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THE STATE OF EMERGENCY MEDICAL SERVICES CLINICIAN MENTAL HEALTH IN VIRGINIA

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ABSTRACT

Background: In the United States, research has found that emergency medical service (EMS) clinicians contemplate and attempt suicide at a rate approximately 10 times higher than the general population. However, prior to this study, no comprehensive data existed on the mental health status and needs of Virginia's EMS clinicians.

Objective: To evaluate mental health conditions, substance use, COVID-19 stress, and job satisfaction among Virginia's EMS clinicians, and to assess the perceived mental health cultures, services, and barriers to seeking help within clinicians' agencies.

Methods: The Virginia Office of EMS (OEMS) constructed a comprehensive EMS clinician mental health cross-sectional survey during the spring of 2022. The survey was sent to every certified EMS clinician over the age of 18 with a working email address within the Commonwealth (N=36,376) as of April 15, 2022.

Results: A total of 2,930 EMS clinicians who actively served in EMS within the past 12 months responded to the survey. On average, clinicians reported 9.9 days of perceived poor mental health out of a 30-day period, with 9.1% of clinicians seriously contemplating suicide within the past year. Almost 60% of respondents reported heavy alcohol consumption at least once in the year prior to the survey, while 6.5% had taken prescription drugs for non-medical reasons and 3.7% had used illegal drugs. Approximately 66% of clinicians felt the coronavirus pandemic increased workplace stress. More than half of respondents (57.3%) indicated they had intentions to quit working in EMS. Finally, 31.1% of clinicians disagreed or strongly disagreed that EMS clinician mental health is important to their agency.

Conclusion: Virginia's EMS clinicians experience a greater number of perceived poor mental health days, higher levels of suicide contemplation, and increased substance use as compared to the general population. Further health promotion actions are needed to address these disparities among Virginia's EMS clinicians.

INTRODUCTION

The emergency medical services (EMS) profession is rife with occupational hazards and injuries (Reichard et al., 2017; Bentley & Levine, 2016; Taylor et al., 2015). Common adversities experienced by EMS personnel include muscle strains/tears, back problems, fatigue leading to increased risk of injury, being struck by a motor vehicle, ambulance crashes, violence from patients or bystanders, and exposures to harmful chemicals or pathogens (Reichard et al., 2017; Bentley & Levine, 2016; Taylor et al., 2015;

Reichard et al., 2018; Maguire & O'Neill, 2017; Weaver et al., 2015; Lin et al., 2020; Donnelly et al., 2019; Patterson et al., 2011; Watanabe et al., 2019; Maguire et al., 2018; Gormley et al., 2016; Pourshaikhian et al., 2016; Thomas et al., 2017; Alhazmi et al., 2017). However, even with a high risk of workplace injuries and death, research reveals that first responders are more likely to die by suicide than any other occupational cause of death (Heyman et al., 2018). Significantly, a survey of EMS clinicians in the United States discovered that clinicians contemplate and attempt suicide at a rate ten times higher than the general population (Abbott et al., 2015).

On a regular basis, emergency responders are exposed to significant levels of traumatic incident stress that may have negative impacts on mental health (Traumatic incident stress, 2013). Traumatic incident stress can result from EMS clinicians responding to a variety of tragic events, such as natural disasters, terrorist attacks, deaths and abuse of children, murders, severe injuries and decapitations, and suicides (Centers for Disease Control and Prevention [CDC], 2013; Behnke et al., 2019; Reti et al., 2022). EMS clinicians who experience traumatic incident stress may manifest negative physical, cognitive, and emotional symptoms, including burnout, anxiety, depression, post-traumatic stress disorder (PTSD), and suicidality (CDC, 2013; Behnke et al., 2019; Reti et al., 2022; Bentley et al., 2013; Donnelly, 2012; Martin et al., 2017). Recently, these effects have been seen among healthcare workers responding to the coronavirus disease 2019 (COVID-19) pandemic, who have been at particularly high risk for poor mental health outcomes because of close work with potentially infected patients, limited supplies of protective equipment, and the need to remain separated from loved ones due to possible exposure (Vujanovic et al., 2021). Indeed, studies have shown that COVID-19 has exacerbated stress and sleep disturbances and has increased depressive and anxiety symptoms for frontline emergency and healthcare staff (Yu et al., 2022; Wild et al., 2022; Wright et al., 2021; Marczewski et al., 2021; Blanchard et al., 2022). Adverse mental health outcomes among EMS clinicians are also associated with organizational and operational forms of chronic stress (e.g., fatigue from shift work, paperwork, bullying in the workplace, lack of supervisor support, poor communication within the organization) (Reti et al., 2012; Cydulka et al., 1997; Sterud et al., 2008).

Unfortunately, many EMS clinicians do not have access to help for mental health issues within their workplace. A 2016 national survey on EMS mental health services conducted by the National Association of Emergency Medical Technicians found that less than half of EMS clinicians (46%) reported having access to mental health services within their agency (Goodwin & Lane, 2016). Further, high levels of mental health stigma (i.e., negative views of, and discrimination towards, individuals who have mental health issues) within EMS culture is a significant barrier to EMS clinicians accessing care (Corrigan & Penn, 1999, as cited in Haugen et al., 2017). Stigma surrounding mental health has been associated with poor health outcomes and avoidance of seeking help among persons with mental health concerns (Corrigan, 2004, as cited in Haugen et al., 2017; Haugen et al., 2017). A 2017 systematic literature review and meta-analysis found that 33.1% of first responders experienced mental health stigma and 9.3% experienced barriers to care (Haugen et al., 2017). In 2015, Reviving Responders, an organization dedicated to the research and education of mental health issues in the first responder and EMS communities, conducted a national survey of EMS clinicians and found that only 15% of participants reported working in cultures where peers and management supported those with

mental health issues and encouraged clinicians to use existing supports for help (Abbott et al., 2015). Additionally, the prevalence of suicide ideation and attempts were greater among respondents who did not have support and encouragement from peers or management for mental health issues (56% ideation and 12% attempts) compared to those who were fully encouraged and supported (23% ideation and 4% attempts) (Abbott et al., 2015). Research has also demonstrated that mental health stigma among first responders may lead to increased alcohol use as a method for coping with workplace stress (Gulliver et al., 2018; Gulliver et al., 2019; Martin et al., 2017; Bacharach et al., 2008; Paulus et al., 2017; Meyer et al., 2012; Karnick et al., 2022). Notably, alcohol use rates are higher among first responders than the general population (Gulliver et al., 2018; Gulliver et al., 2019; Meyer et al., 2012; Piazza-Gardner et al., 2014).

A strategic initiative of the Virginia Office of Emergency Medical Services (OEMS) is to develop, implement, and promote programs that emphasize the health and safety of clinicians (Virginia OEMS, 2017). As part of this commitment to Virginia's first responders, the OEMS launched the "Make the Call" initiative in late 2018, a statewide mental health awareness campaign with the goals of destigmatizing mental health issues and encouraging first responders to seek mental health support (Virginia OEMS, 2018). As an extension to the "Make the Call" campaign, the Virginia OEMS conducted its first statewide mental health survey among Virginia's clinicians in the summer of 2019. Due to the high prevalence of poor mental health outcomes discovered from the 2019 survey and the reports of increasing stress related to the COVID-19 pandemic, the OEMS conducted a new statewide survey of EMS clinician mental health in the spring of 2022 (Yu et al., 2022; Wild et al., 2022; Wright et al., 2021; Marczewski et al., 2021; Blanchard et al., 2022). The goal of the survey was to assess the mental health status of Virginia's EMS clinicians, as well as the perceived mental health culture and services within the clinicians' agencies. Additionally, clinicians were asked questions regarding substance use and the impact of job satisfaction, the COVID-19 pandemic, and workplace violence on clinician mental health. The Virginia OEMS' long-term goal is for these data to be used to create evidence-based interventions that improve EMS clinician mental health, reduce the stigma and barriers associated with first responders seeking mental health support, and improve resiliency within the EMS field.

METHODS

Objectives

The OEMS developed a survey instrument to determine:

1. The mental health status of Virginia's EMS clinicians;
2. Substance use prevalence, frequency, and relationship with EMS service;
3. Perceived barriers that prevent EMS clinicians from seeking help;
4. Existing mental health support and services available to clinicians;
5. Attitudes and beliefs surrounding mental health within EMS agencies;
6. The impact of job-related verbal abuse and physical assault on mental health;
7. The pandemic's impact on clinician mental health; and
8. Clinicians' job satisfaction and intentions to quit.

Data Collection/Data Source

As no survey existed that met the research needs of the Virginia OEMS for this project, a unique survey tool was developed. Several questions were selected from existing government questionnaires, including the 2018 and 2020 Behavioral Risk Factor Surveillance Surveys, the Health-Related Quality of Life 14 questionnaire, the 2019 National Survey on Drug Use and Health, and the National Institute on Drug Abuse's Drug Use Screening Tool (CDC, 2018; CDC, 2021; CDC, n.d; Substance Abuse and Mental Health Services Administration [SAMHSA], 2018; National Institute on Drug Abuse [NIDA], n.d.). Additionally, questions regarding EMS clinician mental health, mental health barriers and stigma, and existing available resources were inspired from national surveys conducted by Reviving Responders and the National Association of Emergency Medical Technicians (Abbott et al., 2015; Goodwin & Lane, 2016); however, modifications were made to create unique questions to fit the context of this project. One question concerning the impact of COVID-19 on stress and mental health was developed based on a coronavirus impact poll published by the Kaiser Family Foundation in 2020, though it was revised to ensure applicability to the current study (Kirzinger et al., 2020); other COVID-19 questions were written by the Virginia OEMS staff. Questions assessing intention to quit were developed internally by the OEMS, while the job satisfaction question used was inspired by Paul Spector's psychometrically validated Job Satisfaction Survey (Spector, n.d.). Lastly, unique questions were created by Virginia OEMS staff to assess clinicians' employment history, certification level, employment and volunteer status, and involvement with a fire suppression agency.

Research Electronic Data Capture (REDCap), a web-based tool fully compliant with Health Insurance Portability and Accountability Act criteria that is used for gathering data, was utilized to deliver the survey in an online format (REDCap, n.d.). Survey logic was applied in the survey so only relevant questions were presented to clinicians (e.g., questions on EMS clinician outcomes occurring in the 12 months prior to the survey were only asked of respondents who indicated they had ever experienced the outcome). The final instrument contained 92 questions (see Appendix, Table 8).

Institutional Review Board (IRB) Review

The Virginia Department of Health's IRB reviewed the current study to ensure protection of the rights and welfare of the study subjects. IRB exemption approval was received for this project in February 2022.

Selection of Participants

The final survey tool was emailed to all certified EMS clinicians over the age of 18 within the Virginia OEMS database (n = 36,376) as of April 15, 2022. The survey closed on May 17, 2022. Clinicians who did not provide patient care in the past 12 months were excluded from the analyses.

Statistical Analysis

Frequencies, proportions, and 95% confidence intervals were calculated for categorical data. Means, standard deviations (SD), and 95% confidence intervals were calculated for continuous data. Respondents were able to skip any question for which they did not

wish to provide an answer. As such, the number of responses varied by question. Missing values were considered randomly missing. Survey results were analyzed using Microsoft Excel 2016, StataBE 17, and Tableau version 2022.2.0.

RESULTS

Of the 36,376 EMS clinicians who were sent the online survey, 3,760 responses were received. A total of 320 records were excluded from analyses because the EMS clinician had not been employed or volunteered in EMS in the prior 12 months, while 510 were excluded because the survey was incomplete. A total of 2,930 responses were included in the analysis. Demographic and occupational characteristics of respondents are summarized in Table 1.

Impact of the COVID-19 Pandemic

The impact of the COVID-19 pandemic on the work of Virginia EMS clinicians was assessed with several questions. The majority (66.1%, 95% CI [64.4, 67.9]) of survey respondents indicated that they had experienced additional EMS job-related stress attributable to the coronavirus pandemic, with 22.5% (n=658) of all respondents reporting the stress had a major negative impact on their mental health and 34.2% (n=1,002) relaying a minor negative mental health impact. Further, 85.3% (95% CI [84.0, 86.6]) of clinicians reported that their agency had experienced staffing shortages because of the pandemic, with 24.3% of

Characteristic	Number of clinicians (%) (n=2,930)
Age	
< 30	526 (18.0)
30 – 39	613 (20.9)
40 – 49	614 (21.0)
50 – 59	585 (20.0)
60 – 69	283 (9.7)
> 69	73 (2.5)
Missing	236 (8.1)
Sex	
Male	1,959 (66.9)
Female	871 (29.7)
Other	19 (0.6)
Missing	81 (2.8)
Associated with a Fire Department	
Yes	1,819 (62.1)
No	1,094 (37.3)
Missing	17 (0.6)
Certification Level	
Emergency medical responder	12 (0.4)
Emergency medical technician	1,469 (50.1)
Advanced emergency medical technician	227 (7.7)
Intermediate	249 (8.5)
Paramedic	966 (33.0)
Missing	7 (0.2)
Employment / Volunteer Status	
Full-time	1,348 (46.0)
Full-time and volunteer	288 (9.8)
Full-time and part-time	133 (4.5)
Part-time	96 (3.3)
Part-time and volunteer	138 (4.7)
Volunteer (unpaid)	696 (23.8)
Stipend/paid volunteer	35 (1.2)
Taking a break	104 (3.5)
Retired	39 (1.3)
Quit	31 (1.1)
Other	20 (0.7)
Missing	2 (0.1)
Years of EMS experience	
Less than 1 year	131 (4.5)
1-2 years	238 (8.1)
3-5 years	315 (10.8)
6-10 years	424 (14.5)
11-15 years	394 (13.4)
16-20 years	409 (14.0)
> 20 years	1,016 (34.7)
Missing	3 (0.1)

Table 1. EMS clinicians' demographic and employment characteristics, Virginia, 2022.

total respondents indicating the shortages had been temporary and 61.1% reporting the shortages were ongoing. The most frequently reported reasons for experiencing staffing shortages included people leaving the organization or quitting (56.7%, 95% CI [54.9, 58.4]), issues related to hiring, training, and recruitment (48.5%, 95% CI [46.7, 50.3]), the need for quarantine or isolation (40.4%, 95% CI [38.6, 42.2]), and people cutting back hours (28.6%, 95% CI [27.0, 30.2]). A total of 1,912 (65.3%, 95% CI [63.5, 67.0]) EMS clinicians felt the staffing shortages resulted in increased levels of EMS work-related stress.

Job Satisfaction

When EMS clinicians were asked whether they agreed with the statement "I feel appreciated by my agency when I think about what they pay me," 41.6% reported they agreed to some extent (i.e., agreed slightly: 14.5.%, 95% CI [13.3, 15.8]; agreed moderately: 16.8%, 95% CI [15.4, 18.1]; or agreed very much: 10.3%, 95% CI [9.2, 11.4]). However, 36.2% disagreed that they felt appreciated (disagreed slightly: 7.8%, 95% CI [6.9, 8.8]; disagreed moderately: 11.1, 95% CI [10.0, 12.2]; disagreed very much: 17.3%, 95% CI [16.0, 18.7]). Almost 22% were unpaid volunteers for whom the question was not applicable.

Importantly, most (n=1,680, 57.3%) survey respondents reported intentions to quit working as an EMS clinician at some point in the year prior to the survey compared to 42.2% who responded that they had never seriously thought about quitting. Specifically, 1,073 (36.6%, 95% CI [34.9, 38.4]) respondents relayed that they had seriously thought about quitting but had not taken actions to quit, 500 (17.1%, 95% CI [15.7, 18.4]) indicated they had taken action towards quitting (e.g., updating their resume, looking or applying for a new job, reducing EMS service hours), and 107 (3.7%, 95% CI [3.0, 4.3]) had quit practicing as an EMS clinician altogether. Reasons for experiencing intentions to quit were also assessed and are described in Table 2.

Reason for intention to quit	Number of clinicians (%)*	95 % CI
Work-related stress, burnout, or other mental health concerns	1,233 (42.1)	[40.3, 43.9]
Lack of sleep / chronic fatigue	898 (30.6)	[29.0, 32.3]
Low wages	785 (26.8)	[25.2, 28.4]
A desire for better work-life balance	765 (26.1)	[24.5, 27.7]
Concerns over physical health and safety	644 (22.0)	[20.5, 23.5]
Job negatively impacts partner / family relationships	582 (19.9)	[18.4, 21.3]
Heavy workloads / over-worked	558 (19.0)	[17.6, 20.5]
Conflict with leadership / coworkers	488 (16.7)	[15.3, 18.0]
Little to no chance for career growth	441 (15.1)	[13.8, 16.3]
Retirement	235 (8.0)	[7.0, 9.0]
I am a volunteer and no longer have the time	162 (5.5)	[4.7, 6.4]
New career interest	148 (5.1)	[4.3, 5.8]
Other	94 (3.2)	[2.6, 3.8]
*Proportions are calculated out of 2,930 total respondents. CI = confidence interval		

Table 2. Reasons why EMS clinicians thought about quitting, took action to quit, or quit working in EMS, Virginia, 2022.

Health-related quality of life indicator	No. missing responses	Mean (SD)	95% CI
Poor physical health	119	4.4 (7.5)	[4.2, 4.7]
Poor mental health	99	9.9 (10.2)	[9.5, 10.2]
Sad, blue, or depressed	115	8.8 (10.1)	[8.4, 9.1]
Worried, tense, or anxious	105	12.6 (11.3)	[12.2, 13.1]
Insufficient sleep or rest	98	16.1 (10.5)	[15.7, 16.5]
SD = standard deviation			

Table 3. Average number of days in the past 30 days clinicians perceived experiencing health-related quality of life indicators, Virginia, 2022.

Health-Related Quality of Life

Most EMS clinicians reported their perceived general health to be good (38.7%) or very good (34.8%), while 16.1% reported their general health to be fair (13.8%) or poor (2.3%). Table 3 displays the average number of days in the past 30 days clinicians experienced health-related quality of life indicators.

Hours of Sleep & Shift Length

Overall, EMS clinicians reported receiving an average of 6.1 hours (SD 1.3; 95% CI [6.0, 6.1]) of sleep in a 24-hour period. As shift length increased, the average hours of sleep a clinician received within a 24-hour period decreased. Clinicians who worked shifts greater than 24 hours in duration (3.7%) reported the lowest average amount of sleep, at 5.3 hours (SD 1.3; 95% CI [5.1, 5.6]). Clinicians who worked 24-hour shifts (40.5%) slept 5.7 hours (SD 1.2; 95% CI [5.6, 5.8]), those with 12- to 23-hour shifts (30.3%) reported 6.3 hours of sleep (SD 1.3; 95% CI [6.2, 6.4]), clinicians working 8- to 11-hour shifts (12.4%) slept 6.5 hours (SD 1.2; 95% CI [6.3, 6.6]), and clinicians who worked less than 8-hour shifts (3.7%) reported 6.8 hours of sleep (SD 1.2; 95% CI [6.5, 7.0]).

Mental Health Outcomes

Overall, 2,392 (81.6%; 95% CI [80.2, 83.0]) clinicians believed they experienced at least one poor mental health outcome (i.e., burnout, traumatic stress, depression, PTSD, verbal abuse causing emotional or psychological harm, physical assault causing emotional or psychological harm, or suicidal ideation) at some point during their careers associated with their work as EMS clinicians (vs. 70.7% during past 12 months; 95% CI [69.1, 72.4]). Table 4 displays the proportions of EMS clinicians who responded 'yes' to each mental health indicator question.

Mental health outcome	Ever during career		Past 12-months	
	Number of clinicians (%)*	95 % CI	Number of clinicians (%)*	95 % CI
Burnout due to stress of the job	2,089 (71.3)	[69.7, 72.9]	1,828 (62.4)	[60.6, 64.1]
Work-related traumatic stress that was bad for their mental health	1,678 (57.3)	[55.5, 59.1]	1,212 (41.4)	[39.6, 43.1]
Work-related depression	1,435 (49.0)	[47.2, 50.8]	1,161 (39.6)	[37.9, 41.4]
Work-related PTSD	1,313 (44.8)	[43.0, 46.6]	1,021 (34.8)	[33.1, 36.6]
Verbal abuse causing emotional or psychological harm	497 (17.0)	[15.6, 18.3]	385 (13.1)	[11.9, 14.4]
Physical assault causing emotional or psychological harm	374 (12.8)	[11.6, 14.0]	220 (7.5)	[6.6, 8.5]
Seriously contemplated suicide	476 (16.2)	[14.9, 17.6]	267 (9.1)	[8.1, 10.2]
EMS service contributed to suicide contemplation	337 (11.5)	[10.3, 12.7]	182 (6.2)	[5.3, 7.1]
Made plans to kill themselves	202 (6.9)	[6.0, 7.8]	100 (3.4)	[2.8, 4.1]
Tried to kill themselves	70 (2.4)	[1.8, 2.9]	17 (0.6)	[0.3, 0.9]
Known a clinician who had suicidal thoughts	1,771 (60.4%)	[58.7, 62.2]	974 (33.2)	[31.5, 34.9]
Known a clinician who attempted or died by suicide	1,492 (50.9%)	[49.1, 52.7]	443 (15.1)	[13.8, 16.4]
*Proportions are calculated out of 2,930 total respondents.				

Table 4. Number of EMS clinicians who experienced negative mental health outcomes, Virginia, 2022.

Substance Use

A total of 1,979 (67.5%; 95% CI [65.8, 69.2]) EMS clinicians reported using either alcohol, tobacco, prescription drugs for non-medical reasons, or illegal drugs in the 12 months prior to completing the survey. Table 5 shows the frequency of substance use among Virginia EMS clinicians. The definition of heavy alcohol use (i.e., drinking five or more alcoholic beverages per day for men or four or more per day for women) employed for this study was established by the National Institute on Alcohol Abuse and Alcoholism (Glossary, 2023).

Substance	Frequency of Use	Number of clinicians (%)*	95% CI
Heavy Alcohol Use • For men, 5 or more drinks a day • For women, 4 or more drinks a day	Never	1,174 (40.1)	[38.3, 41.8]
	Once or twice	716 (24.4)	[22.9, 26.0]
	Monthly	379 (12.9)	[11.7, 14.2]
	Weekly	461 (15.7)	[14.4, 17.1]
	Daily or almost daily	186 (6.3)	[5.5, 7.2]
Tobacco products	Never	2,097 (71.6)	[69.9, 73.2]
	Once or twice	154 (5.3)	[4.4, 6.1]
	Monthly	56 (1.9)	[1.4, 2.4]
	Weekly	70 (2.4)	[1.8, 2.9]
	Daily or almost daily	527 (18.0)	[16.6, 19.4]
Prescription drugs for non-medical reasons	Never	2,719 (92.8)	[91.9, 93.7]
	Once or twice	94 (3.2)	[2.6, 3.8]
	Monthly	22 (0.8)	[0.4, 1.1]
	Weekly	11 (0.4)	[0.2, 0.6]
	Daily or almost daily	63 (2.2)	[1.6, 2.7]
Illegal drugs	Never	2,770 (94.5)	[93.7, 95.4]
	Once or twice	64 (2.2)	[1.7, 2.7]
	Monthly	22 (0.8)	[0.4, 1.1]
	Weekly	14 (0.5)	[0.2, 0.7]
	Daily or almost daily	9 (0.3)	[0.1, 0.5]
*Proportions are calculated out of 2,930 total respondents.			

Table 5. Frequency of past-year substance use among EMS clinicians, Virginia, 2022.

Agency Mental Health Services and Culture

The majority of respondents (67.5%; 95% CI [65.8, 69.2]) reported their agency offered mental health services. However, 32.2% of clinicians reported limited or no access to care through their agency (i.e., the clinician did not know whether mental health services were offered: 15.2.%, 95% CI [13.9, 16.5]; the agency did not offer any mental health services: 14.0%, 95% CI [12.7, 15.2]; or the agency had services in development, but none were available at the time of the survey: 3.0%, 95% CI [2.4, 3.6]). Table 6 displays respondents' perceptions of their agencies mental health culture. Most clinicians held positive views of their respective agencies' mental health culture, including the importance of clinician mental health.

Perceived Barriers to Seeking Help for Mental Health Issues

Of the 2,413 (82.4%; 95% CI [80.9, 83.7]) clinicians who reported an adverse mental health outcome (i.e., burnout, traumatic stress, depression, PTSD, verbal abuse causing emotional or psychological harm, physical assault causing emotional or psychological harm, or suicidal thoughts) or substance use felt to be related to working or volunteering as an EMS clinician, 1,508 (62.5%; 95% CI [60.5, 64.4]) did not seek help. Table 7 displays the reasons why clinicians did not obtain assistance for EMS-related mental health issues they had ever experienced. For all mental health issues identified, the most frequently perceived barriers to care included not having time and not wanting a mental health problem documented in the employment record. For every mental health issue except one (i.e., seriously contemplating suicide), not feeling help was needed was among the

Perceptions of agency culture	Agree or strongly agree		Disagree or strongly disagree	
	Number of clinicians (%)*	95 % CI	Number of clinicians (%)*	95 % CI
EMS clinician mental health is important to my agency	1,980 (67.6)	[65.9, 69.3]	912 (31.1)	[29.4, 32.8]
My agency provides sufficient mental health support and services for EMS clinicians	1,566 (53.4)	[51.6, 55.3]	1,305 (44.5)	[42.7, 46.3]
If needed, I know where to find help within my agency for mental health issues	2,090 (71.3)	[69.7, 73.0]	799 (27.3)	[25.7, 28.9]
If needed, I would feel safe discussing mental health issues with my coworkers	1,667 (56.9)	[55.1, 58.7]	1,225 (41.8)	[40.0, 43.6]
If needed, my coworkers would encourage me to get help for mental health issues	2,280 (77.8)	[76.3, 79.3]	603 (20.6)	[19.1, 22.0]
If needed, I would feel safe discussing mental health issues with my supervisor or upper leadership	1,540 (52.6)	[50.8, 54.4]	1,344 (45.9)	[44.1, 47.7]
If needed, my supervisor or upper leadership would encourage me to utilize mental health services	2,139 (73.0)	[71.4, 74.6]	730 (24.9)	[23.3, 26.5]
*Proportions are calculated out of 2,930 total respondents.				

Table 6. EMS clinicians' perceptions of their respective agencies' mental health culture, Virginia, 2022.

top reasons clinicians reported not pursuing care. Additionally, leading reasons for not seeking help among clinicians who experienced burnout, traumatic stress, depression, PTSD, or substance use included that they felt that they possessed the coping skills necessary to handle the situation and that they did not think obtaining care would be useful. Clinicians who contemplated suicide expressed fear about what others might think of them, and that obtaining support would threaten their employment, as main factors for not pursuing treatment.

DISCUSSION

The survey revealed worse physical health among first responders than the general population. In a 30-day period, clinicians reported an average of 4.4 days of perceived poor physical health, which was more than the general population of Virginia (3.7 days in 2022) (Robert Wood Johnson Foundation, n.d.). The survey also identified several areas of concern related to clinician mental health and access to care. Specifically, participants reported an average of 9.9 days of poor mental health in a 30-day timeframe, more than twice as high as the general population of Virginia in 2022 (4.2 days) (Robert Wood Johnson Foundation, n.d.). Similarly, clinicians reported a concerning average number of days of experiencing symptoms of depression (8.8 days) and anxiety (12.6 days) in a 30-day period.

Sleep was identified as another major area of concern among participants. On average, clinicians reported sleeping only 6.1 hours within a 24-hour period, less than the 7 or more hours of sleep per night recommended for adults (Hirshkowitz et al., 2015). Further, reported sleep duration decreased as shift length increased. Research demonstrates that inadequate sleep is not only associated with accidental death, injuries, and a multitude of chronic diseases, but also poor mental health and burnout (Hirshkowitz et al., 2015; Grandner et al., 2015; Kecklund & Axelsson, 2016; Medic et al., 2017; Barger et al., 2015; Krystal, 2012; Wolkow et al., 2019).

Resons for not seeking help	All outcomes	Burnout	Traumatic stress	Depression	PTSD	Verbal abuse	Physical assault	Suicidal thoughts	Substance use
	(n=1,508)	(n=1,260)	(n=911)	(n=737)	(n=644)	(n=246)	(n=159)	(n=111)	(n=1,017)
	EMS α (%) 95% CI	EMS α (%) 95% CI	EMS α (%) 95% CI	EMS α (%) 95% CI	EMS α (%) 95% CI	EMS α (%) 95% CI	EMS α (%) 95% CI	EMS α (%) 95% CI	EMS α (%) 95% CI
I didn't want it on my employment record	**311 (20.6) [18.6, 22.7]**	**288 (22.9) [20.5, 25.2]**	**225 (24.7) [21.9, 27.5]**	**231 (31.3) [28.0, 34.7]**	**186 (28.9) [25.4, 32.4]**	**104 (42.3) [36.1, 48.4]**	**78 (49.1) [41.3, 56.8]**	**65 (58.6) [49.4, 67.7]**	**239 (23.5) [20.9, 26.1]**
I didn't have time	**371 (24.6) [22.4, 26.8]**	**349 (27.7) [25.2, 30.2]**	**256 (28.1) [25.2, 31.0]**	**261 (35.4) [32.0, 38.9]**	**204 (31.7) [28.1, 35.3]**	**95 (38.6) [32.5, 44.7]**	**65 (40.9) [33.2, 48.5]**	**52 (46.8) [37.6, 56.1]**	**278 (27.3) [24.6, 30.1]**
I didn't feel it was needed	**768 (50.9) [48.4, 53.5]**	**624 (49.5) [46.8, 52.3]**	**436 (47.9) [44.6, 51.1]**	**306 (41.5) [38.0, 45.1]**	**267 (41.5) [37.7, 45.3]**	**79 (32.1) [26.3, 37.9]**	**57 (35.8) [28.4, 43.3]**	19 (17.1) [10.1, 24.1]	**509 (50.0) [47.0, 53.1]**
I already possess sufficient coping skills	**525 (34.8) [32.4, 37.2]**	**436 (34.6) [32.0, 37.2]**	**323 (35.5) [32.3, 38.6]**	**231 (31.3) [28.0, 34.7]**	**204 (31.7) [28.1, 35.3]**	74 (30.1) [24.4, 35.8]	45 (28.3) [21.3, 35.3]	26 (23.4) [15.5, 31.3]	**339 (33.3) [30.4, 36.2]**
I was concerned about what others might think of me	256 (17.0) [15.1, 18.9]	239 (19.0) [16.8, 21.1]	185 (20.3) [17.7, 22.9]	202 (27.4) [24.2, 30.6]	160 (24.8) [21.5, 28.2]	78 (31.7) [25.9, 37.5]	53 (33.3) [26.0, 40.7]	**57 (51.4) [42.1, 60.6]**	198 (19.5) [17.0, 21.9]
I didn't think it would be useful	**296 (19.6) [17.6, 21.6]**	**273 (21.7) [19.4, 23.9]**	**213 (23.4) [20.6, 26.1]**	**215 (29.2) [25.9, 32.5]**	**173 (26.9) [23.4, 30.3]**	76 (30.9) [25.1, 36.7]	52 (32.7) [25.4, 40.0]	42 (37.8) [28.8, 46.9]	**222 (21.8) [19.3, 24.4]**
I was afraid it would threaten my employment	225 (14.9) [13.1, 16.7]	210 (16.7) [14.6, 18.7]	167 (18.3) [15.8, 20.8]	174 (23.6) [20.5, 26.7]	142 (22.0) [18.8, 25.3]	**87 (35.4) [29.4, 41.3]**	**64 (40.3) [32.6, 47.9]**	**55 (49.5) [40.2, 58.9]**	173 (17.0) [14.7, 19.3]
Getting help costs too much money	287 (19.0) [17.1, 21.0]	264 (21.0) [18.7, 23.2]	201 (22.1) [19.4, 24.8]	203 (27.5) [24.3, 30.8]	169 (26.2) [22.8, 29.6]	**88 (35.8) [29.8, 41.8]**	**66 (41.5) [33.9, 49.2]**	**45 (40.5) [31.4, 49.7]**	218 (21.4) [18.9, 24.0]
My agency doesn't offer help	115 (7.6) [6.3, 9.0]	105 (8.3) [6.8, 9.9]	82 (9.0) [7.1, 10.9]	79 (10.7) [8.5, 13.0]	73 (11.3) [8.9, 13.8]	38 (15.4) [10.9, 20.0]	24 (15.1) [9.5, 20.7]	24 (21.6) [14.0, 29.3]	87 (8.6) [6.8, 10.3]
I didn't know where to get help	116 (7.7) [6.3, 9.0]	109 (8.7) [7.1, 10.2]	77 (8.5) [6.6, 10.3]	89 (12.1) [9.7, 14.4]	69 (10.7) [8.3, 13.1]	33 (13.4) [9.2, 17.7]	24 (15.1) [9.5, 20.7]	23 (20.7) [13.2, 28.3]	87 (8.6) [6.8, 10.3]
Other	73 (4.8) [3.8, 5.9]	62 (4.9) [3.7, 6.1]	49 (5.4) [3.9, 6.8]	36 (4.9) [3.3, 6.4]	30 (4.7) [3.0, 6.3]	11 (4.5) [1.9, 7.1]	3 (1.9) [0.0, 4.0]	3 (2.7) [0.0, 5.7]	45 (4.4) [3.2, 5.7]

EMS α = Number of EMS clinicians.

Note: Top five reasons for not seeking help for each adverse mental health outcome are in bold font

Table 3. Reasons why EMS clinicians did not seek help by EMS-related mental health outcome ever experienced, Virginia, 2022.

This study revealed that 59.5% of Virginia EMS clinicians reported heavy alcohol use at least once in the past year, with 35.0% drinking heavily on at least a monthly basis. This greatly exceeds the rate of monthly heavy alcohol use (6.3%) reported by U.S. civilians 18 years of age and older participating in the 2022 National Survey on Drug Use and Health (Alcohol Use in the United States, 2023). Further, 3.7% of EMS clinicians indicated they had used illegal drugs in the past year, with 1.5% reporting use at least monthly. These proportions are lower than the past-year and past-month estimates of illicit drug use (22.7% and 15.0%, respectively) reported by adult participants of the 2021 National Survey on Drug Use and Health (SAMHSA, 2021).

A total of 81.6% of clinicians reported experiencing at least one poor mental health outcome they believed was associated with their EMS service over the course of their careers (vs. 70.7% during the past 12 months). In other words, more than four out of every five EMS clinicians perceived experiencing burnout, traumatic stress, depression, PTSD, suicidal tendencies, verbal abuse or physical assault causing emotional or psychological harm, or a combination of these outcomes, related to EMS work. In regard to suicidality, the percent of participants experiencing suicidal ideation during the past 12 months (9.1%) was approximately two times higher than that reported among Virginians (4.2%) and the U.S. general population (4.6%) in 2022 (Mental Health America, 2022). This is

similar to the 2019 Virginia Public Safety Mental Health Pilot Survey, which found suicide ideation among fire and rescue personnel to be 7.8% in the year prior to the survey (Fairfax Coalition of Police Local 5000, n.d.). However, national surveys have identified greater levels of suicide ideation among firefighter and EMS practitioners than proportions reported from these Virginia-specific studies (Abbott et al., 2015; CDC, 2022).

Of the 2,413 clinicians who experienced a negative mental health outcome or substance use related to their EMS service, the majority (62.5%) did not seek help. Specifically, not wanting the mental health concern documented in their employment record was one of the most frequently reported reasons for not obtaining assistance across all mental health issues. This finding is consistent with similar studies (Abbott et al., 2015). A total of 32.2% of respondents reported limited or no access to care through their agency, compared to 54% nationally (Goodwin & Lane, 2016). While most clinicians (67.5%) reported having access to mental health services through their agencies, 44.5% of respondents did not feel the resources supplied were sufficient. Additionally, 31.1% of clinicians reported a perception that mental health was not important to their agency, and a large proportion of clinicians reported that they would feel unsafe discussing mental health issues with their supervisors (45.9%) or coworkers (41.8%). Hence, agencies may have mental health services that clinicians are unaware of or hesitant to access because treatment is not encouraged or for fear of being stigmatized (Abbott et al., 2015; Goodwin & Lane, 2016).

A strength of this study was that it was a statewide comprehensive mental health survey of EMS clinicians in Virginia. Additionally, the survey had a large response rate and had representation from every region throughout Virginia. Moreover, the survey provides decision makers with baseline information surrounding the status of EMS clinicians' mental health and the perceived mental health cultures, services, and barriers to seeking help within clinicians' agencies. Lastly, the survey can be easily adapted to federal, state, and local contexts.

Several limitations of this study exist. First, the study relied on a convenience sample of clinicians with valid email addresses who were willing to take the survey. While the large sample size of this study potentially mitigates selection bias, it is possible that self-section and non-response bias occurred. Further, due to the sensitive nature and stigma surrounding mental health issues, it is possible that social desirability bias occurred, resulting in underrepresentation of the prevalence of mental health issues among clinicians. However, an anonymous online survey tool with limited personal identifiers was used to encourage the clinicians to answer honestly. Another possible limitation is that the mental health outcomes reported (e.g., depression, PTSD) were based on clinicians' self-perceptions and not clinical diagnoses. Lastly, while extensive work went into building and pre-testing the surveillance instrument used to collect the data, validation and reliability testing were not performed.

In summary, this survey identified that Virginia's EMS clinicians experience disproportionate burdens of poor mental health compared to the general population of Virginia. While many EMS agencies offer mental health resources, some clinicians lack access to life-saving services, or the services are viewed as inadequate. Troublingly, many EMS practitioners do not utilize available support due to mental health stigma, such as the fear of threatened employment. Leadership should play a key role in prioritizing and

normalizing seeking care for mental health issues within an agency's culture. Further investments in providing first responder-specific resiliency and mental health resources, as well as continued interventions to eliminate the stigma surrounding mental health issues, are needed to improve the health and safety of Virginia's EMS clinicians.

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APPENDIX

Selected questions for analysis from the 2022 Virginia EMS clinician mental health survey

- Job Satisfaction
  - How strongly do you agree with this statement: "I feel appreciated by my agency when I think about what they pay me"? A. Agree very much B. Agree moderately C. Agree slightly D. Disagree slightly E. Disagree moderately F. Disagree very much G. Not applicable/unpaid volunteer. Source: Spector, Job Satisfaction Survey
  - Within the past 12 months, which statement best describes your thoughts and intentions about quitting being an EMS provider (this does not include switching to a new EMS agency or EMS provider role)? A. I have never seriously thought about quitting B. I have seriously thought about quitting but have not taken any actions to quit C. I have actively taken action and made plans to quit (looking for a new career or job, updating resume, volunteering less, applying for jobs, etc.) D. I have quit practicing as an EMS provider
  - Select the reason(s) you thought about quitting, are taking action and making plans to quit, or quit being an EMS provider: (Select all that apply) A. Work-related stress, burnout, or other mental health concerns B. Concerns over physical health and safety C. A desire for better work-life balance D. Lack of sleep/chronic fatigue E. Heavy workloads/overworked F. Job negatively impacts partner/family relationships G. Low wages H. Little to no chance for career growth I. Conflict with leadership/coworkers J. I am a volunteer and no longer have the time K. New career interest L. Retirement M. Other
- COVID-19 Impact
  - Have you personally experienced any additional EMS job-related stress that can be attributed to the coronavirus pandemic? A. Yes B. No
  - Do you feel that the stress related to the coronavirus pandemic has had a negative impact on your mental health? A. Yes – Major impact B. Yes – Minor impact C. No. Source: Kirzinger, Kearney, Hamel, & Brody, 2020

    - Due to the COVID-19 Pandemic, has your agency experienced staffing shortages? A. Yes – Temporary B. Yes – Ongoing C. No D. Unsure
    - Select the primary cause(s) of the staffing shortages (select all that apply): A. Quarantine or isolation B. People needing to cut back hours for personal/family-related reasons C. People leaving the organization/quitting D. Issues related to hiring, training, and recruitment E. Provider(s) dying from COVID F. Other
    - Have staffing shortages during the COVID-19 pandemic caused you an increase in EMS work-related stress? A. Yes B. No
- HRQoL
    - Would you say that, in general, your health is†: A. Excellent B. Very Good C. Good D. Fair E. Poor F. I don't know/not sure Source: 2018 BRFSS Questionnaire, 2018; 2020 BRFSS Questionnaire, 2020; CDC HRQOL–14 "Healthy Days Measure"
    - Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good? Source: 2018 BRFSS Questionnaire, 2018; 2020 BRFSS Questionnaire, 2020; CDC HRQOL–14 "Healthy Days Measure"
    - Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good? Source: 2018 BRFSS Questionnaire, 2018; 2020 BRFSS Questionnaire, 2020; CDC HRQOL–14 "Healthy Days Measure"
    - During the past 30 days, for about how many days have you felt you did NOT get ENOUGH REST or SLEEP? Source: CDC HRQOL–14 "Healthy Days Measure"
    - During the past 30 days, for about how many days have you felt SAD, BLUE, or DEPRESSED? Source: CDC HRQOL–14 "Healthy Days Measure"
    - During the past 30 days, for about how many days have you felt WORRIED, TENSE, or ANXIOUS? Source: CDC HRQOL–14 "Healthy Days Measure"
- Sleep Hours
    - On average, how many hours of sleep do you get in a 24-hour period? Source: 2018 BRFSS Questionnaire, 2018; 2020 BRFSS Questionnaire, 2020
- EMS Mental Health Indicators
    - Have you ever felt burned-out due to the stress from working or volunteering as an EMS provider? Burnout may result from regular workplace stress that has not been successfully managed. Symptoms of burnout may include feeling depleted of energy or exhausted; increased feelings of negativity, cynicism, and mental distance toward one's job; or decreased workplace productivity or performance. A. Yes B. No C. I don't know Source: 2019 National Survey on Drug Use and Health (NSDUH), 2018; QD85 Burn-out
    - During the past 12 months, have you ever felt burned-out due to the stress from working or volunteering as an EMS provider? A. Yes B. No C. I don't know

- Have you ever experienced traumatic stress due to working or volunteering as an EMS provider that you believe has been bad for your mental health? Traumatic stress may happen when you are exposed to a tragic event, severely injured children or adults, dead bodies or body parts, or loss of a coworker. A. Yes B. No C. I don't know. Source: Traumatic incident stress, 2013
- During the past 12 months, have you ever experienced traumatic stress due to working or volunteering as an EMS provider that you believe has been bad for your mental health? A. Yes B. No C. I don't know
- Have you ever felt that you have suffered from post-traumatic stress disorder (PTSD) due to working or volunteering as an EMS provider? PTSD may include signs and symptoms of constantly replaying a traumatic event in your head, avoiding places that remind you of a traumatic event, feeling numb or hyperaware to your surroundings, withdrawing from family and friends, or experiencing nightmares, sleeplessness, anxiety, difficulty concentrating, or startling easily. A. Yes B. No C. I don't know Source: PTSD, 2023
- During the past 12 months, have you ever felt that you have suffered from post-traumatic stress disorder (PTSD) due to working or volunteering as an EMS provider? A. Yes B. No C. I don't know
- Have you ever felt that you have suffered from depression due to working or volunteering as an EMS provider? Depression may include signs and symptoms of feeling sad or anxious often or all the time; not wanting to do activities that used to be fun; having trouble falling asleep or staying asleep; feeling tired (even after sleeping well); feeling irritable, easily frustrated, or restless; having difficulty concentrating, remembering details, or making decisions; or thinking about suicide or hurting yourself. Source: Mental health conditions: Depression and Anxiety, 2022
- During the past 12 months, have you ever felt that you have suffered from depression due to working or volunteering as an EMS provider? A. Yes B. No C. I don't know
- Since becoming an EMS provider, did you ever SERIOUSLY THINK about trying to kill yourself? A. Yes B. No Source: 2019 National Survey on Drug Use and Health (NSDUH), 2018
- Do you believe your experiences as an EMS provider contributed in any way to you SERIOUSLY THINKING about trying to kill yourself? A. Yes B. No Source: 2019 National Survey on Drug Use and Health (NSDUH), 2018
- BEFORE becoming an EMS provider, did you ever SERIOUSLY THINK about trying to kill yourself? A. Yes B. No Source: 2019 National Survey on Drug Use and Health (NSDUH), 2018
- At any time in the past 12 months, did you SERIOUSLY THINK about trying to kill yourself? A. Yes B. No Source: 2019 National Survey on Drug Use and Health (NSDUH), 2018
- During the past 12 months, do you believe your experiences as an EMS provider contributed in any way to you SERIOUSLY THINKING about trying to kill yourself? A. Yes B. No Source: 2019 National Survey on Drug Use and Health (NSDUH), 2018

    - Since becoming an EMS provider, have you ever MADE ANY PLANS to kill yourself? A. Yes B. No Source: 2019 National Survey on Drug Use and Health (NSDUH), 2018
    - During the past 12 months, did you MAKE ANY PLANS to kill yourself? A. Yes B. No Source: 2019 National Survey on Drug Use and Health (NSDUH), 2018
    - Since becoming an EMS provider, did you ever TRY to kill yourself? A. Yes B. No Source: 2019 National Survey on Drug Use and Health (NSDUH), 2018
    - During the past 12 months, did you TRY to kill yourself? A. Yes B. No Source: 2019 National Survey on Drug Use and Health (NSDUH), 2018
    - Have you ever known an EMS provider who had suicidal thoughts?17 A. Yes B. No
    - Do you know any EMS providers who have had suicidal thoughts within the past 12 months? A. Yes B. No Source: Abbott et al., 2015
    - Have you ever known an EMS provider who attempted or died by suicide? A. Yes B. No Source: Abbott et al., 2015
    - Do you know any EMS providers who have attempted or died by suicide within the past 12 months? A. Yes B. No Source: Abbott et al., 2015
- Verbal and Physical Assault
    - Have you ever been verbally abused by a patient or bystander while serving as an EMS provider? Verbal abuse is defined as extremely critical, threatening, or insulting words meant to demean, belittle, or frighten you. A. Yes B. No Source: Violent Crime
    - Did the verbal abuse cause you any emotional or psychological harm? A. Yes B. No
    - During the past 12 months, how many times were you verbally abused by a patient or bystander while serving as an EMS provider? A. 0 B. 1 C. 2—3 D. 4—5 E. 6—10 F. 11+
    - Did the verbal abuse in the past 12 months cause you any emotional or psychological harm? A. Yes B. No
    - Have you ever been physically assaulted by a patient or bystander while serving as an EMS provider? Physical assault is defined as an attack, attempted attack, or threat of attack with or without a weapon, regardless of whether an injury occurred. A. Yes B. No Source: Violent Crime
    - Did the physical assault(s) cause you any emotional or psychological harm? A. Yes B. No
    - Did the physical assault(s) cause you any physical harm or injury? A. Yes B. No
    - During the past 12 months, how many times were you physically assaulted by a patient or bystander while serving as an EMS provider? A. 0 B. 1 C. 2—3 D. 4—5 E. 6—10 F. 11+
    - Did the physical assault(s) in the past 12 months cause you any emotional or psychological harm? A. Yes B. No
    - Did the physical assault(s) cause you any physical harm or injury? A. Yes B. No

- Alcohol, Tobacco, and Substance Use
  - In the past 12 months, how often have you used the following? Never Once or Twice Monthly Weekly Daily or Almost Daily Source: NIDA Drug Use Screening Tool NIDA-Modified ASSIST
    - Alcohol consumption: for men, 5 or more drinks a day; for women, 4 or more drinks a day.
    - Tobacco Products
    - Prescription Drugs for Non-Medical Reasons
    - Illegal Drugs
  - Do you believe your experiences as an EMS provider contributed in any way to your use of any of the substances listed above? A. Yes B. No
- Mental Health Support and Services
  - Did you ever seek help for burnout, traumatic stress, PTSD, depression, suicidal thoughts or actions, emotional or psychological harm from verbal abuse or physical assault, or substance use (alcohol, tobacco, prescription drugs for non-medical reasons, illegal drugs)? A. Yes B. No
  - If you experienced burnout, traumatic stress, PTSD, depression, suicidal thoughts or actions, emotional or psychological harm from verbal abuse or physical assault, or substance use (alcohol, tobacco, prescription drugs for non-medical reasons, illegal drugs) that you believe was associated with your experience in EMS but DID NOT get help, what stopped you? (Select all that apply) A. I didn't feel it was needed B. I already possess sufficient coping skills C. My agency doesn't offer help D. I didn't think it would be useful E. I didn't have time F. Getting help costs too much money G. I didn't want it on my employment record H. I was concerned about what other people might think of me I. I was afraid it would threaten my employment J. I didn't know where to get help K. Other Source: Abbott et al., 2015
- Perceived Agency Mental Health Culture
  - Does your agency offer EMS providers mental health services? A. Yes B. No C. No, but they are in development D. I don't know Source: Goodwin & Lane, 2016
  - Does your agency allow you to use mental health services while working or volunteering? Services may include peer support programs, critical incident stress management/debriefing, employee assistance programs (EAP), chaplaincy programs, mental health hotlines, etc. A. Yes B. No C. I don't know Source: Goodwin & Lane, 2016
  - Please rate how strongly you agree or disagree with the following statements: Strongly disagree Disagree Agree Strongly Agree Source: Goodwin & Lane, 2016
    - EMS provider mental health is important to my agency.
    - My agency provides sufficient mental health support and services for EMS providers.
    - If needed, I know where to find help within my agency for mental health issues.
    - If needed, I would feel safe discussing mental health issues with my coworkers.

- If needed, my coworkers would encourage me to get help for mental health issues.
- If needed, I would feel safe discussing mental health issues with my supervisor or upper leadership.
- If needed, my supervisor or upper leadership would encourage me to use mental health services.