

Psychological Debriefing and Prevention of Post-Traumatic Stress *More Research is Needed*

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Attempts to prevent or minimise psychological morbidity following traumatic events have resulted in calls for the routine provision of early psychological intervention for the victims of trauma. These calls are based on the hypothesis that the earlier intervention occurs, the less opportunity there is for maladaptive and disruptive cognitive and behavioural patterns to become established (Rachman, 1980).

Early interventions are intuitively appealing and a response to perceived need, but do they work? This paper focuses on the evidence for the effectiveness of psychological debriefing (PD) which is probably the most widely advocated preventative intervention at present.

What is psychological debriefing?

Jeffrey Mitchell, an American psychologist, initially described “critical incident stress debriefing” (CISD) with ambulance personnel in 1983. CISD has been modified and expanded by others including Dyregrov (1989), who coined the term PD. It has been used with those directly involved in traumatic events, emergency service workers, and the providers of psychological aftercare.

PD is a structured intervention designed to promote the emotional processing of traumatic events through the ventilation and normalisation of reactions and preparation for possible future experiences. Although initially designed for use in groups, it has also been used with individuals, couples and families. A typical PD takes place 2–3 days after the trauma as a single group meeting lasting approximately two hours.

How effective is psychological debriefing?

Anecdotal reports of the effectiveness of PD are plentiful (Dyregrov, 1989; Armstrong *et al.*, 1991) and have fuelled its increasing use. However, the vast majority of published data suffer from a variety of serious methodological difficulties which are summarised in Table 1.

Uncontrolled studies

The first group of data-containing studies lack any control or comparison groups. Sloan (1988) described

Table 1
Common methodological shortcomings in psychological debriefing (PD) research

Not prospective
Small sample size
Absence of control group
Varying degrees of trauma
Absence of random allocation
Other confounding variables ignored
Low response rates
Sampling bias
Lack of uniformity of PD
Timing variance
Questionnaire v. interview results

30 survivors of a non-fatal aeroplane crash who received PD. All of them experienced high levels of symptomatology initially, the intensity of which decreased rapidly over the first eight weeks, but then more slowly. Robinson & Mitchell (1993) assessed the efficacy of PD among 172 emergency workers in Australia. Two weeks after the PD, 60% completed questionnaires. Overall, the respondents found the PD to be of “considerable value”.

Flannery *et al.* (1991) described the debriefing of psychiatric staff members who had been assaulted by patients. Of the 62 people debriefed, 69% reported to be “regaining a sense of control” within ten days, and only seven required further support.

Searle & Bisson (1992) described eight soldiers severely traumatised during the Gulf War who received PD within five days of the trauma. Six of them satisfied the DSM-III-R criteria for post-traumatic stress disorder (PTSD) at five weeks (American Psychiatric Association, 1987) and five of them required prolonged treatment before their symptoms improved.

The absence of a control group in these four studies makes interpretation of the results problematic because of the natural diminution in symptoms over time (akin to a normal bereavement reaction) irrespective of whether or not subjects receive PD.

Comparison studies

Comparison studies consider two groups of individuals involved in the same traumatic event and

compare them according to whether or not PD was received. Their findings are weakened because individuals are not allocated to PD or non-PD groups on a random basis. The reasons that determine whether or not individuals attend PD may be extremely important and result in considerable sample bias, markedly affecting the outcome.

McFarlane (1988) followed up 469 firefighters involved in a series of Australian bushfires. He found that those who received PD shortly after the incident were less likely to develop acute post-traumatic stress reactions than those who were not debriefed. However, the ultimate effectiveness of the debriefing process was thrown into doubt by his finding that individuals who developed a delayed-onset post-traumatic stress reaction were more likely to have attended a debriefing than those who did not.

Deahl *et al* (1994) considered the effectiveness of PD in 74 soldiers who acted as gravediggers during the Gulf War; 55 of them received PD soon after the incident, following the Dyregrov model (1989). Analysis of completed questionnaires at nine months revealed no difference between these soldiers and those who did not receive a PD. Hyton & Hasle (1989) similarly questioned the effectiveness of PD in their study of 58 non-professional firefighters who were exposed to dead bodies following a major hotel fire in Norway. They found no difference in psychological symptoms two weeks later between those formally debriefed and those who had talked with colleagues.

Controlled studies

There have been no adequate prospective controlled studies involving random subject allocation to PD or no intervention. The few studies looking at the effectiveness of brief early interventions similar to PD with a controlled design were published more than ten years ago. Bunn & Clarke (1979) assessed the use of a 20-minute "supportive interview" with a psychologist for the relatives of severely ill or injured patients admitted to an emergency ward, the alternative being no intervention. Those interviewed were less anxious immediately after the interview, but unfortunately there was no follow-up to assess its effectiveness, even in the short term.

Perhaps the best designed study (the one drawback being the small sample size) is that of Bordow & Porritt (1979). They studied 70 male road-trauma victims who were hospitalised for at least one week. The 30 men in group A received no intervention. The ten in group B were 'reviewed' (an intervention similar to PD, with detailed discussion of the trauma) soon after their admission, but received no further intervention. The remaining 30 (group C) received

the "immediate review" and then 2–10 hours of formal intervention from a social worker looking at practical, social and emotional levels of support depending on their apparent needs. Follow-up 3–4 months later revealed that group C suffered significantly fewer psychological sequelae than group B, who in turn fared better than group A.

More complex early interventions

Bordow & Porritt's (1979) study suggests that more complex early intervention may be more effective. Mitchell himself (1988) acknowledged that

"not everyone in every instance will benefit from a CISD. Many times they will need more help than a debriefing alone can provide".

The British Psychological Society Working Party (1990) concluded that single methods of support in isolation following traumatic events are unlikely to be effective unless combined with other methods.

Some of the best data on the effectiveness of early interventions come from the Israeli studies on sufferers of combat stress reaction during the Lebanon war. For example, Solomon & Benbenishty (1988) showed that early, brief intervention helped to reduce psychological sequelae in this vulnerable group, but not actually prevent them.

Raphael (1977) evaluated the effectiveness of brief early intervention in a controlled study of 30 women who had lost partners and were felt to be at high risk of developing psychological difficulties. Duckworth (1986) looked at policemen involved in the Bradford football stadium fire who scored above a cut-off of 12 on the General Health Questionnaire; there was no control group. Both studies suggested that brief early intervention was effective.

However, a more recent report (Brom *et al*, 1993) failed to demonstrate any difference at one- and six-month follow-up between a group of 68 road traffic accident victims who received a preventative counselling programme, and 83 who did not. Ten per cent satisfied the criteria for PTSD in both the intervention and control groups. Hence the evidence to support the effectiveness of more complex early interventions is not conclusive.

Risks of psychological debriefing

It has become increasingly recognised that there may be risks associated with PD and other forms of early psychological intervention. An unfortunate corollary is the stress placed upon service providers, who may become secondary victims themselves (Berah *et al*, 1984; Raphael, 1986; Talbot, 1990).

Enforced PD can lead to passive participation and resentment in individuals. Flannery *et al* (1991) used this observation to argue against mandatory debriefing. A good example of enforced early intervention is the case of the Americans held hostage in Iran in the late 1970s (Rahe *et al*, 1990). Many of the hostages felt "ready to fly home immediately", but instead spent a four-day period of seclusion and gradual reintroduction to liberty in Germany before being reunited with their families. Although "nearly all" acknowledged that their initial feelings were "overly optimistic", no comment was made on the feelings of those who were forced to undergo this process against their will.

McFarlane (1989) voiced concern that over-enthusiasm for primary preventative methods might delay the diagnosis and effective treatment of those who do suffer psychological sequelae. He argued that "clear definition of the limitations of the crisis intervention approach and the point at which more formal treatment is required" is needed. His concerns were fuelled by his finding that many individuals with psychiatric disorders as a result of the Australian bushfires presented late, due to other professionals' fears that labelling on referral to a psychiatrist would occur (McFarlane, 1984).

Conclusions

At present the hypothesis that PD decreases psychological sequelae has not been adequately tested. The data available from these methodologically-flawed studies suggest that, at best, PD affords some protection against later sequelae and, at worst, makes no difference. It is already apparent that individuals receiving PD are not immune to later psychological sequelae. Therefore, if PD is employed following traumatic events, formal follow-up to identify individuals who do go on to develop serious psychological sequelae is vital.

The current body of knowledge suggests that the presence or absence of other factors (e.g. an acute stress reaction, personality, past psychiatric history, adequate social support) are likely to affect the psychological outcome of individuals involved in traumatic events more than the presence or absence of PD. Indeed, when individuals have an adequate support network and do not have other vulnerability factors, PD may be redundant.

If PD (or any other professional psychological intervention) is to be made available to large numbers

of individuals, considerable resources will be required. It is essential, therefore, that the efficacy of PD is properly evaluated before providing it as a routine service. This should give a clearer indication as to whether or not it should be routinely offered to everyone involved in traumatic events, restricted to 'high-risk' individuals, or abandoned. Who should deliver PD, when, and what form it should take, are also important unresolved issues.

If these questions are to be adequately answered, future research must adopt rigorously sound methodology with a prospective controlled design and random allocation to PD or non-intervention groups. Attention must also be paid to adequate measurement of the dimensions of trauma, other variables that may affect the outcome, and both pre- and post-treatment assessment.

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