

## Psychosocial Care and Shelter Following the Bijlmermeer Air Disaster

**Marceline B.R. Kroon and Werner I.E. Overdijk**

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On the early evening of October 4, 1992, an El Al Boeing 747 freighter crashed only a few minutes after take-off into a large apartment building in the Bijlmermeer, a suburb of Amsterdam, The Netherlands. The impact and ensuing fire killed 43 people, including the three crew members and the only passenger, injured several dozens on the ground, and left over 260 people homeless. The unexpected, uncontrollable, and destructive nature of disasters makes people lose their sense of safety and of the predictability of the environment. Apart from their physical injuries and loss of property, air-crash survivors may also suffer severe emotional consequences. Not only passengers and crew, but also those who are hit on the ground, the families and friends of both groups, rescue workers, and support personnel may be affected [Brooks & McKinlay, 1992]. Clearly, most of the survivors will be in need of material support, such as money and housing, and also psychosocial aid. This aid should include activities that help people to come to terms with the psychological aspects of the recovery process, and opportunities to satisfy their interpersonal needs [Garaventa Myers, 1989].

This article reviews the management of the psychosocial aid and aftercare provided for survivors in the context of the Bijlmermeer air disaster. The research on which it is based included an examination of all relevant city documents, interviews with some 40 city officials and representatives of other aid agencies, and a comprehensive media archive. We will explore how the local authorities coped with the organizational challenges involved in responding to the needs of survivors, and discuss the implications of the findings for preparing for and responding to other aircraft emergencies.

### **Survivor Characteristics Influencing the Need for Psychosocial Care**

In disasters like this, ordinary people, those on the plane as well as people on the ground, suddenly become fatalities or survivors. Here, we will use the term “survivors” to characterize the surviving inhabitants of the stricken apartments, those present at the disaster site at the time of the crash, the families and friends of both groups, and the bereaved. Psychosocial care for disaster survivors requires a different approach than is used in treating the mentally ill [Hodgkinson & Stewart, 1991; Lebedun & Wilson, 1989; Tierney, 1989]. For one thing, survivors find it difficult to recognize their psychological reactions and are reluctant to

seek psychological and psychiatric help. This is generally attributed to their unfamiliarity with the symptoms of psychotrauma and with the kind of services provided by mental health agencies, and to the stigma associated with this form of aid [Gist & Stolz, 1982; Hodgkinson, 1989; Mangelsdorff, 1985; Mehta, 1991; Stewart, 1989 a, 1989 b; Williams et al., 1988; Yates et al., 1989]. In addition, the specific needs of survivors are influenced by demographic characteristics such as age, ethnic background, and socioeconomic status, and by previous traumatic experience [Garaventa Myers, 1989].

#### Survivors of the Bijlmermeer Air Disaster

Most survivors of the Bijlmermeer disaster were immigrants coming from the Dutch Antilles, Aruba, Surinam, Ghana and other parts of Africa, Turkey, India, Pakistan, and some Arabic-speaking and Spanish-speaking countries. There were only a few native Dutch people among them. The survivors had a relatively low socioeconomic status and level of acculturation, and there was a considerable number of illegal immigrants among them. Moreover, some had traumatic experiences in their home countries, such as political persecution, or involvement in the SLM air disaster at Zanderij airport, Surinam, in 1989. In short, the crash struck a socially vulnerable and multicultural community.

#### **Functions and Use of Shelters**

Temporary sheltering does much more than just provide physical shelter [Quarantelli, 1991]. Evacuees also have to be fed, and, especially if evacuation has been unexpected and the predisaster homes have been destroyed or damaged, need further material support such as clothing and financial aid. Mass shelters also serve as information centers and consultation sites. Meeting others similarly affected at the shelters may help survivors to make sense of the situation, evaluate their own reactions, and develop coping alternatives [see Buunk, 1992; Yates et al., 1989]. Furthermore, shelters seem to fulfill a symbolic function, signifying that the government cares about the survivors and is prepared to help them [t Hart, 1993].

Shelters serve to improve the efficiency and speed of the helping operation, since they allow access to many survivors at a time. Wartime experience has shown that the ideas of "immediacy," "proximity," and "expectancy" (of returning to normal functioning and to work) reduce the number of long-term wartime psychiatric casualties [Mangelsdorff, 1985]. With respect to disasters, Raphael [1986] cited studies indicating that evacuation of survivors to a place far from the disaster area has a negative effect on mental health. Timely, on-the-spot interventions and the expectation that psychological reactions are normal and will pass are generally advocated in postdisaster mental health care [Butcher & Hatcher, 1988; Jacobs et al., 1990; Mangelsdorff, 1985; Williams et al., 1988]. However, no long-term systematic studies using control group designs to assess the effectiveness of the mental health interventions after disasters have been reported [Mangelsdorff, 1985; Yates et al., 1989].

Disaster research consistently shows that public shelters are generally underutilized, because survivors prefer to seek refuge with relatives and friends.

However, the lower survivors are on the socioeconomic ladder, the more likely they are to use mass shelters [Drabek, 1986; Quarantelli, 1982, 1991; Tierney, 1989].

#### Shelter After the Bijlmermeer Air Disaster

In The Netherlands, it is standard practice to organize public shelters in the event of a disaster or major accident. Directly after the Bijlmermeer disaster, the local authorities set up three shelters, one in each of two sports centers and one in a school. In addition, there were several spontaneous initiatives to provide shelter by schools, churches, community centers, and private persons. In the course of the evening of the crash all the official shelters were centralized in the Bijlmermeer sports center. On the first night about 200 evacuees were accommodated, and 36 wounded were taken to hospital. In all, 266 apartments had been rendered uninhabitable by the crash. Estimating an average of three persons per apartment, and considering the fact that 43 bodies were eventually identified, we calculated that about one third of the people living in the disaster area initially went to the public shelters. This confirms the earlier finding that many homeless seek shelter elsewhere.

The use of the public shelters was undoubtedly reduced by the fact that many of the survivors were illegal immigrants, who feared the registration at the official shelters. The authorities, however, announced soon after the disaster that all survivors, regardless of their legal status, would be treated equally and given the help they needed. In this respect, it should be noted that the authorities were not solely concerned with giving aid. They also had an interest in determining the number and identity of the victims as accurately as possible. For that purpose, the assistance of the illegal immigrants was indispensable.

In the Bijlmermeer sports center, comprehensive care, i. e., material, legal, medical (first aid), and psychosocial aid, was provided under the same roof. Such a procedure saved the survivors the trouble of going from office to office. This policy seems to be commendable in general, but in this case it was especially beneficial. Considering the multicultural background and acculturation level of the survivors, many of them would probably have had difficulty finding their way in the Dutch bureaucratic system.

#### Different Locations

In addition to the Bijlmermeer sports center, where survivors could stay during the day, the city authorities set up night shelters in four different locations, i.e., two municipal buildings, a school, and a navy barracks. In contrast to the experiences reported in other disasters, there were no difficulties in getting these facilities opened, staffed, and supplied [see Quarantelli, 1984].

Using separate shelters for sleeping and day care can be practical, because both require a different infrastructure. However, the distance between the shelters in this case posed a number of difficulties. First of all, it complicated the coordination and exchange of information between the different organizations and services involved. On the first evening, this problem was made worse by the poor quality of the telephone connections, which quickly became overtaxed. The lack of communication resulted, for instance, in uncertainties at the night shelters about how many survivors had to be accommodated, when they would arrive, and

whether or not they would need meals. Furthermore, the dispersal of the survivors hindered registration, and impeded accurate dissemination of information about the fate of missing persons. Finally, the night shelters, which were located relatively far from the Bijlmermeer sports center, necessitated transportation by buses, which meant extra organization and an extra check-in point. To keep track of survivors and to preclude misuse of the services by fraudsters, the survivors had to check in every time they entered or left the shelters and buses. This procedure of course involved several registration checks a day, and was aggravating for survivors as well as disaster workers.

### **Registration of Survivors and Helpers**

It is vitally important for postdisaster recovery that survivors, relatives, friends, and other interested parties be informed as quickly and accurately as possible about the fate of their missing loved ones. Therefore, every effort should be made to carefully register survivors and identify the dead [Raphael, 1986]. The helpers and counselors should also be registered, noting their names, credentials, times of arrival and departure, and the survivors they work with. In this way, their specific skills can be optimally tailored to the needs of the survivors, a certain amount of continuity in counseling can be provided, and helpers can be protected from working too many hours without rest [Jacobs et al., 1990].

#### Registration in the Bijlmermeer

Both of these requirements were poorly met after the Bijlmermeer air disaster. It should be noted, however, that accurate registration of survivors and identification of the dead were particularly difficult in this case. In most air disasters it is the passengers and crew who are the victims, and they have usually been registered by the airline or travel agency. In this case, however, because most of the victims were on the ground, the list of passengers and crew was of little help. Registration and identification was further complicated because the city's data for the population in the affected neighborhood were seriously flawed as a result of the large number of subtenancies, which allowed many inhabitants to live there anonymously.

For these reasons, the authorities had to start practically from scratch in composing lists of survivors, missing persons, and fatalities. On the evening of the crash, the district authorities set up telephone lines for the reporting of missing persons. At the same time, the police had staffed a check-in point at the entrance of the Bijlmermeer sports center where survivors were registered and could also report people they were missing. Nevertheless, the registration procedure was initially inadequate due to the lack of standard forms specifying the data to be recorded and the use of unqualified personnel. At first there was no exchange of information between the different registration sites. Moreover, missing persons were often reported under different names, and the foreign names posed spelling difficulties. Last but not least, the illegal immigrants among the survivors were reluctant to report themselves or their missing relations and friends to the authorities. It took some time before the authorities mastered these difficulties.

The registration and identification of helpers also posed some problems. There was little control of credentials, allowing pseudo-helpers, some of whom

turned out to be drug dealers, to enter the shelters. It is difficult to check helpers' credentials, since not all of them are professionals working in formal institutions. However, the fact that different forms of psychosocial aid, such as psychological counseling, ministerial work, and support by interest groups, were coordinated separately may have unnecessarily complicated control of the situation.

#### Survivors and Pseudo-survivors

In contrast to the normal finding that survivors prefer to avoid mass shelters, the number of people applying for shelter increased significantly in the days after the crash. The Salvation Army and the Social Security Service recognized several of their clients from non-affected parts of Amsterdam among the survivors. These developments made the authorities suspect that a number of people were taking advantage of the services for survivors. They introduced a more strict check-in procedure, and gave out identity cards to both survivors and disaster workers.

However, while this policy looked good on paper, in practice there were serious problems of implementation and control. First of all, it was difficult to formulate explicit criteria to determine who was entitled to aid. As noted before, population data concerning the affected community were flawed, so anyone could claim to have lived there. The lack of suitable equipment and personnel to produce large numbers of identity cards at short notice caused long queues of sometimes outraged survivors and helpers in front of the distribution office. Furthermore, there was some uncertainty about whether all survivors and helpers needed an identity card. Finally, since the registration procedure requested personal data, it kept illegal immigrants away from the shelters. This was not only against the official policy that all survivors, irrespective of their legal status, were entitled to aid, but also against the desire of the authorities to be accurate in determining the number and identity of the fatalities. Therefore, after a while the district authorities and the police issued special day tickets for the shelters as well, for which registration was not required.

Obviously, some form of control was necessary to counter improper use of services, and to keep track of clients [see Jacobs et al., 1990]. At the same time, any attempt to control and possibly exclude people from services was likely to encounter considerable opposition. Because the disaster struck an underprivileged district, it might have reinforced preexisting feelings of relative deprivation among the inhabitants. Furthermore, because of their common predicament, strong bonds between survivors often develop. Such high in-group cohesion can easily be accompanied by out-group hostility, especially when the out-group threatens to act against the in-group's interests [see Brown, 1988]. The authorities clearly underestimated the difficulties of implementation and control involved in the check-in procedure. It reduced the number of people using the shelter facilities as intended, but it should have been prepared more carefully.

#### **Planning and Coordinating Psychosocial Services**

Although the psychosocial consequences of disaster are well documented [e.g., Gist & Lubin 1989; Raphael 1986], it has been found in the United States that airports and airlines often lack facilities for the organization and supply of psychological services to crash survivors and their relatives [Butcher & Hatcher, 1988;

Butcher & Dunn, 1989; Anderson, 1988]. The same holds for The Netherlands. At the time of the Bijlmermeer disaster, the Amsterdam Municipal Disaster Plan [1988] did not include psychosocial care for survivors. Schiphol airport has only recently (after the Bijlmermeer disaster) developed plans on psychosocial care for survivors and helpers [Schiphol Airport Emergency Plan, 1991/1993], and major Dutch carriers are currently developing such plans.

Providing shelter and support to disaster survivors requires an integrated effort by many different aid agencies. The diversity of the organizations involved in disaster relief, and the complexity and uncommonness of the situation, necessitate careful disaster planning and training. Participating organizations should be made familiar with each other's activities, and there should be regular disaster drills [Garaventa Meyers, 1989; Quarantelli, 1980, 1984].

In the first few days after a disaster, coordination is usually facilitated by a high degree of solidarity among all those involved. However, over a longer period of time, ambiguity concerning roles and tasks, fatigue, and emotional strain will start taking their toll, and disputes of competence often arise [Hodgkinson, 1989; Quarantelli, 1984; Raphael, 1986; Tierney, 1989]. Coordination is further affected by the nature and strength of the interorganizational ties. It is not uncommon in disaster situations for new structures of authority to emerge. Organizations with relatively high levels of experience or information, such as the police, are usually accepted as coordinators by the other services involved [Quarantelli, 1980, 1984]. These processes were also visible in the aftermath of the Bijlmermeer disaster.

#### Coordination at the Bijlmermeer Sports Center

After the Bijlmermeer disaster, a variety of municipal and other organizations provided shelter and gave psychosocial aid. On the first evening, representatives from the helping organizations formed a coordinating committee. They met twice a day, with the police chairing the meetings. In addition, a committee of survivors was created, cochaired by a church representative and the manager of the Bijlmermeer sports center. Twelve different groups were represented: Africans, Antillians, Arabic-speaking people, Arubans, Cape Verdeans, Dutch, Ghanaese, Israelis/ Jews, Pakistanis/Indians, Spanish-speaking people, Surinamese, and Turks. This survivor committee dealt with language problems and requests for help. The chairpersons communicated these requests to the coordinating committee, of which they were also members.

The disaster plan for Amsterdam contains a detailed section on evacuation and sheltering, including specifications of the tasks and responsibilities of different municipal and other organizations. Nevertheless, the coordination in the shelters did not function as planned. The general coordination center at City Hall, headed by the Mayor, assigned responsibility for coordination in the sports center to the District Council of the affected area. In a recent reorganization of the administrative structure of Amsterdam, relatively autonomous Districts were formed. However, the role of the District authorities had not been formalized in the municipal disaster plan. When the District officials moved to take over command in the sports center, they found the police already firmly in charge. The formal authority given to the District Council by the coordination center at City Hall did not legitimize their taking control in the eyes of the different parties in the sports center. This remained so throughout the existence of the shelter,

and complicated the collaboration between the aid agencies at the shelters, as we will see next.

### Collaboration between the Aid Agencies

Some days after the crash, controversies between the services began to arise. To begin with, different views developed on the sort of support survivors needed first. Was information on insurance matters and permanent housing required instantly, or did they just need a shoulder to cry on? Did the day shelter have a symbolic or a purely instrumental function? One faction, which included the City and District authorities and the mental health centers, stressed the importance of collective mourning and coping with grief. In their view, comprehensive care should be provided under one roof, by both black and white disaster workers. Other services, such as the Social Security Service, defined the day-care shelter more narrowly as an information center. They noted the development of isolated support factions within the Bijlmermeer sports center, and an increasing number of pseudo-victims illegitimately using the shelter's facilities. A week after the crash, these differences of opinion culminated in a conflict about when to close down the services at the day shelter. Eventually, the coordination center at City Hall decided that the services would be gradually diminished in order to prevent survivors from feeling abandoned. This episode clearly illustrates the lack of actual authority the District authorities had over the City services, who only accepted orders to remain at the shelters from the City authorities.

Another controversial issue concerned how to deal with ethnic differences between the survivors. Should all survivors be treated as one group, or should differences in ethnic identity be considered? And could white disaster workers be of any help to black survivors? For some groups of survivors, any help was welcome, regardless of the color of the person who offered it. But others initially refused all contact with white helpers, and strongly distrusted the authorities. While these fears soon subsided, other problems stemming from cultural differences arose. For example, the Western type of psychosocial care was somewhat less tangible and prescriptive and used less outreach than some survivors were used to. Also, some bureaucratic practices, such as requesting survivors to fill in standard forms and to show their papers, even though their houses and possessions had been destroyed, met with disbelief and indignation. The help of representatives of the ethnic groups involved proved to be essential in bridging these cultural differences.

### Dealing with the News Media

Air disasters typically receive a great deal of public attention and extensive media coverage. This may be attributable to their unpredictable and highly destructive nature, which allows the victims little chance of escape [Perrow, 1984]. The Bijlmermeer air crash, like the 1988 Lockerbie disaster, may have been even more shocking because not only passengers and crew fell victim to it, but also people on the ground. Passengers and crew can be assumed to be aware of the risks involved in flying before they board the airplane, while those on the ground are totally unprepared for their ordeal [Crisis Research Center, 1993; see also Gist & Stolz, 1982].

While the press can adversely affect a relief operation in various ways, such as by blocking the way of helpers, releasing unchecked, incorrect news, interviewing survivors, and obtaining confidential information from inexperienced relief workers and volunteers [Jacobs et al., 1990; Quarantelli, 1980], the media can also be a valuable source of information and advice on how to cope with the consequences of a disaster [Jacobs et al., 1990]. Successful partnerships between authorities and the media can develop, with the mental health authorities providing the media with valuable resources for stories, and the media ensuring broad and consistent coverage of the mental health messages [Gist & Stolz, 1982; Williams et al., 1988].

#### Media Policy after the Bijlmermeer Air Disaster

Large numbers of national and foreign media representatives converged early on the Bijlmermeer disaster site, the various coordination centers, and the shelters. In order to protect survivors from being troubled by journalists looking for sensational stories and pictures, the police kept the press out of the shelters. Unfortunately, the efforts to protect survivors in the shelters from media assaults had the side effect of discriminating against white survivors of the crash. Since most survivors were black, whites were often denied access to the Bijlmermeer sports center unless they could identify themselves as helpers.

Although the authorities responded adequately to the need to inform the public about the disaster and the relief operation, they seemed at least initially to regard the media as an enemy rather than an ally. The police treated media representatives brutally enough to make the Dutch Society of Journalists file a formal complaint. In the press conferences that were held two times a day by the Mayor, chief of police, and chief of the fire brigade, most attention was paid to the current state of affairs, such as giving updates on the numbers of casualties and fatalities. The authorities made less use of the media for disseminating information on the psychological reactions that survivors might experience following a disaster, how to cope with them, and what psychosocial services were available.

#### **Aftercare for Survivors and Helpers**

Since the municipal disaster plan did not contain a section on psychosocial aftercare for survivors and helpers, a plan was developed *ad hoc* by the municipal Mental Health Service, with the help of an external psychiatrist. The aftercare plan called for various forms of support, ranging from legal advice to psychotherapy, to be provided primarily within the survivors' existing social networks. When professional mental health services were deemed necessary, the plan advised referring survivors to the existing mental health organizations, instead of establishing a special aftercare organization.

Relying on community support systems and social networks, and integrating aftercare in the ongoing, established mental health care structures are effective principles in several respects. First of all, as pointed out earlier, survivors generally do not see themselves as disturbed, and are reluctant to seek professional help [Hodgkinson, 1989; Yates et al., 1989]. Community participation is typically high in the aftermath of even the most severe disasters [Tierney, 1989], and



such participation can positively affect the coping process [Raphael, 1986]. Also, support by existing social networks prevents language problems and ensures that interventions are in accord with cultural customs. Finally, using the regular, established service channels ensures the continuity of mental health care for survivors [Garaventa Meyers, 1989]. Despite these advantages, however, some important caveats can be identified.

This decentralized way of providing aid to survivors involves many organizations and requires a large amount of coordination and monitoring. However, it is doubtful whether the organizations will continue such coordination over a long period of time. For instance, the Mental Health Services in The Netherlands are autonomous organizations and are not used to central coordination of their activities [Meijer, 1992]. Coordination and monitoring were further complicated by the fact that survivors moved to different parts of the city, or even to other cities. Moreover, not all of the community support groups and social networks were capable of playing an extended role, leaving some survivors with unreliable social networks. According to the aftercare plan, they should then be helped by the professional mental health services. To enhance the accessibility and acceptability of these services to the multiethnic group of survivors, professionals from different cultural backgrounds were employed. Nevertheless, there were many complaints about insufficient tailoring of mental health interventions to different cultural customs and needs [Task Force Bijlmer Air Disaster, 1993].

Aftercare for disaster workers was provided by their own organizations. However, there was no guarantee that all agencies could adequately care for their own disaster workers. For instance, debriefings were mandatory in some cases, but voluntary or even absent in others, and the extent to which disaster workers were rewarded for their efforts differed considerably. Also, this scheme of aftercare for helpers did not provide for the many volunteers who did not belong to any formal organization. Volunteers are confronted even more strongly with unfamiliar roles and tasks than professionals, and therefore may be more uncertain about the demands of their role. Such uncertainty is known to contribute to the stressfulness of the situation [Raphael, 1986].

### **Conclusions and Recommendations**

What can be learned from the experiences of the Bijlmermeer air disaster about the management of psychosocial care in the aftermath of other emergencies? Evidently, the Bijlmermeer disaster was an unusual type of air disaster, with only a few victims among passengers and crew, and many more on the ground. It makes a considerable difference whether or not a disaster disrupts a local community, and whether people are caught up many miles from home, or are in a familiar environment. Thus, the recommendations that follow apply specifically to disasters affecting people in their own communities.

Concentration of the shelters improved the efficiency and manageability of the aid operation. When different shelters are necessary, they should preferably be located at close range. Furthermore, if possible, shelters should be located close to the survivor's former homes, avoiding disruption of existing social networks and assisting survivors to regain their sense of normality. In order to facilitate disaster recovery, assistance policies and practices should be tailored

to the specific demographic, cultural, and psychological characteristics of the survivor population.

The difficulties of coordinating psychosocial services provided for survivors are well-known, but even so they are often insufficiently prepared for. After the Bijlmermeer disaster, too, coordination posed a number of difficulties, including conflicts between the aid agencies at the shelters and problems in the provision of aftercare. Careful planning and training is needed, so that roles and tasks have been delineated as clearly as possible in advance, and organizations are familiar with one another's competencies and methods.

The registration of survivors proved to be very difficult in this disaster. This is a vital aspect of disaster relief, and deserves a corresponding amount of attention. Using standard registration forms from the very beginning, with rigorous procedures of signing in and out, are minimal requirements. This should apply to survivors and helpers alike; it serves to keep track of clients, and to hinder the improper use of the services for survivors.

The press is often considered a necessary evil in disaster relief. Care should be taken to protect survivors from unwanted intrusions by the media, and to check the broadcasting of rumors and misinformation. At the same time, good working relationships between the authorities and the media are desirable, so that the potential of the media as disseminators of information and mental health education can be exploited to the fullest extent.

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