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Introduction
There has been a considerable body of research over recent years demonstrating that in addition to any loss of life and injury, destruction of infrastructure and economic disruption, disasters also cause significant rates of psychological morbidity in both survivors and emergency personnel (Raphael et al, 1987).

A study into the consequences of the Newcastle earthquake (Carr et al, 1995) identified two broad factors responsible for psychological injury, namely:
• threat, arising from exposure to injury or possibility of injury
• disruption, a measure of issues such as property damage and displacement.

While both factors were significant predictors of morbidity, higher exposure or threat was associated with a greater use of support services, higher perceived stressfulness of the situation, and more severe psychological morbidity. Of those who were exposed to high levels of threat, 18.3% were regarded as 'at risk' for the development of post-traumatic stress disorder.

Post-traumatic stress disorder (PTSD) (Tiller et al, 1996) is one of the more common of psychological reactions to a disaster. First described in combat veterans, it is now recognised that similar difficulties arise in individuals who have been victims of disasters or accidents, or subject to a criminal victimisation. It seems likely that the condition has always been with us, but prior to recent times has received other names, consistent with beliefs concerning causation. For example, in the 19th century a pattern of symptoms were identified following railway accidents. This was attributed to 'spinal shock'. More recently, during the second World War, combatants were said to have developed 'shell shock'.

Post-traumatic stress disorder can be considered as a severe and sometimes persistent form of anxiety disorder, accompanied by intrusive and distressing memories, and generally also associated with avoidance behaviours. While the majority of individuals who develop PTSD will improve over a period of several months, chronic symptoms are common, although many will learn to live with them.

For some, PTSD can be a chronic disabling disorder. McFarlane (1986) has reported on the longitudinal course of PTSD in a group of South Australian fire fighters exposed to the Ash Wednesday bushfires. He found that the level of morbidity at 4 months of the disaster remained substantially unchanged at 29 months, at which time more than one-fifth of the firefighters were continuing to experience symptoms.

A wide variety of treatment measures and other interventions have been attempted with post-traumatic stress disorder. There seems to be no consenss as to the best form of treatment, and considerable debate as to what preventative value, if any, measures such as critical incident stress debriefing, might have (Raphael and Meldrum, 1995; Deahl et al, 1994; Kenardy et al, 1996). In view of this, there is a strong case for improving preventative possibilities. In a disaster, this would require examination of the means by which individuals are exposed to threat, or suffer subsequent dislocation.

The aim of this paper is to explore some of these possibilities for prevention, by examining some of the events occurring during the aftermath to the Port Arthur shootings.

Post Arthur - lessons for early disaster management

by Ian Sale and Peter Hessman, Hobart, Tasmania

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in and out of the site were difficult. These had important consequences for later developments at the site.

As evening fell, the majority of visitors and workers were still at the site, their numbers now swelled by various emergency personnel and volunteers, and other site workers who had arrived to assist. The majority congregated in various site buildings or in the motel. Their knowledge of what had occurred remained patchy.

Perhaps inevitably rumours started to spring up. There were concerns that there may have been more than one gunman, perhaps even a terrorist group, or that the gunman at Seascape might escape through the police cordon. Inevitably in this collectively anxious, vigilant and bewildered atmosphere someone heard, or thought they heard, gunshots.

It is easy to imagine what happened next. A wave of panic swept through the site. Darkness was falling, adding to the sense of vulnerability. The majority locked themselves into buildings, drew curtains and lay on the floor, and went through a lengthy period of extreme fear. Many were to say later that this period was even more terrifying than the time of the shootings. It was well into the evening before there was a significant and conspicuous police presence.

Other than adding to the feelings of insecurity, the limited police presence during the afternoon and early evening contributed to difficulties in adequately securing the several crime scenes, particularly the restaurant. Fortunately this had no impact upon the subsequent prosecution. However many individuals, emergency personnel and civilians were able to enter these areas without having legitimate cause to be there, and thus expose themselves unnecessarily to extremely distressing scenes.

The first counsellors arrived during the evening, transported to Port Arthur in a bus accompanied by armed police, at a time when information about the incident was very incomplete, and even police had concerns whether the offender was adequately contained at Seascape. It is doubtful whether the counsellors themselves felt particularly secure or whether they had any notion of the circumstances they would encounter.

Angry scenes occurred later in the evening when police insisted that visitors and site workers should attend counselling at a centre established at the Police Academy (on the outskirts of Hobart). Site workers in particular were reluctant, preferring to stay with their colleagues, or return home to their families. A compromise was reached when counsellors conducted a CISD session at a youth hostel at Port Arthur. Even then, some declined to attend.

Police recorded the names and addresses of those who were potential witnesses. However, many were not recorded. Unfortunately, no case registration was set up until three days later. The exact number of persons who were present at the site, or who arrived later, remains unknown.

Overnight, the police were held at bay at Seascape. Many of the Peninsula residents remained terrified that the offender would evade police and continue his rampage. One elderly couple reported that they had sat up all night, in darkness, listening for sounds of intruders and nursing a loaded rifle. They were probably not alone in maintaining such vigilance until the news broke in the morning that the offender had been taken into custody.

It is also clear that it was a lack of information that provided a fertile substrate for the development of rumour. That rumour and panic might spread through such a large group of frightened and bewildered individuals was probably predictable had it been considered.

Discussion

It can be seen that events and conditions conspired to cause the numbers of persons exposed to frightening circumstances to be greatly expanded beyond those who had the misfortune to be in or near the restaurant and adjacent areas, and thus increase the numbers at risk of psychological morbidity.

The events during those first few hours after the shootings illustrate how any distinction between ‘response’ and ‘recovery’ is a blurred one.

This account of these events is not intended to be critical of the police response. The situation faced that night was unprecedented, and the response was rendered difficult due to the remoteness of the area, the terrain and the communication problems. With the benefit of hindsight it will almost always be possible to argue that some things might have been different. However there are lessons to be learnt that may have relevance to future disaster responses.

It now seems obvious that conditions at the site would have benefited from a more conspicuous police presence, headed by senior personnel. This may have prevented or reduced the later rumour and alarm. It may also have been possible to more effectively secure the crime scenes in this location.

It is also clear that it was a lack of information that provided a fertile substrate for the development of rumour. That rumour and panic might spread through such a large group of frightened and bewildered individuals was probably predictable had it been considered. However, emergency services were focussed on the evacuation of the wounded and the siege.

It has also become apparent that there was considerable fear and bewilderment in the surrounding community. Their information was largely confined to that available through the mass media. Information released to the media was in part dictated by operational considerations, that is, the belief that the offender would also have access to television and radio. There may not have been an appreciation of the continuing apprehension amongst those who lived in the area. Inevitably, this also allowed rumour to flourish.

Finally, the role of counsellors must be considered. Undoubtedly police and other personnel needed assistance in coping with the large numbers of distressed visitors. General support, reassurance, information and practical help were all called for, and in general
were given. However, there seems to have been an expectation that the counsellors would ‘counsel’ and, in particular, that they would conduct group debriefing.

There appears to be an assumption that counselling will be required for those exposed to a disaster, but whether this assumption is based on research, or some intuitive belief that it must be helpful to get matters aired, is unclear. And, even if it is assumed that debriefing is helpful, is it reasonable for it to be compulsory (as for emergency personnel) or assertively encouraged (as for the civilians)?

A specific difficulty when a disaster arises as a result of criminal activity is that processes such as CISD may complicate the tasks of the investigators in gathering evidence. It is not unreasonable to fear that an individual’s recall of an incident may be contaminated by hearing others give their versions. This problem arose following the Port Arthur incident and was of concern to police (Bennett, 1997).

During these early hours after a disaster it is probably more important that the survivors feel safe (which in this instance was doubtful), that they are aware that their friends and family know them to be safe (also doubtful), that their physical needs and comfort are addressed, and that they have some idea of what has happened and what will happen.

Responding to those in distress is an intuitive human response. Rigid adherence to an institutionalised form of comforting in the form of psychological debriefing may inhibit more natural and common-sense expressions of care.

References

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Peter Hession is a Detective Constable, joining Tasmania Police in 1974. He has been serving with the CIB for 8 years and is a Specialist Detective. He was one of the first police officers to reach the Port Arthur Historic Site on the day of the massacre, and for the first few hours was in charge of that crime scene.

New UN Disaster Management Glossary
The United Nations Centre for Human Settlements (Habitat) in Kenya, along with the Disaster and Emergency Reference Centre in The Netherlands, has developed a first-draft Disaster Management Glossary.

Disaster reduction is gaining recognition as an important aspect of development planning. Information material and training programs in prevention and disaster management have increased in scope and number. The language of disaster management from various disciplines is for many planners still unfamiliar, and the glossary hopes to fill that gap and clarify terms used.

The list is multi-disciplinary, and most entries are coded according to the specific sector of disaster management from which the term comes. These include general disaster management (DM), technological disasters (TD), human settlement (HS), natural disasters (ND), emergency response (ER) and wildfire (WF).

The publication can be obtained for US$10 by contacting:
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