Psychosocial support services for emergency medical services personnel in the City of Tshwane, South Africa: availability and accessibility

RMD Makgolo, Y Havenga, M de Villiers

Adelaide Tambo School of Nursing Science, Faculty of Science, Tshwane University of Technology, Pretoria, South Africa

Correspondence
Prof. Yolanda Havenga
e-mail: havengay@tut.ac.za

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ABSTRACT

Background: Emergency medical services (EMS) personnel are exposed to dangerous, challenging, and emotionally draining work situations as they reach out to survivors of emergencies to provide physical and emotional support. Attending to life-threatening incidents while being directly exposed to personal safety threats is common.

Objective: We described the availability and accessibility of psychosocial support services for EMS personnel in the City of Tshwane, South Africa in 2022.

Methods: A descriptive qualitative research design was used. Twelve EMS personnel were purposively sampled from one of the seven regions in the City of Tshwane, and data were collected using semi-structured interviews. Data were analysed using qualitative content analysis.

Results: Despite the available services for EMS personnel, which they acknowledged, the utilisation thereof was poor. This was due to the limited numbers of service providers and inadequate referral procedures. Peer and self-support were alternative strategies used, and private professional services were consulted. While there is a need for psychosocial support for EMS personnel, barriers such as concerns about stigmatisation, referral difficulties, and resource limitations prevent access to, and use of, services.

Conclusion: There is a dire need for preventive and supportive psychosocial interventions for EMS personnel. Strengthening psychosocial support for these healthcare professionals can prevent burnout and increase resilience. Support services should address psychosocial hazards in the workplace and psychosocial health literacy, and be supported by management.

INTRODUCTION

Emergency medical services (EMS) personnel are first responders to medical emergencies and disasters in communities. They *"interact with people and the forces of nature in extreme circumstances"*.[1] They provide acute care for urgent and critical conditions on the scene, prehospital care, and patient transportation to relevant hospitals.[2] The burden of disease as a consequence of trauma in South Africa is increasing. Minnie et al. (2015) reported that prehospital trauma in South Africa was significantly higher than the global average,[3] impacting the workload and exposure to critical incidents of EMS personnel.[4]

Emergency medical services personnel are exposed to many critical incidents (also referred to as traumatic events).[5-8] According to the 2022 *Diagnostic and Statistical Manual of Mental Disorders* (DSM5-TR),[9] a traumatic event includes exposure to actual or threatened death, injury or sexual violence, witnessing the event, learning that the trauma happened to a close relative or friend, or repeated exposure to aversive details of a traumatic event, usually in the course of professional duties.[6,10] They are sometimes threatened and assaulted by community members, and theft and verbal abuse of EMS personnel are common.[10] Vincent-Lambert and Westwood (2019) estimated that 66% of South African EMS personnel reported being assaulted while on duty.[11]

Dealing with critical incidents is emotionally demanding and EMS personnel need to remain calm and professional in all situations.[1,12] They are also often exposed to long working hours, shift work, financial stressors, conflict, and lack of support in the work environment, all of which affect their physical and psychosocial health.[4,13,14] Physical consequences include digestive problems, headaches, backache, sleep deprivation, and fatigue.[4] After exposure to critical incidents, many EMS personnel experience psychological distress, which can affect their work performance.[15]

Several studies have suggested that, due to the nature of their work, EMS personnel are at greater risk of adverse psychological outcomes than is the general population.[8,16,17] In a meta-analysis of 18 studies, Petrie et al. (2018) estimated that 11% of EMS personnel suffered from post-traumatic stress disorder (PTSD), 15% had depression, 15% experienced anxiety, and 27% experienced general psychological distress.[18]

The work of EMS personnel also has social consequences, impacting family life and structures.[18] Shift work disrupts marital and parental responsibilities, leisure, participation in social events, and household schedules.[4,8]

However, not all EMS personnel are negatively impacted if support systems, including support from management, are in place.[8,19] Psychosocial support is essential for improving the overall mental wellbeing of EMS personnel.[16, 20] Early intervention after a critical incident can improve the team's cohesion, reduce adverse responses, reduce sick leave, and increase performance.[21]

The aim of this study was to describe the availability and accessibility of psychosocial support services for EMS personnel in the City of Tshwane, Gauteng province, South Africa.

METHODS

This was a descriptive qualitative study. The study population comprised 120 EMS personnel from five stations in the City of Tshwane, with a minimum of one year of experience. Purposive sampling was used to select EMS personnel who were considered likely to be the most informed about the the psychosocial support services available and their accessibility.

After permission was obtained from the EMS managers of the five stations, potential participants were approached while on duty, but waiting to be called out to medical emergencies, and the study was explained to them.

Data were collected using semi-structured individual interviews from December 2021 to February 2022. The interviews were conducted in English at the station in a private room and were audio-recorded. The interview questions were: "*What are your experiences with the use of psychosocial support services for EMS personnel in your work environment?", "Which psychosocial support services are available for EMS personnel working in public health services in the City of Tshwane?",* and *"How do you get access to these psychosocial support services?"* The interviews took 40–60 minutes. Field notes were included with the interview transcripts in the data analysis.

Table 1. Demographic characteristics of study participants (N = 12)

Characteristic	n	%
Sex		
Male	5	41.6
Female	7	58.4
Age (years)		
≤ 30	2	16.7
31–40	6	50.0
41–50	4	33.3
Emergency medical services experience (years)		
6–10	5	41.7
11–15	6	50.0
> 15	1	8.3
Job title		
Basic ambulance assistant	11	91.7
Emergency care technician	1	8.3

Data collection and analysis were done in parallel to identify themes and determine the point of data saturation. If an emergency callout interrupted the interview, then it was terminated and rescheduled at a more convenient time.

The interview schedule was piloted on two participants. Since no changes were made to the interview schedule after pilot testing, these two participants were included in the analysis.

The study was approved by the Tshwane University of Technology's Research Ethics Committee [# FCRE 2021/05/009 (SCI) FCPS 2].

Data analysis

The audio-recorded interviews were transcribed verbatim; no transcription software was used. Data were analysed using qualitative content analysis, repetitive statements were identified, and relevant meanings were formulated. Thereafter, themes were identified with consensus among the researchers.

Trustworthiness

The framework described by Lincoln and Guba, cited by Polit and Beck (2021), was used to ensure the study's trustworthiness.[22] This framework identifies five criteria for trustworthiness: credibility, dependability, confirmability, transferability, and authenticity. Credibility was enhanced through multiple interviews lasting up to one hour. Dependability was enhanced by an audit trail of the approved proposal, audio-recorded interviews, transcriptions, consent letters, and field notes. The senior researchers enhanced confirmability and co-analysed the data; consensus was reached on themes, categories, and sub-categories. Transferability was enhanced by purposively sampling EMS personnel with sufficient information about the topic. Authenticity was enhanced by audio-recording the interviews and quoting participants verbatim.

RESULTS

Twelve EMS personnel were interviewed before data saturation was reached. As shown in Table 1, most of the study participants were female (n = 7, 58.4%). Half (n = 6, 50.0%) were aged 31–40 years. Six of the study participants (50.0%) had 11–15 years of experience; only one (8.3%) had more than 15 years of experience. Most were basic ambulance assistants (n = 11, 91.7%).

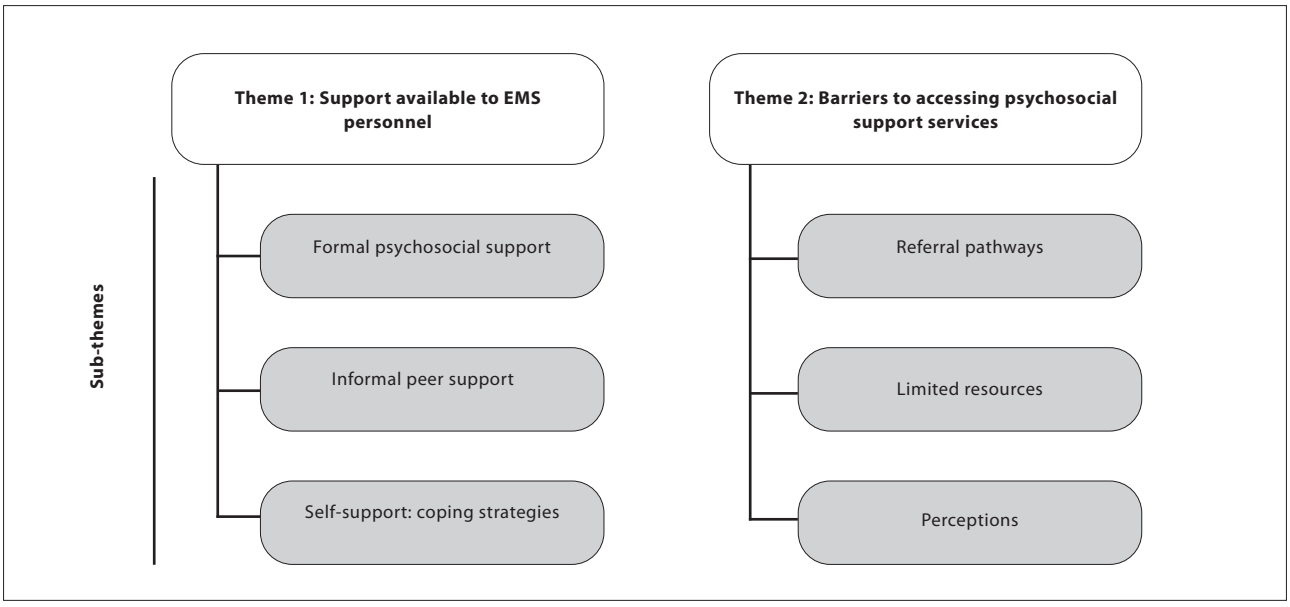

Figure 1. Themes and sub-themes identified from interviews with study participants

Themes

Two main themes emerged: 1) support available to EMS personnel and, 2) barriers to accessing psychosocial support services (Figure 1).

Theme 1: Support available to EMS personnel

Three sub-themes were identified within this theme, viz. formal psychosocial support services, peer support, and self-support and coping strategies.

Formal psychosocial support

The formal support services that the EMS personnel were aware of, and had used, included both public and private health services and occupational health services. Public health services were used when they were physically ill or had suffered a physical injury, such as an accidental needle stick injury. These services included the chaplain's services, which usually provided support immediately after someone had attended a traumatic incident and needed debriefing.

> *There is a municipality clinic where, when you have pricked yourself with a needle, they will take you there and test you; they must counsel you and give you emergency whatever.*
>
> *P3*

> *We were hijacked the time we were working at the clinics; they came and took the vehicle at the station at gunpoint, then that day and at the end of it, they called the chaplain.*
>
> *P2*

One of the available services known by the participants was occupational health and safety (OHS), offered at the wellness clinics in the City of Tshwane. The participants explained that the wellness clinic services were under-resourced, as one professional was responsible for all personnel working in the area.

> *We have wellness support, but we have one person; the problem is one person deals with the stations…, but all departments, not only from EMS. It is a problem for us because she is unavailable at any time. It will take time to see her because you have to make an appointment.*
>
> *P7*

The participants explained that, due to the limited support services in their work environment, they used private health services such as psychologists, psychiatrists, and other medical practitioners.

> *I think we are not coping because we are human beings. I resorted to a personal psychologist; I believe we all have medical aid. They also have to resort to that, so I advise them to see a therapist, a counsellor or psychiatrist, psychologist, or anything to help you.*
>
> *P11*

Informal peer support

The participants explained that they faced many challenges in the 12 hours of their shifts and attended to all calls, including motor vehicle accidents, suicides, and assaults. They shared that they were often not counselled at work, but supported each other as a team or discussed the incident with colleagues working on that shift.

> *The support so far is with the colleagues, especially after an incident or call. We just come together, speak about it, or we work together we speak what we went through.*
>
> *P9*

> *Discuss with colleagues; it becomes better and better every day. When you arrive home, you do not stress; you do not think of what is happening at work. You can focus on your family and partner.*
>
> *P7*

Self-support: coping strategies

When asked how they coped with exposure to trauma, the participants stated that they used different self-coping strategies, such as suppression, normalisation, humour, avoidance (absenteeism), substance misuse, and recreational activities.

They explained that, even if they tried to forget the incidents they had attended, those incidents presented as trauma symptoms later because they were suppressed. Some participants said that they suppressed thoughts about the trauma they had experienced, in order to cope with the next call to which they needed to attend.

> *No, none* [trauma counselling]*, you sit alone, think about it, make sure you get rid of it from your mind and make sure that you are not going to live with it for the rest of your life.*
>
> *P6*

> *You are coming from a train accident; somebody has been smashed by a train, then you come here at the station, you clean the ambulance, and they give you another call. You must behave as if nothing has happened at the previous call and then be a new person when you go for another call. You just have to react as if everything is ok.*
>
> *P12*

The participants stated that the regular exposure to trauma in the working environment has made these incidents appear normal, and that this normalisation enabled them to have the strength to cope.

> *We just take the day as it is; there is nothing new or different. As long as you come to work, you console yourself that the current job that I have applied for and the situation where I am going to work are normal.*
>
> *P12*

Humour was common after attending traumatic calls.

> *At some point, you think it is a joke. Sometimes, you laugh about it, even when it is traumatising. At the end of the day, you will be relieved and feel much better. Speaking about it makes things easier. It does not completely remove the trauma, but talking about it makes it easier; this is how I cope with it.*
>
> *P9*

> *The only thing is to talk to colleagues, make jokes about that incident, and get rid of it.*
>
> *P2*

Some participants explained that they sometimes absented themselves from work to avoid traumatic exposures, especially on weekends. Others felt tired due to their long working hours, wanted to rest, and so absented themselves from work.

> *I think it affects us the same; there is much absenteeism. You see, the people are tired.*
>
> *P7*

> *The only time you will see that this person is not coping is when he takes a lot of leave and sick leave.*
>
> *P8*

Some were unable to forget the scenes to which they were exposed, and started using alcohol and other substances as a coping strategy.

> *Let us say you have a problem with these scenes of accidents at work; you start shouting at kids at home, you start taking drugs, drinking, and even absenting yourself from work.*
>
> *P3*

Others used exercise as a distraction, and to relieve stress.

> *I am quiet, so I like to exercise most of the time. If I am stressed, I go to the gym, and exercise is another way to relieve stress, concentrate on other things, and not stay on my mind.*
>
> *P10*

Theme 2: Barriers to accessing psychosocial support services

The participants indicated that they intended to use the available support services, but were prevented from doing so by factors beyond their control. The barriers to using support services were referral pathways, limited resources, and perceptions.

Referral pathways

Participants stated that they had to be referred by their supervisors to any EMS department support service. Both the EMS personnel and their supervisors had to follow a procedure, during a crisis or emergency, to consult with a professional. The participants described these referral pathways as barriers.

> *For every problem you encounter at the station, you pass through the officer, who will arrange everything for you. It is not easy because if the officer is not available, you are going to struggle to get the service.*
>
> *P12*

> *You feel that you need that private session. Sometimes, you want to keep the department from knowing about us. It could be like going to the counsellor's office without the supervisor's knowledge. When I have troubles at home, I tell the supervisor that it is no longer confidential.*
>
> *P6*

There were long waiting times to consult the wellness services, and some chose private psychological services because of the limited support resources available in the work environment.

> *It is not easy for them because it takes time to get assistance. Like for example on my shift there is this lady who was pointed with a gun even today, she is still afraid and has not got assistance from the city, from the wellness, and they have been sending email, email, emails.*
>
> *P9*

Limited resources

The participants provided reasons for their limited utilisation of support services and explained the conditions under which it was compulsory to access them. The available support services comprised a wellness service (a councellor), occupational health services, and services of a chaplain. Often, the supervisors referred the EMS personnel to the relevant support services in the City of Tshwane, but these services were under-resourced. Furthermore, the appointment system was based on a first-come-first-served basis, making it difficult to get support during a crisis. When asked how often they utilised the support services, the participants stated that it was limited.

> *If I am not fine emotionally and I feel I need counselling, I instead pop out the money and go to a private institution where they can help me.*
>
> *P6*

> *If we were using that service as we are supposed to, she would not have coped; that is why she is using appointments. If she was not busy, we could go there and find her, or find her anywhere. She is one person; if you say, I want to see you tomorrow, she will say not tomorrow, maybe after three days. That happens if something serious happens and is referred to by the supervisor.*
>
> *P8*

Perceptions

Some participants believed that the wellness clinic staff could not assist them because they did not understand the trauma they experienced, and were not knowledgeable about the EMS jobs.

> *I am not making any confession. I am sitting on the problem, walking with the problem; I am having a problem. So, I do not think the chaplain can help me because it is not a religious problem I am having; it is a medical problem. So, in most cases, if you do not get the wellness people, you are referred to the chaplain.*
>
> *P11*

DISCUSSION

The study particpants comprised predominantly mid-career professionals with substantial experience in EMS and were, therefore, in a position to respond accurately and appropriately to the interview questions. We investigated the availability and accessibility of psychosocial support services for EMS personnel in the City of Tshwane. Two themes emerged from the interviews, viz. the available psychosocial support and barriers to utilising that support. It became evident that EMS personnel were aware of the formal psychosocial support services, which are introduced during the induction period or when they are referred to them after a critical incident. Peer support was an important coping mechanism, but the participants also used self-support strategies.

Formal psychosocial support services

Having access to formal support services for EMS personnel, such as early post-trauma intervention, can improve social cohesion, coping skills, and work performance, and reduce harmful responses, such as PTSD, depression and anxiety, and absenteeism.[16,21] Formal or professional support services in other countries include support from psychologists, employee assistance programmes, and chaplain services that work together and independently.[10,23] Studies by Tunks

Leach et al. (2022, 2023) confirm the value of chaplain services for EMS personnel in reducing barriers to help-seeking behaviour, enabling referrals to psychological support, and providing relational support rather than diagnostic and managerial support.[23,24]

Informal peer support

The EMS personnel valued informal peer support when dealing with critical incidents and stress. Austin et al. (2018) reported similar findings amongst paramedics in the USA, who relied more on peer networks than formal support to deal with everyday pressure.[25] Peer support provides an opportunity to exchange personal experiences, as shown in several other studies.[3,5,19] Peer support can also improve resilience through camaraderie[4,13] and reduce post-traumatic stress.[21,26] Clompus and Albarran (2016) showed that family support increased the resilience of EMS personnel, although they rarely shared work experiences with their family members,[13] similar to reports from the participants in this study.

Self-support: coping strategies

Alshahrani et al. (2022) found that the EMS personnel in their study who used passive coping, such as suppression or avoidance, were more likely to have higher levels of post-traumatic stress.[26] Avoidance through absenteeism, as described in this study, is a coping mechanism for high levels of stress.[13]

While detachment is a short-term coping mechanism after experiencing distressing incidents,[13] studies have found that the use of suppression by EMS personnel can exacerbate psychological challenges, such as post-traumatic, depressive, and somatic symptoms.[27] In a study by Gärtner et al. (2019), avoidance was predicted to cause less work-related stress but correlated with more severe post-traumatic, depressive, and somatic symptoms.[27] As in our study, alcohol misuse as a coping mechanism and a form of 'self-medication' has been reported by others.[8,14,28,29] The EMS personnel used adaptive coping strategies in this study, such as humour and exercise. The latter can improve resilience and coping,[30] and humour has been reported to serve as a distraction and diffuse tense work-related situations.[13]

Barriers to utilisation

While formal support services were available to our study participants, access was compromised due to the referral pathways, the already overburdened professional services, and the EMS personnel's views that professionals offering psychosocial services did not understand their experiences. Findings from other studies suggest that managerial factors affect access to professional services, such as the failure of managers to acknowledge the psychosocial effects of witnessing traumatic events, and lack of confidentiality.[4,13] Consequently, the EMS personnel in our study often used private professional services outside the workplace. Similarly, Mackinnon et al. (2020) found that more than a third of participants in their study in New Zealand and Australia accessed psychosocial services external to the workplace.[16] Early organisational support is beneficial as it enables managers to refer employees for assistance, assess work-related outcomes, and allocate appropriate resources within a supportive and inclusive work environment.[8,21]

Several studies have reported reduced help-seeking behaviour in EMS personnel due to fears of being seen as weak, career and confidentiality concerns, work pressures, or denial that they needed support.[16,19,31] Perceptions can also be barriers to access. Being suspicious of occupational health professionals and senior management's intentions compromises access to professional psychosocial services.[21] Participants in our study believed that professionals offering psychosocial support, such as chaplains, did not understand the reality of their work environment. Similarly, Mackinnon et al. (2020) found that counselling by professionals without experience of working with EMS personnel led to the psychosocial support being unspecific and generally unhelpful.[16] Lawn et al. (2020) showed that inappropriate therapies contributed to under-utilisation of psychosocial services.[4] To address these barriers, counselling staff need to be well trained in dealing with EMS personnel's exposure to traumatic incidents, as well as their day-to-day work.[14]

Recommendations

The World Health Organization (WHO) guidelines on mental health at work outline evidence-based recommendations to protect, promote, and support the EMS personnel's mental health.[32] These interventions are at organisational, managerial, and individual levels for EMS personnel.[4,32]

Organisational interventions

Policies, systems, and processes should be designed to assess and manage the psychosocial risk factors that affect EMS personnel, such as work design, workload, schedules, work control, equipment, organisational culture, interpersonal relationships at work, roles in the organisation, career development, and the work-home interface. Possible interventions include workload management, schedule and shift changes, improved communication and teamwork, enforced leave, and rest periods.[4,30,32] In the City of Tshwane, policies and procedures should be tailored for specific challenges, such as the high incidence of violence and trauma in certain areas, and cultural and resource constraints. Organisations should advocate for the allocation of funding to strengthen under-resourced psychosocial support services, to reduce waiting times, and improve accessibility. Partnering with provincial health authorities could support referral processes for EMS personnel to address long waiting times.

Training of managers and EMS personnel

Managers and supervisors of EMS personnel should be trained on psychosocial risk management and methods to support and protect their mental health. Training should improve the managers' knowledge, attitudes, and behaviour towards mental health, which would positively impact the help-seeking behaviour of EMS personnel, and enable managers to make appropriate and timely referrals for psychosocial support.[31,32] Similarly, EMS personnel should be trained to provide peer support and self-support, and to identify when professional psychosocial support services are required.[32] Training to increase the psychosocial health literacy of EMS personnel and their managers can further assist to reduce stigma, through increasing awareness of available psychosocial support services.[4,32] This training should start with preparing EMS students and new employees in pre-incident psychosocial and resiliency preparation.[4,6]

Individual interventions

Psychosocial interventions should be implemented in the workplace for all employees. Such interventions include stress management, mindfulness training, cognitive behavioural therapy, self-care training, communication skills training, critical incident stress management, psychological first aid, support groups, and employee assistance programmes.[20,32-34] The processes that need to be followed to access psychosocial support services should be revisited; clear and uncomplicated processes should be introduced to promote help-seeking behaviour by EMS personnel. Furthermore,

leisure-based physical activities should be part of the workplace culture and processes.[32] Due to resource constraints, alternative methods of providing support and interventions should be implemented, e.g. partnering with support groups such as the South African Depression and Anxiety Group (SADAG) and providing workplace-based online or telephonic crisis intervention and support services.[32] Manager support and referral systems should improve linkages to care through clear and confidential referral systems. Introducing confidential, direct-access systems to psychosocial support services – bypassing hierarchical referral pathways that discourage help-seeking – could support psychosocial support utilisation for EMS personnel in public health services in the City of Tshwane.

Limitations

The purposive sampling method, small sample size, and setting of our study limits its generalisability to EMS personnel in other cities in South Africa, or globally. The use of interviews to collect data could have led to social desirability bias. In addition, the interviews were conducted in English, which was not the first language of all participants, and which could have limited their ability to fully express themselves.

CONCLUSION

Emergency medical services personnel are, by the nature of their work, disproportionately affected by psychosocial disorders. Our findings highlight the need to improve their access to psychosocial support services. Systemic challenges such as psychosocial resource constraints, referral pathways, and stigmatisation in the public health sector are barriers to accessing formal support services. However, alternative professional services are used, and EMS personnel support each other. Preventive and targeted psychosocial support interventions are needed to reduce psychosocial risks and foster a culture of support in the EMS. Interventions must take the unique workplace culture into account, be supported by the organisation and senior management, and utilise existing social cohesion and peer support systems. Prioritising the psychosocial health of EMS personnel will foster a more resilient and capable workforce, assist in retaining EMS personnel, reduce burnout, and improve the much-needed emergency service delivery in South Africa.

KEY MESSAGES

1. Access to structured support services, such as early post-trauma interventions, improves coping, reduces stress-related disorders, and enhances work performance.
2. Complex referral processes, overburdened professional services, confidentiality issues, and a lack of trust in professionals are barriers to using formal support services.
3. Informal peer support is a key coping mechanism, fostering resilience and camaraderie among EMS personnel.

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DECLARATION

The authors declare that this is their own work; all the sources used in this paper have been duly acknowledged and there are no conflicts of interest.

AUTHOR CONTRIBUTIONS

Conception and design of the study: RMDM, YH, MdV
Data acquisition: RMDM
Data analysis: RMDM
Interpretation of the data: RMDM, YH, MdV
Drafting of the paper: RMDM, YH, MdV
Critical revision of the paper: RMDM, YH

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