

**THE IMMEDIATE COMMUNITY RESPONSE TO DISASTER
THE EAST BAY HILLS FIRE**

By

Norma S. Gordon, M.A.
The Public Health Foundation of Los Angeles County, Inc.

Carl A. Maida, Ph.D.
University of California, Los Angeles

QUICK RESPONSE RESEARCH REPORT #51

1992

The views expressed in this report are those of the authors and not necessarily those of the Natural Hazards Center or the University of Colorado.

**THE IMMEDIATE COMMUNITY RESPONSE TO DISASTER:
THE EAST BAY HILLS FIRE**

*Norma S. Gordon, M.A.
The Public Health Foundation of Los Angeles County, Inc.*

*Carl A. Maida, Ph.D.
University of California, Los Angeles*

*Submitted
October 1992*

THE IMMEDIATE COMMUNITY RESPONSE TO DISASTER: THE EAST BAY HILLS FIRE

This study examines the immediate community response to the East Bay Hills Fires. It investigates how mental health and other human services were mobilized and delivered in the disaster-affected communities in Alameda County during the initial post-impact period within one month of the firestorm, with respect to: (1) the extent of service delivery; (2) the providers and recipients of these services; (3) obstacles to service delivery; (4) the level of coordination; and (5) the timeliness of response.

THE EVENT

On October 20, 1991, a firestorm destroyed more than 3,000 homes and took 25 lives in the hillside residential neighborhoods of Oakland and Berkeley, California. A brush fire that was extinguished the day before, reignited. Gusts of hot, dry air swirled through the hillside groves of Monterey pines and eucalyptus trees that were damaged by five years of drought and a freeze the previous winter. Many of the homes, built before fire codes existed, used highly-flammable wood shake siding and roofing in their designs. On many properties brush and overhanging branches were allowed to accumulate.

The fire, spread by winds gusting up to 65 miles per hour destroyed 2,777 single-family homes and 433 apartments in the 1,600 acre fire zone. The East Bay Hills Fire was declared officially under control on October 23, 1991 at 8:00 a.m., some seventy hours after it began. To subdue the firestorm, an estimated 25 million gallons of water were used by 1,844 fire-fighters. The cost of property damage has been put at \$2 billion. The Red Cross reported over 4,500 people were homeless and 444 ill or injured as a result of the worst residential fire in American history.

METHODS

Instrument Design and Expert Panel Review

We developed an instrument to assess the immediate post-disaster needs using criteria developed by the Federal Emergency Management Agency (FEMA) and the National Institute of Mental Health (NIMH) in order to determine:

- 1) Who is delivering and receiving direct services, outreach, consultation and education?
- 2) What types of services are being offered?
- 3) How are specific cultural, ethnic and geographical needs being met?
- 4) What is the professional perception of immediate service needs?

The instrument was critically reviewed by three disaster mental health experts from NIMH, the State of California, Department of Mental Health, and the Suicide Prevention Center/Family Service of Los Angeles. We assembled a panel of experts,

composed of 25 county disaster coordinators in California, who received a copy of the original instrument and a brief Disaster Expert Panel Review assessment form which asked the following questions:

- 1) Are the questions stated clearly?
- 2) Would this questionnaire be useful as a planning tool?
- 3) Would this questionnaire be useful as a needs assessment tool?
- 4) Would this questionnaire assist you in identifying the potential demand for mental health services after a disaster?
- 5) What additional information would you want to have included in this questionnaire?

Key Informant Interviews

We developed a sample of key agencies that provided services to the disaster victims through a review of local newspaper notices, and phone contacts with staff of the American Red Cross, the NIMH, the State of California Department of Mental Health, and the East Bay Community Foundation. Letters were then written to key administrators, soliciting their cooperation in the study.

The sample of twelve key informants was selected to represent public mental health agencies, United Way agencies, the Red Cross and other community-based organizations that responded to fire victims. The interviews were conducted by a team of interviewers six weeks after the disaster. The key informants helped to identify other administrators and clinicians who took part in the immediate emergency response for inclusion in our survey sample.

The Survey

The sample consisted of 40 respondents within the following classifications: 1) sixteen administrative and clinical staff from seven agencies representing public mental health and hospital-based mental health; 2) fourteen clinicians from the private sector who volunteered services to public mental health agencies and to the American Red Cross; and 3) ten administrative staff from human services organizations in the non-profit sector who provided a wide range of services to disaster victims.

RESULTS

Expert Panel Review

The questionnaire was critically well-received, with 20 of the 25 expert respondents indicating positive views of its usefulness. The respondents, in general, regarded the questionnaire they reviewed as useful for planning and conducting a needs assessment and for identifying the potential demand for disaster mental health services. Those who were critical (five respondents) made positive suggestions for improvements of the questionnaire, most citing that it was too specific to the disaster. Some expert respondents questioned whether the exact numbers of individuals served, their marital

status and their ethnicity, would be available to agency respondents one month after the disaster. Some suggestions were directed toward longer term objectives than were the focus of our investigation, e.g.: 1) the coordination of clinicians in private practice who may be willing to volunteer services; 2) any contingency plans that mental health agencies may have to re-allocate and re-assign staff to disaster duties; and 3) the need for mental health resources in the recovery phase, 3 - 12 months after a disaster.

Key Informant Interviews

Disaster Coordinator, Alameda County Department of Mental Health (ACDMH): The Alameda County Department of Mental Health was the initial mental health agency to coordinate with the State Department of Mental Health in this disaster. The agency responded immediately, mobilizing staff and resources for disaster interventions as a result of recent experience in managing the Loma Prieta Earthquake response. The agency worked collaboratively with other community agencies, including the American Red Cross and the mental health systems in Santa Clara, Contra Costa, San Mateo and Santa Barbara Counties.

As the key mental health agency, the ACDMH was responsible for staffing the Disaster Assistance Center (DAC) when it opened. Its own staff and volunteers provided a variety of services, including outreach at the coroner's office, "ride-alongs" with safety personnel, escorting disaster victims to the fire zone, and debriefings of emergency service workers. Agency personnel staffed a hotline and mailed information to 4,000 victims on the FEMA mailing list. The volunteers whom they mobilized for this disaster had previously received training by the agency staff as part of the NIMH-funded training program implemented following the Loma Prieta Earthquake. The agency was able to mobilize outreach efforts, including staff support and consultation, to the schools in the peripheral area because of a previous contract with the Oakland Schools to provide training after the major earthquake.

Disaster Coordinator, City of Berkeley, Mental Health Services (BMHS): This city mental health department had recently (since July 1, 1991) gained jurisdictional status, and elected to launch disaster response efforts independent of Alameda County activities. A parallel effort, therefore, was being made to provide disaster mental health services, including outreach and drop-in services to fire victims, and consultation, training and critical incident stress debriefings to emergency service workers within its jurisdiction. BMHS also implemented a crisis intervention program, including a 24-hour crisis telephone service and a mobile crisis team. This provided on-site crisis intervention and supportive counseling at the evacuation center, at Alta Bates Hospital emergency room and at the base of the devastated area in the Berkeley Hills. Debriefing sessions were offered to staff and volunteers but were reported as being poorly attended.

BMHS is crisis-oriented and receptive to volunteers and participation from other sectors of the community. Previous collaborative efforts with the University of California Student Health Service to mobilize resources in response to community-scale crises have afforded opportunities for the networking and coordination necessary for managing a large-scale disaster response. What is unique about Berkeley Mental Health's response is

the utilization of large numbers of professionally-trained volunteers, called the Mental Health Volunteer Project Disaster Response Team. Activation of the volunteer cadre enabled this relatively small agency to offer a large array of services, including a considerable outreach effort.

Chief, Department of Psychiatry, Children's Hospital-Oakland: The Department of Psychiatry's outreach efforts following the fire were directed towards school systems, and were targeted solely to the children affected in the fire zone. Services included school consultations, classroom intervention and parent groups. The hospital Psychiatry Department has an ongoing interest in children affected by community-wide traumatic events. It has developed interventions for victims of trauma, including community violence and the effects of the Loma Prieta Earthquake, offered training programs for school personnel, and is engaged in ongoing research in this area. All of these activities were supported by a private endowment provided by Children's Hospital, and were essentially separate from other mental health activities in the community.

The staff's most successful efforts, however, were with the counselors from one particular school. The Department offered group sessions to parents and school personnel at a private school in the disaster area. Children's Hospital staff worked closely with the parent association in this close-knit school. Follow-up activities involved consultation with school counselors over the next several weeks. The counselors reported that many of the children indicated emotional disturbances. The parent groups, however, were not well attended after the first session and were subsequently canceled.

The hospital staff continued their consultation activities over the next several weeks, with teachers and counselors in three schools in the impacted area. Staff observed that parents were not identifying traumatized children. Therefore, in collaboration with the school counselors, hospital staff employed case-finding techniques such as children's drawings to identify those at risk.

Director of Disaster Services, Chief of Disaster Health Service, and Coordinator of Mental Health Services/Crisis Intervention Team, The American Red Cross: The Red Cross, a volunteer-driven organization, played an outstanding role in this disaster through its Oakland and Golden Gate chapters. The Red Cross assembled a volunteer cadre, provided by the naval and coast guard personnel from locally stationed ships and commands. This cadre staffed the Disaster Welfare Inquiry Unit (DWI) phone bank. It processed over 3,000 inquiries after the fire.

The delivery of mental health services is not ordinarily a part of the mission of the Red Cross in a disaster. The Red Cross mass care workers will often observe considerable grief and bereavement among the disaster victims in the shelters. The Red Cross makes referrals to local departments of mental health. Major changes in mental health policy at the Red Cross have taken place over the past two years, through the establishment of a National Disaster Mental Health Task Force, as part of its concern for emotional support not only to victims but, also to Red Cross volunteers and other emergency service workers. The American Psychological Association, through an agreement with the Red

Cross, has been providing emergency mental health training to Red Cross volunteers who are also licensed mental health professionals.

This was the first disaster where the mental health component of the Red Cross was utilized. A large number of professional therapists volunteered their services to the Red Cross, however, only experienced clinicians and Red Cross-trained therapists were utilized. Conflicts emerged between the Red Cross and the public mental health agency in the early days of the disaster regarding the use of mental health volunteers. In the first days following the fire, ACDMH workers lacked proper identification to enable them access to the service centers. The Red Cross assisted them by issuing name badges used by Red Cross crisis teams. Turf issues emerged, however, between mental health staff from the ACDMH and Red Cross volunteer counselors who were assigned to the scene by the Red Cross mental health coordinator. The Red Cross crisis teams encountered immediate rejection from ACDMH staff inasmuch as the director of that agency's disaster response regarded her agency as having the sole jurisdiction in assisting the fire victims at the DAC. After some days, these turf issues were resolved, but essentially the Red Cross-trained counselors were limited to serving only Red Cross volunteers. Red Cross debriefing teams scheduled sessions for volunteer workers, which however, were poorly attended. We were informed that this may have been due to the fact that many of the volunteers were exhausted from excessively long (12-hour) shifts and often returned to their homes, a considerable distance away, after their shifts ended. Overall, the efforts of the crisis intervention teams were well-received, appropriately utilized, and much appreciated by Red Cross personnel in the field. There were difficulties, however, in the organization of the mental health response. A shortage of telephones and cellular phones made it difficult to obtain information in the field and to provide an organized response.

Senior Vice President, Alameda County United Way: Several United Way agencies provided counseling services to disaster victims, specifically Catholic Charities, Lutheran Social Services, Jewish Family Services, and Family Service of the East Bay. Services provided included individual counseling, support groups for survivors, community debriefings, telephone crisis counseling and information and referral services. Among other services offered by United Way agencies were legal, financial and housing assistance, clothing and food. An outstanding service that United Way provided was the preparation and distribution of the newsletter, *From the Ground Up*, that included comprehensive information regarding community resources. This newsletter was sent to the entire list of DAC registrants.

The United Way served, as well, as a focal point for coordinating the efforts of 50 new and pre-existing neighborhood groups, collectively entitled Phoenix Associations. The primary task of its organ, *The Phoenix Journal*, was "to help rebuild the East Bay and to maintain communication between the people who lost their homes on October 20, 1991, and among those whose homes survived."

The United Way participated, as well, in planning emergency preparedness activities, including spearheading the East Bay Fire Emergency Fund collaboratively with the Red

Cross. A Mental Health Task Force had been formed at the time of the fire within the United Way planning structure, specifically the Oakland Community Fund. Task force members identified mental health needs of fire victims and discussed strategies for allocating needs for services to school children in the impacted area.

Associate Director, University Health Service, University of California, Berkeley: The University's mental health response was directed to the university community. Approximately 500 students, faculty and staff lost their homes and were displaced by the fire. Crisis services were immediately made available under the University's emergency plan. University Health Service (UHS) staff integrated with Berkeley Mental Health (BMHS) personnel as part of their community crisis efforts. This mechanism was developed over the past years in response to the Loma Prieta Earthquake, a campus residential fire and a hostage event. As a result, both agencies were able to mobilize collaborative efforts for fire victims.

Although the campus was closed on the day following the fire, the UHS was fully staffed and functioned as a crisis center. Staff initiated crisis services, offered phone counseling and organized the University's response. The UHS has established linkages with local counseling resources as a result of the prior crises on the Berkeley campus. Their efforts on behalf of the fire victims in the university community were provided through NIMH funding as a subcontractor with BMHS.

The Survey

The following information was derived from the survey:

Prior Clinical Experience

The respondents, on the whole, had prior clinical experiences with all age groups, and with emergency service workers. The human service organization respondents worked with a broad range of groups in the community, including representatives of business and industry, and they participated in emergency preparedness activities.

Services Delivered

The public mental health agencies, with funds provided by FEMA/NIMH to the State of California, delivered a wide range of disaster mental health services to fire victims, including crises counseling, outreach to disaster victims, individual and group counseling, critical incident stress debriefing, assistance to fire and law enforcement personnel, school-based and hospital-based interventions, community organization, training and education. The volunteers provided clinical support in all of the activities of the mental health agencies where they donated their time. The organizations in the voluntary sector also provided a wide range of services to fire victims, including crisis and bereavement counseling, information and referral, assistance to families with young children and to older adults, housing assistance, and the coordination of volunteer efforts.

The public mental health providers were reimbursed by federal funds. Hospital-based services, however, did not receive special federal reimbursement. The non-profit agencies had a variety of sources of reimbursement, which however, were not governmental ones. They received reimbursement from the Red Cross, the Oakland Community Fund and the United Way.

Service Providers

In the public mental health sector, services were provided by both paid professional staff and volunteer psychologists, social workers, trained counselors, and psychiatrists. In the non-profit sector, service providers included nurses, health educators, social workers and administrative personnel. Professionals in both sectors were predominately Anglo, but also included Latino, Asian/Pacific Islanders and African-American staff. Some of the agencies in our sample hired additional staff to meet their disaster service needs: 1) the public mental health agencies added staff and contracted with consultants; 2) the Red Cross hired a disaster mental health specialist; and 3) the University of California, Berkeley contracted with consultants.

Service Recipients

The recipients of these services were predominantly Anglo adults. The children served represented a more diverse population as a result of outreach activities to the schools. The University of California, Berkeley population served was demographically representative of the campus population.

Use of Media

The media were instrumental in disseminating information about available services. All the mental health agencies prepared press releases and public service announcements for the print and electronic media. The United Way had the primary responsibility of preparing an information and referral newsletter that was mailed to all FEMA registrants. ACDMH disseminated information at the Disaster Assistance Center and prepared posters that were distributed community-wide.

Mobilization of Services

All agencies began delivery of their services immediately or during the first week after the fire. All the mental health agencies activated their disaster plans and mobilized their staffs. Both the public mental health and the voluntary sector organizations had developed mechanisms for alerting and recruiting staff in an emergency. Much of this seems to have been put in place since the Loma Prieta Earthquake. These agencies used telephone trees and other rapid mobilization techniques to alert their staff and volunteers.

All of the public and non-profit agency respondents perceived their efforts as effective or very effective in the immediate aftermath of the fires. The volunteers self-ratings of effectiveness varied, and appeared to be dependent upon whether their assignment

enabled them to use their clinical skills. Two of the agencies planned detailed evaluation of their services. BMHS intended to carry out pre- and post-testing of victims, evaluation of the volunteer response, follow-up of outreach efforts, and overall evaluation of services. The University of California, Berkeley planned a needs assessment and a detailed record study of the 500 fire victims who were either students or university personnel.

Demand for Services

The demand for services varied. There were fewer demands than expected at the DAC and various outreach locations. There was less demand than expected at the support group meetings held in the community. Clinical services for children were lower than expected at clinic locations, with more requests for services at the schools. The university hospital-based program reported more demand than expected. The volunteers in the mental health system reported disappointment with the demand for their services. The Red Cross respondents reported a greater than expected demand for crisis counseling but lower participation than they had expected for debriefings offered to Red Cross personnel. Non-profit agencies reported a range of responses in their expected demand for services, with the majority stating either a greater or as expected demand for services.

Preparedness

All respondents reported being well-prepared for this disaster because of their participation in previous community-scale crises. All agencies reported having a disaster plan, and except for the hospital-based programs, participating in county-wide planning activities. The public mental health agencies had received formal training in disaster interventions, including critical incident stress debriefing training. They had participated, as well, in prior NIMH-funded training programs. The University hospital-based program reported having received no formal training in disaster interventions. The volunteers reported having received "some" or "extensive" training. The non-profit sector respondents had not received specific disaster training; however, all had received crisis intervention training as it was relevant to their work. Respondents from nine public and United Way agencies reported offering critical incident stress debriefings, support groups and stress management workshops to help mitigate the stress of their workers. One-half of the volunteers in the sample reported having received such interventions.

Coordination

All respondents reported familiarity with the range of crisis services available in the community; however, coordination among providers varied. The public mental health systems reported good coordination with other providers during the fire. This included deployment across jurisdictional lines, as there had been long-standing coordination with city emergency services. The hospital-based programs reported limited coordination. The non-profit agencies reported limited coordination with public mental health agencies, although they reported extensive coordination among themselves.

The respondents reported the following cooperative arrangements: University of California, Berkeley worked with BMHS and Red Cross staffs; campus-wide crisis teams worked with fire and police. ACDMH shared resources with Solano, Santa Barbara, San Mateo and Santa Clara county mental health departments, and the Red Cross. Children's Hospital-Oakland offered evaluation and consultation to local school districts. Family Service of the East Bay cooperated with the Red Cross and United Way community-based organizations. The Chamber of Commerce provided staff support and materials, assisted the City of Oakland at the DAC, and participated in the Fire Coalition. Berkeley-Oakland Support Services worked closely with other relief agencies such as the Red Cross and the Salvation Army. Alta Bates Hospital-Older Adults Services Center networked with other services for the elderly. The United Way Information and Referral served as an information clearinghouse and published daily updates. Eden Information and Referral cooperated with other agencies, including the Red Cross, in providing housing lists and housing referrals. The Volunteer Center, Inc. was the clearinghouse for volunteers to many other organizations and agencies, and served as the liaison to the Red Cross, the Salvation Army, City of Oakland, and Office of Emergency Services. Bananas, a child care resource agency, shared resources with other childcare providers.

Obstacles to Service Delivery

Public Mental Health Agencies

The major obstacles reported by public mental health systems were the lack of coordination and cooperation with other mental health jurisdictions and with other emergency services providers. There were also problems in dissemination of information about services and lack of immediate publicity about services offered. There was a time-lag in implementing services for school children, difficulties in determining where to locate mental health services, and staffing problems. BMHS was burdened with calls from private practitioners volunteering their services. There were problems integrating these volunteer services with those provided by the staff.

Hospital-Based Mental Health

Children's Hospital-Oakland reported a lack of coordination of service delivery, stating that the needs of children were neglected because of the trauma being experienced by the adults. The respondent also reported organizational problems in service delivery due to a lack of recognition of children's needs and where services for them should be located. He observed, as well, resistance by officials to early intervention efforts on behalf of children.

Volunteer Clinicians

The major obstacles reported by the volunteer clinicians were: the lack of organization of the public mental health agencies, their staffing problems and confusion about the location of services. The overabundance of volunteers created confusion in making assignments and problems in the allocation of volunteers to sites in the community.

Volunteers also cited general communication problems between the public mental health agencies, and poor information dissemination to the public. Respondents from neighboring Solano and Marin counties reported ACDMH's resistance to placing professional volunteers in the field after the disaster. American Red Cross volunteers reported poor organization within the Red Cross as well, stating that they were not informed about the availability and role of stress counselors.

Voluntary Sector Agencies

Major obstacles were also reported by respondents from the United Way agencies. Family Services of the East Bay reported that the ACDMH was unresponsive to their offers of assistance and that Red Cross administrators appeared disorganized. The Alameda County United Way reported that there seemed to be considerable confusion and lack of organization among all parties concerned in the response. Bananas reported that the large number of volunteers offering help overburdened their system.

Respondents reported a lack of sensitivity by the Red Cross and the City of Berkeley to the needs of the homeless in the city, when priority was being given to the fire victims. The issue of the competitive needs of these two populations surfaced specifically in relation to providing emergency shelter to fire victims, and apparently neglecting such needs in the homeless. The fire victims, however, represented a different socioeconomic class than the homeless, and there was strong community reaction to assigning priority status to this "privileged" group of disaster victims.

Recommendations From Survey Respondents

Public mental health agency respondents recommended that their planning efforts for future disasters should take into account a number of problem areas: 1) better integration of mental health efforts into the city disaster plan through ongoing coordination with city officials; 2) better assessment of mental health needs to determine where services are to be located and personnel reassigned; 3) integration of support groups with existing community institutions such as the PTA and Senior Citizens centers; 4) provision of more comprehensive information to mental health workers regarding where services are available in the community; and 5) clarification so that mental health workers can gain access to shelters, the DAC and other locations where access is limited to emergency services personnel.

Respondents in United Way agencies recommended the following planning areas: 1) increased disaster planning, training and availability of funds for survivors; 2) fuller access to underserved and vulnerable populations through better coordination with the lead agency; 3) substantive cooperation and mobilization of interagency networking capacity by the lead mental health agency; 4) better community-wide coordination and integration of crisis services; 5) rapid assessment of technical needs, including phone, FAX and other forms of communication at the time of the emergency and in the immediate aftermath; and 6) a phone line at the United Way Information and Referral set aside exclusively for disaster victims and their needs.

Respondents in both public and non-profit agencies reported the need for more of the following services: 1) individual services, case management and household advocacy; 2) outreach, home visits and aftercare; 3) planning for children's needs and services to schools; 4) practical assistance and advocacy for victims; 5) public information services; and 6) debriefing and support for crisis intervention workers.

DISCUSSION

The Immediate Response

The major firestorm spread through affluent hillside communities and resulted in almost total residential loss. The population was composed of predominantly long-term residents who owned homes in the East Bay Hills: There were also apartments burned and renters displaced. Taking into account the scale of the fire, there were relatively few fatalities or injuries requiring hospitalization.

Public mental health agencies, namely Alameda County Department of Mental Health (ACDMH) and City of Berkeley Mental Health Services (BMHS), were involved immediately in offering crisis services to disaster victims. They mobilized and dispatched staff to the scene of the fires, providing assistance to emergency service workers and to fire victims. Although the public mental health response was timely, there were problems with coordination, allocation of resources and utilization of professional volunteers. These problems were often a result of the absence of pre-disaster planning and networking among mental health providers, city and other emergency preparedness agencies.

Leaders within the public mental health systems were confounded by jurisdictional vagaries, and this affected adequate service delivery in the early phases of disaster response. Funding for mental health services following a disaster becomes available through FEMA and the NIMH. These funds are allocated to the local county mental health agencies. The designated county agency has the authority to contract for additional services from local providers. ACDMH was the key agency in this disaster and was responsible for staffing the DAC, Red Cross shelters and serving as primary liaison to the emergency services network.

The fire destroyed areas of Berkeley, and city mental health officials mobilized their disaster response based upon their perceived jurisdictional responsibilities to their constituency. ACDMH, however, initially received exclusive program consultation from the disaster coordinator of the State of California Department of Mental Health. Confusion occurred because BMH was only recently assigned jurisdictional independence as a free-standing mental health department. Because BMH had been overlooked initially by the State officials, conflicts surfaced between city and county systems. This created problems in service delivery, and turf issues emerged in the early aftermath of the fire. The city agency ultimately was included in the State of California/NIMH loop and prepared a request for funding.

Both systems had the experience and the training necessary to mobilize their resources for the fire victims. Alameda County had dealt with a major natural disaster, the Loma Prieta Earthquake, that occurred two years prior to the firestorm. The City of Berkeley had considerable experience with smaller-scale crises events, including a hostage crisis and a fraternity fire in the university area. The major problems, then, were in the areas of communication between the two systems, funded by NIMH, as well as their coordination with the other organizations providing counseling to fire victims.

There was an abundance of mental health and counseling services offered by the non-profit sector. United Way agencies, because of their administrative structure, customarily operated separately from publicly funded mental health agencies. However, a disaster implies a unique set of circumstances. There were problems in the delivery and utilization of counseling services. Although information regarding the availability of their services was well-disseminated, there were several factors that contributed to their underutilization. In the first week or two, disaster victims were primarily concerned with their basic needs. Mental health workers assisted in these early efforts, including escorting victims to the disaster zone and providing a presence at the DAC. As has been reported in other disasters, "counseling" services offered at the DAC were poorly utilized. The debriefing efforts offered by mental health professionals to the Red Cross volunteers were also poorly utilized due to fatigue and by the desire of the volunteers to return home after long shift times. Awareness of these problems eventually led to the formation of a mental health committee within the United Way planning structure, specifically within the Oakland Community Fund. The committee, formed in the wake of the fires, set about to address issues of need and resource allocation of public and private mental health services to residents of Alameda County.

The Volunteer Response

As in other recent disasters, there had been an outpouring of volunteers to assist in the mental health efforts of both the NIMH-funded public sector systems and the American Red Cross. Many of these volunteers had been trained by the local professional associations, the Red Cross and training provided by NIMH-funded programs in the Bay Area. Both public agencies reported difficulties in making effective use of the overabundance of volunteers who offered their services after the fire. This was a problem that United Way agencies had to confront, as well. The major issues had to do with screening of volunteers and administering the volunteer effort. Although there was a clear need for counseling services, agencies had difficulties integrating the volunteers into their efforts.

An example demonstrating the lack of effective coordination of formal and voluntary resources was the difficulties experienced by the American Red Cross in having their trained professional volunteers accepted by ACDMH in earlier phases of the disaster. That agency permitted the Red Cross mental health cadre to provide services only to Red Cross volunteer emergency service workers and not to disaster victims. Other trained mental health professionals also reported frustrations with the lack of receptivity by ACDMH of their offers to help.

The United Way agencies reported being overwhelmed, as well, by the volunteer response. These organizations lacked the administrative support which would have enabled them to utilize better this outpouring of help. This was particularly true in the early days of the disaster and its immediate aftermath. We saw in this disaster, then, the positive results of prior training efforts and the willingness of the private sector to offer assistance and the negative results of inadequate planning which would have enabled these volunteers to be utilized more effectively.

Community Organization

Because of the location of the fires in an affluent area, contiguous to a major university, and impacting residents who had lived there for many years, the outpouring of resources and offers of assistance were greater than in most disasters. Community homeowner associations rapidly mobilized on behalf of disaster victims. They developed a strong political voice to assure that the needs of the community were met. Outstanding in these efforts was the Phoenix Coordinating Council, an umbrella organization established in the wake of the firestorm to coordinate a network of existing neighborhood organizations in the devastated hillside communities. The Phoenix Coordinating Council established a newsletter, *The Phoenix Journal*, to disseminate critical information to area residents and to serve as a voice in influencing government agencies and insurers. The Phoenix organizations, for example, attempted to influence building codes and architectural policies of local government development and planning councils.

RECOMMENDATIONS

The results of this study clearly indicate that mental health and other human services were delivered in a timely fashion in the aftermath of the East Bay Fire. There were, however, problem areas that included: 1) inadequate pre-disaster planning, 2) lack of coordination, 3) communication difficulties between and within systems in the area of technical communication, 4) information-sharing between systems regarding the timing and location of the mental health service response, and 5) coordination of volunteer efforts.

On the basis of our analysis, we recommend that:

- 1) Public mental health agencies and non-profit organizations providing counseling should identify clearly in their pre-disaster planning activities their jurisdiction, role and activities.
- 2) Better coordination is necessary within and between systems during the immediate period following a disaster to assure more effective allocation of resources and delivery of services to the community.
- 3) Inasmuch as all the agencies reported a lack of telephone linkages within and external to these organizations, they should assess problem areas on the basis of all past disaster experiences and obtain technical assistance in order to improve emergency communications capabilities.

- 4) Pre-disaster guidelines should be established to assure essential networking capabilities within the mental health system and optimal information-sharing regarding the allocation of resources and services during a disaster.
- 5) A volunteer coordinator position should be built into an organization's disaster plan, and a screening committee established that would include representatives from local professional organizations.

ACKNOWLEDGMENTS

This study was supported by a grant from the Natural Hazard Research and Applications Information Center, the National Institute of Mental Health and the National Science Foundation. The authors gratefully acknowledge the assistance of The Public Health Foundation of Los Angeles County. Norman Farberow of Suicide Prevention Center/Family Service of Los Angeles assisted in the design of the study and critically reviewed the research instrument and the final manuscript. Brian Flynn of the National Institute of Mental Health critically reviewed the research instrument. Linda Fain of the State of California Department of Mental Health, William O'Callahan of the American Red Cross, and Sandra Pyer of the East Bay Community Foundation helped us to develop our sample of key informants and the expert review panel. We would like to thank Nancy Fernandez of the Alameda County Department of Mental Health, Sam Gerson and Chic Dabby of the Psychological Services Center/California School of Professional Psychology, Steve Lustig of University Health Service/University of California, Berkeley, Greg O'Ryon, Deborah Moore and Ruby Kamaka of the American Red Cross, Herbert Schreier of the Department of Psychiatry, Children's Hospital-Oakland, Carole Watson of the Alameda County United Way, David Wee of the City of Berkeley Mental Health Services, and Yigal Ben-Haim of Alta Bates-Herrick Hospital Burn Center for their cooperation during various phases of the research.