

**ADDRESSING BURNOUT IN PARAMEDICS**

**LEADING COMMUNITY RISK REDUCTION**

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An applied research project submitted to the National Fire Academy as part of the  
Executive Fire Officer Program

July 2004

## **ABSTRACT**

Paramedic burnout in the Memphis Fire Department (MFD) is the issue addressed in this study. The problem is that paramedic burnout in the MFD may be causing the emergency medical and fire fighting services to be of poor quality. The purpose of this research is to determine in what ways the paramedics on the MFD suffer from burnout and how decreasing burnout may raise the standard of service, therefore saving lives.

The evaluative research method was used to answer the following research questions:

1. What are the causes of paramedic burnout?
2. In what ways do the paramedics on the MFD suffer from burnout?
3. How does paramedic burnout affect the emergency medical and fire fighting services rendered to the customers?
4. What have helping professions done to decrease burn out in employees?

A literature review and interviews were conducted to determine what data was available to support the research questions. Additional means of gathering data included a questionnaire and a survey.

Burnout in paramedics is caused by, but not limited to, the following reasons: the public's abuse of EMS, lack of sleep, high levels of responsibility, lack of autonomy, and feeling unappreciated. Paramedics suffer physically and psychologically from burnout. Burnout negatively affects the emergency medical and fire fighting services rendered to the customers. Methods to decrease burnout include implementing health and wellness programs, increasing time off, in-house counseling, and peer counselors.

Recommendations made to the MFD are to conduct further research to identify

what types of shifts other emergency services use to decrease burnout. The MFD should hire more paramedics so they can have the resources to mandate the 12 hour shift, develop public education class for EMS, and, finally, change the culture within the MFD that alienates the paramedics.

## **CERTIFICATION STATEMENT**

I hereby certify that this paper constituted my own product, that where the language of others is set forth, quotation marks so indicate, and that appropriate credit is given where I have used the language, ideas, expressions, or writings of another.

Signed: \_\_\_\_\_

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## INTRODUCTION

The Memphis Fire Department (MFD) operates on a three-shift schedule, working 24 hours on 24 hours off for three shift days and then having four days off. A sample schedule can be found in appendix-A. The fire department has 30 emergency units that are staffed by one firefighter paramedic and one emergency medical technician (EMT). Ideally the paramedics work for three shift days on the unit and then three shift days on the fire equipment. In many cases, the paramedics work up to 9 shift days or more on the units with out a break; however the EMT's work for three shift days on the unit about every two months. It is the author's belief that this scheduling may contribute to burnout in paramedics.

The problem is that paramedic burnout in the MFD may be causing emergency medical service to the customers to be of poor quality, as well as affecting the paramedic's fire fighting duties therefore affecting fire department personnel. The purpose of this research is to determine in what ways the paramedics on the MFD suffer from burnout and how decreasing burnout may raise the standard of service for our customers, therefore saving lives.

The evaluative research method will be utilized to answer the following research questions:

1. What are the causes of paramedic burnout?
2. In what ways do the paramedics on the Memphis Fire department suffer from burnout?
3. How does paramedic burnout affect the emergency medical and fire fighting services rendered to the customers?

4. What have helping professions done to decrease burn out in employees?

The author suggests that by determining what causes paramedic burnout, one may be able to alter these factors and thereby reduce burnout. Decreasing burnout may therefore raise the level of service to customers and save lives on both the medical and fire emergency scenes. Furthermore, decreasing burnout may extend a paramedic's career and make it more enjoyable.

## **BACKGROUND AND SIGNIFICANCE**

In 2003, the MFD received 412 EMS citizen complaints. It is the authors belief that paramedic burnout maybe a contributing factor due to the fact that the 30 MFD emergency units responded to 91,620 emergency calls that year. Since the establishment of the EMS service in 1966, emergency calls have increased 300 percent.

In 1996, the MFD cross-trained all paramedics to become fire fighters. The paramedics did not have a choice whether to cross-train or not. Prior to cross-training, the emergency units were operated by two paramedics, whereas now they operate with one paramedic and one EMT. The heavy workloads coupled with the fact that now there is only one paramedic on the unit increases the risk of error by the paramedic and the risk of the MFD being sued. Lawsuits are not only very costly to the fire department financially, but are also costly to the MFD's reputation, therefore causing the MFD to lose the trust of the community.

The purpose of this research is to determine in what ways the paramedics on the MFD suffer from burnout and how decreasing burnout may raise the standard of service for our customers therefore saving lives. Decreasing burnout will increase productivity on and off the emergency scene. For example, the more satisfied a paramedic is with his/her

job, the more likely he/she will want to complete quality training to enhance both his/her medical and fire fighting skills, perform fire prevention duties and conduct public education classes. The skill level of a paramedic on the scene of any emergency may mean the difference in life or death to a civilian or a fire fighter.

This research project relates to Unit 4 “Intervention Strategies” in the National Fire Academy’s Leading Community Risk Reduction course. The objective in Unit 4 is to identify intervention strategies for reducing community risk (NFA, 2003, p. SM 4-5). Decreasing paramedic burnout will not only allow paramedics more time to train and conduct public education presentations it may increase their desire to do both with more enthusiasm therefore reducing the risk to the community.

This project also relates to three of the four United States Fire Administration’s operational objectives: “reduce the loss or life from fire in the age group 14 years old and below... reduce the loss or life from fire in the age group 65 years old and above ... and reduce the loss or life from fire of fire fighters” (U.S. Fire Administration National Fire Academy --Applied Research Guidelines 2002, p. II-2). Paramedic will be more active in the community if they are not burnout. Teaching fire prevention, the proper use of the EMS and injury reduction strategies to the public will reduce the likelihood of the fire department responding to an incident therefore saving both firefighter and civilian lives.

## **LITERATURE REVIEW**

A literature review was conducted to determine what data is available that supports the following research questions: What are the causes of paramedic burnout? In what ways do the paramedics on the MFD suffer from burnout? How does paramedic burnout affect the emergency medical and fire fighting services rendered to the



customers? What have helping other professions done to decrease burn out in employees? Research was conducted at the Learning Resource Center at the National Fire academy, the Memphis and Shelby County Public Library, Southwest Tennessee Community College library, the Internet and through interviews.

“Burnout, a concept dating to the late 1970’s (Maslach, 1978), is a chronic pattern of negative affective responses that can result in reduced job satisfaction, reduced productivity, increased absenteeism, or increased turnover (Peters, Youngblood, & Greer, 1997)”(J.C. Quick, J.D. Quick, Nelson, & Hurrell, 1997, p. 71). People in helping professions, for example fire fighters, paramedic, police officers, and hospital personnel, tend to experience burnout more frequently than people not in helping professions. This is attributed to the expectations to perform flawlessly in emergency situations that can be emotionally draining.

Maslach (1982) described burnout as a process that typically proceeds through three phases: emotional exhaustion, depersonalization and reduced personal accomplishment. Emotional exhaustion reflects a depletion of emotional resources and inability to give psychologically. Depersonalization, probably a coping mechanism, includes negative, cynical attitudes about the recipients of one’s services. Finally, reduced personal accomplishment refers to decreased job satisfaction and a reduced sense of competence (Quick et al., 1997, p. 71).

People experiencing burnout may also quit doing things such as hobbies they once loved.

Methods used to deal with distress and burnout include exercise, diet, meditation, rest and relaxation. “Counselors at some psychiatric facilities are allowed to take periodic ‘mental health’ days.... The cost of burnout is much higher than the cost of a brief

respite” (Quick et al., 1997, p. 226).

People in helping professions experience burnout for several reasons including high call volume, feeling limited by an organization’s standard operational procedures or not having the authority to use techniques or procedures that would better serve the customer or patient, and the feeling of not being appreciated. Helping professions often mirror bureaucratic organizations, “Bureaucratic organizations in general can promote three cause of burnout: (1) overload, (2) lack of autonomy, and (3) lack of rewards” (Pines and Aronson, 1988, p. 101). In the emergency medical profession, high call volume in large cities is to be expected; however how an organization rotates personnel in areas with a high call volume may ease the overload to individuals. “Managers can also increase the staff’s sense of power by decentralizing the authority and involving people in all levels of the organizations structure in decision making” (Pines and Aronson, p. 111). A simple thank you or a pat on the back is an easy, fast, and cost effective way to reward personnel.

Fishkin and Fox (1994) listed paramedics as having one of the most stressful occupations. “Jobs requiring high levels of responsibility yet allowing minimal control have long been thought to be the most stressful” (Fishkin and Fox, p. 43). Burnout negatively affects both the customer and fire department personnel. “Occupationally, burnout often brings with it a whole series of complications, including absenteeism, a sense of isolation and poor work performance” (Fishkin and Fox, p. 119). Health problems caused from work related distress is a risk to paramedics. “Main risks factors have to do with social aspects of the work environment, in particular lack of support from the supervisor as well as colleagues and poor communication” (Van der Ploeg & Kleber,

2003, para. 5). Van der Ploeg and Kleber also list job overload, shift work, role conflict, and lack of social support as chronic work related stressors (para. 6). Absenteeism increases the work load on the paramedics that have to cover calls for the paramedics that are on sick leave or off due to an on the job injury (OJI) therefore increasing the well paramedics risk of burnout. “Some EMS agencies believe there is a direct correlation between absence and employee well-being and have established health and wellness programs to prevent illness or injury” (Ludwig, 2004, p. 30).

Many things contribute to the burnout of paramedics including being put in threatening or violent situations and the fear of being exposed to infectious diseases. “One study estimates 12.7 fatalities per 100,000 EMS workers annually due to transportation-related injuries, air ambulance crashes, cardiovascular incidences and homicides. This compares to a rate of 5.0 per 100,000 for the general U. S. population” (Franks, Kosher & Chapman, 2004, para.26).

The public abuse of the EMS causes the run volume to increase therefore contributes to burnout. “Other factors that lead to burnout are irregular work hours....” (Franks et al., para. 18). Lack of support and professional recognition from within the organization may also increase burnout.

Employee assistant programs and wellness programs may help employees deal with burnout. “Useful stress reduction techniques include lectures, education in diet and health management and employee group discussion concerning stress and ways to deal with it” (Fishkin and Fox, 1994, p. 44). Implementing a wellness program alone could reduce absenteeism by teaching paramedics how to take better care of themselves both physically and mentally.

Fatigued paramedics make mental mistakes when treating their patients. They may show no or little sympathy when treating their patients when they are fatigued. “I can remember nights when I was so tired that I honestly didn’t care whether patients lived or died – I just wanted to get some sleep” (Auerbach, 2002, p. 118). Another reason for the lack of sympathy in paramedics is caused by abuse of the emergency medical system. For example, people will call for an emergency unit to get a ride to the hospital for a doctor’s appointment. “One of the most frustrating things for a paramedic, he said, is the non-emergency calls, such as when people call if they have the flu. In those cases, they must learn to treat everyone fairly and evenly” (Belgum, 1999, p. 22). Educating the public to use the EMS properly may reduce the abuse of the system. Reduction in the abuse of the system may help ensure that a unit is where it is truly needed at the time of a real medical emergency. The Chicago Fire Department “...made permanent six paramedics who focus on injury prevention and use of EMS...” (TriData Corporation, 1999, p. 75).

Cary Cherniss conducted two studies of helping professionals. The first study was done during the professionals first year of service. The first study showed that “in the beginning they were idealistic, caring and committed” (Cherness, 1995, p. 17). When they began to burn out “they lost much of their compassion and commitment” (Cherness, p. 17). The second study was done ten years later with the same professionals. The second study showed that the professionals who overcame their burnout “...were among the most satisfied, dedicated and caring” (Cherness, page 170). After conducting these two studies Cherniss gave the following seven recommendations to reduce burnout:

1. Planning for better work environments.

2. Providing opportunities to develop special interest.
3. Making it easier to work with difficult clients.
4. Increasing organizational negotiation skill.
5. Relying more on the quality of previous work experiences in selection for professional training.
6. Providing more career counseling and professional development.
7. Giving professionals a greater role in the planning of change (p. 170-178).

Successful organizations often already use techniques or have programs centered around their employees to decrease or eliminate burnout.

Working 24-hour shifts with little or no rest enhances burnout. “Much workplace distress can be attributed to rigid schedules and an overemphasis on conformity and consistency in the place where we work” (Reinhold, 1996, p. 175). A person’s ability to think clearly is hampered when they do not get enough sleep. “Fatigue...destroys your body’s ability to cope with challenges and resist illness” (Reinhold, p. 202).

The 24-hour shift worked by firefighter personnel creates a strain not only on the firefighter physically, but also causes problems within his family unit as well. Sleep patterns become disturbed as a result of such shift work. Firefighters often sleep during their days off and thus lose contact with the day-to-day activities and needs of their own families, thereby creating additional pressures and frustrations that are counter-productive to a healthy work and home life (Fishkin, 1989, p. 30 & 31).

Paramedics are faced with a multitude of challenge everyday and need an appropriate amount of rest to serve the public properly.

The shortage in paramedics across the country may also contribute to burnout. Many paramedics are forced to work overtime. “In some situations in Fairfax County, paramedics are working 36-hour shifts in order to fill gaps” (Ludwig, 2004, p. 30). Retaining and recruiting paramedics is becoming difficult for many fire departments because “...A number of paramedics have moved into nursing, where the pay is much greater and the working conditions are more suitable and abuse is much less” (Ludwig, p. 32). Fire departments across the country are struggling to staff paramedic positions. There has also been a significant drop in enrollment to paramedic school in many states. “Fire administrators in the short term need to create tiered systems, offer better pay and other incentives, and look for other opportunities to retain and recruit paramedics” (Ludwig, page 32).

To address the issue of overworked paramedics the Chicago Fire Department Emergency Medical Bureau went from three platoon work schedule (working a 24 hour shift then off 48 hours) to a four platoon work schedule (working a 24 hour shift then off 72 hours) in 1995. A sample schedule can be found in appendix-B. “It has worked well, the number of lay-ups has decreased by 16.5 percent per year since the schedule was implemented” (TriData Corporation, 1999, p. 136). Lay-ups are sick or on the job injury time taken off. There also has been a massive reduction in customer complaints “...from and average of 168 per year (from 1989 to 1995) to 42 in 1998” (TriData Corporation, p. 139).

Emotionally draining calls often take a toll on paramedics. Many of the paramedics hide their emotions for fear of being perceived as weak, or they may be in denial. Several things can occur when these emotions are not expressed. “Loss of

sleep..., difficulty concentrating at work..., making mistakes on calls..., less tolerant towards family, friends, coworkers” (Ford, 2003, para. 5). Emotionally distraught paramedics may also be less tolerant of patients.

Many paramedics do not understand why they feel the way they do or know how to deal with their feelings after being exposed to a traumatic call. “Without proper training on how to cope with the stress of working with trauma victims paramedics and first responders often burnout” (Wright, 2004, para.13). Employees need to be trained to recognize burnout that is rooted in emotional stress. Organizations should have a plan in place to assist paramedics who experience burnout due to emotional strain.

The Los Angeles City Fire Department (LAFD) has addressed burnout in a number of ways since they consolidate their EMS and fire suppression bureaus they allow paramedics to train as firefighters. “That way, if they felt burned out, they could either switch to fire fighting – which some consider less stressful – or move back and forth between the two jobs” (Belgum, 1999, p. 21). The LAFD has in-house counseling and they have firefighters and paramedics that are trained as peer counselors to help paramedics deal with burnout. “The department also requires that all personnel involved in an acute tragedy undergo a critical stress incident debriefing” (Belgum, p. 21).

## **Interviews**

Interviews were conducted with the MFD’s medical director, the EMS quality control improvement coordinator and doctors that work in various hospital emergency rooms (ER) in Memphis to supplement the literature review. The interviews can be found in Appendix C.

## **Survey and Questionnaire**

A survey was conducted to determine the following: does burnout negatively affect the emergency medical and fire fighting services rendered to the customers, what causes burnout, and what could be done to decrease burnout. The survey was open to all MFD paramedics who presently ride the emergency units. The survey was necessary because there is not any current data to determine what causes burnout in paramedics on the MFD and the affect burnout has on the people they serve. The survey can be found in Appendix D.

To determine in what ways paramedics on the MFD suffer from burnout, as well as the causes of burnout and the affect it has on the customer, a simple questionnaire was give to nine quality improvement officers. The questionnaire was necessary because there is not any current data to use in determining in what ways the paramedics on the MFD suffer from burnout. The questionnaire can be found in Appendix E.

These findings influenced the project by determining what causes burnout and in what ways the MFD paramedics suffer from burnout. It determined if burnout affects the emergency medical and fire fighting services rendered to the customers. The research also identifies what can be done to decrease burnout in employees.

## **PROCEDURES**

### **Definition of Terms**

**Paramedic: “Emergency medical technician-paramedic (EMT-P)** A person who has completed training based on the EMT-Paramedic National Standard Curriculum. A paramedic has advanced training in patient assessment, cardiac rhythm interpretation, defibrillation, drug therapy and airway management” (Sanders, 2001, p. 1564).



## **Terms Defined**

**Emergency medical technician:** “The EMT-B has completed training based on the EMT-Basic National Standard Curriculum and is trained in all phases of basic life support (BLS), including the use of automated external defibrillators (AED’s) and assistance of a patient with the administration of some emergency medications” (Sanders, 2001, p. 11).

**Distress:** “Negative, debilitating, or harmful stress” (Sanders, 2001, p. 29).

**Burnout:** “Burn-out (cumulative stress) is characterized by physical and emotional exhaustion and negative attitude. The syndrome can develop when one is exposed to chronic stress that cannot be managed with effective coping mechanisms” (Sanders, 2001, p. 46).

**Unit:** “Ambulance: A generic term that describes the various land-based emergency vehicles used by EMS personnel” (Sanders, 2001, p. 1375).

**Lay-ups:** Lay-ups is sick time taken off and on the job injury time taken off.

**Fire Management Zone: (FMZ)** A dedicated area in ones running territory specific to one’s shift and company assignment where they are responsible for performing prevention strategies (e.g., hanging smoke detectors, hydrant testing, public education and conducting survey in target hazards).

## **Literature Review**

The author began gathering data on March 15, 2004. Journal articles were obtained from the National Fire Academy’s Learning Resource Center. Literary works were used from the Memphis and Shelby County Public Library and the Southwest Tennessee Community College library. The Internet was used to obtain articles and a

Comprehensive Review of the Chicago Fire Department done by TriData Corporation. Emergency calls and citizen complaint data were obtained through the MFD EMS secretary Lotosha Williams.

### **Interviews**

Interviews were conducted with Memphis Fire Department Medical Director Dr. Kevin Merigian, on May 17, 2004 and with the EMS Quality Control Improvement Coordinator Michael Lambert on May 10, 2004. The purpose of these interviews was to get the MFD EMS supervisors' opinions on the causes of burnout for the MFD paramedics and in what way the paramedics suffer from burnout. An additional purpose was to determine what the MFD could do to decrease burnout.

Interviews were conducted with emergency room doctors on May 4, 2004 and May 10, 2004 to ascertain views from doctors working in various hospital emergency rooms. These interviews were conducted to determine what causes burnout in paramedics and if and burnout has a negative affect on how patients are medically or emotionally treated by paramedics. An additional purpose was to determine if burnout affects the interpersonal relationship between emergency room personnel and paramedics.

### **Survey and Questionnaire**

A survey was developed to determine if the MFD paramedics experience burnout and what causes burnout. Additional reasons for the survey include determine if burnout has a negative affect on the emergency medical service rendered, including attitudes toward patients, and if burnout negatively affects the paramedics desire to train or work in their FMZs. The final reason for the survey was to obtain suggestions from the

paramedics on what the MFD could do to decrease burnout. The survey consists of five multiple-choice questions and two open-ended questions.

A simple questionnaire was developed to determine in what ways the paramedics on the MFD suffer from burnout and how burnout affects the emergency medical and fire fighting services rendered to the customers. An additional purpose was to determine what the MFD could do to decrease burnout. The questionnaire consists of four open-ended questions.

### **Process**

The survey was developed by the author on April 13, 2004 and presented to the MFD administration for approval on April 15, 2004. The voluntary survey was given out at a MFD staff meeting on April 15, 2004 to be distributed to all paramedics that ride the emergency units. Additionally, the survey was emailed to all Battalion Chiefs and posted on the website <http://memphisfire.net/>. The completed surveys were returned to the author through inter-departmental mail. The survey information was then entered into an Excel spread sheet to calculate the data.

The questionnaire was developed by the author on April 18, 2004 and faxed to all of the Quality Improvement Officers on the same day. The questionnaire was also voluntary. The questionnaires were faxed back or sent through inter-departmental mail to the author. The results of the questionnaire were then manually tabulated.

### **Population survey**

The MFD has 249 paramedics: 187 of these paramedics ride the units, 62 paramedics do not ride the units because they have been promoted or they have support

function assignments. The 62 were not asked to complete a survey. A total of 101 surveys were returned to the author by May 14, 2004.

### **Population Questionnaire**

The MFD has nine Quality Improvement officers. A total of seven questionnaires were returned to the author by May 12, 2004.

### **Limitations**

There were several limitations to the survey simply because of the size of the MFD. Ensuring that all personnel were given the opportunity to fill out a survey was difficult. The amount of time it took to receive the surveys was lengthy. Compiling the data for the survey was time consuming, particularly the two open-ended questions. The inexperience of the author in developing surveys and conducting interviews was also a limitation.

The author's procedures may be duplicated in other departments by using the population and the EMS supervisors in their departments and local hospital emergency room doctors or personnel. Utilization of a local library may also be necessary.

## **RESULTS**

### **Interview results**

The Medical Director Dr. Kevin Merigian did not believe that burnout actually exists within the MFD. He believes paramedics become disenchanted with their job because most calls are not life or death calls; the majority of EMS is primary care on wheels. The Director felt paramedics did not suffer from burnout, but they feel that their expertise is unappreciated. Poor care is given to those in need from individuals who

believe they suffer from burnout. These paramedics are judgmental and patronizing to their patients. To reduce what the paramedics believe is burnout he suggests finding ways for the paramedics to understand their role as an EMS provider.

The MFD EMS Quality Improvement Coordinator Michael Lambert felt that burnout was caused by the United States health care system that forces people without insurance to use the EMS, therefore causing high call volume. Additional causes of burnout include a lack of support from fire suppression personnel and a lack of adequate supervision in the field. The coordinator felt that burnout causes the paramedics to suffer emotionally and physically from being abused by the public and the fire department. Burnout causes these paramedics to become complacent in both their emergency medical and fire fighting services. To reduce burnout Mr. Lambert would like to mandate the 12-hour shifts, hire more paramedics, and change the culture of the fire department to accept paramedics like they do fire fighters, and let paramedics know they are appreciated.

The emergency room doctors felt that burnout was caused by abuse of the 911 system. They felt that burnout negatively affected patient care. An example given by Dr. Pierce gave the following example; “With burnout comes lack of attention to detail. Secondary injuries are missed; routine task are not double checked.” Suggestions given to reduce burnout include: correct the 911 system, provide more off time for paramedics between shifts, awards, facilitate communication within the fire department, and create an emotionally and physically relaxing environment at the fire station.

### **Questionnaire results**

The following describes in what ways MFD paramedics suffer from burnout. Paramedics suffer physically and psychologically from lack of sleep. They develop a

negative attitude toward the fire department, family, patients, and their job. They also feel isolated, unsupported, and unappreciated.

Burnout negatively affects the emergency medical services rendered to the customers. Paramedics become complacent, and the quality of care drops. Less compassion is shown toward patients. Rude paramedics who have poor bedside manner cause negative public relations.

Suggestions made to decrease burnout include putting more units in service and implementing a mandatory 12-hour shift on the unit. This new shift would allow the paramedic to ride on the unit 12 hours then on the fire equipment 12 hours (or vice versa) within the same 24 hour shift. The Quality Improvement Officers also recommended educating the public on the proper use of the 911 system in an effort to decrease run volume. Finally establishing pride in EMS and if fire fighters show more respect for the paramedics' job this may also decrease burnout.

### **Survey results**

To obtain the MFD paramedics views on burnout, a survey was developed and made available to all paramedic who ride the units. One hundred and one of 167 responded. Forty of the paramedics strongly agreed that they experience burnout, 17 partially agreed, 35 agreed, five partially disagreed and 14 disagreed. When ask if they believed other paramedics experience burnout 37 strongly agreed, 13 partially agreed, 28 agreed six partially disagreed and 17 disagreed. When ask if burnout negatively affects the service rendered including attitude toward patients, 37 strongly agreed, and 13 partially agreed 28 agreed, six partially disagreed and 17 disagreed. When ask if burnout negatively affects the service other paramedics render including attitude towards patient,

57 strongly agreed, 19 partially agreed, 18 agreed, three partially disagreed and four disagreed. When asked if burnout negatively affects their desire to train or work in their fire management zones (e.g., hanging smoke detectors, hydrant testing, public education and conducting surveys in target hazards) 27 strongly agreed, 17 partially agreed, 36 agreed, ten partially disagreed and 22 disagreed. Charted results can be found in Appendix F.

The following are the top five causes of burnout:

1. Abuse of 911 system
2. Extensive time on unit
3. High call volume
4. Lack of sleep
5. Lack of support from administration and or fire fighters

The following are the five most-given suggestions to decrease burnout:

1. Mandate the 12-hour shifts
2. Hire more paramedics
3. Put more units in service
4. Educate the public on the proper use of the 911 system
5. Support of administration and fire fighters.

**Research Question 1.** What are the causes of paramedic burnout? The literature shows that burnout is caused by the following reasons: being expected to perform flawlessly in emergency situations, high levels of responsibility combined with high call volume, a lack of autonomy, the feeling of not being appreciated, shift work, roll conflict, lack of social support and professional recognition. Emotionally draining calls, being put

in threatening or violent situations and the fear of being exposed to infectious diseases also contributes to burnout. The survey and the literature both list high call volume, the public's abuse of EMS, lack of sleep, and a lack of support from paramedics organizations as causes of burnout.

**Research Question 2.** In what ways do the paramedics on the Memphis Fire Department suffer from burnout? The questionnaires determined that paramedics suffer physically and psychologically from lack of sleep. They develop a negative attitude toward the fire department, family, patients, and their job. They also feel isolated, unsupported and unappreciated. The EMS quality improvement coordinator felt that the paramedics suffer emotionally from being abused by the public and the department. However, the medical director did not believe they suffer from burnout. The literature review, although not specific to MFD paramedics, also concluded that paramedics suffer emotionally, psychologically and physically from burnout.

**Research Question 3.** How does paramedic burnout affect the emergency medical and fire fighting services rendered to the customers? Poor work performance is an effect of burnout. Other effects caused by burnout are making mental mistakes, being less tolerant of patients, and showing little sympathy. The survey showed that 65 percent of paramedics strongly agreed or agreed that burnout negatively affected the emergency medical services they render to patients. Likewise, 75 percent strongly agreed or agreed that burnout negatively affected the emergency medical services that others rendered to the patient. The survey also showed that 62 percent of paramedics strongly agreed or agreed that burnout negatively affects their desire to train and work in their FMZ's, therefore negatively affecting the fire fighting services rendered to the customers.



**Research Question 4.** What have helping professions done to decrease burnout in employees? Helping professions have implemented employee assistant programs and health and wellness programs to help decrease stress and burnout. Some other methods used to help decrease burnout includes training on how to cope with the stress of working with trauma victims, diet, exercise, meditation, rest and relaxation. Telling paramedics they are appreciated and showing them the proper level of respect for the job they do may also decrease burnout.

The Chicago Fire department has paramedics in public education to teach injury prevention and the proper use of the EMS. This may decrease the run volume, thereby reducing burnout. Chicago also went to a four-platoon work schedule, which increased the paramedics' time off between shifts, and ultimately reduced the number of lay-ups and complaints.

The LAFD allows paramedics that have cross-trained to transfer from EMS to fire suppression or to move back and forth between the two jobs when they feel burned-out. They have provided in-house counseling and peer counselors to help paramedics deal with burnout, and critical stress incident debriefings are required for personnel who are involved in an acute tragedy. LAFD has worked to address the emotional and psychological aspects of burnout.

## **DISCUSSION**

The literature review and the author's findings through the survey, questionnaire and interviews are comparable. The main reason for burnout, according to the surveyed group and Quality Improvement Officers as well, is high call volume. Abuse of the 911 system and a lack of sleep were other reasons listed for burnout and may be a causal

factor for the high call volume. One paramedic said “I can remember nights when I was so tired that I honestly didn’t care whether patients lived or died – I just wanted to get some sleep” (Auerbach, 2002, p. 118). The surveyed group, Quality Improvement Officers and the EMS supervisors all mentioned a lack of support from the administration and the fire fighters as another reason for burnout. Paramedics not only in the MFD but also across the country feel like they are treated like second class citizens. “Main risks factors have to do with social aspects of the work environment, in particular lack of support from the supervisor as well as colleagues and poor communication” (Van der Ploeg & Kleber, 2003, para. 5).

Burnout causes the paramedics on the MFD to suffer physically and psychologically. Several things contribute to the physical suffering including lack of sleep, heavy workloads, and exposure to infectious diseases. “Fatigue...destroys your body’s ability to cope with challenges and resist illness” (Reinhold, 1996, p. 202). Exposure to violence puts them at a physical and emotional risk. Witnessing and caring for the victim of a violent act alone can put a huge emotional strain on anyone. Finally, feeling like an outsider within the fire department also takes an emotional and psychological toll on paramedics.

Fire fighting and emergency medical services rendered to the customer are negatively affected by burnout. Paramedics become complacent in both their medical and fire fighting training. They have little desire to work in their fire management zones (e.g., hanging smoke detectors, hydrant testing, public education and conducting survey in target hazards), therefore leaving the public and other fire fighters at risk. Finally, when caring for the patient they may make mistakes, neglect to properly treat a patient, or have

poor attitudes towards their patients. Cherness' study of helping professionals showed that when these professions began to burnout "they lost much of their compassion and commitment" (Cherness, 1995, p.17).

Helping professions have done many things to decrease burnout including implementing health and wellness programs. The LAFD has peer counselors to help paramedics deal with burnout. "Useful stress reduction techniques include lectures, education in diet and health management and employee group discussion concerning stress and ways to deal with it" (Fishkin, 1994, p. 44). The Chicago Fire Department's Emergency Medical Bureau changed their work shift. This gave the paramedics 72 hours off between shifts instead of 48 hours.

The author believes that burnout among paramedic's needs to be constantly monitored for their well being as well as the well being of others. Refusing to address the problem of burnout puts the customers as well as fire department personnel at risk. Emergency medical and fire fighting duties are often neglected or performed poorly by individuals suffering from burnout. Civilians and fire fighters are often injured or killed as a result of these negligent acts or behaviors. Implications of addressing paramedic burnout will improve the emergency medical and fire fighting services rendered to the customer. Improving these services will save lives on both the medical emergency and fire scene. Reducing burnout will also increase most paramedics' desire to work in their fire management zones and do quality training, therefore making the fire scene and emergency medical scenes safer.

## **RECOMMENDATIONS**

The literature, survey instrument, questionnaires, and interview with quality

improvement coordinator all reveal that exhausted paramedics burn-out, and this negatively affects the services given to customers. Reducing burnout will improve the services therefore saving lives.

It is recommended that the MFD conduct research to identify what types of shifts other emergency services in cities similar to Memphis use to help elevate exhaustion among paramedics. The MFD should involve the paramedics in this research and obtain input from them. The input should include the types of shifts they believe would work to decrease burnout as well as other emergent issues within the fire department. Giving the paramedics ownership in the decisions that affect them will insure them that they have the support of administration.

MFD should hire more paramedics so the department would have the resources to mandate the 12-hour shift and put more units in service. Hiring more paramedics would also allow the MFD to put more supervisors in the field. Future recommendations include: developing a public education class on the proper use of the 911 system and injury prevention, training all MFD fire fighters and paramedics to conduct these classes, and putting public education specials in positions that are dedicated to injury prevention and the use of the 911 system only. Finally it is recommended that the MFD, address the issues and change the culture with in the department that denies the paramedics the proper appreciation, respect, and support they deserve from other fire fighters. This needs to be addressed at all ranks. It is recommended that team-building classes and diversity training are conducted to help change the culture.

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## Appendix A

### Three shift work schedule

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1 A-Shift	2 C-Shift	3 A-Shift	4 B-Shift	5 A-Shift	6 B-Shift	7 C-Shift
8 B-Shift	9 C-Shift	10 A-Shift	11 C-Shift	12 A-Shift	13 B-Shift	14 A-Shift
15 B-Shift	16 C-Shift	17 B-Shift	18 C-Shift	19 A-Shift	20 C-Shift	21 A-Shift
22 B-Shift	23 A-Shift	24 B-Shift	25 C-Shift	26 B-Shift	27 C-Shift	28 A-Shift
29 C-Shift	30 A-Shift					

## Appendix B

### Four Shift Work Schedule

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1 A-Shift	2 B-Shift	3 C-Shift	4 D-Shift	5 A-Shift	6 B-Shift	7 C-Shift
8 D-Shift	9 A-Shift	10 B-Shift	11 C-Shift	12 D-Shift	13 A-Shift	14 B-Shift
15 C-Shift	16 D-Shift	17 A-Shift	18 B-Shift	19 C-Shift	20 D-Shift	21 A-Shift
22 B-Shift	23 C-Shift	24 D-Shift	25 A-Shift	26 B-Shift	27 C-Shift	28 D-Shift
29 A-Shift	30 B-Shift					



## Appendix C

### FFP Burnout interview with the Medical Director

Name: Kevin S. Merigian, M.D.

Date: 05/17/04

1. What are the causes of paramedic burnout? In actuality, the term burnout leads one to believe that the paramedics are over worked. There are a number of activities that lead them to believe that they are burned out, but in my opinion, burnout doesn't actually exist. Paramedics join the EMS system to make a difference to citizens who are in crisis. However, the illusion of constant life/death runs or calls is just that: an illusion. Once they realize that the majority of EMS is primary care on wheels, they become disenchanted with their job. They feel that they were sold a pig in a poke and that their intrinsic value is being wasted on the masses, when in fact, they are providing an invaluable service to the community. It's just not what they thought it would be. Subsequently, they get lazy and take on a victim hood mentality and the apathy sets in. They then become "burned out."

2. In what ways do the paramedics on the Memphis Fire department suffer from burnout? I do not believe they suffer from burn out. I think they are disillusioned and frustrated with a career that wasn't all what it was cracked up to be. They like the financial benefits of the job, but they don't feel that their expertise is well appreciated.

3. How does paramedic burnout affect the emergency medical and fire fighting services rendered to the customers? There is no question that the apathy creates a mediocre service line and that the individuals who are disillusioned give poor care to those in need. These paramedics are judgmental and patronizing to their patients and have

a “no responsibility” attitude.

4. What can be done to reduce burnout in Paramedics? Find ways for the paramedic to understand his role as an EMS provider. The fact that the overwhelming number of calls are for non-emergencies should alert them to the fact that they are highly trained but their value is in the evaluation and transportation of the non-emergent patient.

## FFP Burnout Interview with EMS Quality Improvement Control Coordinator

Name: Michael Lambert

Date of interview: 5-10-04

1. What are the causes of paramedic burnout? The United States health care system causes the public that does not have health insurance to use the ambulance service for any health-related problem. Paramedics do not have enough supervisors in the field. As far as for the MFD the culture here is to treat paramedics and EMS like stepchildren, paramedics are picked on by many of the fire fighters from all ranks. Paramedics are unappreciated and unsupported.

2. Does the appreciation and support for paramedics improve as the fire personnel gets younger. Yes, because the younger employee have been required to ride the units as EMTs.

3. In what ways do the paramedics on the Memphis Fire department suffer from burnout? They suffer emotionally from being abused by the public and the department.

4. How does paramedic burnout affect the emergency medical and fire-fighting services (e.g. public education and fire management zone) rendered to the customers? Burnout causes them to become complacent. They do not think public education or fire prevention is a part of their job.

5. Do you think educating the public on the proper use of the 911 system will cut down run volume therefore decreasing burnout? Not as long as the country's health care system is in the shape it is in

6. What can be done to reduce burnout in Paramedics? Mandate the 12-hour shifts on the units for the paramedics and EMTs. Hire more paramedics so we can put two

paramedics back on the units. The culture on the fire department needs to change. The entire fire department from the top down needs to embrace EMS and stop treating paramedics like stepchildren. Let them know they are appreciated and respected.

## Emergency Room Doctor Interview

Name: Patrick Toy, M.D.

Hospital Observation occurred in: Methodist Central

Date of interview: 5-10-04

1. Do you believe that paramedics you observe in the ER suffer from burnout? Yes.
2. What causes burnout in paramedics? There is no moment of rest. The paramedics are trained to take care of many situations. Many patients from this particular hospital are brought to the ER by ambulance. To some, the ambulance is nothing more than a taxi cab. Having paramedics rush to a scene to a supposed emergency situation is insulting to find a patient who does not have an emergency condition. Many patients have bad attitudes toward the individuals who come to help. They have a feeling of entitlement versus one of thankfulness.
3. Does burnout have a negative affect on how patients are medically or emotionally treated by paramedics? How? Yes. Abuse of the 911 system affects paramedics negatively. Those abuses result in the suffering of other legitimate emergent situations. Attitude affects performance. Paramedics have a more difficult time empathizing with the patients.
4. Does burnout affect the interpersonal relationship between ER personnel and paramedics? How? It could, but I have not observed this situation in the ER. The paramedics are more than helpful to the ER personnel.
5. What can be done to reduce burnout in Paramedics? More time in between shifts. Award the paramedics.

## Emergency Room Doctor Interview

Name: Mark Pierce M. D.

Hospital Observation occurred in: Regional Trauma Center

Date of interview: 5-4-04

1. Do you believe that paramedics you observe in the ER suffer from burnout? Yes.
2. What causes burnout in paramedics? Patient abuse of the 911 system is definitely a factor, I think the nature of the acutely injured patient, frequently intoxicated or involved in criminal behavior. It just becomes hard to maintain empathy for patients who involved themselves in high-risk behavior.
3. Does burnout have a negative affect on how patients are medically or emotionally treated by paramedics? How? Certainly, medically it does. With burnout comes lack of attention to detail. Secondary injuries are missed; routine tasks are not double-checked.
4. Does burnout affect the interpersonal relationship between ER personnel and paramedics? How? I don't know that I've seen this as a major problem. ER staff and paramedics take care of the same patients under somewhat similar circumstances so I think there is a feeling of knowing what the others go through.
5. What can be done to reduce burnout in Paramedics? Correct the abuse of the 911 system.

## Emergency Room Doctor Interview

Name: Michael Davis M.D.

Hospital Observation occurred in: Methodist University Hospital

Date of interview: 5-10-04

1. Do you believe that paramedics you observe in the ER suffer from burnout? Yes.
2. What cause burnout in paramedics? Paramedics try to solve other people's problems and often forget about themselves. It is difficult dealing constantly, day after day, with the sick and injured, emotionally distraught and death, and the dying patient. Yet, they deal with them during every call, every shift, every day, year by year. Then the other side of the coin involves external concerns, such as, a lack of advancement opportunities and low salaries; which lead to high turnover in this profession. On the other hand, police, fire, and rescue squad departments offer attractive salaries and benefits.
3. Does burnout have a negative affect on how patients are medically or emotionally treated by paramedics? How? When these problems multiply faster than they can handle them, they move into a state of emotional and mental exhaustion, unable to cope and may lash out or become "jaded" to often-genuine concerns or problems from the patients.
4. Does burnout affect the interpersonal relationship between ER personnel and paramedics? How? Yes, some ER personnel perceive paramedics as second rate caregivers.
5. What can be done to reduce burnout in Paramedics? Some relieve stress by telling jokes or by talking about their inner thoughts to others. Health exercise programs, hobbies, and other outside interests may all help. If all else fails, take a vacation.

## Appendix D

### FFP Burnout Questionnaire with EMS Quality Improvement Officer

Name:

Date:

1. What are the causes of paramedic burnout?
2. In what ways do the paramedics on the Memphis Fire department suffer from burnout?
3. How does paramedic burnout affect the emergency medical and fire-fighting services (e.g. public education and fire management zone) rendered to the customers?
4. What can be done to reduce burnout in paramedics?



## Appendix E

### FFP Burnout Survey

Memphis Fire Department Paramedics:

Battalion Chief Hope Lloyd is conducting a required research project for the National Fire Academy's Executive Fire Officer Program. The purpose of this research is to determine if the paramedics on the Memphis Fire Department suffer from burnout and if so how decreasing burnout may raise the standard of service for our customers therefore saving lives. Decreasing burn out will make the MFD a safer and more enjoyable place in which to work. Burnout is defined as a depletion of energy and a feeling of being overwhelmed by other people's problems. Please rank the following statements on a scale from 1-5: 1-strongly agree, 2- partially agree, 3-agree, 4-partially disagree, 5-disagree. Additional comments may be put at the bottom.

Please take the time to complete this survey and return to Battalion Chief Hope Lloyd, Battalion 2-C-Shift. This survey is confidential, thanks in advance for your assistance.

1. Do you experience burnout as a paramedic for the Memphis Fire Department?  
**1 2 3 4 5**
2. Do others experience burnout as a paramedic for the Memphis Fire Department?  
**1 2 3 4 5**
3. Does burnout ever negatively affect the emergency medical service you render including attitude toward patient?  
**1 2 3 4 5**
4. Does burnout ever negatively affect the emergency medical service other paramedics render including attitude toward patient?  
**1 2 3 4 5**
5. Does burnout negatively affect your desire to train or work in your fire management zone.  
**1 2 3 4 5**
6. What causes paramedic burnout? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
7. What could the Memphis Fire Department do to decrease burnout? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### Appendix F

