WHAT'S KILLING OUR MEDICS?

REVIVING RESPONDERS

Ambulance Service Manager Program

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Author's Note

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Abstract

Stress affects everyone without bias towards gender, age, race, and health or career choice. On February 10th, 2015 a group of seven EMS professionals with varying years of experiences, titles, and roles across the United States formed REVIVING RESPONDERS with the intent to question the prevalence and severity of Critical Stress and mental wellness amongst EMS field providers. Critical Stress, as defined by this group, is "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."

A survey targeting EMS providers started on February 19, 2015 and ended on March 30, 2015 with a total of 4,021 participants. The results of the survey show alarmingly high levels of stress, suicide contemplation, and suicide attempts amongst the people that responded. The survey revealed that while some respondents found formal support institutions to be effective, opportunities for improvement were exposed. Cultures that didn't support the employees through Critical Stress had higher rates of suicide contemplation and attempts.

Background

The 2011National EMS Assessment reported 826,000 licensed and credentialed paid and volunteer EMS professionals in the U.S. (CDC 2014). Very little information was found in the way of national data on suicide contemplation and suicide attempts amongst EMS providers in America; however, 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 survey was intended primarily for EMS personnel whose primary role is working on an ambulance.

Project Objectives

There were three major objectives of this project. The first objective was to identify the prevalence and severity of Critical Stress (CS) to include suicide contemplation and suicide attempts in front-line Emergency Medical Service Personnel. The second objective was to measure the effectiveness of current formal support institutions in the EMS industry such as peer-to-peer counseling similar to Critical Incident Stress Management (CISM) teams; professional therapy programs associated with Employee Assistance Programs (EAP); and private therapy. The last objective was to measure the EMS culture as it pertains to field provider support of mental wellness, and field provider encouragement to engage in the formal support institutions mentioned above.

The Survey

A survey was created and placed on the Survey Monkey website (www.surveymonkey.com). Dino Curzi, the epidemiologist with the Contra Costa County Division of American Medical Response, aided in the publication of the survey to the site. The survey was distributed via email, list servers, and social media initially to EMS field personnel in Kansas, Missouri, Texas, Oregon, Colorado, and California. However, the survey quickly had respondents from across the nation. See Appendix 1 for the survey.

The Results

The survey lasted 40 days providing 4,021 responses from across all 50 States, the District of Columbia, Puerto Rico, American Samoa, and Guam. This paper shares the results of the data (See Appendix 1.0), and a portion of the complete data analysis. Due to the time constraints of the project, a complete analysis of the data is not included in this paper or the accompanied presentation.

The highest response came from the group with 6-10 years of experience. According to the survey, approximately 3400 (85%) respondents had experienced CS, (37%) had contemplated suicide and 225 (6.6%) had attempted suicide. The CDC (National Center for Injury Prevention and Control, Division of Violence Prevention, 2012) reported in 2012 an estimated 1 million adults (0.5% of the U.S. population) had attempted suicide, while 3.7% of the general population has contemplated suicide. 66% of respondents stated they had not sought help even though 75% of the respondents had mental health assistance available to them through their workplace. 49% of individuals responding to the survey stated they did not sense a need regarding seeking help for critical stress. Other responses included: 25% of providers not wanting it on their employee record, 23% not wanting to be identified, and 26% concerned about what other people would think.

According to the data, of those that sought assistance, the in-house peer counseling (CISM type) program was the most frequently utilized at 41%, followed by private mental health providers at 35%, and then Employee Assistance Programs at 26%. The survey allowed the respondents to select all applicable options, so a person could indicate any combination of EAP, in house counseling, private assistance, and other help that was available. Most programs had no time restrictions applied to them for when they could be accessed.

The results determined that 63% of providers thought that the CISM type program was very or extremely helpful, and 61% felt that the private counseling was very or extremely helpful. 53% of providers felt that EAP was very or extremely helpful (Figure 1). Respondents reported that 65% of the time they had a follow-up appointment, and that this was helpful 63% of the time.

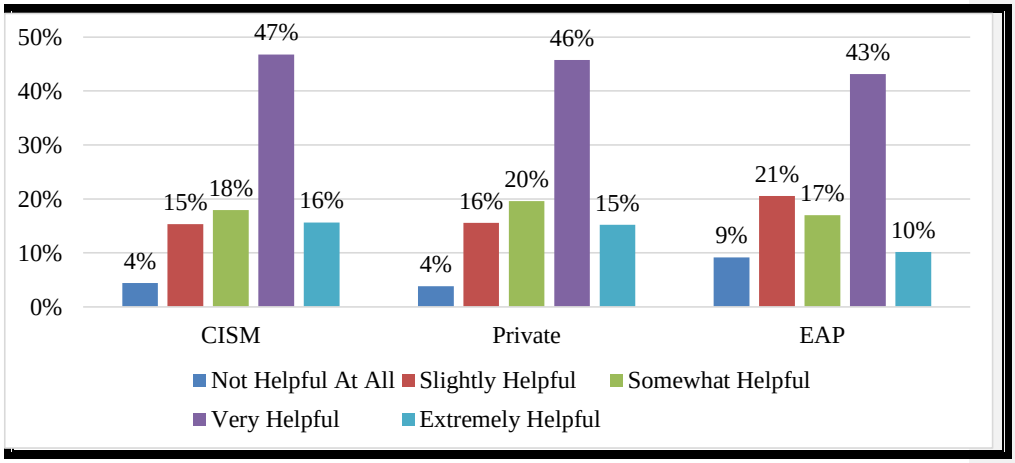

Figure 1: The Effectiveness of Different Formal Support Institutions

In summary of the effectiveness of follow up appointments, (Question 11- "Were the follow-up appointments helpful?") according to the 35% of providers that responded "No" the following free text results stand out the most. While not all of the comments were included, the group feels that each is concerning. See Appendix 2

Free text responses describing how respondents managed stress were evaluated and categorized. Some responses listed more than one and were noted for all applicable categories. The highest amount of 834 claimed that they utilize exercise while only 189 stated using alcohol to manage their stress. Sex and drug abuse as techniques to manage stress were the lowest tallied responses with 13 and 11 respectively (Figure 2).

How do you manage Stress?	
Total # of Answers	2498
Exercise	834
Talking	688
Hobbies	591
Friends & Family	415
Other	278
Faith	229
Alcohol	189
Nothing	159
Time Off/Vacation	148
Meditation	116
Counseling / Therapy	101
Compartmentalization	70
Sleep (avoidance)	65
Alone Time / Seclusion	62
Prescription Drugs	59
Healthy Eating & Sleeping	58
Humor	51
Work More Shifts	26
Stress Eating	26
Cry	16
Sex	13
Drug Abuse	11

Figure 2: Stress Management Techniques

Analysis

Prevalence of Suicide Contemplation and Suicide Attempts

One of the most significant results highlighted in this survey was the comparison between the percentage of survey respondents that either contemplated or attempted suicide and the percentage of general population adults that either contemplates or attempt suicide nationally. The CDC reported in 2012 that 0.5% of the U.S. adult population had attempted suicide, while 3.7% of the general population has contemplated suicide (National Center for Injury Prevention and Control, Division of Violence Prevention, 2012). Comparatively, 37% of EMS respondents contemplated suicide and 6.6% had attempted suicide.

Supportive Cultures and Support Effectiveness

This portion of analysis assumes that there are different cultures in EMS across the country with respect to the quantity and quality of mental health support. For example, field providers in some EMS systems are immersed in a culture where they do not speak about their Critical Stress because they feel they will be ostracized by their peers and reprimanded by their management. On the contrary, field providers in other EMS systems are constantly encouraged to acknowledge their Critical Stress and they are surrounded by CISM and EAP programs. These and various other subcultures are possible realities. The objective of this portion of the analysis is to analyze which cultures are most prevalent, and measure the effectiveness of mental health support within each of those prevalent cultures.

When the data is categorized by how an individual responded to the questions below, different subcultures in EMS are identified.

Considering your mental health, do you feel supported by your peers?

Considering your mental health, do you feel supported by your management team?

Did your peers encourage you to seek mental health assistance?

Did your management team encourage you to seek mental health assistance?

Specifically, 16 different theoretical subcultures emerge (See Figure 3). These subcultures do not necessarily reflect real subcultures in EMS. For example, Subculture 6 is a resulting subculture that exists where field employees do not feel that their peers support their mental health; their mental health is supported by their management team; their management team does not encourage the use or formal support institutions; and their peers encourage the use of formal support institutions. The survey suggests that this subculture is not very prevalent since only 4 respondents felt that this subculture exists. These subcultures are illustrated in Figure 3 on the next page. The prevalence displayed by the survey results are listed by percentages for each subculture.

			Peers do not encourage the use of formal support institutions	Peers encourage the use of formal support institutions.
Mental Health is Not Supported by Peers	Mental Health is Not Supported By Management	Management does not encourage the use of formal support institutions	**Subculture 1** **20%**	**Subculture 2** **3%**
		Management encourages the use of formal support institutions	**Subculture 3** **2%**	**Subculture 4** **1%**
	Mental Health is Supported by Management	Management does not encourage the use of formal support institutions	**Subculture 5** **1%**	**Subculture 6** **0%**
		Management encourages the use of formal support institutions	**Subculture 7** **1%**	**Subculture 8** **1%**
Mental Health is Supported by Peers	Mental Health is Not Supported By Management	Management does not encourage the use of formal support institutions	**Subculture 9** **15%**	**Subculture 10** **7%**
		Management encourages the use of formal support institutions	**Subculture 11** **1%**	**Subculture 12** **2%**
	Mental Health is Supported by Management	Management does not encourage the use of formal support institutions	**Subculture 13** **22%**	**Subculture 14** **2%**
		Management encourages the use of formal support institutions	**Subculture 15** **7%**	**Subculture 16** **15%**

Figure 3: EMS Subcultures

The conclusion of this analysis is that there are four prominent subcultures reflected in the survey data. They are as follows in figure 4:

Subculture	Representation
No mental health support and no encouragement to use formal support institutions.	20%
Peer support only for mental health. No encouragement to use formal support institutions	15%
Peer and management support for mental health, but no encouragement to use formal support institutions.	22%
Support from both peers and management with regards to mental health, and encouragement from both peers and management to use formal support institution.	15%

Figure 4: Prevalent EMS Subcultures

Since these four subcultures are the most prominent, further analysis of the data will only include these four subcultures for the extent of this analysis.

The goal of this portion of analysis is to compare and contrast prominent subcultures in the following areas:

The prevalence of critical stress

The prevalence of suicide contemplation

The prevalence of suicide attempts

The prevalence of field providers seeking help for stress

The effectiveness of the support received

The survey identified that Critical Stress is almost equally present in all different subcultures; however suicide contemplation and suicide attempts are remarkably more common in an environment that does not support mental health than in one that supports mental health and encourages the use of programs like CISM and EAP. Likewise, the data shows that employees are more likely to seek help if they are a part of a supportive culture with respect to their mental health. Furthermore, field employees that were in a supportive and encouraging culture perceived help as more effective than those that were part of a culture that did not support mental health or encourage the use of formal support institutions. The actual data is reflected in the charts below (Figures 5-9).

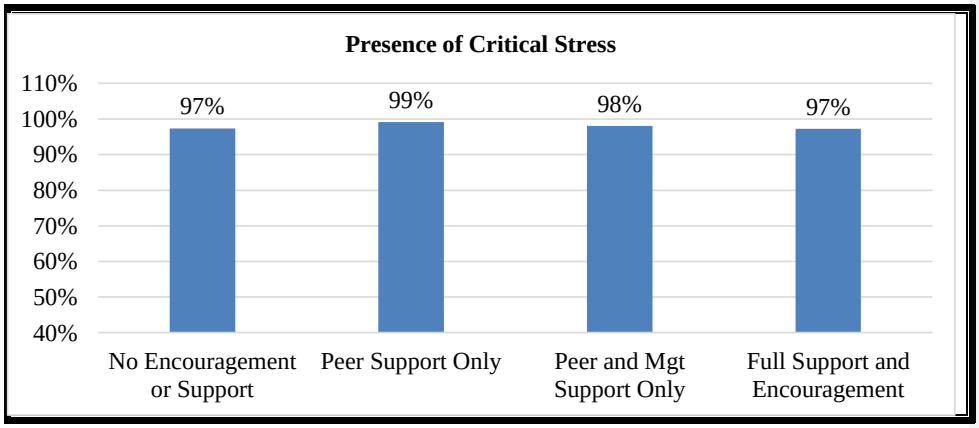

Figure 5: Presence of Critical Stress

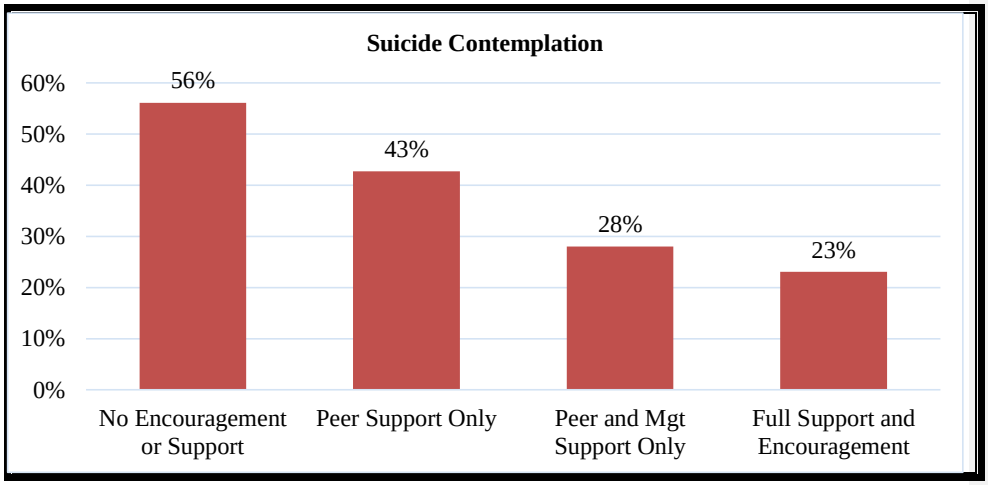

Figure 6: Suicide Contemplation

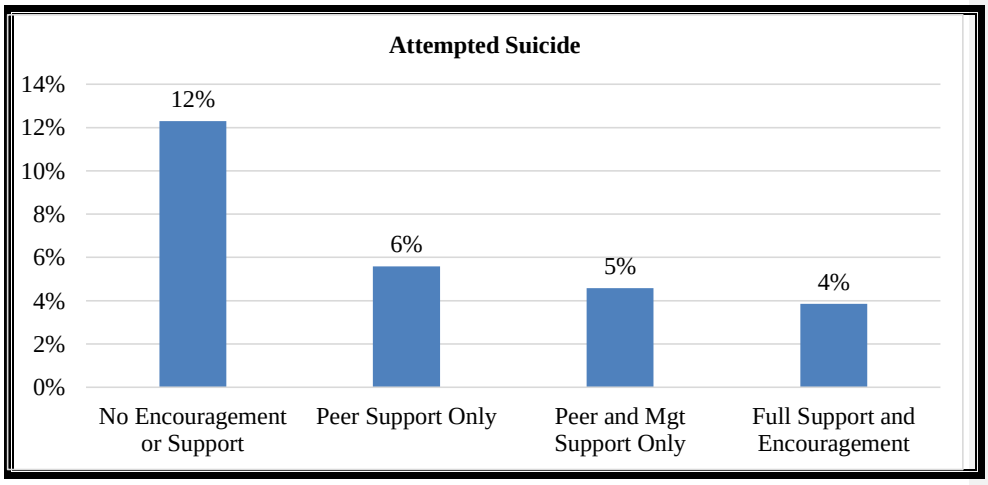

Figure 7: Attempted Suicide

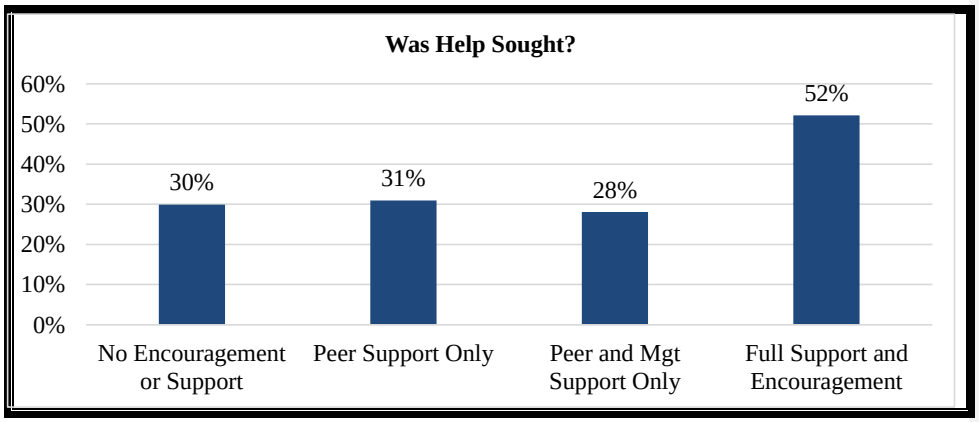

Figure 8: Was Help Sought?

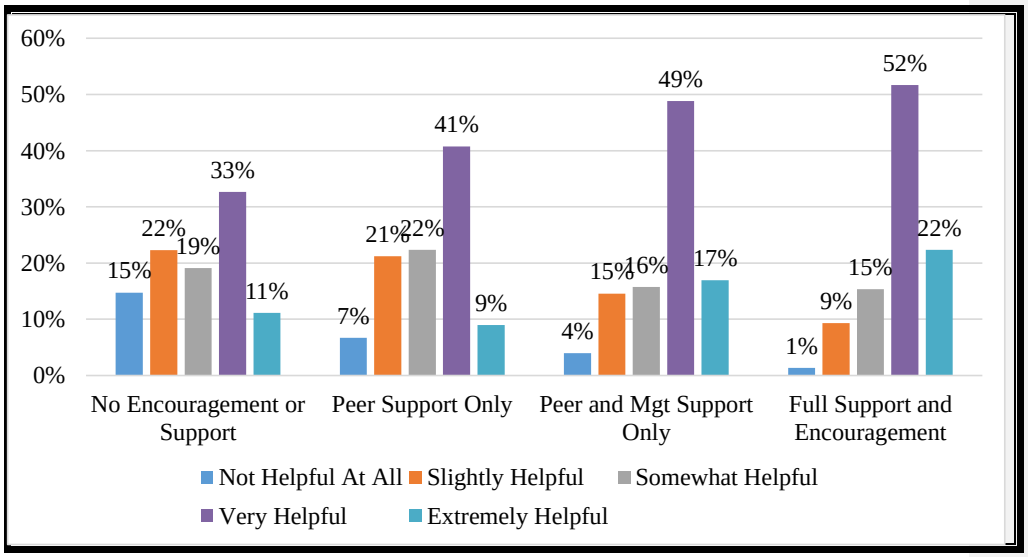

Figure 9: Suicide Effectiveness

Pre-Employment Screening and Critical Stress

Pre-Employment mental health screening appeared to have no effect on the presence of Critical Stress, suicide contemplations, and suicide attempts as seen in figure 10.

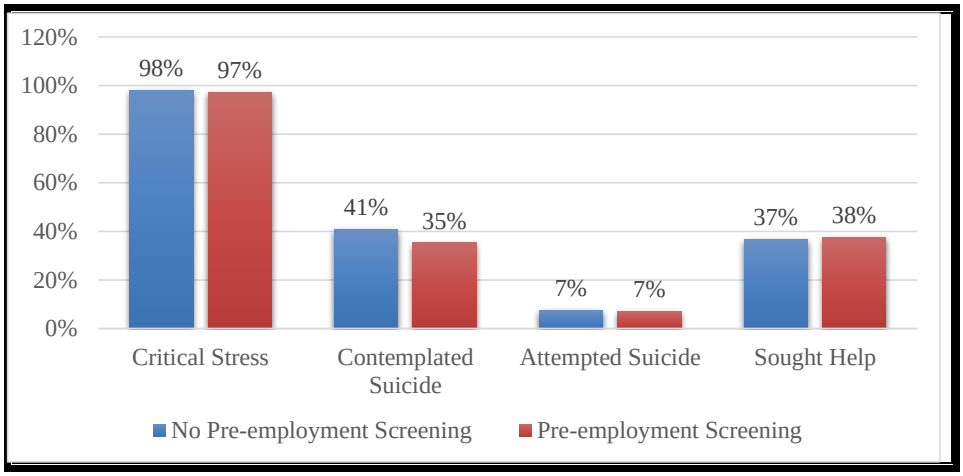

Figure 10: Pre-employment Screening

Mandatory vs. Voluntary Support

We evaluated the helpfulness of the programs and compared them to the respondents whose employer mandated attendance versus providing the service on a voluntary basis. Providers reported that voluntary attendance was helpful and most helpful a combined 59% of the time while being mandated was only reported helpful and most helpful 46% of the time. See Figure 11.

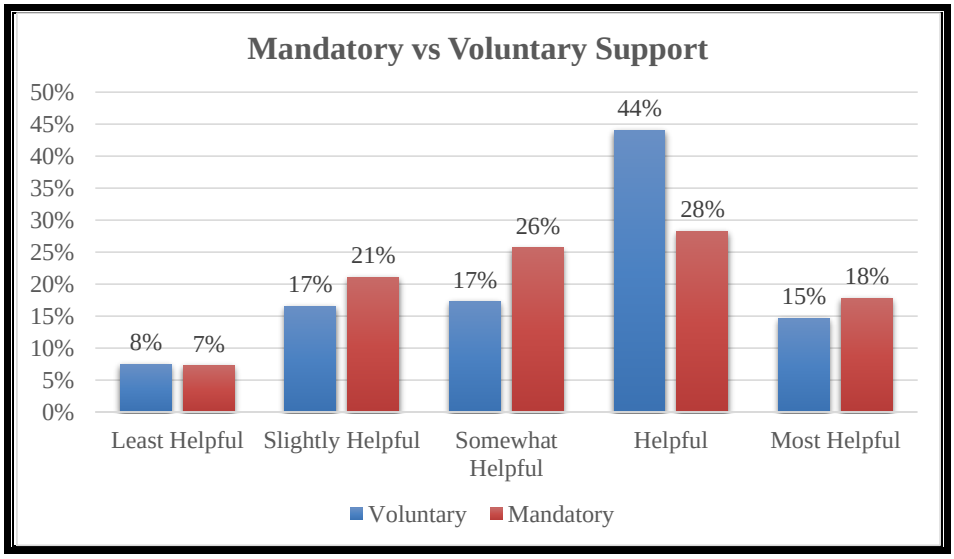

Figure 11: Mandatory vs Voluntary Support

Formal Support Institution Improvements

This analysis looked at trends in survey responses for improvements that providers would like to see based on the type of formal support institution they utilized. 19% of the respondents that selected they had no services available or made a conscious decision to not use a provided service stated that they would have like the ability to remain anonymous, and 22% of the same respondents stated they did not have access to the support services listed. The breakdown of all the responses can be found in Figure 12.

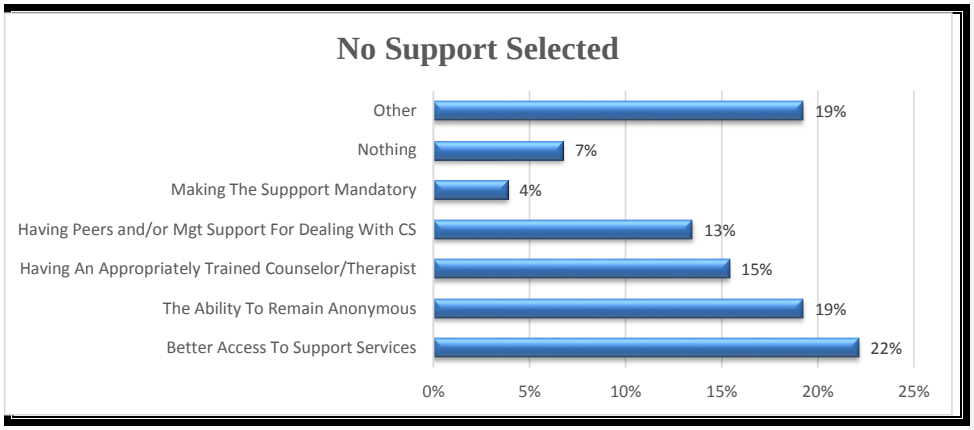

Figure 12: Support Improvements for No Support Selected

Provider responses concerning opportunities for improvement within the Employee Assistance Program revealed that 52% of respondents felt that an appropriately trained counselor would have made it more beneficial. All of the results can be found in figure 13.

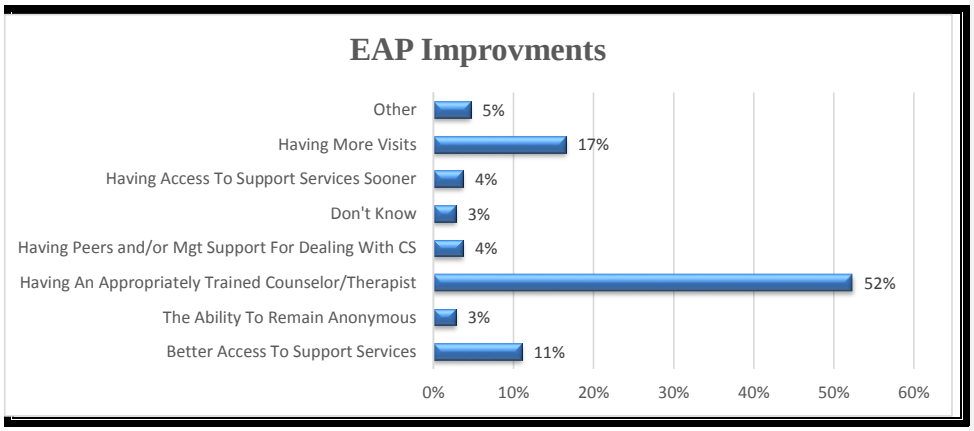

Figure 13: Support Improvements: EAP

The responses from providers for what could improve the CISM type peer to peer counseling can be found in figure 14. The highest rated responses were having a properly trained counselor (16%), having support from management and/or peers (13%), and not being in a group setting (13%).

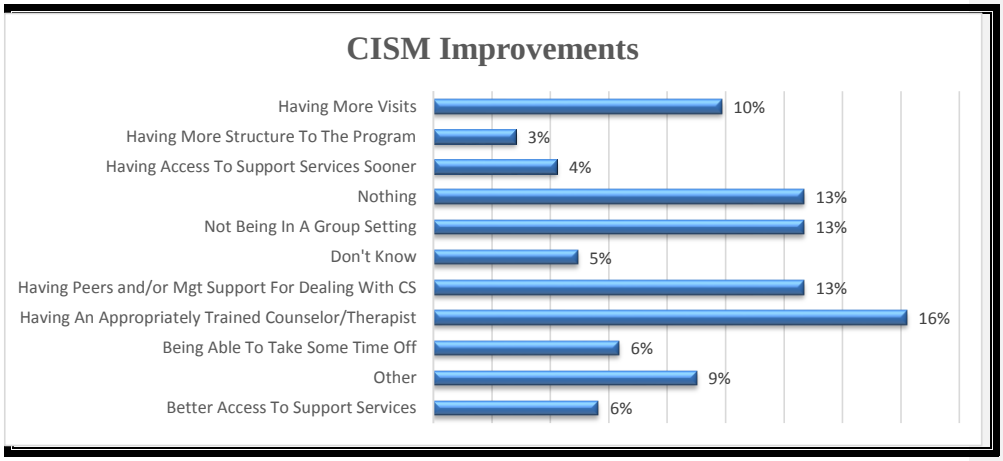

Figure 14: CISM Improvements

Evaluating what would make private therapy better showed that, like other programs, having an appropriately trained therapist was recommended by 41% of the respondents. Other responses are noted in figure 15.

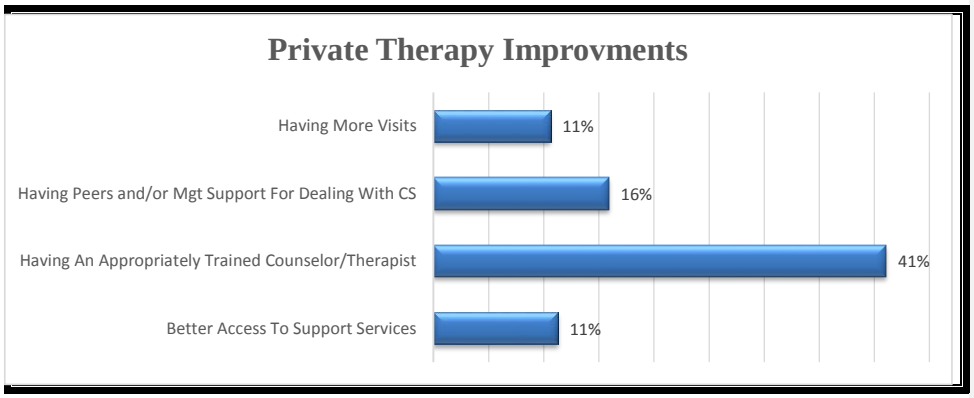

Figure 15: Private Therapy Improvements

Conclusion

Critical Stress exists in an overwhelming majority of the survey respondents across the nation. Suicidal ideation and suicide attempt rates are significantly higher in respondents to the survey than the national average. With respect to formal support institutions, over half the respondents found the help to be valuable regardless of the type of support institution. A significant amount of the respondents stated that EAP and private therapists would be more effective if they were experienced in dealing with EMS provider patients and/or patients that suffer from PTSD. The survey suggested that help was more effective if providers had a professional culture that supported their mental health and encouraged them to utilize formal support institutions when compared to providers that had a culture that did not support mental health and encourage formal support institution help. More to the point, suicidal ideation and suicide attempt rates are significantly lower in cultures where mental wellness is supported and help for Critical Stress is encouraged.

The current data analysis concludes that peers and administrators need to be reeducated on the importance of supporting the provider's mental health issues. While no mental health program was substantially stronger than another, it is apparent that when there is management and/or peer support, they all showed benefit to EMS providers. There is still a stigma with seeking help that needs to be addressed throughout the industry. As Reviving Responders continues to analyze this data, we will begin developing recommendations for program enhancements and alternative up-to-date treatment practices. Another potential benefit would be working with suicide call centers to provide training on managing the personalities and background for emergency workers. Critical stress is assumed to be a part of the job that

Commented [NC1]: I don't think the survey showed a lack of education, although I believe this to be true.

providers should accept, but the time has come that EMS is recognized for the emotional trauma its providers endure.

In regards to what would have made the support more helpful, Figures 3 and 4 list different subcultures and prominent cultures. Ideally, all of the following need to happen to make the support more helpful: changing the current EMS support culture among management and peers, peer access to counselors with knowledge of EMS, increasing awareness of the multitude of stressors that every provider faces daily, and recognizing warning signs before it is too late. Several survey respondents also think that education in EMS programs and training is needed.

Questions continue to arise and a closer look with other professionals shall continue. This survey is only the beginning of this research and has revealed powerful results that something must change in EMS to effectively address mental health issues. As stated earlier, the provided information is minuscule compared to the data necessary to formulate any plan in correcting critical stress. The EMS Mental Health Task Force, "Reviving Responders," continues to work towards a more permanent solution.

Commented [EB2]: Does this need to be capitalized when we refer to Reviving Responders is this part of our name, or a description of what we are?

References

Centers for Disease Control and Prevention. (2014, June 26). Centers for Disease Control and Prevention. Retrieved from www.cdc.gov: http://www.cdc.gov/niosh/topics/ems/

G, P. (2011, 1 31). Yes, There is a Right and Wrong Way to Number Rating Scales. Retrieved from SurveyMonkey Blog: https://www.surveymonkey.com/blog/en/blog/2011/01/13/how-to-number-rating-scales/

National Center for Injury Prevention and Control, Division of Violence Prevention. (2011, February). Centers for Disease Control and Prevention. Retrieved from www.cdc.gov: http://www.cdc.gov/violenceprevention/pdf/self-directed-violence-a.pdf

National Center for Injury Prevention and Control, Division of Violence Prevention. (2012). Centers for Disease Control and Prevention. Retrieved from www.cdc.gov: http://www.cdc.gov/violenceprevention/pdf/suicide-datasheet-a.pdf

Appendices

Appendix 1

The survey questions were precluded with the following statement:

"Thank you very much for taking part in this survey. Your input is extremely valuable.

Before you take part in this survey we wanted to clarify two points:

1. You will remain anonymous.

2. We want to define Critical Stress for the purposes of this survey. Critical Stress is 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."

QUESTIONS	RESPONSE CHOICES
Q1-Do you work in EMS, how long?	• <1 year- 1.6% • 1-5 years- 18.6% • 6-10 years- 22.3% • 11-15 years- 17.6% • 16-20 years- 13.2% • 21-25 years- 11.5% • 26-30 years- 6.9% • 31-35 years- 5.0% • 36-40 years- 2.2% • >40 years- 1.1%
Q2- In what state or US territory do you live?	All 50 US States, Puerto Rico, American Samoa, District of Columbia, and Guam
Q3- Is your service or experience primarily urban, suburban, or rural?	42.2% Urban, 41.0% Rural, and 40.4% Suburban
Q4- EMS Provider Stress Questions: • **Have you experienced critical stress?** • **Have you ever contemplated suicide?** • **Have you ever attempted suicide?** • **Do you know anyone working in EMS that has contemplated suicide?** • **Do you know anyone working in EMS that has attempted suicide?**	• 85% answered YES • Surprisingly 37.55% answered had • Sadly 6.6% answered had • 65% knew someone that had

• **Did you seek help?** • **Do you have access to mental health assistance through your workplace for Critical Stress?**	• 53% knew someone that had • Yes or No
Q5- If you experienced Critical Stress but did not seek help, what prevented you from doing so? • **No help available** • **Didn't want it on my record** • **Didn't want to be identified** • **Didn't sense a need** • **Concerned about what others would think** • **Other (please specify)**	Why wasn't help sought? • 11.8% • 25.3% • 23.5% • 49.4% • 26.2% • 18.6%
Q6- If yes, what type of assistance did you seek? • **Employee Assistance Program (EAP)** • **In-house peer counseling, sometimes known as CISM** • **Private** • **Other (please specify)**	• 26% • 41% • 35% • 20%
Q7- If you did seek support, how helpful was the support received? (1-10 scale)	1=8% 2=5% 3= 6% 4=6% 5=10% 6=8% 7=13% 8=20% 9=9% 10=15%
Q8- What would have made the support more helpful?	(Appendix 2)
Q9- What are the time restrictions on when you can access these support services? • **No restrictions** • **<24 hours** • **< 1 week** • **< 1 month**	• 81% • 8% • 9% • 2%
Q10- Did you have any follow up appointments? (yes or no)	65% stated YES 35% stated NO
Q11- Were the follow-up appointments helpful?	63% stated YES 35% stated NO

Q12- Stress Support Questions: • **Did your peers encourage you seek mental health assistance?** • **Did your management team encourage you to seek mental health assistance?** • **Did your management team require you to seek mental health assistance?** • **Were you required to undergo psychiatric prescreening prior to your employment with your current agency?** • **Considering your mental health, do you feel supported by your peers?** • **Considering your mental health, do you feel supported by management team?**	• 30% • 29% • 6% • 10% • 71% • 48%
Q13- What skill/ techniques do you utilize to manage your stress?	Indicated in article (Figure 2)
Q14- Is there anything else about Critical Stress that was not asked that you would like to comment on?	Indicated in article (Appendix 3)

Appendix 2

"Provider just didn't get it."
"No one ever contacted me from EAP, when I went back post antidepressants script to complain of suicidal thoughts; they gave me a number for a suicide hotline and a new script. I never went back."
"After we identified that I had a drinking problem that was all that was focused on. Nothing to do with the PTSD"
"Just keep asking about worst calls and saying, wow, I didn't know you did that stuff."
"I sought help for all stressors in general. During my intake interview the counselor state I should have killed myself or died multiple times. I wasn't suicidal when I went to the meeting. Afterwards, I felt I was hopeless."

"EAP was of no help. Private care didn't "buy in" to my problems. I believe that the diagnosis was most likely "attention seeking."

Appendix 3

Critical Stress was never mentioned, other than in passing, throughout the entirety of my career until the last couple of years. I believe this needs to be addressed from the first EMT Basic course to better prepare EMS workers and remove the stigma associated with stress.
I am an EMS program director now. Students come to us with so many mental health issues and a lack of coping skills, that their future in Critical situations will be tough. Many are not even able to complete the class to get certified, which is good in my mind!
It needs to be addressed and accepted through the EMS Community. And not frowned up on nor released from duty if you have been diagnosed with mental illness that can be controlled & treated. Don't take away the career passion from those who fight every day. I think it would be easier to deal with it was accepted like any other health condition. Of course as long as it doesn't affect safety or performance of your patient, crew, or yourself.