A MENTAL HEALTH DISASTER INTERVENTION MODEL

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This paper addresses itself to a new area of formal, official and professional intervention of a mental health team in a post-disaster recovery effort. The planning, consultation and education performed by an organized mental health group is related to the role in which they function, the procedures which they adopt, and the skills which they find necessary to develop a co-professional alliance with lay and government agencies. Organization and training of teams to deliver assistance services is also discussed.

Crisis counseling, including psychological "first-aid", advocacy and out-reach, emerge as the most significant mental health processes available to professionals who participate with the multi-disciplinary professionals, community and governmental groups in recovery and reconstruction operations during an emergency disaster assistance effort. It is a unique and challenging new area of work for mental health activity.

There is rapidly increasing awareness on the part of mental health professionals, the public, and the government of the urgent need for mental health assistance and intervention following a natural catastrophic disaster - tornado, flood, earthquakes. Practitioners who participate in community mental health programs are particularly cognizant of this necessity, as well as the multiplicity of opportunities for service to disaster-affected populations to prevent pathological crisis resolution following the impact consequences of natural disasters. Case histories of attempts at intervention are beginning to appear in newspapers and magazines, as well as in professional journals and literature and on the agenda of related conferences and meetings. This focused attention on mental health assistance and intervention for disaster victims heralds the emergence of a new and challenging frontier for mental health activity.

Supporting increased public and professional awareness of the psychological stress produced during and following a catastrophic event, Congress has recognized and legislated mental health intervention in the Disaster Relief Act of 1974, Public Law 93288 (93rd Congress, 1974. It reads as follows:

> Crisis counseling assistance and training: The President is authorized through the National Institute of Mental Health to provide professional counseling service, including financial assistance to state or local agencies or private mental health organizations to provide such service or training of disaster workers to victims of major disasters in order to relieve mental health problems, aggravated by such major disaster or its aftermath.

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This section, then, authorizes and sanctions mental health professionals working in a community to develop a grant and obtain funding assistance programs through a contract mechanism. N.I.M.H. is hereby empowered to facilitate the efforts to acquire appropriate monies for the hiring and mobilization of teams of workers to assist in solving the disaster affected population's psychological problems. This regulation has had a catalytic effect, furthering the activities of professionals throughout the United States in recent years. (Lindemann, 1965, Quarantelli, 1972, Quarantelli and Dynes, 1973, and Cohen, 1976.) [2 3 4 5] Reports of the Wilkes-Barre disaster intervention (Titchener, 1976) [6], the interventive activities described by Tyhurst (1957) [7], and the studies by Lindemann following the Coconut Grove fire in Boston (1975)[2] have illustrated and emphasized the potentialities of collaborative efforts between mental health professionals, community caregivers and state officials in time of community and individual crisis.

Based on the cumulative findings of these critical writings, mental health guidelines for disaster assistance and intervention have been developed. The key to an effective mental health response is that a mental health team must mobilize quickly, and gain rapid entry into the Federal, State and local disaster-assistance system of governmental structures and individuals. The goal is to develop linking relationships with the objectives of (1) mobilizing resources to gain sanction to participate with governmental leaders and (2) developing useful psychological intervention procedures during the period of time following the disaster to assist in crisis management.

I. CONCEPTS OF PLANNING AND PROCEDURE

What knowledge and experience is significant in mobilizing a team of mental health workers and formulating a cohesive approach to offer assistance?

A) Developing a Conceptual Framework

First, certain areas of inquiry must be pursued to provide the data on which a framework of reference will be built to guide the team's activities. A mental health team will be better equipped to plan and incorporate effective strategies if it knows the particular circumstances of the catastrophic event, and has a basic understanding of the type of population affected. Each group of variables will influence the "field of action" where activities are mobilized.

There are four basic areas of knowledge to be acquired before actually entering the disaster scene and initiating participation:

1) Obtain a description of the type of catastrophic event. For instance, was the impact immediate and without warning? Was the population prepared? Was there public information to appraise the situation as in a storm or hurricane, or was there a sudden, violent upheaval, as in an earthquake? Was the site of the disaster an urban setting, where the congestion of the buildings added to the destructive impact of the event, or was it on the edge of a city with little structural loss?

The tornado thast slammed through Windsor Locks, Connecticut (October, 1979) is an example that highlights lack of preparedness. It caused $179 million dollars damage in three communities where ninety-five homes and thirty-eight businesses were destroyed, 2 individuals died and more than 500 were injured. All this happened in a matter of minutes when the wind ripped through a suburban area one mile wide and three miles long.

2) What are the characteristics of the population? What was the environment like before the event, and what is it like now? How has the population sustained the impact?

The Appalachian population affected in the Buffalo Creek disaster of February, 1972 has been studied by Ericson (1976)[8] who described the community as one that highly valued family bonds. The family provided the support system needed to deal with everyday life in isolated conclaves of geographical groupings. Family bonds were close and special. The family expressed an affective and generalized structural entity from which every member could draw some resources as needed, and to which every member gave of himself unquestionably and spontaneously. Their livelihood revolved around the exploitation of coal. Economically and politically, the aftermath of the torrential rain, overloading the capacity of the mining dam which broke and allowed over 132 million gallons of water to roar down the valley became the center of the controversial investigation followed by litigation about the cause of the disaster.

3) Was there complete destruction of the major organizational and political agencies, as with the earthquake in Managua, Nicaragua in 1972? What were the immediate official governmental measures taken to develop the assistance of human support systems to parallel fiscal emergency programs? What has been done to counter the effects of the disorganization of human social structures? What groups have been mobilized to help the survival activities of the individual? Who is providing food and shelter and assistance for physical injury?

In Nicaragua, senior members of the government took over the leadership of the relief agencies, organizing them along military lines. Ministers and all other heads of programs gathered in the President's house, which became the Central Headquarters for daily centralized planning. Here, meetings were held continually and orders were given for relay of food and housing resources. Medical supplies and vehicles shuttled continually in and out of the compound. In addition, one of the strong influences to reconstruct the social organizations was exerted by the clergy.

4) What was the prevailing political climate of the community? What cultural and economic aspects will contribute to the emotional reactions of this population to the post-disaster crisis?

The flood that ripped through the city of Corning, New York, in June, 1972 crippled trade and industry, setting up a serious unemployment problem. (Kilman, 1976).[9] The Corning Glass Works geared itself to meet the short and long term effects of after shock effects following the flood. Exhibiting leadership and concern, a group of representatives from industry organized services to meet and assist individuals. The introduction and support of a situational crisis team

under the sponsorship of the Corning Glass Works and Family Service Agency, (both of them integral to the community), made the team more acceptable than it would have been as a group of unsponsored outsiders.

B) Activating a Plan

Once this type of information has been accumulated, it is possible to formulate a plan of action. The stage has been set for initial entry. Three modes of action take priority:

1) Enter the specific geographic area where disaster-assistance is being organized - whether it is a shelter, a displaced population camp, or a congregation of tents in a safe level of the terrain. Link into the network of assisting individuals guided by the knowledge obtained during the investigatory activities.

2) Develop and establish collaborative working procedures with the political organizations and governmental agencies. This may include the disaster Civil Defense, the Red Cross, and the various community agencies in operation. The mental health leader needs to explain, introduce and describe the service that mental health professionals can offer to assist these agencies in their recovery assistance tasks.

3) Conduct a rapid needs assessment to ascertain the ethnic, cultural, and economic characteristics of the displaced and traumatized population. Was this a population that had many needs before the disaster, and will have meager skills and knowledge of how to cope with reconstructing their own lives? This information will help determine the extent of need for assistance, both physical and psychological. Whether the needs are minimal, moderate, or severe, some accommodation for mental health procedures must become incorporated into the other activities controlled by the person in charge of Disaster Operations.

These activities are two-fold in objective: they are both learning and assisting procedures for the mental health team. They must occur immediately upon linking with the other groups so as to hasten the process of mobilizing the resources available to the mental health team.

II. ISSUES IN PERSPECTIVE

It is a monumental task to sort out the concrete and psychological needs of a disaster stricken population. The success with which it is done depends largely on logistical coordination and concerted efforts of a variety of individuals from a wide variety of professional disciplines and mandated activities. There will be a multitude of caregivers, many of whom may not be clear as to their own responsibilities, tasks, and objectives. The approach to establishing and maintaining cooperative relationships must be fluid and spontaneous, and, above all, sensitive and compassionate.

A number of conditions will influence how the mental health team will participate in the disaster site. One major consideration will be the skills they bring and mobilize to evaluate the multivarious types of traumatic psychological symptomatology exhibited by the population. Another key influential issue will be

the pattern of service priorities selected by public, governmental and voluntary agencies as they organize themselves to assist. (Generally, physical comfort and somatic traumas are first priorities). Another issue takes the form of a question that arises and recurs as mental health professionals conceptualize and approach disaster work: "Is the knowledge we have in our background as trained mental health workers sufficient to guide us through the multiple types of post-disaster intervention activities within the matrix of human services structures?"

Two main areas of theoretical formulation can be helpful in addressing these issues, and also in developing the procedures and methods to be employed during the three phases of post-disaster psychological and social reaction. (Each phase lasts several days or weeks depending on the severity of trauma and loss).

The first concerns basic knowledge in the area of loss and mourning theories involving reactions to traumatic and overwhelming losses of life, limb, familiar physical surroundings or loss of significant others. Understanding the progression of crisis reactions and resolutions will assist individuals in coping with the inherent stresses and facilitate the conceptualization of observed phenomena in the prevailing disaster scene.

The second valuable body of knowledge is applied knowledge; that which can be obtained from the principles and practices of community psychiatry as documented by workers in previous disasters. Their experiences offer direction as well as examples of how to apply these theories and practices to understand what happens in a disaster, and how to organize and mobilize professional resources within a community structure to assist disaster victims. They have also defined and documented the changing psychological phases which follow a disaster (impact, resolution, reorganization). In addition, many of the principles of crisis intervention aiming at crisis resolution, short-term therapy, counseling and support to couples, families, and groups will form the mental health worker's repertoire of applied expertise. Consultation and Education as a community practice emerges as a key method to link and collaborate with all the aiding agencies.

III. GUIDELINES: Goals and Objectives

It is important for a mental health team to have a basic understanding of the objectives involved in disaster assistance activities. Assuming that all the aforementioned knowledge, experience and therapeutic skills are adequately accounted for, the following blueprint of goals and objectives will help guide the mental health team during their crisis participation:

1) All activities must be directed at developing <u>useful</u> procedures which will be of immediate value to the network of individuals with whom the mental health team will be working and will fit into the spectrum of other interventive activities and be useful to the citizens themselves. Traditional clinical activities and procedures must be streamlined and simplified to the point of a <u>first aid interventive approach</u> - especially in the first hours or days. Evaluating and ascertaining the state of crisis of individual victims, and rapid mobilization of mental health teams must occur in a unified rhythm of activity with the other crisis caregivers.

2) Because the number of mental health workers is generally small in relation to the need, it is important to begin with a triage approach and prioritize feasible and salient issues. Activities must be limited to the immediate and most effective modalities which are generally time limited.

3) As the organization of the disaster aid network develops, and as more knowledge and familiarity with the situation, prevailing issues, and patterns of service emerges, psychological procedures can become more elaborate and areas of resposibility will begin to broaden. Mental health workers should strive to offer direct help to individuals traumatized by the disaster by working with and through the various organizations, while also continually offering indirect services, such as consultation and education, to the caregivers.

4) As opportunities arise, mental health workers should search for ways to participate in the extensive areas of helath, education and welfare which spring up around disaster assistance.

5) Human relationships must be establshed and sustained at every level of organization and leadership, and adapted as service patterns change and develop through the different phases of governmental assistance.

6) To keep the mental health teams focused on the main objectives, data and documents relating to their activities should be accumulated and organized and the analysis shared both with workers and key sanctioning groups.

IV CASE STUDY: The Boston Blizzard, 1978

The following example will illustrate and clarify some of the concepts and guidelines presented. This example is taken from the activities of a mental health team which intervened in the blizzard-tidal surge of February 16, 1978, in one of the communities near Boston, Massachusetts. The storm set state records for snow accumulation in a 24 hour period, and for the most snow from one storm; it was also catalogued as the 10th worst disaster in United States history.

The storm lasted thirty-three hours, with wind gusts of 69 miles per hour, and 92 miles per hour in Cape Cod. There was a violent, swirling northeast wind, which, together with high tides, resulted in major flooding - severely damaging the state coastal communities. Twenty-eight persons died; over 2,250 were injured, and 450 were hospitalized during the blizzard. 2,133 homes were reported destroyed, 9,000 homes were seriously damaged, and over 25,000 homes were hurt by the flood. More than 30,000 people had to be evacuated from their homes, and many individuals were trapped in their cars for up to 36 hours.

On the second day following the blizzard, a mental health team made up of professionals from different disciplines swung into action to collaborate with other state and voluntary agencies' personnel. Initially, their activities took place in the emergency shelters that were organized for displaced persons. Later, an outreach program was established to follow-up on the victims who had been moved to temporary housing or were receiving other assistance. The team's first objective, which became apparent as soon as they entered the system of disaster assistance

organizations, was how to establish links to the on-going governmental group which had already assembled the day before their arrival. We must note here that entering a disaster assistance system necessitates a crucial linkage activity. This becomes the responsibility of one of the members of the group; a particular individual must take on the leadership role at this juncture and negotiate the conditions of collaborative efforts.

The blizzard and storm destroyed several neighborhoods in the catchment area where the author was the Mental Health Director. Taking on the role as head of operations in the disaster assistance program, the author took full responsibility in organizing and linking the mental health staff to on-going activities as they unfolded throughout the period covered by the post-disaster relief program. At the same time, the Director worked with other staff and administrators in the Department of Mental Health to develop the linkages necessary to set up a small, rapid decision-making group directly focused on the disaster response effort. In this case, the entrance of the group into the system was facilitated by the fact that the mental health professionals had previously been practicing in the affected community. They were already linked to the Community Neighborhood Health Center, which was operating an emergency and first-aid unit in the shelter. They were also able to quickly establish a collegial relationship with Red Cross workers, who welcomed their assistance. The head of operations introduced herself to the Red Cross Senior Staff and explained how the mental health professionals could be of assistance.

From this beginning, relationships were extended to include the official community representatives in the disaster area. These consisted of a representative of the Mayor of Boston, a Senior Civil Defense Staff person, and representatives of State and Federal Disaster Agencies and various State Human Services Agencies. All these individuals assisted the mental health professionals to conduct a rapid needs assessment of community and individuals' problems.

A logistics plan was developed rapidly and implemented in the first days following the disaster. The number of professionals required, the shifts that would be covered, the location of the team, and the procedures that would be followed were delineated. Methods of communicating findings and decision-making were agreed upon and shared with all the team members. Through collaborative mental health first-aid assistance techniques, procedures and objectives were immediately conceptualized and defined, and communicated to the Health Team and Red Cross staff. Since individuals were already being interviewed and assisted by these two groups, the mental health workers quickly developed a system of instruction covering some of the characteristic mental health syndromes to be expected. The members of the health team and the Red Cross worker would gather for a 15-30 minute session. Anxiety syndromes, depressive symptoms and reactions of uncontrollable anger were explained to these professionals, so that they could understand them as part of the post-disaster trauma. In this way, they could manage the individual themselves, or ask for assistance from the mental health professional.

The team also offered their time and energy to help individual victims exhibiting some of the following critical symptoms: uncontrollable epileptic attacks, threatened miscarriages, drug and alcohol withdrawal symptoms, somatic-

equivalents of tension, acute anxiety signs and depressive syndromes. They participated in direct, face-to-face time-limited therapeutic intervention with disaster victims.

During the first days, the triage model which emerged divided needs into physical problems, health, mental health and housing needs. Professionals from the three units - Mental-Physical Health, Red Cross and Housing Allocation - worked closely and interchangeably with the people who had congregated in the shelters. They collaborated and kept the flow of the needs moving to the appropriate teams. If, for example, after talking with staff attending to housing needs someone needed further psychological services, they would be taken to the mental health team. Many rapid mental health interventions were given sitting next to an individual on a cot, or in groups on the shelter floor. Mental health professionals would approach individuals who appeared upset, despondent or anxious, offered to hear what they were "going through", and make a determination if any further help should be offered. If the individual agreed, and needed a brief diagnostic intervention, he would be escorted to an area where a team member was "on-duty". This small area consisted of a corner of one room where a modicum of quiet and privacy assured the possibility of offering psychological diagnosis and time-limited counseling.

Three types of population needed the most immediate help during the first week (phase one): ex-mental patients who didn't have their medication, drug and alcohol users unable to obtain their usual amounts of stimulants, and individuals who had no previous history of mental illness but who were decompensating under the intense stress. Mild sedatives and anti-depressant medications were prescribed. Supportive therapy, ventilation, clarification, and guidance were the main psychological interventive processes used.

A note about post-disaster crisis counseling: it cannot be practiced in the same way as a therapeutic technique used in a clinical or private consultation setting. It is on-going, shifting in its focus and closely related to the future planning of disaster-stricken individuals as they begin to reconstruct their lives. The professional must not only sort out the different aspects of complicated life circumstances in which they find the victims, help them deal with their immediate physical and psychological problems and assist them in future planning, but also comprehend the complex structure of agencies rapidly deployed by the bureaucratic system to aid these individuals. This is what makes the unique experience of disaster work a new frontier for mental health workers. It certainly makes it a unique challenge.

The next two weeks (second phase) presented new modalities of intervention as families were followed into their relocated housing. Opportunities to ascertain the degree and variety of problems and emotional reactions multiplied. Team member were deployed throughout the city continuing their relationships with troubled individuals and relief-assisting agencies.

After the focused activities of the first three weeks of the Post-Blizzard intervention came to an end, plans for the next six months (third phase) had to be translated into operations and activated. The Team discovered that the activities and functions had to be re-adapted and therefore delineated an interventive model for the follow-up period as follows:

1) Teams of mental health professionals would have to be attached to different human services agencies in each community at large, including direct links to clinics of the Department of Mental Health.

2) Wherever the population in need was relocated, the mental health teams would interface between them and the Federal and local resource agencies.

3) The mental health workers would participate at different levels of responsibility in a collaborative disaster activities approach with state and federal agencies who have specific public functions after a disaster.

4) Outreach and advocacy to assist individuals traumatized by results of their post-disasters living situations would be instituted. Psychological counseling procedures would be used to aid in crisis resolution.

As these objectives were translated into operations, it was essential that the community perceive the mental health workers as part of an overall effort to support, guide, and assist them in recovering their former coping abilities. It was important to remember and to emphasize to community caregivers <u>not</u> to approach the individual who was having difficulty in coping as if he were sick and, thereby, allow him to develop a role of "patienthood" as part of the reaction to the disaster. This necessitated adopting a consistent educational approach in dealing with caregivers who tend to have set stereotypes of mental health workers as professionals who deal only with illness and psychopathology.

Post-disaster counseling and crisis intervention, therefore, offer a unique model for mental health activities and for broadening the perspective of caregivers. It is a rather novel and new area for mental health workers but it is legitimate and offers the possibility of a healthy resolution to post-disaster coping behavior. To be effective however, it must continuously prove useful to both the citizen <u>and</u> to the community caregivers.

Post-disaster crisis counseling, then, can be defined as follows: an active intervention technique that restores the capacity of the individual to cope and handle the stressful situation in which he finds himself, and the assistance to this individual to re-order and re-organize his (or her) world through the process of human interaction. Education and interpretation of the overwhelming emotions produced by post-disaster stresses are offered to help restore an individual's sense of capability and hopefulness. These are the demands a mental health professional must meet to help a displaced and dispossessed population.

Long term planning and continuation of team activities requires certain out-reach and follow-through efforts on the part of mental health professionals. Their crisis-oriented work continues as the affected population begins to deal with daily life. Assistance programs offering mental health services and those sponsored by government agencies (F.D.A.A., HUD, SBA), have to be meshed with the unique situation in which the individual finds himself. To be accepted as collaborators by the community-based disaster assistance groups, which have generally, in the past, been ambivalent about mental health intervention, a mental health team must be skilled and value these human relationships. Unless this professional link is well developed and is functional with these organizations, mental health interven-

tion diminishes as the months elapse. That is, a population that is not able to ascertain its own level of post-disaster disfunctionality will not use the opportunities available unless those services are accessible and available in a setting without organizational and professional barriers. To provide needed services to victims on a long-range basis, it is essential to systematize the link between the post-disaster teams and the formal Mental Health system in the initial conception and basic design of a disaster-assistance plan for a community. Then it will continue to serve as a back-up service for individuals suffering from severe emotional disfunction, and it will ensure that the community mental health team continues with on-going programs to aid disaster victims.