

Interventions for Critical Incident Stress in Emergency Medical Services: A Qualitative Study

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Summary

Background: Controversy over the use of Critical Incident Stress Debriefing has left Emergency Medical Services (EMS) Organizations with little direction in preventing sequelae of Critical Incident Stress (CIS) in their employees.

Objective: To explore and describe Emergency Medical Technicians' (EMTs) experiences of Critical Incidents and views on potential interventions, in order to facilitate the development of interventions that take into account EMS culture.

Methods: We interviewed 60 EMT practitioners and supervisors, and examined interview transcripts using ethnographic content analysis.

Results: Participants experienced a brief time-out and early emotional support from supervisors and peers as important in preventing sequelae of CIS. The authors illustrate the differences between supervisor and peer support. Barriers to support are identified, and ways to address them through education are suggested. An organizational culture that stigmatizes emotional vulnerability underlies many of the barriers.

Conclusions: EMT practitioners want emotional support in their workplace soon after a Critical Incident, and would welcome interventions that enhance this. Educating both supervisors and front-line practitioners to recognize and respond to Critical Incidents is acceptable to them and perceived as important, along with simple interventions such as a brief time-out. Directly addressing the issue of stigma in EMS culture is a valuable, though challenging, intervention.

Key words: critical incident stress; emergency medical technicians; qualitative methods; early intervention; secondary trauma

Introduction:

Emergency Medical Technicians (EMTs) frequently encounter traumatic incidents, also known as “critical incidents” (Mitchell, 1983) which can result in significant emotional sequelae (Beaton, Murphy, Johnson, Pike, Corneil, 1998; Alexander & Klein 2001). There have been few well-designed studies that focus on the needs of these personnel (Eriksson, Foy, Larson, 2004). For over 20 years, Critical Incident Stress Debriefing (CISD) (Mitchell JT, 1983) has been the most popular intervention offered to EMTs and other first responders (Everly & Mitchell, 1999). However, the use of CISD has become controversial (Rose, Bisson, Churchill, Wessely, 2002; van Emmerik, Kamphuis, Hulsbosch, Emmelkamp, 2002). The trend now is to “screen and treat” symptomatic trauma survivors (Rose, et al 2002), eschewing early intervention entirely. This leaves Emergency Service Organizations with little direction as to how to respond to their traumatized employees in the aftermath of a critical incident (Tuckey, 2007; Suveg, 2007).

Listening to the Emergency Medical Services employees themselves (Rose, Bisson, Wessely, 2003; Orner, 2003) is a valuable starting point for developing a new approach. In this first phase of a three-phase study, we interviewed EMTs and their supervisors in order to determine 1. their perceived need for intervention for critical incident stress, and 2. the types of intervention and strategies that have felt valuable (and not so valuable) for them. We chose an exploratory approach for this phase in order to: 1. allow fresh ideas to emerge, 2. explore them in may impact on the acceptability of a new intervention. We intend to validate our findings with a quantitative approach in phase 2, and to develop and test an intervention in phase 3.

Methods:

Participants:

Volunteers were recruited from attendees (supervisors and front-line providers) of a mandatory continuing education programme (CME) in a large urban Emergency Medical Services (EMS) organization. This included all supervisors and front-line EMTs on active duty at the time of the CME. They were given a choice of individual interviews or focus groups, or were assigned if they had no preference. Saturation (i.e., the point at which no new information emerges) guided the sampling process. We sampled to ensure that both genders and all job levels were represented. In our jurisdiction there are three levels of EMTs, designated as levels 1, 2, and 3, with level 3 EMTs having advanced life support training. Supervisors have all worked as EMTs in the past, and their comments were welcomed on either their experience on the front lines, or as supervisors, or both. Each participant received a \$60 honorarium. The study received institutional research ethics board approval and each participant signed a consent form.

Data collection:

Identical guidelines were used for individual interviews and focus groups (Britten, 1995). The semi-structured interview opened with an invitation to talk about their experience of critical incidents. Further probes included a) how the incident affected them, both physically and emotionally; b) how they dealt with the incident; c) what helped and what didn't; and d) recommendations for improving recovery. The interview structure was sufficiently flexible to permit the elaboration of more in-depth or emotionally significant data. Individual interviews lasted between 60 and 90 minutes and were conducted by one of the authors (PB). Focus groups ran for 90 to 120 minutes and were conducted by 2 facilitators (two of JH, PB, and a focus group

facilitator). We planned for focus groups of 4 to 8 members, to maximize interactive data.

Interviewers kept notes on non-verbal interactions and tone of the interview. All interviews took place in interview rooms away from the workplace, and were audiotaped and transcribed.

Data analysis:

Two of the authors listened to all audiotapes (JH, PB) for emphasis and emotional tone, and three of the authors (JH, PB, MG) together developed thematic coding trees based on the transcripts. Coding was discussed and compared regularly among coders, and one author (JH) reviewed the coding of all the transcripts. All instances of differences in coding were resolved by consensus among the three coders. Ethnographic content analysis (ECA) was used to examine the transcribed material (Altheide, 1987; Savage , 2000). ECA is an integrated method for describing contextualized meaning patterns as well as analyzing textual material for both frequency and numerical relationships. We enumerated textual data only from the individual interviews, and analyzed the qualitative data from both individual and group interviews. This is because the nature of free-flowing group discussion does not lend itself to enumeration. For instance, usually only some participants choose to comment on a topic, and those who do so may not give a complete response. Group interviews, on the other hand, are particularly useful for understanding organizational culture (Kitzinger J, 1995).

We categorized both broad and specific themes using a constant comparative method (Glaser and Strauss, 1967). This entailed a systematic iterative examination and categorization of text based on specific themes. Following initial textual categorization based on meaningful units or data segments, multiple re-readings eventuated in progressively higher-order thematic coding (Tesch R, 1990). Initial themes included descriptive categories of critical incidents and their sequelae, types and timing of strategies used to deal with the stress, helpful and non-helpful

interventions, and interviewees' recommendations for improving recovery. Themes that emerged on further reading were roles of various supports (e.g. peers, supervisors, family), barriers to support, and chronic workplace stressors.

In order to enhance the rigour of the findings we used a technique known as "member validation" (Hoffart, 1991). This consisted of presenting the data and our interpretations at a CME programme six months later. The attendees were essentially the same group who had seen the recruitment presentation and included those who had participated in the interviews. Feedback was solicited on how well the themes captured their experiences, and was used to both verify and modify our findings.

Results:

Participants:

Out of a total of approximately 100 supervisors and 900 front-line EMTs in the organization, there were 60 participants. Of these, 31 participated in 8 focus groups (which were composed of between 2 and 8 members) and 29 participated in individual interviews. Four of the individual interview participants were supervisors, but no supervisors participated in any focus groups. Participants in both kinds of interviews were representative of the organization in terms of average age (39 years) and years of service (13 years). There were 33% females (compared to 24% in the organization), and 49% level 3 EMTs (compared to 25% in the organization).

Description of Participants:

Both in focus groups and in individual interviews, the EMTs and supervisors were dedicated to and took pride in their work. They described addressing emotional issues with their patients and patients' families with considerable sensitivity and expertise, and recognizing this as an important, if unanticipated, part of their job. They presented as an insular group, preferring the company of other EMTs, and feeling most understood by them. However, there was evidence of management-union friction in the comments of both front-line and supervisory EMTs. Front-line EMTs tended to mistrust whether management (sometimes including the supervisors) had their best interests in mind.

The interviewees reported considerable experience with, and concern about, critical incidents. The frequency, intensity and type of exposure; impact of workplace stressors; and the

resulting perception that early intervention is necessary and valuable is described in a separate paper (Halpern et al, manuscript in preparation).

Themes:

The crucial role of the workplace immediately after the incident:

In describing the types of intervention and strategies that have felt valuable (and not so valuable) for them, interviewees focused on the ways they interacted within the organization more than on the ways they coped as individuals. The themes of supervisor support and the need for a time-out period in the period immediately after the incident were most prominent.

1a .Supervisor Support :

The responses of supervisors in the first 24 hours after the incident were discussed with remarkable emotion and frequency (21/29 individual interviewees). Supervisors who were seen as unsupportive were described as critical, often in angry, resentful and disappointed tones. Supportive supervisors were described with considerable appreciation. The following quotes illustrate the qualities of support and how it is perceived:

Acknowledgement (implicit or explicit) of the incident as critical:

“But just, what really helped me was that he got there so fast and he took me out of service and it was just a big sigh of relief.” (Participant #109)

Expressing concern about the wellbeing of the EMT:

“And she came out and said, ‘I’ve been so worried about you.’” (Participant #124)

Willingness to listen:

“the day after that call, my supervisor kind of sensed that I wanted to talk to him and I don’t know why, you know, he came to the hospital. But it was the next day and he was kind of like, so pull up a chair, sit down. Let’s just talk. And it was like I wanted somebody just to say to me, okay, this is your time and you can talk right now and I’m not going to judge you. I’m not going to talk about anything. I’m going to let you just have your 10 minutes. And that made a huge difference. I have the utmost respect for my particular supervisor... Whether it was talking specifically about the call or just having a little bit of a ‘hey you’re okay at your job’, type comment.” (Participant #122).

Valuing the EMT’s work:

“I want somebody to say, you really did a good job”. (Focus group)

Offering material help:

“Knowing that somebody cared enough to go that extra bit to connect and saying, are you okay, how’s it going? Is there anything I can do? (Participant #124)”

“And our supervisor took us out of service for 15 minutes. I’m going to buy them a coffee, took us over to the Second Cup, just little things like that do go a long way.” (Focus group).

“And so our supervisor was really, we have a great supervisor and he’s, you know, asked us all specifically, are you guys okay, you know. And the other crew went off on stress for the rest of the shift. We stayed, because we said, you know, we’re okay. We just kind of dealt with the aftermath of everything. It was still a pretty stressful call but at least we had that option. And he had no problems, like, he said, go home. Whatever you guys need. So and that’s a big thing.” (Focus group)

Barriers to supervisor support:

One supervisor described four sources of failure to offer emotional support on the part of management:

The ways in which his own discomfort with emotions interfered:

“Yeah, and I’ll use a call the other day. When I saw a (*starts to cry and has difficulty speaking*). One second. (Take your time.) When you see one of your co-workers in distress, it puts you in distress.”

His difficulty identifying the more idiosyncratic calls (such as a patient resembling the EMT’s loved one) as critical:

“And you’re not there after each call, so how do you find out that, how do you know that someone may have been triggered, or is taking it a little harder?”

The difficulty some have in recognizing that an EMT is emotionally affected:

“But I was fortunate enough, I could recognize when people are in distress. You know what their norm is; and when you see them in withdrawal and, I can’t recall the classic, but in my mind, I said, that’s not right. Let’s deal with it.”

Inadequate skills and possibly poor training:

And we have a lot of new very smart supervisors now, coming up in the system. They do need to be exposed to it. I don’t know what they were given at their orientation as a supervisor. So they could be out there now and have no training in it. (Participant #126)

Restricted role definition may also be a barrier to supervisor support:

Yeah and it’s like, oh, and when you see the supervisor vehicle pull up to the station, you’re going, okay, who’s in trouble? Who’s done what? Instead of he’s coming in to thank you for a call or, you know, hey, how’re you doing? What can I do for you? It’s, uh, can I talk to you? (Focus group)

EMTs identified the following barriers to their requesting support after a critical incident:

Fears of stigma and appearing weak:

“you’ve got to be strong and you’ve got to be tough and none of this stuff can bother you but it’s going to!” (Participant #106)

“I guess I’m just supposed to get back on that horse. Suck it up. Get back on that horse. Get in there.” (Participant #118)

“Everyone wants to be tough and strong. Maybe that was my downfall or problem at the time and I didn’t want to admit that I needed any kind of help. I guess I didn’t want to be perceived as weak.” (Participant #110)

Not recognizing the call as a critical incident:

“I can’t believe this is bothering me. It didn’t bother me after the call. And I was like, I just don’t understand. (“Participant #120)

“I think recognition. And recognition in ourselves, but recognition in our co-workers too. And I think it’s, like, if P3 and I were working together and he’s having a, he’s having issues, I need more to be able to recognize it in him.”(Focus group)

“And I realized about a year later that the call really messed me up for a year.” (Focus group)

Avoiding thinking or speaking about the call:

“And to be honest with you, most of the way I’ve survived, I forget about things. I forget about the calls and everything else. So unless someone, as I mentioned earlier, unless someone brings a call up and I start thinking about it, I don’t think about it. I’ve found that’s how I’ve survived very nicely.” (Participant #130)

“I think my response normally was just to push aside that thought as quickly as possible and move on.”(Participant #103)

Expecting an unsupportive response:

“Depending on who it is... one supervisor, we took, we did a [critical call], and we took the last hour of the shift off. And he was making us fill out all these forms and, you know, telling us that if we wanted to take the next shift off that we had to go see our doctor and get a note for this and that. And you know, just made it more stress.”(Focus group)

The difficulties of both supervisors and EMTs in reaching out came across as a complex “dance”, in which EMTs either were reluctant to speak about the critical incident, or regarded their supervisors with suspicion until they felt convinced of their genuine concern.

An EMT:

“Yeah. Personally I find that if you asked me right after the call how I’m doing, I’m fine. (every one repeats, I’m fine and laughs). I don’t want you to come up and get in my face and say, are you okay? Just leave me alone. Okay. Ask me in a couple of days, am I okay with the call, sort of thing.” (Focus group)

A Supervisor:

“What I like to do is, if I know about a call, I hear it go down or, and I hear it’s horrendous, I try to show up at the hospital. And just, how are you doing? Anything I can get you? Do you need any equipment? You know. And I may hang around. Not in their face, but I’ll be there. And I find, you may see them standing off to the side. If you approach them, they walk away. Okay. Give them time. A lot of times, if you go outside the building, you find they’ll follow you. And let them start the conversation. If I see someone’s really in trouble by their physical action, their facial expressions, I may give them time then go and ask them, you okay? I know that’s the worst thing you can say, are you okay? What I try to do now is, you know, can I get you something? Do you need some time? Do you need some equipment? Do you want me to help you with your equipment? And usually that’s when you’ll get them talking.” (Participant #126).

A Second Supervisor:

“my style is to just hang around and if I can’t get a minute with him, as we’re walking off, can I talk to you for a second and I’ll take him off to the side. Never talk in front of anybody else. Unless it’s a group discussion gets going but I’ll pull that person aside. Or I might just take him into a room and close the door and say, hey, what’s going on? You know. But how do you teach that skill? I don’t know. And that’s your challenge...” (Participant #128).

The “dance” requires considerable skill on the part of the supervisor. It requires an ability to recognize and empathize with emotions, even when the EMT is doing his best to avoid feeling them, has trouble recognizing them, and is mistrustful that the supervisor is able or willing to help. This is all within a context of an organizational culture that stigmatizes emotional vulnerability.

1b. Opportunity for a time-out:

Another crucial resource appears to be a time-out. This is a period, optimally ½-1 hour, in which the EMT is taken out of service. This time is usually spent with peers. Here are descriptions of what usually occurs during this time and how important it feels:

“I think that people, at least, everyone that I’ve, most people I’ve worked with, pretty good at just talking, we just, you know, we just talk about it afterwards. Nothing specific, but you just, a matter of talking about it and decompress, get a coffee, before you start your paperwork. You know, just kind of sit. (Focus group)

our supervisor took us out of service for a couple of hours and let us go have lunch, sat down and had lunch and just kind of relax and talk amongst ourselves, not even about the call, just about whatever, just to kind of relax. Before we went back on shift. Certainly we could have booked off the rest of the day, you know, on stress leave or whatever, but we all, found that just having, just being able to have a couple of hours to, kind of, you know, relax a little bit, that helps us a lot.”(Focus group)

“We went out and had lunch, talked about it, talked about, you know, just stuff, family, and felt much better after that.”(Focus group)

“Like I said, after, like just kind of sitting down with the people who were on the call and just kind of doing whatever you do to cope with it. Some people, you know, some people don’t do anything; they just kind of sit there. But we usually talk about, you know, X is really good about talking about his kids and on kids’ call and he’s oh, you know, I was really upset on this call because, you know, I associated with my kids and he just, you talk about anything you want to, like, you know, stupid calls that you did the day before and it’s just like, ah, you just vent. And you know they understand.” (Focus group)

The time-out period is a time to speak about the incident, casually, at their own pace, in a comfortable unstructured environment, with people of their own choosing. Emotions about the call are mentioned, but not dwelled on, and appear to be woven in and out of a conversation that consists also of less charged topics. There is freedom to discuss the incident to the degree that one feels comfortable. The EMTs identify this time as an opportunity to “relax” and “decompress”.

The time-out is preferably spent with peers, optimally the work-partner or others who have been on the same call. The following is a particularly pithy description of the importance of the work partner at these times:

“I have my own sort of peer that I can trust. And usually your partner, I find, is usually, especially if you’re permanent partners...I have the same partner every shift. I can talk to that partner. We spend 12 hours, I spend more time with my partner than I do with my wife. I can talk to them about, you know, this stuff, right? And they were there. If I

was on a call, they were on the call with me, It generally works that way. So, it's a lot easier to talk to them." (Participant #114).

In new recruits especially, who have not developed a strong connection with peers or who are fearful of appearing weak or incompetent, family and friends are the preferred companions, and although they can sometimes be reached by telephone, often this type of talking has to be postponed until the end of shift. However, family and friends are often protected from the "burden" of hearing about critical incidents. Interviewees did not often use mental health support services offered by the organization (staff psychologist, employee assistance team made up of fellow EMTs). Explanations for this included concerns about confidentiality, perception of lack of professional competence, fear of stigmatization, and difficulty accessing the resources. For the few who had been involved in a debriefing, their perceptions ran from helpful to harmful. Emergency physicians were sometimes consulted during this early period for reassurance about management of calls involving patients who succumbed to their illness/injury.

Barriers to time-out:

Barriers to time-out are similar to the barriers to receiving emotional support from supervisors, with the additional barrier of time pressures. EMT reluctance to request time-out was also due to concerns about confidentiality. This description is from a supervisor's point of view:

"and I know our department's very, very poor at keeping secrets. So if I put a crew out of service, I have to tell the communications center. Communications says, we're sitting this far apart, Hey Mike, I just put the 22 car out of service in stress. Every dispatcher in there hears it. Every call receiver in there hears it. So they hear it. I don't know if they say anything. I don't know if they go home and tell all their friends and family. But I don't like that system. There's no quiet way of doing it." (Participant #128)

One EMT described her reluctance to talk about the incident, even during a time-out with peers, because of the emotional discomfort it can engender:

“You know, I do talk to my partner, but I don’t dwell on these things, because the more I talk about it, the more I think I feel the emotions that I’ve been trying to suppress.”
(Participant #102)

Interviewees’ recommended interventions:

Recommended interventions focused on education, addressing barriers to support, improving chronic workplace stressors. One frequent recommendation was the introduction of Morbidity and Mortality rounds. These are a non-judgemental format for feedback on difficult cases which could be a potential source of mutual support and reassurance. Many proposed education for themselves, their supervisors and families in recognizing signs of critical incident stress. Other ways of addressing barriers to support were also suggested such as education about stigma in the workplace and improving supervisors’ capacity to reach out. The latter was more frequently suggested and endorsed than the former, likely because for many EMTs the stigma is so firmly entrenched in the culture that it remains unrecognized and unchallenged. Some recommendations were contradictory, and seemed to be the result of attempts to circumvent some of the barriers. For instance, in spite of the overwhelming majority of EMTs preferring that interventions be optional, some suggested that the most common types of critical incidents (e.g. those involving children) routinely be followed up by supervisors or mental health staff, and even went so far as to recommend that debriefing be mandatory. This would circumvent their difficulty in identifying and admitting to feeling critical incident stress.

Discussion:

Crucial role of the workplace immediately after the incident:

This study extends our understanding of how EMTs cope by highlighting the importance of the first 24 hours in the workplace. Supervisor support and a time-out period are perceived as the most valuable resources.

The importance of supervisor support to EMTs after critical incidents has not previously been described. This study also identifies the types of support that EMTs prefer from their supervisors, as well as the barriers to support. Previous studies have noted the perception of inadequate supervisor support (Regehr, Goldberg, Hughes, 2002) and the importance of workplace support to the general welfare of EMTs (Aasa, Brulin, Angquist, Barnekow-Bergkvist, 2005; Brough, 2005), both during non-critical periods. In a survey of ambulance personnel in the UK, Alexander and Klein (2001) found that peer support was seen as “much more likely to be available than support from senior staff”, and the organization was seen by many EMTs as unconcerned about their welfare after a critical incident. Some of their conjectures about this perception of unconcern match our findings: inability of staff to tolerate their own emotions or convey feelings of concern; reluctance of EMTs to ask for help because of concerns about confidentiality.

The value of peer support for EMTs in the immediate post-incident period has been previously noted (Orner, 2003), and this study expands on the ways in which peers support each other and the barriers. The brief time-out in which this peer support largely occurs has not previously been studied in detail. However, in a study of police officers, Carlier et al (Carlier, Lamberts, Gersons, , 1997) stress that “insufficient time allowed by the employer to resolve the

trauma is a major organizational risk factor” for posttraumatic stress symptoms. Interestingly, the question of a time-out for physicians and surgeons after intra-operative death has recently been explored (Smith, 2001; White & Akerle , 2005).

Types of Intervention:

The types of intervention that emerge from this study consist of 2 major components in the early aftermath of an incident:

1. Emotional support offered by the supervisor which consists of acknowledgement of the incident as critical, valuing the work done by the EMT, concern about the wellbeing of the EMT, willingness to listen and to offer material help such as a brief time-out period.
2. The availability of a brief (often just 1/2- 1 hour, rarely more than a few hours) time-out period, usually spent in what appears to be casual conversation with peers, but which serves to decrease emotional hyperarousal and allows for self-titrated release of emotion, in the context of a comfortable, understanding environment.

It should be noted that in both components 1 and 2 the majority of EMTs prefer to talk with supportive others (rather than keep silent or be alone). Although their self-image tends to be one of emotional independence (Miller,1995), in these circumstances they nonetheless welcome the emotional support of both their supervisors and peers. The support is only accessible if the barriers can be navigated: if attention to vulnerable emotions is sufficiently comfortable for both giver and receiver; if there has been adequate training and preparation in understanding one’s own emotions and knowing how to approach one another; if both supervisors and EMTs feel confident that support will be offered and received without concern about organizational stigma or confidentiality. Then EMTs can deal with their emotions while maintaining the crucial feeling of control over their emotions and surroundings (Orner, 2003).

Comparison to Critical Incident Stress Debriefing:

The types of intervention that emerge from this study differ appreciably from the format of Critical Incident Stress Debriefing. Although CISD focuses on the role of the workplace, it is a formal process which is often designated to mental health professionals rather than the members of the EMS organization. This formality and dependence on less familiar personnel may bypass natural internal processing and natural social support (van Emmerik et al, 2002). The formal debriefing at the centre of CISD takes place 24 to 72 hours later (Everly & Mitchell, 1999), a time which appears to be of less importance to our interviewees than the period within 24 hours of the incident. The formal framework of CISD does not allow for the self-titrating of emotional expression illustrated by our interviewees' descriptions of talking to their peers. It has been postulated that the formal discussion of both details and emotions of a critical incident may have the opposite effect to that desired, that is sensitization to trauma-related stimuli. (van Emmerik et al, 2002).

Proposed Model of Recovery:

Most models of recovery from all kinds of trauma highlight the role of cognitive processing of the event (Stephens & Long, 1999). However, our interviewees have highlighted a different, and possibly more significant aspect of recovery: the early reduction of emotional hyperarousal. Although the association of acute hyperarousal with increased risk of chronic PTSD has been known for some time (Yehuda, McFarlane, Shalev, 1998), the idea that reducing hyperarousal soon after a traumatic event might be the most beneficial approach is relatively recent (Schell, Marshall, Jaycox, 2004). It has been postulated that failure to reduce hyperarousal may be at the heart of symptoms of a continuing hyperaroused state such as sleep disruption, irritability, and the intrusive symptoms of PTSD. Further, it

has been suggested that internal strategies used to deal with such a state may lead to further pathology: for example, avoidant symptoms of PTSD, substance abuse, depression, burnout, somatic and relationship difficulties (Litz, Gray, Bryant, Adler, 2002).

Suggestions for Intervention:

The present study suggests methods by which EMS organizations might develop interventions dealing with CIS that would be acceptable to their personnel. The effectiveness of these interventions remains to be studied in phases 2 and 3 of this project. Education figures prominently in the suggestions of the interviewees: education for themselves, their families and supervisors of the signs and symptoms of critical incident stress; the provision of Morbidity and Mortality Rounds. These are important and can be addressed without significant organizational upheaval. Ensuring that a time-out period is available in spite of time pressures is somewhat more difficult to ensure because of operational pressures, but may in the long-run (minimizing longer leaves, disability etc.) prove to be cost-effective. Improving the training of supervisors, such that they recognize the importance of their role in dealing with critical incident stress, and ways to manage the inevitable “dance” that ensues, should also be in the realm of possibility. The issue of stigma, the discomfort that EMTs and supervisors feel when faced with vulnerable emotions within their organization, is the most insidious and far-reaching barrier, which makes it both the most important and most challenging to face. The fact that many of our participants recognize it explicitly and welcome addressing it is encouraging. Their ability to deal with the emotions of their patients as an often unexpected part of their role is also a hopeful sign. Education about stigma, likely involving the kind of scenario-based hands-on training used so effectively in the rest of EMT education, may well be an effective and ultimately cost-effective programme for EMS

services to provide for both front-line and management personnel. It would allow for greater effectiveness of the natural resources available to them in their workplace: the support of their supervisors and peers.

Limitations of the study:

Our interviewees were all self-selected, and although the sample was representative of the EMS organization studied in many ways, volunteers may also have been more traumatized, more vocal, or differ in other important ways from the majority of EMTs. While the group we studied was not large, we achieved our goal of sampling until new information was no longer forthcoming.

Conclusion:

EMTs suffer considerably from critical incidents and would welcome new interventions to prevent or mitigate emotional sequelae. They identify as important to their recovery two workplace resources in the immediate aftermath of an incident: 1. Supervisor support and 2. a brief time-out period in which to talk informally, often with peers. Barriers to accessing such support are identified, including difficulties recognizing and acknowledging critical incident stress on the part of both EMTs and supervisors; role restriction and inadequate training in support for supervisors; practical issues such as time pressure, and most pervasively, the culture of stigma within the organization. These results are compared with the previous literature on critical incident stress and suggestions are presented for interventions that would be acceptable and likely effective. Further research (phases 2 and 3) will verify the value of these strategies.

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