The treatment of occupational stress in the field of emergency medical services

Patricia A. Boeck

University of Northern Iowa

Let us know how access to this document benefits you

Copyright ©1993 Patricia A. Boeck

Follow this and additional works at: https://scholarworks.uni.edu/grp

Part of the Education Commons

Recommended Citation


This Open Access Graduate Research Paper is brought to you for free and open access by the Student Work at UNI ScholarWorks. It has been accepted for inclusion in Graduate Research Papers by an authorized administrator of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.
The treatment of occupational stress in the field of emergency medical services

Abstract
Danger can be exhilarating: going into situations that others fear to consider, being pushed to the edge of one's physical and psychological limits, and having the awareness that one's skills and reactions routinely determine whether another person lives or dies

This open access graduate research paper is available at UNI ScholarWorks: https://scholarworks.uni.edu/grp/2089
THE TREATMENT OF OCCUPATIONAL STRESS IN THE FIELD OF EMERGENCY MEDICAL SERVICES

A Research Paper
Presented to
The Department of Educational Administration and Counseling
University of Northern Iowa

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

by
Patricia A. Boeck
December 1993
This Research Paper by: Patricia A. Boeck

Entitled: THE TREATMENT OF OCCUPATIONAL STRESS IN THE FIELD
OF EMERGENCY MEDICAL SERVICES

has been approved as meeting the research paper requirements
for the Degree of Master of Arts.

Audrey L. Smith

October 26, 1993
Date Approved

Advisor/Director of Research Paper

Terry Kottman

October 27, 1993
Date Approved

Second Reader of Research Paper

Robert H. Decker

Oct. 28, 1993
Date Approved

Head, Department of Educational Administration and Counseling
Danger can be exhilarating: going into situations that others fear to consider, being pushed to the edge of one's physical and psychological limits, and having the awareness that one's skills and reactions routinely determine whether another person lives or dies (Mitchell, 1984). This type of danger is an inherent and ever-present part of the job of the emergency medical services (EMS) worker. However, according to most sources in the literature (Garcia, 1988; Metz, 1982; Mitchell, 1984; Spitzer; 1988), no EMS professional experiences the exhilaration that accompanies this danger without paying a price, and that price is occupational stress.

Heaney and van Ryn (1990) noted that the concept of occupational stress and its potential effects on health have been of great interest to the public, to researchers, and to mental health practitioners for many years. These authors' contention is reinforced by the considerable number of literary and empirical studies investigating the nature and effects of occupational stress (Dewe, 1989; Klarreich, 1987; Motowidlo, Packard, & Manning, 1986; Newton, 1988). Everly (1990) linked occupational stress to both short-term effects such as job anxiety, job tension, and job satisfaction and to longer-term outcomes such as
depression, ulcers, cardiovascular disease, and mortality.

Goodspeed and DeLucia (1990) offered impressive figures indicating that stress impacts not only individuals, but also the welfare of the nation as a whole. They maintained that the cost of stress to national industry is between $75 and $100 billion annually as a result of absenteeism, medical claims, and diminished productivity. In addition, Pelletier and Lutz (1988) estimated that over 50 percent of workers' compensation cases and 60 to 90 percent of visits to health care professionals are for stress-related disorders. As a result of such findings, there has been widespread general acknowledgment in industry of the existence of occupational stress, with resultant development of worksite stress management programs (DeFrank & Cooper, 1987).

Despite the fact that leaders in industry have for many years been concerned with and responded to the stress-related needs of their workers (Donatella & Hawkins, 1989; Murphy, 1984; Reynolds & Shapiro, 1991), until quite recently practitioners in the fields of EMS and mental health have not taken the cue and examined the occupational stress needs of EMS personnel. This lack of attention is amazing in light of the fact that
EMS has repeatedly been assessed by national studies and surveys to be one of the most stress-inducing areas in which to work (National Institute of Mental Health, 1988b).

Concern for EMS occupational stress has been on the increase in the past decade, particularly since University of Maryland Emergency Services psychologist Jeffery Mitchell (1988a, 1988b) published a set of articles in the nationally read Journal of Emergency Medical Services. An acknowledged pioneer and expert in the area of EMS stress, Mitchell was one of the first people to identify, study, and treat EMS personnel suffering from occupational stress (Spitzer, 1988). Mitchell (1988a, 1988b) described the concept of EMS occupational stress, outlined a treatment plan for specific aspects of this stress, and sparked a mushrooming interest by EMS practitioners in this phenomenon. Among those calling attention to the increase in interest were Clark (1989), Harris (1989), Walker (1990), and the U.S. Congress Office of Technology Assessment (1989).

The specific impact of occupational stress on the field of EMS may at first be difficult to conceptualize. This impact is perhaps better understood when viewed in respect to the number of
individuals on a national basis who suffer from this phenomenon. The latest figures available, compiled by the United States Congress Office of Technology Assessment (1989), indicated that there were approximately 750,000 people engaged in the field of EMS as volunteer or employed workers. Mitchell and Resnik (1986) reported that around 4% of emergency personnel develop some sort of stress disorder in response to their EMS duties and responsibilities. By utilizing the above statistics, it can be estimated that approximately 30,000 EMS personnel in the U.S. suffer from occupational stress at any given time. This figure of 30,000 seems fairly high, especially when it is recognized that until recently little has been done to understand or assist these individuals toward recovery (Mitchell & Bray, 1990).

Despite the fact that EMS professional literature has introduced and addressed EMS occupational stress (Clark, 1989; Mitchell, 1988; Mitchell & Bray, 1990), there has been minimal, if any, resulting attention to this phenomenon by the mental health profession. A review of the current mental health literature yielded no resources that specifically addressed the phenomenon of EMS occupational stress. In view of this neglect, it would appear that the time is long overdue for
counselors and therapists to respond to the call for help that has been issued by Mitchell and his EMS colleagues.

The purpose of this paper is to briefly describe acute and chronic stressors that are specifically related to the EMS profession, to review the counseling methods currently being utilized to treat this stress, and to suggest another method of treatment that heretofore has been relatively ignored by counseling professionals.

Types of EMS Stress

Simply stated by Matheny, Aycock, Pugh, Curlette, and Cannella (1986), the stress process begins when self-generated or outside demands, or "stressors," are made on a person. These demands disrupt the homeostatic equilibrium of the individual and result in negative and/or uncomfortable feelings (Baldwin, 1979). These feelings are labelled as "stress."

It has long been observed (Caplan, 1964; Carson & Butcher, 1992) that exposure to stressors, and the resulting feelings of stress, are experienced by everyone at various points during the lifespan. Furthermore, such exposure can and frequently does result in positive effects for the individual by teaching him or her healthy coping processes. Caplan
explained that these coping processes are psychological self-regulatory mechanisms that facilitate return to homeostatic balance following the impact of an emotionally hazardous situation or stressor. Baldwin (1979) noted that development of coping processes begins at birth and continues throughout life. It is through this phenomenon that individuals compile a repertoire of coping behaviors from which to draw when responding to future exposure to stressors.

However, Carson and Butcher (1992) reported that the individual's repertoire of coping behaviors can be rendered ineffective under certain conditions. These conditions include situations in which: (a) the coping repertoire contains no experiences similar to the one currently being encountered, (b) the individual has learned maladaptive or faulty coping behavior to previous similar situations, or (c) the stressor is significant enough to overwhelm and negate the learned healthy coping process. Everly (1990) noted that an individual may experience stressful situations in which he or she is unable to effectively use coping behaviors. When this inability to cope occurs, a crisis may ensue that has a negative impact on the individual's emotional health. It is this type of crisis-inducing stress, and the resulting negative
impact, that will be the focus of this paper.

One of the most notorious types of outside stressors in the field of EMS is the critical incident (Hutchinson, 1983; Metz, 1982; Mitchell & Resnik, 1986). In a definition offered by Walker (1990), a critical incident is an act of nature, a recognized disaster, or an event involving death, destruction, and disruption. This concept was expanded by Clark (1989) to also include "any single crisis situation that causes emergency personnel to respond with immediate or delayed stress-altered physical, mental, emotional, or social coping mechanisms" (p. 47). Harris (1989) noted that critical incidents have sufficient emotional power to overwhelm an individual's ability to cope. Furthermore, critical incidents have the potential to produce reactions strong enough to interfere with the rescuer's ability to function either on-scene or later.

Well known and fairly recent examples of critical incidents include the crash landing of flight 232 in Sioux City, Iowa; the chaotic collapse of the freeway in the wake of the San Francisco/Oakland earthquake; and the terrorist bombing of the World Trade Center in New York City. Each of these scenarios represents the type of situation in which rescue workers are surrounded with horrendous debris and destruction as
they feverishly tend to the needs of multiple casualties (Walker, 1990).

Mitchell (1988a) pointed out that among the lessons learned from critical incident tragedies is the fact that EMS personnel are vulnerable human beings. In spite of their high levels of skill and endless hours of training, rescuers have all the normal physical and psychological responses to the horror of human suffering.

Fortunately, it is unlikely that the vast majority of EMS personnel will be bombarded by the type of stress resulting from the critical incidents described above. This does not mean, however, that these people will be free of the burden of EMS-related stress. While their exposure to stressors may be less dramatic, the fact remains that they will be confronted by outside stress every day as they go about the business of performing their "routine" EMS duties (Harris, 1989).

In the occupational field of EMS, non-critical stressors can take many forms, with some being more obvious than others. The result of insidious exposure to these fairly routine non-critical stressors is what Mitchell and Bray (1990) called "cumulative stress." The following examples fit within Mitchell and Bray's
cumulative stress category. Yesterday the rescuer may have been on one of those ambulance calls where a piece of equipment failed and nothing after that seemed to go right, thus producing stress. Last week this same rescuer may have held the hand of an emaciated young cancer patient during the transfer back to the hospital for her final admission, all the time haunted by his or her memory of this patient as an attractive, strong wife and mother. Last month the rescuer may have helped pull a lifeless neighbor from the grain bin into which he had fallen and suffocated. Last spring the rescuer may have spent an intense weekend walking the riverbank searching for the body of a four year old drowning victim, a body that still has not been recovered.

According to Mitchell and Bray (1990), cumulative stress is a reaction to acute, delayed, and chronic stressors that have developed over a long period of time. This stress reaction can result from any combination of stressors in the individual's home and personal life, organizational stressors, and routine stressors on the job (Harris, 1989). If allowed to go untreated, cumulative stress can be as destructive to the rescuer as critical incident stress (Garcia, 1988; Howell, 1988).
Coupled with these outside stressors is the stress resulting from the self-generated demands that EMS personnel frequently place upon themselves. Considerable attention has been given to the type of unique personality it takes to enter the field of EMS (Clark, 1989; Harris, 1989; Howell, 1988; Walker, 1990). These studies painted a fairly consistent portrait of EMS personnel as risk-takers and detail-oriented perfectionists. Despite the fact that they appear to possess a high level of self-confidence, they are inclined to second-guess and brood over their mistakes. Furthermore, the authors of the studies agreed that most EMS personnel are heavily invested in control of themselves, of others, and of situations. They want to set things right and are unwilling to take "no" for an answer.

Spitzer (1988) reported that continued success by proficient EMS personnel inevitably leads to an exaggeration of risk-taking, perfectionism, self-confidence, control, and, ultimately, to a false sense of security. Rescuers are not, in other words, the sort of people to worry about psychological stress. They have always tolerated the pressure and assume they always will be able to do so.

Everly (1990) pointed out that the personal
characteristics described above are not bad, but in fact are necessary for EMS personnel to enter situations that non-EMS people would fear to consider. However, even though these characteristics can be definite assets on the job, they compound the stress level of rescuers faced with events over which they have little or no control. It seems a sad paradox, indeed, that the very personality type needed to be proficient in the field of EMS is also quite vulnerable to developing problems from EMS occupational stress.

Current Treatment Modalities

Three types of treatment for EMS occupational stress are presently being utilized: critical incident stress debriefing (CISD), employee assistance programs (EAP), and individual counseling with a professional counselor (Mitchell & Bray, 1990). Each of these types of treatments will be addressed in this section.

According to information gathered by the National Institute of Mental Health (1988a), CISD is the most well-established, organized, and widely accepted of the three treatment modes for dealing with EMS occupational stress. As EMS stress expert Mitchell (1988a) has pointed out, the sole function of the CISD program is to deal with the stress invoked when rescue workers are exposed to critical incidents. According to Mitchell
(1988a), "the main objectives of CISD are to decrease the impact of a critical incident and accelerate the return of personnel to routine functions after the incident" (p. 45).

The voluntary CISD teams are made up of dedicated and trained mental health professionals who combine their expert knowledge and talents with specially trained peer support personnel drawn from the emergency service's ranks. Peer support personnel consist of persons with fairly extensive experience in on-scene rescue operations and may include emergency medical technicians, paramedics, police officers, fire fighters, and medical helicopter flight crews. CISD teams function in three distinct areas: pre-incident education and training, on-scene support and defusings, and post-incident debriefing (Mitchell, 1988b).

In spite of its proven success and wide acceptance by EMS professionals (Walker, 1990), the CISD program is by its very specialized nature limited in the scope and range of the support it offers. While quite proficient at meeting the needs of rescuers immediately following a critical incident, CISD is not designed to offer long-term support. Nor is it designed to address the needs of individuals experiencing cumulative stress (Everly, 1990). To their credit, organizers and
proponents of the CISD program recognize its limitations and encourage EMS personnel experiencing prolonged stress to utilize other treatment modalities (Mitchell & Bray, 1990).

Examination of treatment modalities leads to a discussion of a second type of treatment mode for EMS occupational stress, the EAP. According to Richard L. Bickerton, EAP information officer with the Association of Labor-Management Administrations and Consultants on Alcoholism (cited in Howell, 1988), organized and structured EAPs had their origins during World War II. Bickerton explained that development of EAPs resulted primarily from two war-related manufacturing situations: a major push for increased quantity and efficiency in production of war materials and the placement of available workers on jobs in which they had little training, skills, or interest. As these two factors intensified, there was a substantial increase in occupational stress-related complaints, disorders, and illnesses.

Howell (1988) noted that continued high post-war production demands only contributed to the problem of occupational stress. In response to this phenomenon, organized labor and management leaders began working together in developing programs to help employees deal
with occupational stress issues. Thus evolved the EAP as it is known today.

According to Garcia (1988), the three basic functions of EAPs are education, training, and clinical services. The education aspect helps familiarize employees with identification of stress-related problems and with the services offered by the EAP, thus encouraging self-referral. The training aspect is directed at supervisors and enables them to understand how the EAP system works, to recognize employee problems early, and to initiate supervisory referrals. Reynolds and Shapiro (1991) examined the clinical services of EAPs and determined that these include short-term counseling, consultation, and referral for more thorough assessment and/or treatment. Convincing evidence has been compiled by Pelletier and Lutz (1988) indicating that these EAP functions have been quite effective in dealing with occupational stress.

The success of EAPs has not been lost on the EMS community, and EMS professionals have in recent years begun to explore and promote the concept of the EAP (Garcia, 1988). However, as Howell (1988) pointed out, "the field of EMS places demands on assistance programs that separate it from other industries" (p. 39). Howell further contended that in order for an EAP to be
successful in the field of EMS, it must be specifically designed to meet the relative needs of the individuals engaged in that profession.

EMS-specific EAPs are in place for emergency service organizations in some of the larger cities across the nation such as Phoenix, AZ; Miami, FL; Tulsa, OK; New York City; and Arlington, VA. (Howell, 1988). However, these special programs are only available to a small percentage of EMS personnel (Mitchell & Bray, 1990). The vast majority of rescuers do not have access to EAPs because they are volunteers or are employed by smaller rural EMS services (Beck, 1988; Hayghe, 1991; U.S. Congress Office of Technology Assessment, 1989).

The question then arises as to where this unassisted majority of volunteer or small service EMS personnel may turn to seek help in dealing with their occupational stress needs. The answer lies in the third type of treatment mode--or, individual counseling by a certified or licensed professional (Barnett-Queen & Bergman, 1989; Mitchell & Bray, 1990).

Individual counseling continues to gain acceptance in the field of EMS because of its documented value and effectiveness (Howell, 1988). However, there are several factors that hinder wide-spread use of
individual counseling by EMS personnel. Barnett-Queen and Bergmann (1989) reported that one of the hindrances to seeking individual counseling is that participation in counseling can be costly. Because the majority of people engaged in EMS are volunteers or are attached to small services, the cost of individual counseling must be born by the individual himself or herself. Even when such counseling is provided in a brief therapy format, a few sessions can affect a personal budget that is already stretched tight by current economic conditions. Research has indicated (Boeck, 1992; Mitchell & Bray, 1990) that the majority of volunteer or small service rescuers experiencing EMS-related stress will leave the field rather than seek help for their problems.

Another hindrance to utilization of individual counseling by occupationally stressed EMS personnel is the stigma that may be attached to it in many EMS organizations (Barnett-Queen & Bergmann, 1989). Rescuers who participate in counseling may be wrongly viewed as weak, "crazy," or unreliable. Clark (1989) pointed out that this stigma most likely arises from the previously described personality characteristics of EMS personnel. Seeking counseling is seen as an admission to a lack of "control," either of self or of
situations. It is difficult for EMS personnel to engage in counseling while maintaining what Mitchell (1988b) called the traditional EMS "John Wayne Syndrome," or "you're not hurt until the bone is showing."

A third hindrance to participation in individual counseling is a flawed referral process in the EMS system (Barnett-Queen & Bergmann, 1989). In order to make a referral for counseling, the person making that referral must have noticed a change or have seen a need in that individual. However, by the very nature of their personalities, those impacted by EMS occupational stress are extremely adept at hiding their feelings and masking their symptoms (Clark, 1989; Mitchell & Resnik, 1986). Usual referral sources are frequently not aware of the problem, and thus a person needing assistance may not receive it.

A Possible Untapped Treatment Method for EMS Stress

There is unquestionable evidence within the counseling profession that group therapy can be beneficial in the treatment of mental health issues (Corey & Corey, 1987; Ohlsen, Horne, & Lawe, 1988; Yalom, 1985). Furthermore, group therapy has proven to be effective in treating disorders of a trauma and/or stress-related origin (Brammer & Shostrom, 1982;

At this time the use of group therapy to deal specifically with EMS occupational stress is an area completely uncharted by both mental health and by EMS professionals. The present search of the literature did not yield any references pertaining specifically to group therapy for EMS occupational stress.

The lack of literary resources regarding utilization of group therapy in treating EMS occupational stress raises some important questions. Are researchers and writers unaware of this seeming void in treatment options for EMS occupational stress? Is group therapy currently being used with these individuals, but simply has not thus far been reported by the practitioners? Is research currently in progress that has yet to be published? Has group therapy indeed been previously tried with this population and found not to be effective? Unfortunately, without more information in the literature, one can only speculate on the answers to
these questions.

An indication of the potential positive effects of using group therapy as a viable treatment option in EMS occupational stress can be gained by a closer examination of similar disorders. EMS occupational stress has been described as closely associated with, and even a form of, post-traumatic stress disorder [PTSD] (Everly, 1990; Green, Lindy, & Grace, 1985; Mitchell & Resnik, 1986). A sound argument for inclusion of EMS occupational stress as a PTSD can be made simply by reviewing the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* (1987). According to this manual, PTSD may be induced by any one of three types of trauma, including observational experiences such as "seeing another person who has been, or is being, seriously injured or killed as a result of an accident or physical violence" (pp. 247-248). Such observational experiences are part of the routine work of EMS personnel.

Williams (1987) has adamantly contended that group therapy, including both structured and supportive groups, is not only beneficial, but a necessary part of treatment for persons suffering from PTSD. It provides the victims of PTSD with concrete validation that they
are not alone in their reactions, and it introduces them first-hand to methods other victims are using to deal with their disorder (Helwig & Assa, 1991). As an indication of its effectiveness in the PTSD treatment process, the concept of group therapy has been supported by Veteran's Centers throughout the United States (Williams, 1987).

Other evidence that can be used to endorse the use of group therapy for EMS occupational stress relates to the use of group therapy in the field of law enforcement (Reese & Goldstein, 1986). The National Institute of Mental Health (1988a) has identified many similarities between work situations encountered by both law enforcement officers and EMS personnel. The field of law enforcement has a long and rich history of examining and tending to the psychological needs of its officers. Dramatic and successful results have been obtained by utilizing occupation-specific group therapy to reduce stress among police officers (Reese & Goldstein, 1986).

The value of peer support is part of the foundation upon which the EMS profession is built (Smith, 1991). EMS personnel experience a special bonding in the field that supercedes differences in age, gender, or socioeconomic status. It is this
bonding that allows them to effectively orchestrate life-saving efforts in a very team-oriented fashion. This same bonding concept would be easily adapted to the group therapy setting.

Summary

The purpose of this paper was to briefly describe acute and chronic stressors that are specifically related to the EMS profession, to review the counseling methods currently being utilized to treat EMS occupational stress, and to address another method of treatment that has been unexplored by counseling professionals in treating this phenomenon. The findings in this paper were based on a review of current literature.

The literature revealed a widely held, but erroneous belief that EMS personnel are trained to be immune to the horrible human tragedy to which they are exposed as part of their jobs. A growing body of evidence indicates that a large number of rescuers develop occupation-based stress reaction disorders as a result of this exposure. Those rescuers displaying such disorders may wrongly be viewed as weak, "crazy," or inept at their jobs. The truth of the matter is simply that they are normal people reacting to abnormal situations.
Concern for occupational stress has been an issue of focus in the field of EMS for the past decade. EMS professional literature contains an increasing number of articles addressing the dynamics of this phenomenon.

As acceptance and understanding of EMS occupational stress has increased within the EMS profession, its leaders have responded by initiating efforts to treat this disorder. Much of this effort has centered around the development of CISD programs. These programs are quite effective at meeting the specific needs of personnel having been exposed to critical incidents. However, many EMS personnel suffer from cumulative rather than critical stress, and in the great majority of cases their needs are not being met in an efficient and effective manner.

Individuals with cumulative stress have few alternatives from which to choose in seeking help for their problem. At this point in time, their options for treatment consist of EAPs or individual counseling. While both treatment modalities can be effective, several factors negatively impact their use by EMS personnel. Unavailability of EAPs and cost of individual counseling are two of the important factors.

Another treatment modality that has received little attention in the literature in relation to
treating EMS occupational stress is that of group therapy. Evidence exists that group therapy has proven useful as a treatment method for individuals suffering from other types of stress-induced disorders, some of which are closely related to disorders caused by EMS occupational stress. Based on this information, the use of group therapy in treating individuals experiencing EMS occupational stress may indeed be a viable treatment option. Group therapy may offer hope to a large number of EMS practitioners who presently are being unserved or underserved by current treatment methods.

An additional finding was that the mental health profession has seemed to overlook the particular needs of this specific group of individuals. Evidence of this oversight is made obvious by the lack of attention to EMS occupational stress in mental health journals.

Conclusion

Lack of published research including empirical studies in relation to utilizing group therapy to treat EMS occupational stress indicates a need for more attention to the subject by mental health professionals. It appears that there are distressed EMS personnel who, for various reasons, have been locked out of the mental health treatment system. It
is possible that group therapy may provide the key to that door.


Prevention and control of stress among emergency
workers: A pamphlet for team managers, (DHHS
Government Printing Office.

Newton, T. J. (1988). Occupational stress and coping

counseling (3rd ed.). New York: Holt, Rinehart &
Winston.

Pelletier, K., & Lutz, R. (1988). Healthy people-
Healthy business: A critical review of stress
management in the workplace. American Journal of
Health Promotion, 2, 5-12.

services for law enforcement. Washington, DC: U.S.
Government Printing Office.

transition: Conceptual problems in the design,
implementation, and evaluation of worksite stress
management interventions. Human Relations, 44,
717-733.

volunteer. Journal of Emergency Medical Services,
16(2), 63-65.


