. An official group within an organization will frequently gather detailed and general information about a disaster. Using this information, the organization will subsequently issue an official statement or instruction to the general public which omits the details of its findings and other relevant information. For example, an announcement advising people to leave a dangerous area may be stated as follows: "Evacuate **X** street or **Y** neighborhood." Though officials may well know the limits/boundaries of the endangered zones, the relative degree of safety in other areas, and other details, the aforementioned instruction may well be the sum total of information in the public statement. Thus, the public is often forced to ascertain the extent of the danger,

what is required of them during the evacuation, and where it
might be safe to relocate. Hence, all too often, organizations
which are well informed about events and potential threats assume
that their public statements will be as clear to the endangered
population as they are to members within the organization. This
is a dangerous assumption!

D. Communication From the Public to Different Organizations

A fourth category of problems associated with organizational
behavior under stress is communication from the public to
different organizations. These problems not only arise after a
disaster, but occasionally arise during predisaster periods. For
example, frequently people will bombard organizations with re-
quests for aid and information, will ask the more visible public
groups what whould be done, where to obtain certain things, and
so forth. A frequent result is the inability of high visibility
organizations to efficiently process large volumes of informa-
tion. Typical is the effect of the flood of telephone calls to
police departments when any untoward event occurs in a community.
The police switchboard often becomes so overloaded with calls
that all communication, both within and/or outside of the organi-
zation, is interminably delayed.

In addition to normal requests for aid and information, organiza-
tions must respond to requests for new information. Few organi-
zations can effectively respond to non-routine questions.
Consequently, persons assigned to man switchboards or complaint
desks often find themselves unable to cope with the increased
demands for new kinds of information during crisis situations.

E. Communication Within Different Systems of Organizations

Often overlooked are communication problems that arise as a
result of the mobilization of different **systems** of organizations
during community disasters. There is a tendency to think of
organizations not as systems, but rather as components operating
independently of each other. This is not the case. Often, there
are sets or systems of interrelated specialized, organizations
that are designed to perform particular disaster-related tasks.

Thus, there are medical systems delivering emergency medical
services, while police and/or military systems provide security.
The accomplishment of these and other disaster-relevant tasks
involves far more than one-way communication among participating
organizations. Rather, there are multiple two-way and chain
communications between different kinds of multi-layered groups.
In a medical system, there may be several first aid stations,
ambulances or transporting units, primary and secondary hospitals
(both public and private), and segments of different authorities
operating within diverse jurisdictions. Although communication
within an organizational system is difficult during nonstressfull
periods, it can, and often does, become quite problematic during
a community disaster, especially since there is an emergent
quality in the behavior of many systems at such times.

Generally, problems in the area of organizational communication
are the most serious ones. If difficulties in this area are not
solved, or at least mitigated, there is no great need to worry
about other kinds of problems. Rapid and accurate communications
are essential core ingredients of any effective and efficient
organizational response to disaster. The absence of these attri-
butes results in inappropriate or inefficient responses to other
problems.

2.   The Exercise of Authority

Disasters require that some agencies and officials assume responsi-
bilities, make decisions, and be seen as legitimate. Naturally, if
the exercise of authority is weak during nonstressful periods, it will
prove even weaker when disaster strikes. If authority is weak in the
first place, as is true, for example, in many county governments in
the United States, it can completely disappear when disaster strikes.
However, even if we assume that the exercise of authority among
agencies and officials during periods of normalcy are operating pro-
perly within a community, there will be problems during the emergency
phases of disasters. The difficulties which surface, however, are
often not those commonly anticipated.

Thus, the chain-of-command and lines-of-authority do not break down in
established organizations. If inadequate communication does exist
during a mass emergency, officials usually continue to exercise their
formal authority and fulfill their normal duties and responsibilities.
If higher echelon officials cannot be reached, personnel at the middle
and/or lower echelons often make decisions they do not normally make.
Even rigid bureaucracies will bend on this matter when faced with
clear-cut crises that require an immediate organizational decision or
response.

A common belief is that organizations may be unable to function effec-
tively due to conflict between the work role and the family role of
officials. Occasionally expressed is the fear that important of-
ficials or key personnel will either not report to work or will leave
their jobs when disaster strikes because of a concern or a need to
take care of their victimized families. Research has shown that this
so-called role conflict **does not** result in the abandonment of, or
failure to carry out, occupational responsibilites. (At least it is
not a major problem, especially in the higher echelons of organiza-
tions, e.g., those positions carrying the most authority.) It is
clear that officials can be expected to do their jobs, although there
is psychological strain for those caught in such a role conflict.

Neither are there many problems arising from questions concerning
which organizations have been delegated the authority and responsi-
bility to perform traditional tasks during periods of disaster. Thus,
there are seldom disputes or questions concerning who fights fires,
repairs telephones, performs major surgical operations, or other
specialized tasks. Such matters are the traditional responsibility of
certain local groups. A disaster is unlikely to alter the normal
pattern.

On the other hand, there are at least four problem areas involving organizational authority in community disasters: (1) loss of higher echelon personnel because of overwork; (2) conflict over authority regarding new disaster tasks; (3) clashes over organizational domains between established and emergent groups; and, (4) surfacing of organizational jurisdictional differences.

A.   Personnel Burnout

This problem stems from the strong tendency on the part of key officials in positions of authority to continue working too long. Such personnel who remain on the job around-the-clock during the disaster will eventually collapse from exhaustion or become inefficient in their decision-making and other areas of responsibility. More importantly, when such officials are eventually succeeded by others, their successors will lack certain information to exercise the necessary authority, because crucial data will not have been formally recorded. Decision-making requires relevant knowledge. Officials with the appropriate information will not always be physically capable of working beyond a certain point. If such officials occupy key positions of authority, the disaster response capability of the organization can be seriously impaired.

B.   Organizational Authority Conflicts

Determining who has the organizational authority to perform new disaster-related tasks is another major problem. When there are new disaster-related tasks to be performed, questions almost inevitably arise about which organizations have the authority to assume them. For example, the responsibility or authority for performing large scale search and rescue activities or mass burials of the dead are normally not everyday tasks of established emergency management agencies.

C.   Organizational Domain Conflicts

Authority problems surrounding the performance of traditional tasks sometimes arise between established organizations and outside or emergent groups. For the most part, "area security" is considered a traditional local police function. Conflicts can arise if state police or military personnel move into the disaster area and also attempt to provide security. Such actions are often viewed by the local police as an attempt to usurp their authority. This issue is sometimes manifested in disputes over who has the right to issue passes allowing entry into a restricted impacted zone.

The situation is even more complex when the competing organization is an extra-community group or an emergent group, as for example, when nonlocal relief or welfare agencies provide services during a community disaster. Though they may be exercising their mandated or usual function of providing standard services, such agencies are frequently viewed as intruders into the domain

or local agencies while performing such functions. If the outside of local relief group is a new organization, established local agencies undertaking the same disaster task(s) are almost certain to ask questions about its legitimacy and authority.

D. Organizational Jurisdictional Differences

Community disasters frequently cut across jurisdictional boundaries of local organizations. This creates a great potential for conflicts. During non-crisis periods, vague, unclear or overlapping authority and responsibility can often be ignored. During disasters this is frequently not the case. Since disasters sometimes require immediate actions and decisions, unresolved jurisdictional issues often surface at the height of an emergency period.

Problems of authority are especially difficult to resolve. In part, this is because the question of organizational authority involves the whole fabric of formal and informal power within a community. This is a subtle and sensitive matter full of pitfalls for anyone not knowledgeable about the nuances of local history. Therefore, it is not surprising that such problems are difficult to plan for and equally hard to handle when they arise.

3. The Development of Coordination

Organizations experience a large number of coordination problems during a community disaster. Three major problems have been noted in social science research:

Lack of consensus among organizations concerning the meaning of coordination;

Strained coordination between organizations working on common but new disaster related tasks; and,

Difficulties in achieving overall communication in a community disaster of any magnitude.

A. The Lack of Organizational Consensus

It is unusual to find any organization which does not agree, in principle, that coordination is needed during disasters. The problem, however, is that "coordination" is neither self explanatory nor a matter of much consensus. At one extreme, some organizations view coordination, at best, as informing other groups of what they will be doing in the disaster. At the other extreme, some organizational officials see coordination as the centralization of decision-making in a particular agency or among a few key officials. Given such diverse views surrounding the meaning of coordination, it is not surprising that even when a formal predisaster agreement to coordinate the disaster response exists, there can occur mutual accusations that one or both parties have failed to honor the agreement. But prior agreement or not, in the absence of an explicit understanding of what coordination

means in operational terms, there will be organizational coordination problems. It is rare to find such an explicit understanding in community disaster planning.

B. Strained Organizational Relationships Created by New Disaster Tasks

Coordination (i.e., mutually agreed linking of activities of two or more groups) between organizations working on common but new tasks is also difficult. Even local agencies that are accustomed to working together, such as police and fire departments, may encounter difficulties when they suddenly try to integrate their activities to accomplish a novel disaster task, such as the handling of mass casualties. While police and fire departments may be accustomed to recovering a few bodies resulting from traffic accidents or fires, the large number of deaths resulting from a major disaster will pose a coordination problem. It is partly the newness of many disaster tasks which create strained relationships among organizations which had previously worked together in harmony. Also, in daily operations there can be a gradual development, frequently on a trial and error basis, of a working relationship between two groups concerned with the accomplishment of a common goal. Such leisurely developments of cooperative relationships are generally an impossibility given the immediate demands during the emergency phase of a community disaster.

C. Impact of Disaster Magnitude

The larger the scope of disaster and the greater the number of responders, the less is the likelihood of success of any overall organizational coordination. In fact, efforts to attain such coordination underlie the imposition of martial law or the designation of national military forces as the decision-makers during the disaster. Historically, neither event has ever occurred in the United States, although both are relatively common response measures undertaken during catastrophes in both developed and developing countries. These steps do not always produce overall coordination. This is understandable.

In almost any society, a major community disaster will precipitate a mass convergence of nonlocal organizations upon the disaster site. The numbers involved, the different levels of the social structure which they represent, the heterogeneous mix of public and private organizations involved, and so forth, virtually assure the impossibility of achieving any overall coordination during the emergency period. As shall be noted later, good disaster planning may effectively reduce the convergence of such organizations and thus allow a relative degree of overall coordination. But such coordination remains relative at best and is frequently never achieved--either by prior planning or by the use of ad hoc efforts--during the emergency period.

The magnitude and increased frequency of new tasks to be performed coupled with the need to integrate too many established,

emergent groups and organizations minimizes the effectiveness of
organizational coordination during disaster situations. Some
former military personnel involved in natural or technological
disaster planning suffer from the illusion that the command and
control system that exists for limited wartime military emer-
gencies--at least in the abstract--can be imposed upon a major
civilian disaster situation.

It is to be noted that the evaluation criteria used to judge the
consequences of not achieving total organizational coordination
determine to a large extent the significance of coordination in
promulgating an effective community response to disaster.

If efficiency of response is rated highly, lack of coordination
can be deemed a serious problem. If, instead, effectiveness of
response is judged more important, it is possible to tolerate a
much lower degree of overall coordination. Coordination is some-
times discussed as if it were an absolute good. This is not
true. There can be relatively effective organizational responses
in disasters without a high degree of coordination.

We have stressed the basic, and often inherent, nature of the problems
which emergency management and human services organizations typically en-
counter. In a community disaster, there will be unavoidable organizational
communication, authority, and coordination problems. Emergency organiza-
tions will be both the source and the focus of these difficulties. Thus,
the collective efforts of community based organizations generate many
problems that usually exceed those occasioned by the disaster victims
themselves.

Prior planning can reduce the management difficulties that will surface at
times of disasters. But even the very best of planning cannot eliminate a
great number of management problems. The problems will occur.

We have tried in our remarks to indicate what the more likely difficulties
will be and their general nature. To be forewarned is to an extent to
create a degree of preparedness.

Because disaster planning cannot achieve everything does not mean that it
is not beneficial. As much planning as possible should be undertaken. In
addition, it should be kept in mind that there will be disaster crisis
management problems.

We hope we have conveyed in what we have said some of the more important
things which should be kept in mind.