



Mental Health and Stress in Emergency Medical Services

National EMS Management Association

Practitioner Mental Health and Wellbeing Committee

A Paper for Industry Consideration and Comment

February 2016

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February 21, 2016

Nearly a year ago I was asked if a group of students working on an Ambulance Service Manager (ASM) Class project could post a link to a survey on the National EMS Management Association (NEMSMA) Google Group. The survey included questions about EMS practitioner stress and suicide. The NEMSMA Board of Directors not only approved posting the link on the NEMSMA Google Group that has approximately 1500 members, but also to our LinkedIn group with approximately 6500 members. Over 4000 EMS practitioners responded to the survey. The ASM group analyzed the data and found several aspects disturbing. I felt their results were important, and that their work should not stop when the class was over.



Over the course of the ASM project I spoke with Erich Barber, and Monique Rose and after they completed the class I offered to establish a NEMSMA committee to carry on the work. Pat Songer accepted the offer to chair the committee and NEMSMA stood up the EMS Practitioner Mental Health and Wellbeing Committee in May of 2015. We tasked the committee with reviewing the current literature and writing a document that explored the present climate regarding practitioner mental health; taking a “snapshot” of the EMS community concerning stress, mental health and suicide.

Chad Newland, Erich Barber, Monique Rose, and Amy Young, all committee members, published the results of their ASM group project in the October, 2015 issue of JEMS while they and the rest of the committee worked on writing a paper to communicate results of their survey, what they found regarding published research, and finally to reveal the extent of the problems EMS practitioners are facing. *Mental Health and Stress in Emergency Medical Services* is the outcome of the committee’s months of work.

The EMS Practitioner Mental Health and Wellbeing committee has taken a first step. It is clear that we are faced with a challenging and complex set of problems. It is clear that we have insufficient peer reviewed research addressing the issues of stress, mental health, and suicide in EMS. Finally, it is clear we have work to do.

Our intent is that this paper will focus attention on the critical issue of stress and its consequences.

We hope it stimulates our community of practice and other critical stakeholders to do the studies, to explore interventions, to open and continue dialog. As a community of practitioners, and as leaders, we have an obligation to learn, to complete or participate in studies, and to take steps to reduce stress, to relieve suffering, and to provide the support and compassion to take care of our own. We must act.

A handwritten signature in black ink, appearing to read "Michael Touchstone". The signature is fluid and cursive, with a prominent loop at the end.

Michael Touchstone, BS, Paramedic
President, National EMS Management Association

The National EMS Management Association (NEMSMA) and its Practitioner Mental Health and Wellbeing Committee have developed this paper to identify the magnitude of mental health issues and suicide among emergency medical providers in the pre-hospital setting.

NEMSMA is a professional association of EMS leaders dedicated to the discovery, development, and promotion of excellence in leadership and management in EMS systems, regardless of EMS system model, organizational structure or agency affiliation.

It is anticipated that this paper will provide insight to the harsh reality of EMS provider suicide and overall state of mental health among the EMS workforce. This paper presents data that demonstrates the need for additional research and program development for the mental health of the EMS workforce.

Introduction

The Tema Conter Memorial Trust reported on their website, "Heroes are Human" that three first responders committed suicide in the first 3 weeks of 2016 (Tema Conter Memorial Trust, 2016).

The Austin Chronicle reported on May 8, 2015, "On Jan. 13, three weeks after making a New Year's resolution to "be done with this place," Austin-Travis County Emergency Medical Services paramedic Ryan Burger took a Glock 40 pistol to his head and shot himself to death." (Hoffberger, 2015)

The channel 9 news in Denver, Colorado stated on February 17, 2015, "Debbie Kibel-Crawford took her own life this past weekend, when the stress of the job became too much to bear. Kibel-Crawford had been a paramedic at Denver Health for more than 25 years." (Wild, 2015)

When speaking of paramedics and EMTs, perhaps the most common statement is, "How do they do it?" This statement is a reference to EMS professional's environment. Chaos, trauma, and violence are a daily occurrence; such is the nature of helping others in their time of need. Most individuals try to imagine what it would be like to see the grotesque bodies of a train wreck or to stand next to a husband that just lost the love of his life after 50 years, but can't seem to wrap their heads around how it could be done, and move on in an attempt to block out the scenes they just imagined. The truth of the matter is that EMS professionals can do the job because they pay a price. This price has several forms of payment: stress, fatigue, nightmares, headaches, depression, and PTSD just to name a few.

Some even pay with *their* lives.

This paper will provide a snapshot of the current state of mental wellness of EMS in United States and Canada using the limited body of knowledge that currently exists. The paper will also highlight the contributing factors suggested in the same body of knowledge to the current state of mental wellness. Ultimately, there is a case built within this paper to support the need for further research to be done, the creation of assessment tools to gauge an organizations mental wellness, and to build best practices for future organizations.

Problem Statement and Background

The 2011 The National EMS Assessment estimated that there were over 826,000 licensed and credentialed EMS professionals in the U.S. which included both paid and volunteer EMS providers (Federal Interagency Committee on EMS, 2011). According to Dwayne Forsman, the Chief Administrative Officer of the Paramedic Association of Canada, there are approximately 40,000 known providers across Canada. These statistics are comprised of people whose work requires them to mitigate extreme situations.

The institution of Emergency Medical Services, by design, sends people into environments where high stressors abound. Providers care for people whose drunk driving just killed an entire family; they transport children that have suffered facial trauma at the abusive hands of their parents; they hold the hand and, through a smile, reassure the soul of someone that is passing away in front of them because their patient's long battle with cancer is lost. These examples may seem graphic to some, but they are very real to EMS professionals, and they occur frequently.

It should not be a surprise that these stressors can lead to post-traumatic stress, acute stress, cumulative stress, and depression. Furthermore, it is not only reasonable to predict that these mental health issues can put a provider at risk for accidents or cause them to make critical errors due to impaired judgment, decision-making, and concentration, but these conditions will undoubtedly put a person at greater risk of either contemplating or attempting suicide.

While there is little research on this issue, there is some data that can provide context to the scope of this issue in the United States. An April 2015 Ambulance Service Manager Program cohort produced and presented a research project titled *What's Killing Our Medics*. This project outlined the results of their survey that centered on the mental health and suicide of EMS providers. The survey received 4,021 responses from EMS providers in all 50 states and several US territories. The volume of responses and geographic representation speaks to the extent of the issue in the U.S. The survey found approximately 3,400 participants experienced "critical stress", a term defined for the survey as "the stress we undergo either as a result of a single critical incident that had a significant impact upon you, or the accumulation of stress over a period of time. This stress has a strong emotional impact to providers, regardless of their years of service" (Newland, Barber, Rose, & Young, 2015).

Again, adequate data is lacking concerning the rates of suicidal ideation and attempted suicide for EMS professionals, but the research that does exist is alarming. The *What's Killing Our Medics* survey also found that 37.0% (n=1,383) of the respondents reported contemplating suicide and 6.6% (225) had even attempted suicide (Newland et al., 2015). These EMS providers are reporting a ten times greater rate of suicidal thoughts than the general population averages of 3.7% and 0.5% respectively (Centers

for Disease Control and Prevention, 2011). See figures 1 & 2 below. Additionally, a 2014 article in EMS World stated, “In Canada, as of Oct. 10, 25 first responders were known to have died by suicide in the preceding five-plus months. By the end of September, the U.S. had around 58 documented fire/EMS suicides in 2014” (Erich, 2014). The Tema Conter Memorial Trust reports that 39 first responders (police, fire, and EMS) died by suicide in 2015, and 3 died by suicide in the first 3 weeks of 2016 (Tema Conter Memorial Trust, 2016).

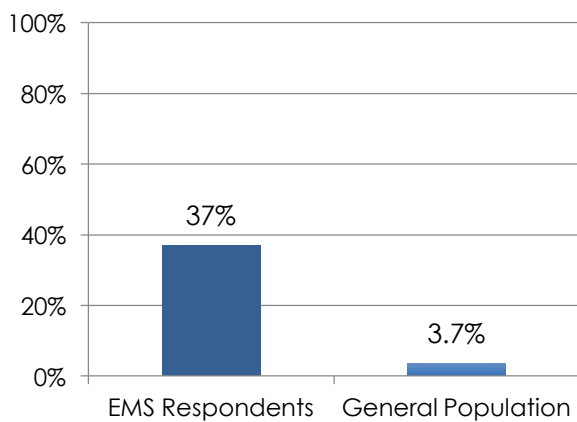


Figure 1. Comparison of percentage of EMS provider respondents who contemplated suicide to reported percentage of general population. (Newland et al., 2015)

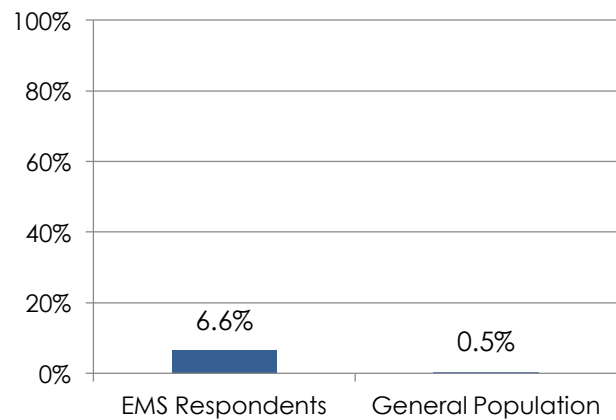


Figure 2. Comparison of percentage of EMS provider respondents who attempted suicide to reported percentage of general population. (Newland et al., 2015)

Stress and the EMS Culture

While stressors abound in the EMS professional's work environment, the EMS culture works against the providers with respect to creating an environment that is conducive to dealing with those stressors appropriately. Many EMS providers exhibit bravado with a tendency to behave in a certain way, even with an expectation to suck it up in order to not show weakness in some cases.

The data from the *What's Killing Our Medics* project supports the notion of a cultural blockade. Of the respondents, 2,672 people stating that they had mental health assistance available to them through their employer, and 2,306 stated they had not sought help for their stress. Of those 2,306, nearly half stated they did not sense a need to seek help, while others stated they didn't want this kind of information to go on their employee record, others were afraid to be identified, and some were concerned about what others would think.

The *What's Killing Our Medic's* survey examined the association between the prevalence of suicidal ideation and the perceived degree of support in the work environment. There were several different work environments that were identified from the survey, but the two most prevalent work environments that were identified in this section of the study were the following:

- A work environment where an EMS professional does not feel supported by either their peers or management with respect to their mental wellness and they are not encouraged by anyone to utilize formal support institutions like Employee Assistance Programs or Critical Incident Stress Management peers.
- A work environment where an EMS professional feels supported by either their peers or management with respect to their mental wellness and they are encouraged by their peers and management to utilize formal support institutions like Employee Assistance Programs or Critical Incident Stress Management peers.

The results showed that 56% of the respondents that worked in an organization where they did not feel supported by their peers or management with respect to their mental wellness and were not encouraged use formal support institutions had contemplated suicide. In contrast, 23% of the respondents that felt supported by their peers and management and were encouraged to utilize formal support institutions had contemplated suicide. Similar contrast was shown in the rates of suicide contemplations. 12% of the respondents to the survey that reported working in an organization where they did not feel supported by their peers or management with respect to their mental wellness and were not encouraged to use formal support institutions had attempted suicide, but only 4% of the respondents that felt

supported and encouraged to get help attempted suicide (Newland et al., 2015). See Figures 3 & 4 below.

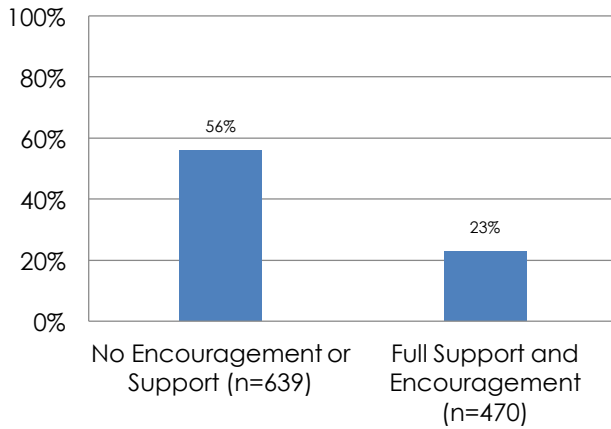


Figure 3. Comparison of the percentage of EMS provider respondents received no encouragement or support to those who received full support and encouragement who contemplated suicide (Newland et al., 2015).

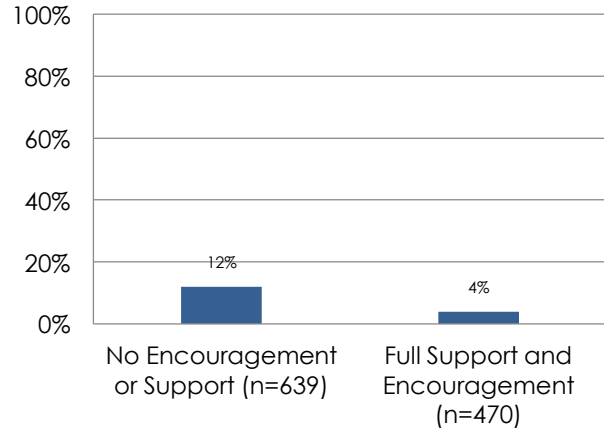


Figure 4. Comparison of the percentage of EMS provider respondents received no encouragement or support to those who received full support and encouragement who attempted suicide (Newland et al., 2015).

Effectiveness of Existing Support Programs

There are two support programs commonly available to EMS professionals. The first is the peer support network available through programs like Critical Incident Stress Management teams. The other is the professional counselling that can be attained through most Employee Assistance Programs.

The *What's Killing Our Medic's* results also suggest that the effectiveness of formal support programs are inconsistent. While a majority (63%) of the respondents indicated they used CISM for support found it to be either very helpful or extremely helpful, 37% of the respondents found CISM to be either somewhat helpful, slightly helpful, or not helpful at all. Likewise, 53% of the EMS providers that used EAP programs for support found them to be either very helpful or extremely helpful leaving 47% who found EAP to be either somewhat helpful, slightly helpful, or not helpful at all. The survey did not specify which elements of the formal support programs are thought to be effective, and which are lacking (Newland et al., 2015).

Next Steps

There is a significant mental health and wellness problem among the EMS workforce in the United States. Insufficient data exists to fully describe the extent and impact of this problem across the 800,000+ professionals that serve around the clock each day.

A national dataset should be developed to collect EMS workforce data supporting the mental health and wellbeing of providers in addition to other provider safety issues. Agency level performance measures should be developed with aggregate reporting at the state and national levels. EMS researchers should be encouraged and supported to conduct fundamental research using this and other datasets to support new insights and to contribute to the EMS body of knowledge.

The dataset and further research should capture attributes of EMS agencies that may contribute to the mental wellness of its field providers. This includes, but is not limited to:

- The availability of formal support institutions
- The frequency that formal support programs are utilized (anonymously reported)
- Shift length descriptors
- Overall agency and provider specific call volume
- The presence and severity of provider fatigue* (based on Provider Fatigue measures and study from Dr. Daniel Patterson and other sources)
- Inventory and utilization of stress coping mechanisms (anonymously reported)
- Count and severity of violence to EMS providers including management support if assaulted and level of security provided by law enforcement
- Count and severity of critical incidents that can dramatically increase the stress to providers. (i.e. location, call type, local demographics, etc.)

The results of the survey described above will help inform further researchers the extent of the problem, and identify the attributes of at-risk providers, appropriate support mechanisms, and best practices. This will lead to better understanding.

Vision

Wellness Assessment Tool

The study mentioned above will produce a snapshot of the state of EMS provider critical stress and mental wellness. It is envisioned that contributing factors will be identified to assist EMS professionals and leaders in reducing critical stress and suicidality.

These contributing factors will be used to develop a Wellness Assessment Tool to help an organization assess their state of mental wellness. This tool will measure the Critical Stress level of the organization as a whole without singling out specific individuals. It will also look at the factors that contribute to the organization's level of Critical Stress.

Best Practices

In addition to helping organizations identify high levels of critical stress, the wellness performance measures will help EMS agencies identify promising best practices. Use of the Wellness Assessment Tool will also be able to identify factors that contribute to the wellness of an agency's EMS workforce. These best practices can be created, catalogued, and shared to be used for improvement and success across the EMS profession.

Conclusion

EMS providers are experiencing previously unrecognized mental health problems at a much higher rate than the general public. As the health care safety net, this issue must become an urgent priority and the necessary resources must be allocated to research the prevalence, severity, and contributing factors of critical stress on EMS providers. Once identified and better understood, solutions can be developed to combat critical stress in EMS. The mental stability of the personal and professional lives of EMS providers is necessary to commendably serve their communities. It is time to provide care to the care givers so they can effectively respond when the next caller dials 911.

EMS professionals and leaders can and must come together today to support our peers and colleagues who are suffering due to their profession. This support must begin now with empathy, insight, care, and concern for your peers while developing mental wellness specific programs and conducting additional research. It is time to bring mental wellness of EMS providers into the light.

Afterword

The Board of Directors of the National EMS Management Association (NEMSMA) extends our sincere thanks to the members of the Provider Wellbeing Committee who created this document. Several people across the country put in a great deal of thought, deliberation and reflection into its creation. We are grateful.

There is no greater calling in our world than service to others. Those who provide emergency medical services to our communities deserve nothing less than our best efforts to ensure they do so with our full support, including mental health and well-being support. Documents like this one help draw attention to this issue and our obligation to serve those who serve others.

While this subject matter is emotionally charged and replete with anecdotal evidence of EMS providers around the North America who have suffered, and even died from mental health struggles, we are acutely aware that there is precious little by way of empirical data in the literature. It is our fervent hope that the work of the EMS Practitioner Mental Health and Well-being Committee will be a catalyst to grow the scientific body of evidence in the area. We call on the mental health and epidemiology communities to use this paper as a spring-board to develop further studies to help us better understand this issue and know how we can best support our caregivers.

All of us have a role in helping to address the mental health and well-being issues of EMS providers. And while the enormity of these challenges may seem overwhelming, we will do well to recall the words of the great care-giver Mother Teresa who said, *"It is the greatest of all mistakes to do nothing because you can only do little – do what you can."*

The Board of Directors
National EMS Management Association

References

Centers for Disease Control and Prevention. (2011, February). www.cdc.gov. Retrieved from Centers for Disease Control and Prevention: <http://www.cdc.gov/violenceprevention/pdf/suicide-datasheet-a.pdf>

Erich, J. (2014, November 1). Earlier Than Too Late: Stopping Stress and Suicide Among Emergency Personnel. *EMS World*

Federal Interagency Committee on Emergency Medical Services. (2011). National EMS Assessment. U.S. Department of Transportation, National Highway Traffic Safety Administration, DOT HS 811 723, Washington, DC, 2012. Available at www.ems.gov

Hoffberger, C. (2015, May 8). *The Austin Chronicle*. Retrieved from www.austinchronicle.com: <http://www.austinchronicle.com/news/2015-05-08/high-stress-at-ems/>

Newland, C. Barber, E., Rose, M., & Young, A. (2015). Critical stress; survey reveals alarming rates of EMS provider stress and thoughts of suicide. *Journal of Emergency Medical Services*, 40(10), 30-34.

Tema Memorial Trust. (2016). *Heroes Are Human*. Retrieved from Heroes Are Human: <http://www.tema.ca/#!inthenews/cro3>

Wild, W. (2015, February 17). *9news*. Retrieved from [9news.com](http://www.9news.com): <http://www.9news.com/story/news/local/2015/02/18/family-says-paramedic-job-stress-contributed-to-suicide/23600857/>

Appendix

NEMSMA EMS Practitioner Mental Health and Wellbeing Committee

NEMSMA President:

Mike Touchstone Regional Director, Philadelphia Regional Office of EMS

Committee Chair:

Pat Songer Chief of EMS and Administrative Director, Humboldt General Hospital

Committee Members:

Erich Barber	Captain, Grand County EMS
Lori Boland	Managing Scientist, Allina Health
Jeff Czyson	Director of Operations, Allina Health Robin Davis
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Todd Stout	First Watch
Darby Weston	Paramedics Director, Ada County
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Matt Womble	Co-Founder, EMERG
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