



DESCRIPTIVE MANUSCRIPT

Psychological First Aid: The Derivation and Evaluation of a Training Package for Use in Mountain Rescue

Anthony Page 

ABSTRACT

Problem: A lack of training exists in psychological support that is available to mountain rescue team (MRT) members. Psychological first aid (PFA) is an appropriate framework to provide that support.

Approach: A derivation of a training package in PFA suitable for use by MRTs in the United Kingdom (UK) and the formulation of a training session plan. A case-study description of an evaluation of the training by an English MRT.

Results: Participants assessed the approach and course to be appropriate, relevant, and useful, and that they would use it themselves in a mountain rescue (MR) incident.

Conclusion: The training should be offered to, and evaluated by, other MRTs to enhance the robustness of the findings. Future evaluation should be extended to determine whether learning has taken place.

Keywords: Psychological first aid (PFA); mountain rescue (MR); training evaluation

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SOYUT

Problem: Dağ Kurtarma Ekibi (DKE) üyelerine sunulan psikolojik destekte bir eğitim eksikliği mevcuttur. Psikolojik İlk Yardım (PİY), bu desteği sağlamak için uygun bir çerçevedir.

Yaklaşım: Birleşik Krallık'taki (BK) DKE'ler tarafından kullanılmaya uygun bir PİY eğitim paketinin türetilmesi ve bir eğitim oturumu planının formüle edilmesi. Eğitimin bir İngiliz DKE tarafından değerlendirilmesine dair bir vaka çalışması açıklaması.

Sonuçlar: Katılımcılar, yaklaşımı ve kursu uygun, ilgili ve kullanışlı olarak değerlendirmiş ve bunu bir dağ kurtarma (DK) olayında kendilerinin de kullanacağını belirtmişlerdir.

Sonuç: Bulguların sağlamlığını artırmak için bu eğitim diğer DKE'lere sunulmalı ve onlar tarafından değerlendirilmelidir. Gelecekteki değerlendirme, öğrenmenin gerçekleşip gerçekleşmediğini belirlemek üzere genişletilmelidir.

Anahtar Kelimeler: Psikolojik İlk Yardım (PİY); dağ kurtarma (DK); eğitim değerlendirmesi

ABSTRAITE

Problème: Un manque de formation existe pour supporter les membres des équipes de sauvetage en montagne en support psychologique. Les premiers secours psychologiques (PSP) sont un cadre approprié pour offrir ce soutien.

Approche: Une adaptation d'un programme de formation en PSP appropriée utilisé par les équipes de sauvetage en Angleterre et la formulation d'un plan de formation. Une description d'une étude de cas d'une évaluation de la formation par une équipe de sauvetage en montagne anglaise.

Résultats: Les participants ont évalué l'approche préconisée et l'ont déterminé comme étant adéquate, pertinente et utile, et que ce serait utilisé dans un événement de sauvetage en montagne.

Conclusion: La formation devrait être offerte, et évaluée, par d'autres équipes de sauvetage en montagne pour augmenter la force des résultats et proposer que les évaluations du futur soient orientées pour déterminer si un apprentissage fut présent.

Mot clés: Premiers Secours Psychologiques (PSP); sauvetage en montagne; évaluation de la formation

Mountain Rescue Teams (MRTs), made up of unpaid volunteers in England and Wales, understand that they have a duty of care towards people involved in mountain rescue (MR) incidents. However, in contrast to managing the physical health needs of casualties, it was not until the most recent edition of the widely used and regularly updated learning and revision guide *Casualty Care Revision in Mountain Rescue* (Barton et al., 2023) that the psychological health of witnesses to, and survivors of, MR incidents were addressed in any detail. Similarly, it was not until 2024 that the Mountain Rescue England and

Wales/Scottish Mountain Rescue/British Cave Rescue Council remote rescue medical technician syllabus specified the mental health skills and knowledge required of candidates sitting for examination.

The reason for these delays is probably the absence of guidance congruent with MRT practice. The most detailed guidance was developed to apply to disasters and mass casualty incidents where the involvement of disaster relief workers providing psychological support begins a few hours after the incident and goes on for several days. In contrast, UK MRTs typically respond to incidents

involving a single or a small number of casualties, and involvement is for a few hours immediately after an incident before a handover to other agencies.

There is little evidence to guide the selection of a model for the provision of psychological support to casualties, even following disasters or mass casualty incidents. Indeed, Bisson (2014) commented that doing nothing was arguably as evidence based as anything else, though he added that this option did not address research findings of the protective effect of perceived high levels of social support. A systematic review (Rose et al., 2002) reported that critical incident stress de-briefing was ineffective in both reducing psychological distress and in reducing the incidence of post-traumatic stress disorder. Following this, there emerged a strong international consensus that psychological first aid (PFA) was the intervention of choice (Forbes et al., 2011).

The present paper describes the derivation of an MR-specific PFA intervention and the PFA training delivered to members of a single English MRT. It reports the results of a small-scale evaluation, examining the acceptability, relevance, and usefulness of the training. The paper follows the Criteria for Reporting on Development and Evaluation of Professional Training interventions in Healthcare- CRe-DEPTH (Van Hecke et al., 2020).

PSYCHOLOGICAL FIRST AID

The Inter-Agency Standing Committee (IASC) (2010) offered the following definition of PFA:

Psychological first aid.... entails basic, non-intrusive pragmatic psychological support with a focus on listening but not forcing talk; assessing needs and ensuring that basic needs are met; encouraging but not forcing company from significant others; and protecting from further harm. PFA thus involves a non-clinical, humane, supportive response to a fellow human being who is suffering and who may need support immediately after an extremely stressful event. It is very different from psychological debriefing in that it does not necessarily involve a discussion of the event that caused the distress. (p.11)

Hobfoll et al. (2007) described PFA as evidence-informed on the grounds that the principles of PFA were derived from the empirical literature in related fields of research. They proposed five empirically supported PFA intervention principles. These were: promoting a sense of safety; calming; a sense of self- and community efficacy; connectedness; and hope. Ruzek et al. (2007) translated these intervention principles into eight “core actions and goals” of PFA. The actions were: contact and engagement, in a non-intrusive, compassionate and helpful manner; safety and comfort, physical and emotional; stabilization, that is calming emotional distress; information gathering, that is identifying pressing needs and concerns; practical assistance to address those needs and concerns; connection with social supports, such as friends and family; information on coping support, to help deal with the event and its aftermath; and linkage with collaborative services able to provide ongoing or future assistance.

Arguably, the desired outcomes of PFA are vague (Shultz & Forbes, 2014), and a lack of controlled trials means that systematic reviews have found little or no evidence for its effectiveness (Bisson & Lewis, 2009; Dieltjens et al., 2014; Fox et al., 2012; Hermosilla et al., 2023). Nevertheless, Lewis & Bisson (2022) asserted that, as an immediate response to trauma, it was currently widely accepted that PFA-based interventions represented best practice. Given the international consensus, the possibility that PFA can be used in non-mass casualty crisis events (World Health Organization [WHO], 2011), and in the apparent absence of any alternative, this paper describes a PFA intervention to provide psychological support to those involved in MR incidents.

An MR incident is likely to be in an inaccessible location and to have occurred in challenging conditions, such as cold temperatures, high winds, wet ground, heavy rainfall, or deep or driving snow. MRT personnel will not be seeing casualties, witnesses, or survivors in a disaster reception center the day after they have been evacuated by first responders or disaster relief workers. MRT personnel are the first responders and as their numbers are likely to be limited their priority will be to treat and evacuate any physically injured or unwell casualties to definitive care as quickly as possible. They will also have the task

of evacuating witnesses and survivors to a safe location. Any PFA framework adopted by MRTs must be flexible and capable of being used, if only in rudimentary form, in almost all circumstances. As MRT members will have multiple other tasks to attend to, following through all the eight core actions of PFA (Ruzek et al., 2007) will be impossible. However, given that any MRT member can find themselves in the position of having to provide psychological support, it is appropriate for team members to have training to enable them to do this as effectively as possible.

Though one has appeared subsequently (Mortimer & Mortimer, 2023), at the time the present evaluation was in progress, no specific PFA intervention for use by MRTs had been published. It was therefore logical to borrow from other PFA frameworks and adapt them for use by MRTs. The present evaluation used the eight core actions of Ruzek et al. (2007) and three of the most comprehensively documented frameworks (Brymer et al., 2006; Everly & Lating, 2017; and WHO, 2011) to produce the PFA intervention described below. It should be noted that each of these three frameworks is congruent with the IASC definition of PFA (IASC, 2010), that they are conceptually similar, that they acknowledge that PFA is not a clinical intervention, and either implicitly or explicitly they assume that PFA can be delivered by trained lay people. The PFA intervention described below was specifically intended for use by UK MRTs in the immediate aftermath of an incident. The focus is on facilitating the evacuation of witnesses to, and survivors of, the incident (including companions, family, friends, and bystanders) to a safe location for handover to other agencies a few hours later.

Primary survey applied to witnesses and survivors

In the UK, MRT members are taught and are familiar with casualty assessment using the DR C ABCDE primary survey approach (Danger, Response, Catastrophic bleeding, Airway, Breathing, Circulation, Disability, Environment) (Barton et al., 2023). The DR C ABCDE primary survey assessment is carried out sequentially to identify life-threatening problems in the

order in which they are most likely to prove fatal. The assessment of witnesses and survivors should begin with an abbreviated primary survey, simply asking if anybody is injured or unwell, as MRT members will prioritize the further assessment of physically injured or unwell casualties. The following assumes that physical first aid will, if necessary, be done along with PFA and that there are sufficient personnel available for at least one member of the MRT to devote some time to the psychological support of witnesses to, or survivors of, the incident even if they must attend to other tasks.

Core PFA actions applied to witnesses and survivors

The core actions of PFA overlap with the assessments carried out in the DR C ABCDE primary survey. The assessments of danger and the need for environmental protection are elements of both. As can be seen below, the core actions also have some overlap with each other. The following describes the core PFA actions in an MR context:

Contact and engagement. The PFAider should introduce themselves as an MRT member assigned to look after the survivors or witnesses, and by asking if anybody is injured or unwell, they have begun the process of engagement. Everly and Lating (2017) give the most detailed advice about making contact and establishing and maintaining rapport. This emphasizes that the PFAider should be careful of their own non-verbal and verbal behavior. They should remain calm, make and maintain comfortable eye contact, and remain attentive. In terms of verbal behavior, they recommended using active listening (aka reflexive listening), the goal of which is to make the other person feel understood. This avoids pressuring the person to talk if they do not want to but allows them to outline their story and disclose how the incident has affected them if they wish.

Safety and comfort. If the location is unsafe, the PFAider should take steps to move the witnesses or survivors to a safer location, with assistance from other MRT members if necessary. The PFAider should assess whether a group shelter and/or extra clothing are required and, if appropriate, ask the witnesses and survivors if they need food or something to drink.

Stabilization. Early on in the process of engagement, the PFAider will have performed a sort of psychological triage as to who has the most pressing need for support and will have started to consider whether an intervention is required to calm and stabilize very distressed or overwhelmed witnesses or survivors. Very distressed people will be obvious, but people who appear distant and disconnected from their surroundings will be less easy to identify, though both are probably at higher risk of developing post-traumatic stress disorder (Ozer et al., 2003) and are likely to be more challenging to evacuate.

In this context, active listening is a stabilization technique, and most witnesses and survivors will not need additional stabilization but may be reassured by an explanation that the distress they feel is understandable and what would be expected in the circumstances. This is often termed normalization. For very distressed people, using simple breathing techniques are suggested (Brymer et al., 2006; Everly & Lating, 2017; WHO, 2011) and for people who appear distant and disconnected from their surroundings “grounding” techniques may be helpful (Brymer et al., 2006).

Information gathering: current needs and concerns. In this context, the immediate concerns of the survivors and witnesses are likely to be the state of the casualty, what actions the MRT is taking to treat the casualty, how and when is the casualty going to be evacuated and how the survivors and witnesses will be evacuated. The main action of the PFAider is to give truthful and accurate information as far as this is possible. For example, survivors and witnesses will be reassured to hear that although the casualty has a broken leg this has been splinted and the pain is being controlled with a strong painkiller, or that a helicopter has been requested, or that the team will be stretchering the casualty off the hill and will walk down with the survivors or witnesses.

Practical Assistance. At a later point the survivors and witnesses may begin to express practical concerns and the MRT may be able to assist with some of these, for example transporting survivors and witnesses to their car which they left parked in a neighboring valley.

It is unlikely that MRTs will have a significant role in the remaining core actions (*connection with social supports, information on coping support, and linkage with*

collaborative services) other than linking the witnesses and survivors with other emergency services in attendance, such as the police or ambulance services.

Specifying a PFA framework suitable for use in mountain rescue

Based on the above, a PFA framework suitable for use in MR can be specified. The PFA intervention begins with an abbreviated DR C ABCDE primary survey to rule out physical injury. Because the core PFA actions applicable in an MR context are not delivered strictly in sequence and overlap with each other and with the DR C ABCDE primary survey, they are condensed into four categories: connect, assess, intervene, and transfer. The acronym derived from these, CAIT, can be used as a mnemonic: **C**onnect: self-introduction, ask about needs, active listening. **A**ssess: physical needs (safety, shelter, extra clothing, food, drink) and psychological state. **I**ntervene: move to a safer location if indicated, protect from environmental conditions, provide food and drink if needed, normalize reactions if appropriate, provide information, stabilize (active listening, breathing techniques, grounding techniques), and provide practical assistance. **T**ransfer: to other emergency services if applicable.

Training in Psychological First Aid for Mountain Rescue Team Members

The MRT training calendar was divided into a general training program open to all team members and role-specific training sessions open only to members with previously assessed proficiency in specialisms such as swift water and technical crag rescue. General training sessions were scheduled to occur on one weekend day and one or two weekday evenings per month. Based on the CAIT PFA framework, a training package was devised to be delivered to MRT members in no more than two hours (the standard duration of an evening training session). The session was scheduled by the team training officer into the general training program and took place on an autumn evening. The training calendar was available to team members on the team's shared electronic drive. All team members, including probationary members, were invited to attend by an email that described the purpose of

the training session and the training evaluation. The email made it clear that attendance was voluntary and would not be included in the team member's training record. The training took place at the MRT base and was delivered by the author (a team member and retired psychiatrist with a medical degree, a postgraduate qualification in psychiatry, and a qualification in education and training) using a Microsoft PowerPoint presentation. All those attending were given a participant information sheet, time to read it, time to consider whether to take part, and the opportunity to ask questions. They were informed

that they could choose to participate in the training, but could decline to participate in the evaluation. In the event, all those attending decided to participate in the training and evaluation, and all provided written consent. The session included a discussion of PFA, an introduction of the CAIT intervention, and a description and role-play of the interventions (active listening, normalization, provision of information, box breathing, and grounding) supplemented by a handout describing these. Participants could take the handout away as a reminder. The session plan and handout are reproduced in **Figures 1–3** below.

SESSION PLAN	
Session details	
Session title: Psychological first aid (PFA) in mountain rescue	Location: Team base
Trainer: Tony Page	Date:
Session aims: MRT members will be introduced to PFA and will formulate a view on whether training in PFA should be developed further	
Session objectives: By the end of the session, MRT members will have a view as to whether: <ol style="list-style-type: none"> 1) PFA is acceptable in a mountain rescue context 2) PFA is appropriate in a mountain rescue context 3) PFA is useful in a mountain rescue context 4) They personally would use PFA in a mountain rescue context and <ol style="list-style-type: none"> 5) will be able to make informed comments expanding on these views 	
Training methods used:	
PowerPoint presentation	Demonstration
Role play	Discussion
Resources needed:	
Chairs, PowerPoint slides, laptop, whiteboard and leads, handouts on intervention techniques, evaluation sheets.	

Figure 1 Session Plan page 1.

Timings	Trainer Activity	Trainee Activity	Resources
5 mins	Introduce topic and explain aims and objectives.	Listen. Ask questions.	PowerPoint slides, laptop, whiteboard screen.
5 mins	Ask trainees to attempt a definition of PFA.	Listen. Offer definitions. Discuss.	
5 mins	Discuss trainees' responses. Compare with definitions on slides.	Listen. Discuss. Ask questions.	PowerPoint slides, laptop, whiteboard screen.
15 mins	Introduce conceptual model of PFA. Go through CAIT.	Listen. Ask questions.	PowerPoint slides, laptop, whiteboard screen.
10 mins	Describe Interventions: active listening, normalization, provision of information, box breathing, grounding. Give handout on these.	Listen. Ask questions.	Handouts.
10 mins	Demonstrate interventions.	Watch and listen.	
30 mins	Observe trainees.	Role play MRT member, then survivor in groups of two. Practice interventions.	
10 mins	Summarize. Answer questions.	Ask questions	PowerPoint slides, laptop, whiteboard screen.
10 mins	Give out evaluation sheets.	Complete evaluation sheets.	Evaluation sheets.
Total 1 hr 40 mins			

Figure 2 Session Plan page 2.

Evaluation of the training package

This training package evaluation was approved through the ethics approval process of the Faculty of Pre-hospital Care of the Royal College of Surgeons of Edinburgh. The training package was evaluated using Kirkpatrick's four levels of training evaluation model (Kirkpatrick, 1996; Kirkpatrick & Kirkpatrick, 2016). This commonly used approach to the evaluation of training in organizations outlines four levels of training outcomes: reaction,

learning, behavior, and results. As PFA is a new concept in MR, it was not considered appropriate to attempt to evaluate higher-level training outcomes, and a decision was made to concentrate on level one "reaction" factors, that is, the relevance, acceptability, and potential usefulness of the training in this PFA framework in an MR context. It was intended that this would indicate whether further development of PFA training was worthwhile.

PSYCHOLOGICAL FIRST AID

DR C ABCDE

Connect, Assess, Intervene, Transfer

Intervene: normalize reactions if appropriate; provide information; stabilize using active listening, breathing techniques and grounding techniques as necessary; provide practical assistance if possible.

Active listening

- remain calm
- make and maintain comfortable eye contact
- don't pressurize to talk, but allow them to outline their story and their reactions if they wish

Box breathing (for extreme distress)

- in 2, 3, 4 hold 2, 3, 4 out 2, 3, 4 hold 2, 3, 4 in 2, 3, 4.....

Grounding (for extreme disconnection)

I want you to look at me and describe me....

Use prompts if necessary- What am I wearing? What color is it?

Figure 3 Handout.

Level one factors are typically assessed using short, simple, non-resource-intensive survey techniques (Kirkpatrick and Kirkpatrick, 2016). In this case, the level one factors were assessed using a paper questionnaire completed anonymously by MRT members immediately after the training session. The questionnaire incorporated four five-point Likert scales rating acceptability, relevance, usefulness, and likelihood that the MRT member would use PFA in an MR context. Participants were also asked to indicate, in four separate free-text boxes, additions that would improve the content of the training, items

that should be removed from the training, suggestions to improve the format of the training, and finally, any other comments. As only small numbers were involved, analysis was by descriptive statistics such as percentages and, for the free-text comments, by identification of themes. The number of potential themes was limited by specific instructions on three of the free-text boxes, and the themes were identified by reading, re-reading, and collating the free-text responses, as suggested by Braun and Clarke (2006). The author carried out both the statistical analysis and the identification of themes.

RESULTS

The training was completed within the two hours allocated for the training session. Not including the author, 16 team members out of a possible total of 39 (41%) attended the training session. All were adults with an age range from early 20s to early 70s and included both male and female team members. The attendance was comparable to the average attendance at other evening training sessions in the autumn months that year. **Table 1** below summarizes the responses:

The participants who completed the questionnaire strongly supported training in this PFA framework, with 100% (all 16) of participants in either agreement or strong agreement that PFA was appropriate, relevant, and useful in an MR context. Similarly, all but one participant indicated that they either agreed or strongly agreed with the statement that they would use PFA in an MR context.

Many participants made comments in the free-text boxes, though these did not necessarily appear in the boxes suggested. Two prominent themes and two minor ones emerged from the analysis of responses. The most prominent theme was the suggestion of the addition of a video, a demonstration by experienced role players, or both, of the techniques introduced in the training session. Another prominent theme was the usefulness of discussion. In the training session, participants were given a brief description of box breathing and grounding techniques and then asked to practice them in pairs. There were a small number of comments to the effect that they disliked participating in role-play. Observing the role play, it was evident that many pairs chose not to do this and instead engaged in discussion. Participants found this valuable and made comments to this effect, with several

suggestions that a discussion of real incidents the team had attended would be particularly helpful, looking at what had been done well and what could be done better.

Other, less frequent, comments included incorporating PFA into outdoor training sessions as a component of the management of the casualty site, observations linking PFA to the possible ongoing contact with casualties and their families post-discharge from the hospital, and comments on the relationship between PFA and the psychological well-being of team members.

DISCUSSION

There is very little literature concerning the provision of psychological support in MR. Juen et al. (2021) outlined how the five intervention principles of Hobfoll et al. (2007) might be applied and gave a case example. The present paper has outlined the reasoning for developing an MR-specific PFA framework. At the time this evaluation was in progress, no such framework had been described, though Mortimer & Mortimer (2023) published one subsequently. Their framework was based on a combination of the five intervention principles of Hobfoll et al. (2007) and “12 psychological first aid actions” of the American Red Cross (American Red Cross, 2017). They provided useful suggestions as to how rescuers should behave and helpful statements they might make, but did not describe how training might be structured, nor did they attempt a training evaluation. To the author’s knowledge, the present paper is the first to attempt an evaluation of training in PFA in MR.

It should be noted that this paper is an evaluation of the quality of the training, not research into the effect of the training on MRT members. It has some

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
PFA is acceptable in a mountain rescue context	10	6			
PFA is relevant in a mountain rescue context	12	4			
PFA is useful in a mountain rescue context	11	5			
I would use PFA in a mountain rescue context	12	3		1	

Table 1 Summary of responses.

significant limitations. The number of participants in the evaluation was very small (16), as it was carried out in a single English MRT. The PFA framework described was derived specifically for use in the UK and may not be applicable in other parts of the world, where services may be organized differently. The author was a member of the MRT evaluating the training, was known to all the participants, and acted as the trainer, all of which might have skewed the results in a more positive direction than had he been a neutral outsider. As the evaluation was an assessment of the quality of the training, not research into the effect of the training on MRT members, specific details such as age, gender, and length of time of MRT membership were not collected, nor was the antipathy of some participants to role-play explored further. In this context, it is worth noting that role play is frequently used in communication skills training programs for healthcare students, though an integrative review found only limited evidence for its effectiveness (Ronning & Bjorkly, 2019). In contrast, however, a study of role play in a program for medical students reported most found it helpful, even though a fifth had had previous negative experiences (Nestel & Tierney, 2007).

Despite these limitations, the results are encouraging. The training could be improved by incorporating modifications suggested by the evaluating participants. In response to feedback from their participants, Nestel & Tierney (2007) developed role-play guidelines based on adult learning principles, and these could be adapted to prepare MRT members for role-play in the hope that it would improve their learning experience. If the training was then offered to other MRTs, the robustness of subsequent evaluations would be enhanced both by a greater number of participants and by enabling comparison across teams. The training evaluation could also be extended to level two of Kirkpatrick's four levels of training evaluation, that is to evaluate whether learning had taken place (Kirkpatrick, 1996; Kirkpatrick & Kirkpatrick, 2016).

CONCLUSION

The results of this very small-scale evaluation with one English MRT indicated that training in this MR-specific PFA framework was judged to be acceptable, relevant, and

useful. Responses indicated that it was likely to be used by MRT members in MR incidents. The training, with suggested modifications, should be incorporated into the training calendar of the evaluating MRT. The training should be offered to, and be evaluated by, other MRTs to enhance the robustness of the findings. This evaluation should be extended to determine whether learning has taken place. The results of this further evaluation, whether positive or negative, would likely have implications for future UK MR training policy and practice.

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COMPETING INTERESTS

The author has no competing interests to declare.

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REFERENCES

- American Red Cross. (2017). *Psychological first aid: helping others in times of stress*. Instructor-led training participant guide. (July 2017). https://cdn.ymaws.com/www.papsy.org/resource/collection/8F65CE7F-36A3-4A2E-9AE8-1546D0092397/W07_-_Psychological_First_Aid_ILTParticipantGu.pdf
- Barton, R., Benson, O., Caple, A., & Gordon, L. (2023). *Casualty care revision in mountain rescue*. Ambleside: Langdale Ambleside Mountain Rescue Team.
- Bisson, J. (2014). Early responding to traumatic events. *British Journal of Psychiatry*, 204(5), 329–330. <https://doi.org/10.1192/bjp.bp.113.136077>
- Bisson, J., & Lewis, C. (2009). *Systematic review of psychological first aid*. Commissioned by the World Health Organization. <https://app.mhpss.net/resource/systematic-review-of-pfa-bisson-lewis-2009>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research*

- in *psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Brymer, M., Jacobs, A., Layne, C., Pynoos, R., Ruzek, J., Steinberg, A., Vernberg, E., & Watson, P. (2006). *Psychological first aid field operations guide* (2nd edition). National Child Traumatic Stress Network/National Centre for PTSD. https://www.ptsd.va.gov/professional/treat/type/PFA/PFA_2ndEditionwithappendices.pdf
- Dieltjens, T., Moonens, I., Van Praet, K., De Buck, E., & Vandekerckhove, P. (2014). A systematic literature search on psychological first aid: lack of evidence to develop guidelines. *PLoS ONE*, 9(12), e114714. <https://doi.org/10.1371/journal.pone.0114714>
- Everly, G., & Lating, J. (2017). *The Johns Hopkins guide to psychological first aid*. Baltimore: Johns Hopkins University Press.
- Forbes, D., Lewis, V., Varker, T., Phelps, A., O'Donnell, M., Wade, D., Ruzek, J., Watson, P., Bryant, R., & Creamer, M. (2011). Psychological first aid following trauma: implementation and evaluation framework for high-risk organizations. *Psychiatry*; 74(3), 224–239. <https://doi.org/10.1521/psyc.2011.74.3.224>
- Fox, J., Burkle, F., Bass, J., Pia, F., Epstein, J., & Markenson, D. (2012). The effectiveness of psychological first aid as a disaster intervention tool: research analysis of peer-reviewed literature from 1990–2010. *Disaster Medicine and Public Health Preparedness*, 6(3), 247–252. <https://doi.org/10.1001/dmp.2012.39>
- Hermosilla, S., Forthal, S., Sadowska, K., Magill, E., Watson, P., & Pike, K. (2023). We need to build the evidence: a systematic review of psychological first aid on mental health and well-being. *Journal of Traumatic Stress*, 36(1), 5–16. <https://doi.org/10.1002/jts.22888>
- Hobfoll, S., Watson, P., Bell, C., Bryant, R., Brymer, M., Friedman, M. J., Friedman, M., Gersons, B., de Jong, J., Layne, C., Maguen, S., Neria, Y., Norwood, A., Pynoos, R., Reissman, D., Ruzek, J., Shalev, A., Solomon, Z., Steinberg, A., & Ursano, R. (2007). Five essential elements of immediate and mid-term mass trauma intervention: empirical evidence. *Psychiatry*, 70(4), 283–315. <https://doi.org/10.1521/psyc.2007.70.4.283>
- Inter-Agency Standing Committee Reference Group for Mental Health and Psychosocial Support in Emergency Settings. (2010). Mental health and psychosocial support in humanitarian emergencies: what should humanitarian health actors know? Geneva. <https://interagencystandingcommittee.org/sites/default/files/migrated/2018-10/IASC%20RG%20doc%20health%20audience.pdf>
- Juen, B., Brunner, H., Warger, R., & Kratzer, D. (2021). Crisis intervention and peer support after incidents in mountain areas. In: H. Brugger, K. Zafren, L. Festi, P. Paal, & G. Strapazzon (Eds.), *Mountain emergency medicine*. Milan: Edra.
- Kirkpatrick, D. (1996). Great ideas revisited: revisiting Kirkpatrick's four-level model. *Training and Development*, 50(1), 54–59. <https://www.proquest.com/docview/227001481/fulltextPDF/8E61111109446B9PQ/1?accountid=17233&sourcetype=Trade%20Journals>
- Kirkpatrick, J., & Kirkpatrick, W. (2016). *Kirkpatrick's four levels of training evaluation*. Alexandria, VA: ATD Press.
- Lewis, C., & Bisson, J. (2022). Managing the risk of post-traumatic stress disorder (PTSD): Best practice for prevention, detection and treatment. *Acta Psychiatrica Scandinavica*, 145(2), 113–115. <https://doi.org/10.1111/acps.13392>
- Mortimer, A., & Mortimer, R. (2023). Psychological first aid for wilderness trauma: interventions for expedition or search and rescue team members. *Wilderness and Environmental Medicine*, 34(3), 346–353. <https://doi.org/10.1016/j.wem.2023.02.009>
- Nestel, D., & Tierney, T. (2007). Role-play for medical students learning about communication: guidelines for maximising benefits. *BMC Medical Education*, 7(3), 1–9. <https://doi.org/10.1186/1472-6920-7-3>
- Ozer, E., Best, S., Lipsey, T., & Weiss, D. (2003). Predictors of posttraumatic stress disorder and symptoms in adults: a meta-analysis. *Psychological Bulletin*, 129(1), 52–73. <https://doi.org/10.1037/0033-2909.129.1.52>

- Ronning, S., & Bjorkly, S. (2019). The use of clinical role-play and reflection in learning therapeutic communication skills in mental health education: an integrative review. *Advances in Medical Education and Practice*, 10, 415–425. <https://doi.org/10.2147/amep.s202115>
- Rose, S., Bisson, J., Churchill, R., & Wessely, S. (2002). Psychological debriefing for preventing post traumatic stress disorder (PTSD). *Cochrane Database of Systematic Reviews*, 2002(2), Art. No.: CD000560. <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD000560/full>
- Ruzek, J., Brymer, M., Jacobs, A., Layne, C., Vernberg, E., & Watson, P. (2007). Psychological first aid. *Journal of Mental Health Counseling*, 29(1), 17–49. <https://doi.org/10.17744/mehc.29.1.5racqxjueafabgwp>
- Shultz, J., & Forbes, D. (2014). Psychological first aid. Rapid proliferation and the search for evidence. *Disaster Health*, 2(1), 3–12. <https://doi.org/10.4161/dish.26006>
- Van Hecke, A., Duprez, V., Pype, P., Beeckman, D., & Verhaeghe, S. (2020). Criteria for describing and evaluating training interventions in healthcare professions- CRe-DEPTH. *Nurse Education Today*, 84, 104254. <https://doi.org/10.1016/j.nedt.2019.104254>
- World Health Organization. (2011). *Psychological first aid: guide for field workers*. Geneva: WHO. https://iris.who.int/bitstream/handle/10665/44615/9789241548205_eng.pdf?sequence=1