Psychological impact of body recovery duties

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Summary

The psychological effects of body recovery duties were studied in two groups, 28 specialized police volunteers and 40 ambulance workers. The Impact of Events scale and the General Health Questionnaire were administered to both groups. The results showed that 20% of the ambulance workers and 3% of the policemen were in the moderate to severe category of psychological distress. In neither group did age, number of incidents attended or years in service correlate with distress. Possible causes of the difference between the two groups, such as the way they were managed, are discussed.

Introduction

There is a growing body of work on the stresses undergone by emergency workers. Studies have been carried out on disaster recovery teams¹⁻⁵, firefighters⁶, ambulance workers⁷, police involved in shooting incidents⁸, on police after the Bradford City stadium fire⁹.

The recovery of bodies after accidents, and the handling and packaging of bodily remains is a terrible but necessary task. Ambulance workers may have to cope with life and death decisions, with the pleas of injured people, and with the sight of mutilated bodies. Body recovery teams, on the other hand, come on the scene when there is no longer any prospect of saving lives. They are spared some of the pressured decisionmaking, but also lose the potential reward of helping someone to live. Their task is without any immediate benefits, though there may be the satisfaction of finding bodies for loved ones to bury, and of providing evidence which may uncover the cause of an accident. Scrupulous care must be taken with even tiny portions of human flesh, making it very difficult for the people doing the job to avoid the horror of the work.

The purpose of the present study was to investigate the psychological effects of body recovery work in two different populations, using a methodology which would allow comparison with contemporary research on rescue teams and groups of survivors. Ambulance workers were chosen as a group under chronic stress and a specialized police team as a group experiencing acute episodic stress. It was hypothesized that the results would be very much in line with the bulk of the previous literature, in that about 10% of the team would be showing psychological distress. It was further assumed that distress would be related to the number of disasters attended or to years in service. The way in which the team had been managed was, on balance, not expected to have a major effect on distress levels.

Methods

The Heathrow Police Victim Recovery and Identification team was formed out of 28 experienced police officers, who had received some training in 1988. Membership was voluntary, and the team had been constituted in anticipation of an aircrash in the vicinity of Heathrow airport. They worked at Lockerbie in December 1988, assisted with body recovery duties when the *Marchioness* pleasure boat was sunk in the Thames, in August 1989, and at a helicopter crash in December 1989¹⁰.

In each of four regional divisions of the London Ambulance Service 10 qualified ambulance workers were drawn at random, providing 40 subjects in all. As full-time workers they were required to answer all emergency calls¹¹.

Two questionnaires were administered in conditions of strict confidentiality. The General Health Questionnaire (GHQ) 28 item version¹², was chosen because it has been standardized for use with the general population, is widely used as a screening instrument giving a probability estimate that an individual is a psychiatric case, and has generated an increasing body of comparative literature. The Impact of Events Scale (IES)¹³ was chosen because it was specifically designed to measure the pressure of memories of traumatic events, and seemed to offer a measure of the mental burden caused by an event, without assuming that symptoms had resulted.

Results

The 28 policemen had a mean age of 38 [standard deviation (SD) 6.3], 15.8 years of service (SD 5.3) and had attended a mean of 1.8 major body recovery incidents (SD 1.0). The officers were middle aged, and had extensive police experience.

The 40 ambulance workers who took part in this study included 31 men and 9 women. Most workers had spent more than 10 years in the service.

Table 1 shows the questionnaire results for both groups on the IES and GHQ. The policemen have scored far lower on these questionnaires. Their IES scores are only slightly higher than the normal comparison who consisted of medical students who had dissected their first cadaver a week previously. The IES scores for ambulance workers are midway between the control and stress clinic patients¹³.

Using the usual cutoff points on the GHQ, 24 of the ambulance workers would be considered as showing probable psychological distress, a rate of 60%, and eight of those were in the moderate to severe category, a rate of 20%. For policemen the rate for probable distress was 16%, with 3% in the moderate to severe category. Paper read to Section of Psychiatry, 10 December 1991

Table 1. Scores on the General Health Questionnaire (GHQ), the Impact of Events Scale (IES)

	Policemen (n=28)		Ambulance workers (n=40)	
	Mean	SD	Mean	SD
GHQ (somatic)	0.8	1.7	2.08	1.76**
GHQ (anxiety)	0.4	0.8	2.63	2.48***
GHQ (social dys- function)	0.5	1.2	1.45	2.08*
GHQ (depression)	0.2	1.1	0.63	1.44 ns
GHQ (total)	1.9	3.7	6.75	5.76***
IES (intrusion)	7.6	7.4	13.80	8.68**
IES (avoidance)	4.7	6.9	12.33	8.19**
IES (total)	12.3	12.3	25.88	15.54***

*Significant at P < 0.05

**Significant at P < 0.01

***Significant at P < 0.001

In neither the case of the policemen nor the ambulance workers were stress levels correlated with age, number of incidents attended or years in service. However, ambulance workers reported that accidents involving children and major disasters were subjectively the most stressful.

Discussion

There are many possible reasons for the differences between these two groups. Policemen occasionally recover bodies, ambulance workers do so on a regular basis. The police have a much higher public profile, and higher wages. The ambulance service perhaps felt more like a Cinderella, possibly because their work was seen as less dramatic. Ambulance workers must perform extraordinary tasks, which are sometimes exhilarating, as when a life is saved, but often mundane and unpleasant. They see people at moments of crisis, when most social restraints are absent, and witness the pain and distress of families by entering the privacy of their homes. They are at risk of contracting diseases and being injured in assaults, must often pick up bodily remains after accidents, and yet never know what scene will face them when they reply to an emergency call.

The spontaneous comments made by policemen during the questionnaire filling and the subsequent discussion revealed an extroverted well-knit team, with many jokes and friendly banter between the officers. At the same time, when prompted to talk about their reactions, they kept a respectful silence when one officer said that he felt that the degree of support from spouses was crucial, and that he had been 'written off' for 5 weeks after Lockerbie. Several others admitted that their Christmas had been ruined, and that they expected their feelings about Christmas to be permanently changed. At the same time, their complaints were about the lack of suitable overalls for doing the job, rather than any need for emotional support. They were also aggrieved that no senior officers were on hand to greet them when they returned from Lockerbie.

Ambulance workers complained of pressure of work, of the emotional and physical demands of being on call, of changing shiftwork patterns, of a poor relationship between management and crews and of not being valued for their skills.

The basic management approach in the Heathrow team was to stress the voluntary nature of the work, and to constantly keep in mind the welfare of the officers. Even on arrival at Lockerbie, officers were told that they could stand down from duties, and that this would not be held against them. The usual adherence to strict police discipline was not insisted upon, and, faced with this unusual and terrible task, officers were allowed to add a measure of spirits to their hot drinks. Furthermore, the usual social distance between the commanding officer and the men was reduced, and the team worked together with little regard for rank. Off duty the team dined together, often joking about the task to relieve their tension, and then went to a private room together, where they had a debriefing session for about an hour. The focus of the discussion was on practical issues, but officers also talked about their reactions.

It appears that the potential trauma of the horrific task of victim recovery and identification can be considerably reduced by the selection of stable and extroverted individuals, who are given training in carrying out their task, managed in a humane, concerned manner, and monitored thereafter as a further expression of concern for their welfare.

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References

- 1 Raphael B, Singh B, Bradbury L, Lambert F. Who helps the helpers? The effects of a disaster on the rescue workers. *Omega* 1983-84;14:9-20
- 2 Taylor AJW, Frazer AG. The stress of post-disaster body handling and victim identification work. J Human Stress 1982;8:4-12
- 3 Paton D. Disasters and helpers: psychological dynamics and implications for counselling. *Counsell Psychol Q* 1989;2(3):303-21
- 4 Paton D. Assessing the impact of disasters on helpers. Counsell Psychol Q 1990;3(2):149-52
- 5 Ersland S, Weisaeth L, Sund A. The stress upon rescuers involved in an oil rig disaster. Acta psychiat scand 1989;80(suppl 355):38-49
- 6 Hytten K, Hasle A. Fire fighters: a study of stress and coping. Acta psychiat scand 1989;80(suppl 355):50-5
- 7 James AEC. Perceptions of stress in ambulance personnel. Work Stress 1988;4:319-26
- 8 Stratton JG, Parker DA, Snibble JR. Post-traumatic stress: Study of police officers involved in shootings. *Psychol Rep* 1984;55:127-31
- 9 Duckworth DH. Psychological problems arising from disaster work. Stress Med 1986;2:315-23
- 10 Thompson JA. The management of body recovery after disasters. Disaster Mgmt 1991;4:206-10
- 11 Thompson JA, Suzuki I. Stress in ambulance workers. Disaster Mgmt 1991;4:193-7
- 12 Goldberg DP, Hillier VF. A scaled version of the General Health Questionnaire. *Psychol Med* 1979;**9**:139-45
- 13 Horowitz M, Wilner N, Alvarez W. Impact of Events Scale: a measure of subjective stress. *Psychosom Med* 1979;41(3):209-18

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