

Psychological debriefing

Theory, practice and evidence

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Stress management and debriefing: historical concepts and present patterns

Arieh Y. Shalev

'They had been brought to the last extremity of hope [yet they showed] a passionate conviction that it would be all right, though they had faith in nothing, but in themselves and in each other'. (Manning, 1990/1930, Introduction, p.xii)

EDITORIAL COMMENTS

Shalev challenges simplistic notions of debriefing as it is frequently applied and outlines its development in the historical contexts of understanding psychological trauma and post-trauma morbidity. He emphasizes the need to be responsive to the diversity of human responses in such situations, the significance of distress and arousal, and the psychological and neurochemical responses in the early post-trauma period. His conceptualization notes the need to consider the traumatogenic effects of extreme stress such as its undesirability, uncontrollability, unpredictability and inescapability. He suggests that prolonged distress during a critical post-trauma period may enhance or even create a 'catastrophic memory' through neuroendocrine mechanisms. The essence of preventing post-trauma morbidity is therefore to reduce distress and arousal.

Traditional approaches, which open up the expression of emotion, make interpretations of response, or describe symptomatic presentations, may be inappropriate. Furthermore, debriefing may be offered where the trauma or stress is continuing, or when other stressors such as loss and dislocation have also occurred. Because any intervention at this early stage may impact on a relatively small segment of the causative matrix,

long-term evaluation may be inappropriate as a method of judging debriefing effectiveness. Beneficial effects may occur, as his research suggests, by following the original model of debriefing ('historical group debriefing'), which is more a fact-finding model of debriefing, similar to operational or instrumental debriefing. This explores the narratives of individuals in the group, accepting their memory of their experience, and makes no interpretation. In his studies such interventions have been shown to reduce the high levels of anxiety of some group members and to provide a more homogeneous and less distressed outcome for group members overall. There was an increase in self-efficacy. He also suggests that this type of experience may lessen the loneliness and detachment that may create problems for those traumatized.

The overall message of this chapter is that 'debriefing' should sit in the spectrum of response to those who have suffered severe psychologically traumatic experiences. But it should not be viewed simplistically because of what it may achieve – taking into account the spectrum of distress, reducing this may be the most important humane and preventive measure.

Shalev is clear on the importance of supporting and not negating the human response to others' suffering at this time. Debriefing is one format that can provide a structure for this. It should be used only to achieve appropriate effects such as the human and caring reduction of distress. This is the key element and this type of intervention is only relevant if it achieves this and is validated by appropriate evaluation. As he states 'both the accuracy of the initial hope and the strength of the negative evidence must be questioned'.

Why early interventions?

The main reason for conducting early treatment interventions after traumatic events is a moral one. Army commanders may also wish to conduct such interventions to reduce loss of personnel. State economists may expect them to reduce the burden of financial compensation given to victims. The medical profession would be pleased to see them reducing the prevalence of long-term morbidity. Yet these are auxiliary goals. The main point is that many survivors and witnesses of extreme events suffer: afflicted, anxious, depressed and dismayed, their pain may also become permanent. Morally, such human conditions should not be left unattended.

The same moral reason requires that early interventions effectively reduce human suffering. It does not dictate, however, which type of treatment should be administered, nor its timing or duration. The latter two are practical or pragmatic considerations. Pragmatism, however, is often obscured by theory, especially when theory becomes dogma. In the area of traumatic stress, a salient example of salutary theory turned into dogma is the early, front-line, treatment of combat stress casualties, the rigid implementation of which during the Vietnam war has been severely criticized (e.g. Camp, 1993) and has not resulted in known beneficial effect on the prevalence of chronic stress disorders (Bourne, 1978; Kulka et al., 1990). A treatment modality can also become the subject of blind belief, in which case its implementation is uncritically preferred over that of other alternatives. This is both pragmatically and morally wrong. Has this become the case with debriefing?

The practical reasons for choosing debriefing, amongst other interventions, are all too obvious. Debriefing is relatively inexpensive and easy to deliver. It is said not to 'medicalize' emotional problems, and is readily acceptable to most relevant institutions. Other practical reasons, however, are debatable: debriefing does not create a stable commitment between the health care giver and his or her client(s). The practice is easily reducible into semi-structured 'do-it-yourself' instruction protocols, and, given the lack of convened standards, the implementation of any such protocol is

relatively immune to quality control. Finally, the expected long-term mythical efficacy of this intervention can be used to defer judgement about its effect until it is too late, and, meanwhile, refrain from additional diagnostic and treatment efforts.

Needless to say, the term debriefing refers to a heterogeneous array of interventions, which may include various degrees of abreaction, cognitive reconstruction, suggestion, self-diagnosis and education. Hence, a conceptual basis for debriefing as such is very elusive, as each component of this ensemble may have a rationale for itself (e.g. Shalev, 1994). Indeed, the healing theories behind abreaction (Freud, 1957/1917) or disclosure (e.g. Pennebaker & Susman, 1988) differ from those of graded exposure or teaching coping skills. Hence, the core of the argument for or against debriefing can not be theoretical and must remain empirical.

If one argues empirically, efficacy is, obviously, the central issue. Beyond efficacy, however, acceptability and the availability of adequate alternatives should also be considered. Debriefing has been accepted as a standard to meet obligations by many of the institutions that expose their members to stressful events, and this should not be overlooked. So far no viable alternatives has been shown to fare better (for a review, see Shalev, 1997b). In that regard, this chapter responds to the half-expressed plea, by a traumatized help-professional who, having been exposed to a massacre in Central Africa, could only say when she came back, overwhelmed, 'We even didn't get debriefing.', i.e. there was no help. If debriefing has become a synonym for help, then the cynical reply 'Debriefing wouldn't have helped you anyway.' is as unprofessional as the uncritical implementation of this technique as a cure for all. Hence, justice must be done not only to the construct of debriefing but also to those who are asking us professionals to provide a solution to their all too obvious distress.

For and against debriefing

The practice of debriefing has received substantial attention during the last two decades. Consequently this area has now been researched and documented in an intense, if somewhat scattered, way. Far from yielding a

consensus, however, the cumulative results convey discontent and criticism. These are related mainly to the simultaneous presence of two diverging assertions: one clearly favouring debriefing and the other completely denying its beneficial effect and therefore its reason for existence.

One of the bitter disappointments came from a series of studies that failed to show a reduction in long-term psychopathology among survivors 'treated' in this way (e.g. Bisson & Deahl, 1994; Deahl et al., 1994; Raphael et al., 1995; Kenardy et al., 1996). Indeed, earlier views, according to which one or a few debriefing sessions could have long-term effects, may have been premature. However, there seems to be a general sense, often amongst survivors (see e.g. Robinson et al., 1997) that debriefing is worth while and beneficial. Hence, both the accuracy of the initial hope and the strength of the negative evidence must be questioned.

Possibly the best criticism of the initial expectations from debriefing relies on a series of recent studies that have shown that chronic disorders result from the combined effect of many contributing factors, and that whatever happens immediately following exposure (including the treatment provided) may have only a limited effect on the final outcome of traumatization.

As to the above-mentioned negative evidence, it comes mostly from retrospective studies without random assignment to treatment groups, studies that employed cursory measurement of trauma exposure (if at all), and were characterized by extremely long time-lags between treatment and measurement of outcome, by poor control for the resulting confounds (time effect, intercurrent life events), and by the absence of very essential continuity of care. The hypothesis to be prove by such a design (i.e. that the effect of one or a few hours of debriefing will be stronger than anything else before, during or after the traumatic event) has a very low probability, and obviously was not confirmed. Similar arguments may apply to the studies reporting positive outcomes. By analogy, if one were to evaluate the effect of the most potent antidepressant by measuring depressive symptoms one year after cessation of treatment, in a heterogeneous group of initially depressed and nondepressed individuals who received only one pill, very little in the recorded result would be

pertinent to the question of efficacy. Rather than telling us about the quality of the agent itself, such results reflect the inadequate dose, the heterogeneity of the initial sample, the time-lag between treatment and evaluation and many other variables. Specifically, a sensitizing effect of debriefing (i.e. group members becoming more aware of their experiences and their emotional responses), when not followed by further elaboration, or if followed by other stressful experiences, may turn from being potentially beneficial to becoming harmful. Importantly, such hypothetical interactions cannot be identified by measuring a global outcome remotely.

Hence better understanding of the complexity of traumatic events, modest expectations from isolated interventions, and better integration of debriefing into the overall care for trauma victims would yield better arguments either for or against practising these interventions. Given the current pressure for evidence-based practice, the long-term survival of debriefing really depends on defining its relevant dimensions and finding a valid yardstick by which to measure them.

This chapter attempts to contribute to the survival of debriefing by arguing that these interventions should not be viewed as treatment for trauma but rather as stress management techniques. It also argues:

1. that in the absence of immediate and measurable relief in distress there is no ground for assuming a long-term effect of debriefing;
2. that the presence of short-term effect does not necessarily assure a long-term effect;
3. that debriefing affects individuals by modulating their concrete and symbolic relationship with the larger group;
4. that loneliness and isolation are particularly frequent among traumatized survivors, and are very harmful;
5. that the traumatogenic elements of stress, i.e. its being undesirable, intense, unpredictable, uncontrollable and inescapable, continue to operate during the period in which debriefing is applied; and
6. that, notwithstanding its exact protocol, debriefing should specifically address these elements.

Table 1.1. Historical appraisal of post-traumatic stress disorder (PTSD)

Σ The original formulation of PTSD borrowed its cardinal symptoms from earlier descriptions of acute grief
Σ The dynamic of loss overshadowed that of fear, exhaustion, surrender or annihilation
Σ Psychological processes, previously identified with recovery from loss, were assumed to be essential for healing traumatic stress disorders
Σ The failure to engage in such processes was to be responsible for PTSD
Σ Conscious levels of mental processing received more weight than other functions such as acquired fear conditioning, implicit learning
Σ The early responses to traumatic stress were considered as normal responses to 'outstanding' or 'abnormal' stressors
Σ The contribution of a priori and a posteriori factors was shunned
Σ The essence of prevention was in properly 'metabolizing' and 'integrating' the meaning of traumatic experience

Early psychological interventions and their historical context

Historically, the psychodynamic dimensions of the immediate aftermath of stressful exposure have been perceived as central for the development of subsequent disorders (Table 1.1). The original formulation of post-traumatic stress disorder (PTSD), for example, borrowed its main symptom clusters, 'intrusion' and 'avoidance', from earlier descriptions of loss and subsequent mourning (Freud, 1957/1917; Lindemann, 1944). Psychological processes, previously described in 'traumatic loss', were assumed to be essential for recovery from 'traumatic stress'. The failure to engage in such processes was similarly perceived as leading to protracted psychopathology, PTSD being explicitly interpreted as a form of 'impacted grief' (Horowitz, 1974). Stress, in fact, was confounded with loss, with many of its inherent elements (e.g. alarm, surrender (or freezing), exhaustion, exposure to grotesque scenes, chaotic responses) being ignored. Conscious integration was also perceived as the main road to recovery, while other levels of mental processing (e.g. fear conditioning, implicit memory) were largely ignored. Such appraisal has led to the assumption that early and appropriate elaboration of the traumatic event, by the survivor, prevents its long-term effect.

The birth of PTSD was also tainted in the 1960s by the specifics of the Vietnam War, amongst which the failure to address the psychological needs of combatants was particularly salient. The description of the Vietnam veterans' unaccommodating and hostile homecoming

(e.g. Lifton, 1973) and their sudden relocation from 'fox holes to continental US' are amongst the founding metaphors of the field of traumatic stress. Indeed, the treatment package delivered by military psychiatrists in Vietnam had very little room for psychological elaboration and abreaction (e.g. Bourne, 1973), as most medical efforts were either preventive (e.g. shorter duration of service) or doctrinal (e.g. ban on backward evacuation of combat stress casualties). The lack of early psychological care was therefore perceived as a direct cause for the high prevalence of mental disorders amongst veterans.

Additionally, the contribution of prior risk factors (biological, prior life events, prior psychopathology) to post-traumatic disorders was underappreciated. Indeed, such explanation was shunned, because the fact of prior vulnerability reduced the explanatory power of combat exposure itself and was seen as playing into the hands of those who tended to argue that only those previously sick (alias 'degenerates' Witztum et al., 1996) do not endure the challenge of combat.

The recognition of posterior risk factors (e.g. relocation, loss, re-exposure; Hobfoll, 1989; Solomon et al., 1993) was equally underappreciated. Importantly, it was also believed that the initial response to a traumatizing event was essentially normal; that a traumatic stressor was one that would induce distress in almost everyone (American Psychiatric Association, 1980); and that given proper treatment, normal recovery should naturally follow (for a critical review, see Yehuda & McFarlane, 1995). The burden of the causation and the essence of healing were, therefore, linked

Table 1.2. Biological theories of early causation

Σ Memory for events is consolidated during the period that immediately follows trauma
Σ Elevated level of the stress hormone adrenaline contributes to memory consolidation
Σ Adrenergic activation is associated with better recall of aversive information
Σ Levels of the stress hormone cortisol, during adversity, modulates the effect of noradrenaline on memory
Σ Information recorded shortly after an event may distort and affect its long-term recall
Σ Prolonged distress during a critical period enhances or even creates a catastrophic memory.
Σ The essence of prevention is in reducing distress and arousal

with working through the effect of the trauma (Table 1.2).

Debriefing was developed in such a historical context. Yet, other treatment interventions based on similar assumptions were developed as well. A salient example is the belief that chronic PTSD could be successfully treated by going back to the original incident and properly 'metabolizing' it. Such belief assumed, via misreading of Freud's assertion about the atemporality of unconscious (childhood) traumata and their later healing via psychoanalysis of adults, that psychologically traumatic events create atemporal recollections, frozen in the survivor's mind, and reversible at any stage. The practice of explorative therapies for PTSD prevailed, therefore, for more than 20 years, and has only recently been criticized as nonefficacious as a result of data collected in inpatient programmes of the Veterans Administration in the USA (Johnson et al., 1996; see comment by Shalev, 1997a).

Similar in its spirit was an attempt to help to reduce post-traumatic symptoms in Israeli combat veterans with PTSD by carefully re-exposing them, in mutually supportive peer groups, to the military environment, three years after the Lebanon war (1982). This enthusiastic and well-meant experiment only aggravated the condition of those involved, as shown by comparing them with a group of veterans with PTSD who did not participate in the programme (see e.g. Solomon et al., 1992).

Debriefing, therefore, is one of many treatment interventions related to the earlier understanding of stress disorders. Recent knowledge (e.g. Yehuda & McFarlane, 1995; Shalev, 1996) has challenged these assumptions, and thereby the ability of mental processing alone to bring about recovery. Yet, the

importance of the early response has not been denied. To the contrary, neurobiological theories (Post, 1992) and recent psychophysiological findings (Shalev et al., 2000) support the idea that the immediate aftermath of exposure is of critical significance. Memories of events may be consolidated during that time (Pitman, 1989). Elevated level of the stress hormone adrenaline contributes to consolidation of aversive learning (McGaugh et al., 1984; Cahil et al., 1994). Abnormally low levels of the stress hormone cortisol may further enhance the effect of noradrenaline on memory consolidation (Bohus, 1984; Yehuda et al., 1993). Information provided during the period that follows exposure may irreversibly affect the content of long-term memory (Loftus, 1979). These considerations converge into assuming that distress during the immediate aftermath of traumatization is indeed, pathogenic.

The accent, however, is on reducing psychic distress and physiological arousal, as means of preventing further pathology. Experiments have shown, in fact, that elementary fear responses can be acquired and maintained, in midbrain structures of the central nervous system, on the basis of poorly elaborated and certainly non-verbal signals (see e.g. Armony & LeDoux, 1997). If such is the case with trauma-related learning, then interventions would be beneficial to the degree that they reduce perceived adversity and the associated arousal. Importantly, a reduction of distress is a target for treatment, and not a specific technique, such that any intervention that would reduce arousal may be appropriate.

Complexity of traumatic events and individual responses

Distress during extreme events has been so well documented in literature and poetry (e.g. Manning, 1990/1930; Sasoon, 1963/1930) that a professional retake can only reduce the direct truthfulness of such testimony:

Discussing exposure to death it is suggested that it is infinitely more horrible and revolting to see a man shattered and eviscerated than to see him shot ... 'and one sees such things; and one suffers vicariously, with the inalienable sympathy of man for man' ... 'One forgets, but he will remember again later, if only in his sleep' ... the unburied dead festering, fly blown corruption, the pasture of rats ... (Manning, 1990/1930, p. 11)

Yet the clarity of narratives seems to be lost when one comes to empirically define and measure human trauma. Inconsistencies between definitions of a 'traumatic event' in successive versions of the American Psychiatric Association's *Diagnostic and Statistical Manuals* can illustrate this point: Traumatic stressors were originally defined as extreme and outstanding (American Psychiatric Association, 1980). Such appraisal has been eroded since (e.g. Breslau & Davis, 1987; Breslau et al., 1991), and the current appraisal of traumatic events (American Psychiatric Association, 1994) is overinclusive to the point of seemingly embracing anything from childbirth (e.g. Wijma et al., 1997) to having endured the Nazi Holocaust. The current proposition includes, in addition, a mandatory dimension of response to the stressor, such that an event is now formally traumatic only for those individuals in whom it immediately provokes fear or horror.

Clinical reality, however, shows that some individuals who later become very sick, do not present with strong emotional responses during the few days that follow exposure (e.g. Shalev et al., 1993). Even those who 'break down' (e.g. soldiers in combat) show 'polymorphous and labile' symptoms, including agitation, depression, numbing, or irritability (e.g. Solomon, 1993): 'a passing parade of every type of psychological and psychosomatic symptom' (Grinker & Spiegel, 1945).

How can one make sense of this array? Possibly by

realizing that despite yielding more reliable observations, the reality of events and the observable behaviour that follows may be less important than the underlying psychological dimensions. Defined that way, an event carries higher risk for traumatic responses when, for the individual involved, it is (a) unexpected (b) unacceptable, (c) intense, (d) uncontrollable and (e) inescapable (Foa et al., 1992; Bolstad & Zinbarg, 1997). Experimental literature shows, in fact, that the degree of control and the possibility of escape during stress modulate the expression of stress hormones in the brain (e.g. Voigt et al., 1990). In other words, while data pertaining to entire groups show statistical correlation between the intensity of the early response and subsequent PTSD, at an individual level the data have rather low specificity: most survivors who express early symptoms are likely to recover normally (see e.g. McFarlane, 1988; Shalev et al., 1997). Indeed, more recent studies (e.g. Ehlers & Steil, 1995) suggest that the way in which such symptoms are appraised by the individual determines their long-term outcome. Another predictive factor that may not translate to overt behaviour is the amount of concrete and symbolic losses related to the traumatic experience (Hobfoll, 1989).

It ensues that, within individuals exposed to potentially traumatic events, some may have extremely bad experiences and others may not. For example, a female survivor of a terrorist incident, in which a bus overturned down a steep valley on its way to Jerusalem (Shalev et al., 1993), expressed an increased sense of self-confidence, stating that under the worst of circumstances she acted with unexpected self-composure and effectiveness. She was the daughter of a Holocaust survivor. In contrast, a younger male survivor of the same incident experienced piercing guilt for not having stopped the action, expressed as intrusive nightmares and daydreams. He had broken his hip during the incident and therefore could not rescue himself nor otherwise modulate the effect of the stressor.

While clearly reflecting differences in sense of control and self-efficacy, the overt behaviour of these two survivors may also be misleading. We could assume, for example, that the ecstatic lady described above was merely counter-reacting to a previously acquired sense

of great vulnerability, and that the valiant young man was, in fact, starting to process new knowledge about his physical and psychological boundaries. Should a debriefing officer intervene and (a) throw the lady back to her catastrophic self-image (e.g. by having her share the dreadfulness of other people's experiences) and (b) cut short the youngster's appropriate processing of the event (by challenging a budding insight)? For those who conduct debriefing the presence of such complexity is a major problem.

Symptoms may, in addition, have different functions at different stages. In an earlier study (Shalev et al., 1996) we described a significant link between experiencing dissociation, during the traumatic event and subsequent PTSD. Dissociative experience predicted PTSD above and beyond the severity of events and the early responses. Data have been collected on an individual basis, one week following trauma.

We revisited the construct of peritraumatic dissociation, using the same rating scale (Marmar et al., 1994), in a debriefing study (Shalev et al., 2000), where data were collected two days after combat exposure, in groups of infantry soldiers of the Israel Defence Forces (IDF; see below). Not surprisingly, higher levels of dissociation were observed in soldiers with more intense combat exposure. Yet, dissociative symptoms significantly correlated with better evaluation of the group's and of individuals performance during combat. Hence, two days after exposure, i.e. exactly when most debriefing interventions are to take place, dissociation seemed to be associated with better appraisal. A recent study of rape victims similarly found that dissociation was associated with reduced physiological responses to reminders of the trauma (Griffin et al., 1997). Should debriefing challenge dissociative and distancing defences?

Heroic appraisal of acts and events may similarly be protective to some individuals, providing a sense of purpose and a symbolic way to transcend the direct experience of horror and disgust. One day after being severely injured, a recent immigrant to Israel, who had survived a terrorist act, said 'Now I have become part of this country's history.' Certainly, such 'defences' may later collapse, yet while they last they may be protecting the individual from extreme, uncontrollable emotions.

Such is also the case of early numbing, which the individual may productively maintain until better opportunities for feeling occur. It has been a common experience, amongst front-line soldiers, during the 1973 Yom-Kippur War, to be at home for 24 hours leave, yet experience numbing and distancing from previously loved activities. 'I sit in a lawn chair, by the University swimming pool, as I always loved to do', commented a student on leave, 'yet nothing is the same. I wonder what am I doing here, what are other people doing? I am there, but not truly so.' Psychiatrists who were attached to combat units used to warn soldiers who were going home that they may not be able to 'ease their defences' (i.e. could expect problems in experiencing emotions, particularly intimacy), yet that such symptoms were not unusual and did not reflect a mental problem (S. Tyano, personal communication). In challenging the heroic meaning of facts and events, and in deliberately seeking emotions, can debriefing inappropriately disturb the protective shield of those who are still numb or dissociated?

Importantly, traumatic events do not end upon termination of the impact phase (Raphael, 1986). Most such events continue, in fact, beyond the actual presence of a threat. Intractable pain may follow physical injury (Schreiber & Galai Gat, 1993). Losses may become fully apparent upon recovery. Humiliating impregnation may follow ethnically motivated rape (see e.g. Kozaric-Kovacic et al., 1995). Unexpected hostile homecoming may shatter painfully achieved self-control and resilience (Lifton, 1973). Debriefing would often occur during a period of ongoing traumatization, where further adversity is expected or actually occurring. 'Therapeutic flexibility' has been wisely recommended for interventions conducted at the early stages of the response to trauma (Rosser & Dewar, 1991).

Coping, crisis and loneliness

After trauma, some individuals may find themselves in a situation of crisis; that is, in a state where their coping resources are overtaxed and dysfunctional. Effective coping has been defined as (a) reducing distress, (b) enabling continuation of task-oriented activity, (c) preventing negative self-perception, and (d) enabling

maintenance of rewarding interpersonal contacts (Pearlin & Schooler, 1978). Defective coping, therefore, would lead to disabling distress, negative self-perception and inability to enjoy rewarding interpersonal contacts. The importance of the last of these cannot be overestimated: in many traumatized patients the first overwhelming experience is one of total loneliness and isolation (see e.g. Dasberg, 1976). Again the older literature portrays the essence of belonging, as during the murderous Battle of the Somme, 1916 (Manning 1990/1930, Introduction, p. xii):

They had been brought to the last extremity of hope [and yet showed] a passionate conviction that it would be all right, though they had faith in nothing, but in themselves and in each other.

or

These apparently rude and brutal natures comforted, encouraged and reconciled each other to fate, with a tenderness and tact which was more moving than anything in life.

Feeling detached and isolated within such groups deprives an individual of the essential support of his or her peers. Not being 'emotionally tuned' in a group, may be one expression of such isolation. In a recent study of debriefing (Shalev et al., 1998), we assessed levels of anxiety and self-efficacy in 39 infantry soldiers, shortly after combat, and found them unequally distributed, with few individuals expressing outstanding levels of distress and detachment from all the others. Figure 1.1 presents the frequency distribution of state-anxiety scores before and after debriefing. As can be seen, the group is much more homogeneous following debriefing, as those who had had the highest scores previously became closer to most others.

Prematurely 'closing' the story

Isolation may also lead to premature closure of one's own incomplete and idiosyncratic narrative of a traumatic event, in which case those with more catastrophic views lose the opportunity to correct such views by listening to others. The following account is drawn from a session of debriefing, conducted a few days after combat exposure.

Company A. walked straight into an enemy ambush, at night, on a rocky hill where nothing was expected to happen. It all began at once: small weapons fire at very close range. The commanding officer and the radio operator were hit immediately. Another officer must have run forward and was also killed. In the darkness no one knew exactly what was going on. Fire seemed to come from all directions. Hand grenades were thrown, and soldiers who heard them coming warned their buddies. A sergeant took command. He thought that he had identified a source of fire and instructed the machine gunner to climb on a heavy boulder and fire back. The man was hit as soon as he reached a firing position. His body rolled down, his weapon remaining on the boulder. Other men started returning fire and throwing hand grenades. One managed to operate the radio. Then everything was silent again. The enemy seemed to have vanished.

While the fire was still going on, the medic ran forward to treat the wounded. In the dark he found the second officer, lying on the ground, and manually checked his body for wounds. His hands found two large bleeding holes in the officer's back. The officer was dead. The medic then left him and turned to treat the commanding officer, who was lying next to him. Unable to do more without light, he put a bandage over the commander's open abdominal wound and kept conversing and reassuring him. They must have communicated that way for several minutes – the medic will never be able to give an accurate estimate of time elapsed. When, at last, he could safely use a torch he then tried to insert an i.v. line but it was already too late: all veins had collapsed. A field surgeon, who arrived with a rescue team, attempted to surgically find a deeper vein, but the man died in their hands.

The company promptly left the area. According to military routine, they counted the remaining ammunition and underwent a series of fact-finding debriefings. The main witnesses, however, were in the hospital, hence many questions remained

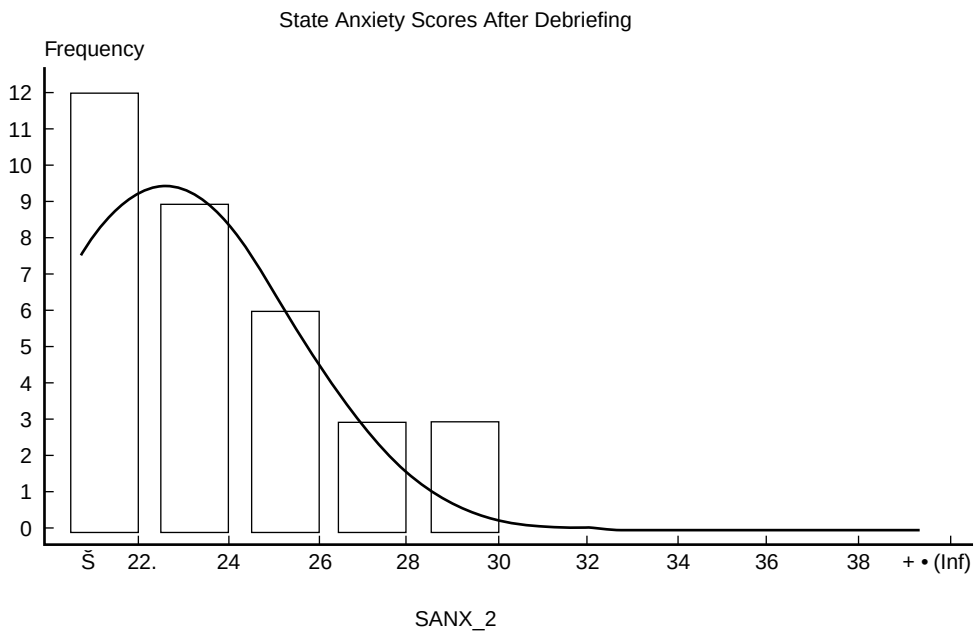
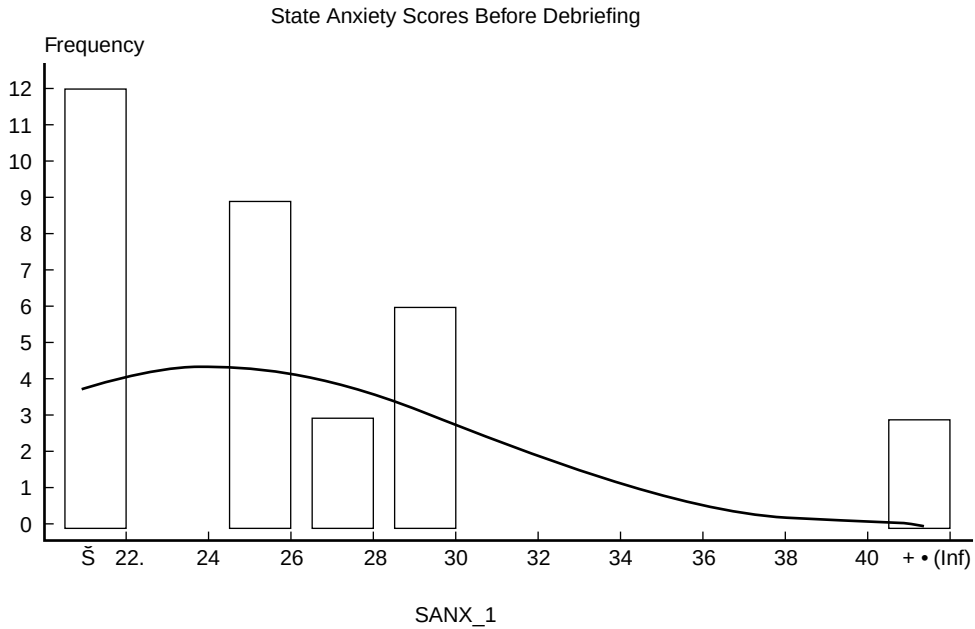


Figure 1.1. Frequency distribution of state anxiety scores before and after debriefing. (From Shalev et al., 1998, Copyright *Military Medicine*, International Journal of AMSUS.)

unanswered. No one could tell how the shooting started or where it had come from. Information about the commanding officer's injury came in later: an autopsy revealed a liver injury, which caused slow but fatal bleeding. These facts, however, did not reach the medic until quite late, leaving him with a piercing sense of incompetence and guilt. Another company searched the battlefield the next morning. They found the body of an enemy. Their grasp of the topography of the hill, however, was very different from the impression of the company's soldiers during the fight. The two versions never matched completely. Consequently, most men were left with uncertainty about actions and errors, which they could neither confirm nor dispel.

Visits to families of the killed-in-action are customary, and most survivors went to see the bereaved parents, where each of them was asked, repeatedly, to describe the action. By the third day after the incident, therefore, many had a 'definitive' version of the event, shaped by telling of the story again and again. Group debriefing revealed, however, that the individual versions differed. One soldier, for example, believed that both officers were killed by one bullet coming from an 0.5 in. machine gun. Others, however, considered this to be totally impossible. The medic remembered that the company commander died within 20 minutes of his injury, whereas the field surgeon's estimate was 45 minutes.

Comparison between versions became a very stressful experience. Five days after the incident the wounded radio operator was released from the hospital. He seemed to clearly remember that they had heard a word spoken in Arabic, that the commander subsequently shouted 'enemy ahead – open fire' and fired his M-16. This thoroughly contradicted what everyone had believed to be true until then – namely that the first shot to be fired was from the enemy. As the radio operator was relating his story a member of the group angrily left the room, saying that he couldn't listen to nonsense any longer. His own version seems to have been made and reshuffling the cards was too

upsetting. Interviewed at this point, some soldiers indicated that they were having nightmares and were suffering from increased alarm reaction.

Others were reconstructing, again and again, their own recollections, trying to make sense of memory gaps and to reconcile paradoxical information.

This vignette illustrates how partial and incomplete pictures of an event settle and become the 'true' memory for each individual. It also shows how both strength (participating in families' grief) and weaknesses (loneliness) coexist at this stage. Such may be the case of many survivors: a mixture of effective and ineffective coping; a volatile combination of attempts to self-regulate and establish autonomy along with the desire to belong and to be taken care of. Importantly, joining the group does not provide a warranty for positive long-term outcome, as groups may be re-exposed, or may further 'catastrophize' the event. Indeed, once a group has defined itself as traumatized then belonging to it may lead (or may depend) on individually adopting the identity of a victim. Cohesion, therefore, is nondirectional, and may either reduce or enhance the expression of psychopathology.

A parsimonious approach to debriefing: cognitive reconstruction of events

In the above it has been argued the inherent complexity of traumatic events and their aftermath creates major constraints to productively practising debriefing. The appropriateness of theory-driven group interventions, at a stage at which individual responses are so diverse, has also been questioned. Specifically, some of the psychological ingredients of such interventions, such as disclosing emotions, 'psychologizing' the meaning of events and addressing some frequent responses as being 'symptoms', may not be productive. Indeed, the extent to which the latter are necessary is unclear: more parsimonious techniques may, in fact, be as effective.

Hence, when in 1991, our group initiated a study of debriefing in combat soldiers on the Lebanon border of Israel, we sought an alternative that would leave enough degrees of freedom to participants, not impose

an alien (i.e. psychological) discourse on situations that are otherwise perceived as martial and operational, and yet have the group review the event and build a common narrative. We borrowed the model from S. L. A. Marshall's historical group debriefing (Marshall, 1944, 1947; Spiller 1980, 1988; Shalev, 1994). Marshall's technique consists of a systematic review of the event, by all the participants, without advice, interpretation or deliberate intervention. The effect of detailed cognitive reconstruction could, therefore, be studied, as such.

Historical group debriefing (HGD) would combine aspects of institutional fact-finding debriefing with psychological understanding of human performance under stress. Institutional, fact-finding debriefing is regularly practised, by numerous institutions, for purposes of gathering information and learning. Apparently instrumental, such team meetings may have a tremendous psychological impact, as they convey a formal meaning to events and deeds, and turn often mild preliminary appraisal into a stable meaning proposition (e.g. success, breakthrough, failure, cowardice). Fact-finding debriefing, in the IDF, is practised by military professionals – often by the group's natural leaders. Importantly, the focus is mostly operational, such that only facts that are relevant to learning expedient lessons are explored.

HGD was developed, during World War II, by the chief historian for the US army, Brigadier General Samuel Lyman Atwood Marshall. Its primary goal was to gather historical data, yet the technique was said also to have had profound psychological effects on participants (Marshall, 1947). As is often the case, the practice of HGD had a theory behind it. Surprisingly, Marshall's theory of ground combat was psychological as much as tactical. It assigned equal value to mental and physical elements, and articulated individual responses with elements of group psychology.

Marshall theorized that the battlefield presents the soldier with scant and ambiguous information. Enemy positions and allied forces are under cover. Sources of threat (e.g. artillery, weapon positions, mines) are camouflaged or hidden. The soldier's capacity to 'overcome his fears' depends, therefore, on his ability to 'feel the presence of others' and maintain a sense of belonging to a group. Individuals in combat, accordingly, can

function effectively only as members of a group. Conversely, the group can function only as long as its individual members maintain a sense of belonging. The forces underlying such mutual dependence were assumed to be both emotional and cognitive, paralysing fear being the direct consequence of 'fragmentation of the information' within the group.

Marshall seems to have grasped another attribute of distressed cognition, namely the individual's inability to identify and make sense of the overall pattern of a stressful event. He assumed, therefore, that no participant had the 'full story'. Consequently, he sought to obtain the 'historical truth' of combat by gathering a group narrative. Moreover, he seems to have trusted the testimony of commanding officers no more than that of privates, both being individual witnesses. He therefore did away with group hierarchy, at least for the duration of an interview: 'The word of a superior as to what a man (or a group) did should not be allowed to prevail against the direct testimony of the man himself' (Marshall, 1944, p. 204).

Marshall's debriefing sessions lasted several hours. They took place soon after combat. All members of the fighting group were invited to participate and 'describe the combat with all the possible details' in a 'strict chronological path'. All available testimonies were collected for each stage. Soldiers' thoughts and feelings were of particular interest as 'the moral side of war' was considered to be as important as its 'purely physical side' (Marshall, 1944, p. 210). Finally, the interviewer was to pay 'warm interest and respectful attention' to the unfolding narrative as 'He cannot obtain the interest of the company and its complete participation unless he conducts himself as a student rather than as a teacher.' The expression of emotions, such as that towards deceased buddies, received 'respectful attention' but no advice or interpretation was offered.

Conducting debriefing in this way, Marshall found that the sessions often became, for the participants, a 'morale building experience' and a 'spiritual purge' (Marshall, 1944, p. 215). Indeed, the technical elements of HGD are designed to allow each participant to disclose his or her own version and compare it with those of others. There are no conclusions, no lessons, and none of the versions is considered as 'true' or 'final'.

Indeed, the coexistence of many views is being validated.

The intervention conducted by us on the Lebanon front implemented Marshall's technical principles of exhaustive chronological review, temporary suspension of military ranks, tolerance of ambiguous information, and equal interest in cognition, emotion and action. No other intervention was included: the sessions started by describing the immediate preparation to combat and ended when the event was fully described. All the participants signed an informed consent, and were free to abstain or to leave the sessions at any moment. Their identities remained confidential. All those whom we asked to participate agreed to do so, but two left the sessions before the end. Thirty-nine individuals completed the study. All had participated in short engagements, in which their group took casualties (from one injured in action to several killed in action). The average age of the group was 19.4 years (range 18.5 to 24 years). The average length of the session was 2.5 hours. Ratings of symptoms of anxiety (Spielberger et al., 1970), intrusive thoughts and avoidance (Horowitz et al., 1979), peritraumatic dissociation (Marmar et al., 1994), combat exposure (Lund et al., 1987), self-efficacy (Bandura, 1982) and combat evaluation were collected before and immediately after the session.

The intensity of symptoms of intrusion and avoidance before debriefing resembles those previously observed in civilian trauma survivors (Shalev et al., 1996) and reflects an intense preoccupation with the event. Changes in the distribution of anxiety scores were presented above (Figure 1.1). Avoidance scores correlated positively with anxiety, and, as stated above, dissociation scores correlated positively with combat evaluation. Importantly, the sessions were followed by statistically significant reduction in anxiety and increase in self-efficacy (Shalev et al., 1998). These results confirmed, therefore, the assumption that the simple fact of reviewing the event by the group (a) can significantly reduce distress and (b) increases the homogeneity of the group.

Summary and conclusion

The main arguments against considering the long-term effect of debriefing as a valid measure of the efficacy of this technique relates to the complex aetiology of stress disorders and the relatively small proportion of the total causation that any brief psychological intervention is likely to affect. It is historically true that the role of psychological factors, operating during the immediate aftermath of traumatization has been perceived as cardinal in the development of subsequent stress disorders. Yet more recent information suggests that reducing arousal, shortly after exposure, may be as important as clarifying and working through the meaning of exposure. Accordingly, the traumatizing elements of the immediate post-event period, such as controllability, self-regulation, intensity of emotions, as well as loneliness and detachment from others, are to be the first concern of those practising debriefing, indeed of any person involved in early treatment of potentially traumatized individuals. Preliminary data are reported, suggesting that distress is unequally distributed amongst survivors. These data imply that those with higher levels of distress are more likely to feel, and be perceived as, different from the others. Finally, a study of debriefing in military units has been presented in support of the argument that simple reconstruction of a group narrative is sufficient to effectively reduce anxiety in recently exposed combat soldiers.

All the above may point to new directions in administering debriefing and measuring its effect. These may include an evaluation of short-term effect of debriefing and isolation of specific components of the technique and detailed study of each. Most importantly, it has been argued that the short-term success of any technique is not sufficient to assure its long-term effect. Debriefing, therefore, should be one of many measures made available to survivors whose health one wishes to protect.

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