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Analysis of the Possibilities of Developing the Resilience of Employees and Members of the Integrated Rescue System in the Czech Republic as Part of Lifelong Education

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Abstract

As part of their professional activities, members and employees of the individual components of the integrated rescue system are involved in solving a wide range of very mentally and physically demanding tasks related not only to saving human lives, but also property. During long-term activities related to dealing with the consequences of emergencies and crisis situations, they are exposed to extreme physical and psychological strain, the long-term influence of which may affect the psychosomatic state and well-being of the intervening personnel. The article deals with some aspects of traumatization, psychological first aid, post-traumatic care, crisis communication, crisis intervention and aspects that are directly related to it. A research investigation was conducted to determine the current state of implementation of intervention activities, the findings of which are the main part of this scientific communication. The article also includes a comprehensive overview of the use of post-traumatic care, crisis intervention and psychosocial assistance to affected persons by individual components of the integrated rescue system over the last ten years. Through the implementation of an anonymous non-standardized research survey, where the respondents were members and employees of individual components of the integrated rescue system, information regarding the provision of post-traumatic care to affected persons, as well as to the intervening professionals, was collected. Including the identification of motivational factors serving as salutoprotective factors. The findings of the investigation will be incorporated into the undergraduate and continuing education system.

KEY WORDS: *traumatization, rumination, resilience, self-efficacy, posttraumatic growth, education*

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1. Introduction

During the performance of their profession, officers and members of the basic components of the Integrated Rescue System (hereinafter referred to as IRS) get into a number of traumatic situations in which the effects of dealing with emergencies and crisis situations can have a negative impact on their psyche. Particularly in the context of such emergencies and crisis situations, which are associated with higher levels of aggression and aggressiveness; a greater number of injured and dead persons; increased media interest or in which they feel the time pressure factor to issue a quick decision, etc. It is important to note that poor decision making in the exercise of the profession (especially in the case of the basic components of the IRS) can sometimes have fatal consequences. Time pressure combined with a lack of all relevant information can negatively affect the course of care provided. Especially if the assistance is provided by telephone (emergency call). This is a largely uncertain, ambiguous and emotionally volatile environment (e.g. on the part of the caller, the presence of fear, uncertainty, acute stress reactions, etc.), but where quick and accurate decision-making on the part of the intervener is required. Emergency operators are obliged to cooperate with people in crisis, gather essential information about them, determine the type and extent of the emergency, assess the forces and resources needed to cope with the emergency and, last but not least, give instructions to callers [2]. One of the possible sources of work stress, therefore, may be the burden of time-pressured decision-making. The following two phenomena can also be considered as another stressful factor negatively affecting the emotional tuning and the course of providing assistance to the affected persons: unethical behaviour at the scene

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of the emergency (in the sense of photographing or filming videos of human suffering with subsequent posting on social networks) and the bystander effect [3].

From the analysis of professional literature related to the issue under study, it can be stated that the need to implement crisis communication and interaction with the affected person at the scene of the emergency and crisis situation; notification of bad news; coping with the consequences of an acute stress reaction, the need to provide first psychological aid, etc. can also be considered as a stressful factor in the performance of the profession by individual IRS units. In accordance with the legislation in force, every officer or member of the IRS at the scene of an emergency or crisis situation is obliged to provide first psychological aid. Psychological first aid is a set of simple procedures aimed at stabilising the psychological state so that the situation for the affected person does not deteriorate any further, ensuring basic human needs, including the promotion of a sense of security and transfer to further care. Everly and Lating [4] view psychological first aid as an effective way of being a supportive and compassionate presence that aids the process of stabilizing the psychosomatic state of the affected person and easing the course of the acute stress reaction. It also contributes to facilitate the access of intervening professionals to the affected persons.

It depends on the individual's level of resilience and their ability to cope effectively with the traumatic event. Resilience can be understood as the general ability of an individual to develop within the limits of normal or healthy development, despite the presence of traumatic circumstances. The central goal of resilience, according to an analysis of the literature, can be considered to be the active ability of an individual to cope effectively with stress and solve problems [5]. A traumatic event is one that is so powerful or frightening to the individual that he or she is unable to process it on his or her own. A traumatic event provokes deep upset. Psychological trauma is caused by a single extremely stressful experience or a prolonged stressful situation that has the following characteristics: the cause is external, extremely frightening and induces the experience of a threat to life, physical or mental integrity and induces feelings of helplessness [6]. These can be, for example, experiences of threats to one's own life or physical integrity, terrorist attacks, natural disasters, mass disabilities, etc. As a result of the traumatisation, the affected person may develop rumination. This is a condition in which the affected person repeatedly dwells on the traumatic event experienced. As part of this process, he or she may repeatedly reflect on and retrospectively evaluate his or her decisions, the process of dealing with the situation, etc. In general, rumination has a negative (sometimes almost paralysing) effect on the person affected. Rumination can be considered the opposite of resilience [7].

In our opinion, it is important for officers and members of the emergency services to understand that it is possible to find meaning in what has happened to an individual and to take positives from this traumatic event in the future. These can then be used effectively in the process of post-traumatic growth. Posttraumatic growth can be described as a positive psychological change that some individuals experience after experiencing a life crisis or traumatic event. Posttraumatic growth does not deny deep suffering, but rather assumes that adversity can inadvertently cause positive changes in understanding of self, others, and the world around us. [8].

2. Analysis of the Possibility of Using Post-Traumatic Assistance in the Basic Components of the Integrated Rescue System

Considering the above-mentioned facts, a system of providing post-traumatic care, crisis intervention and psychosocial intervention services was created in the individual IRS units. It is the provision of this professional care that is the subject of the present paper. The authors' intention in this section was to describe the existing system and to analyse annual reports over the last 10 years on the provision of this specialist assistance to people affected by the consequences of emergencies and crisis situations.

2.1 Fire Rescue Service of the Czech Republic

Post-traumatic care at the Fire and Rescue Service (FRS) of the Czech Republic (CR) was established based on the recognition that the profession of firefighting is one of the most hazardous professions, with extreme physical and psychological stress. In 2002, the concept of the psychological service of the FRS of the CR was approved. To ensure the provision of post-traumatic intervention care, a Post-Traumatic Care Team was established in each region. The coordinator of the team is a psychologist of the Fire Brigade of the given region and the members of the post-traumatic care team are trained firefighters with personal aptitude and motivation to help others. Post-traumatic care is provided to victims of emergencies and crisis situations, to members and employees of the FRS of the CR, as well as to their families. The Concept of the Psychological Service of the Fire Brigade of the CR for 2017-2025 is currently in force.

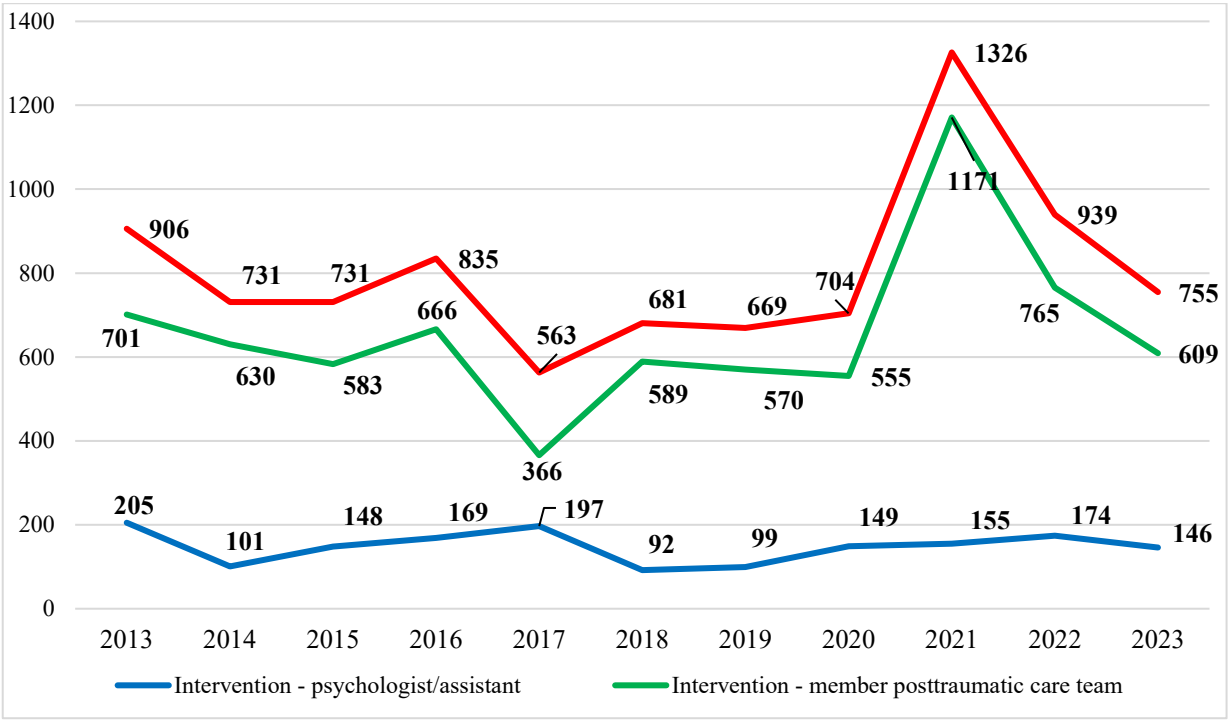

Fig. 1 Number of implemented interventions within post-traumatic intervention care at the FRS of the CR in the period 2013-2023 (source: data provided by the leading psychologist Col. Mgr. M. Wolf Čapková from the psychological workplace of the Ministry of Internal Affairs - General directorate of FRS of the CR)

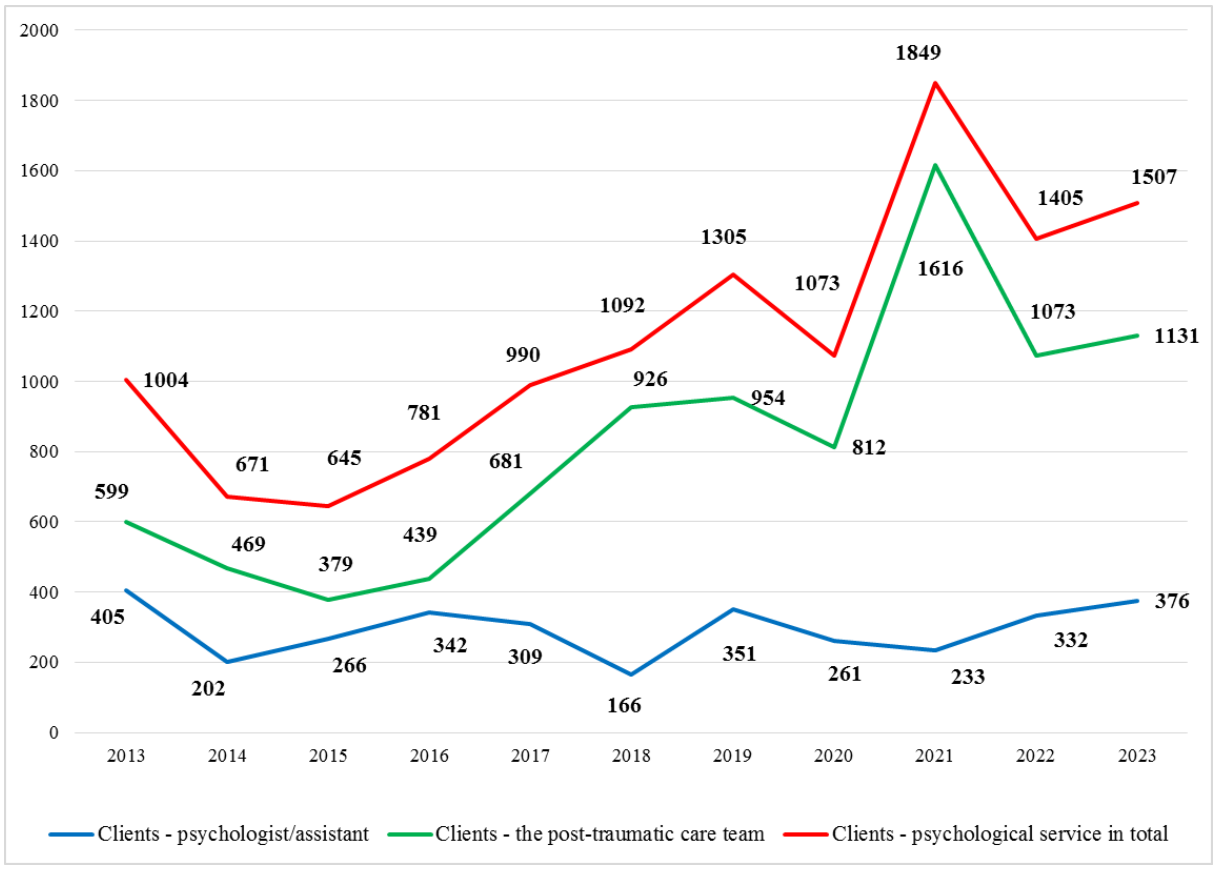

Fig. 2. Graph 2 Number of clients in post-traumatic intervention care at the FRS of the CR in the period 2013-2023 (source: data provided by the leading psychologist Col. Mgr. M. Wolf Čapková from the psychological workplace of the Ministry of Internal Affairs - General directorate of FRS of the CR)

2.2 Emergency Medical Services

Since 2012, the Psychosocial Intervention Service System has been gradually built in the Czech Medical Emergency Service (EMS). This professional assistance is oriented towards supporting health professionals, especially those who have been and are most exposed to acute stressful and post-traumatic influences. These are workers in the ambulance service (pre-hospital emergency care), emergency admissions (hospital care), but also other disciplines. However, the service can be used by healthcare workers regardless of the department where they work.

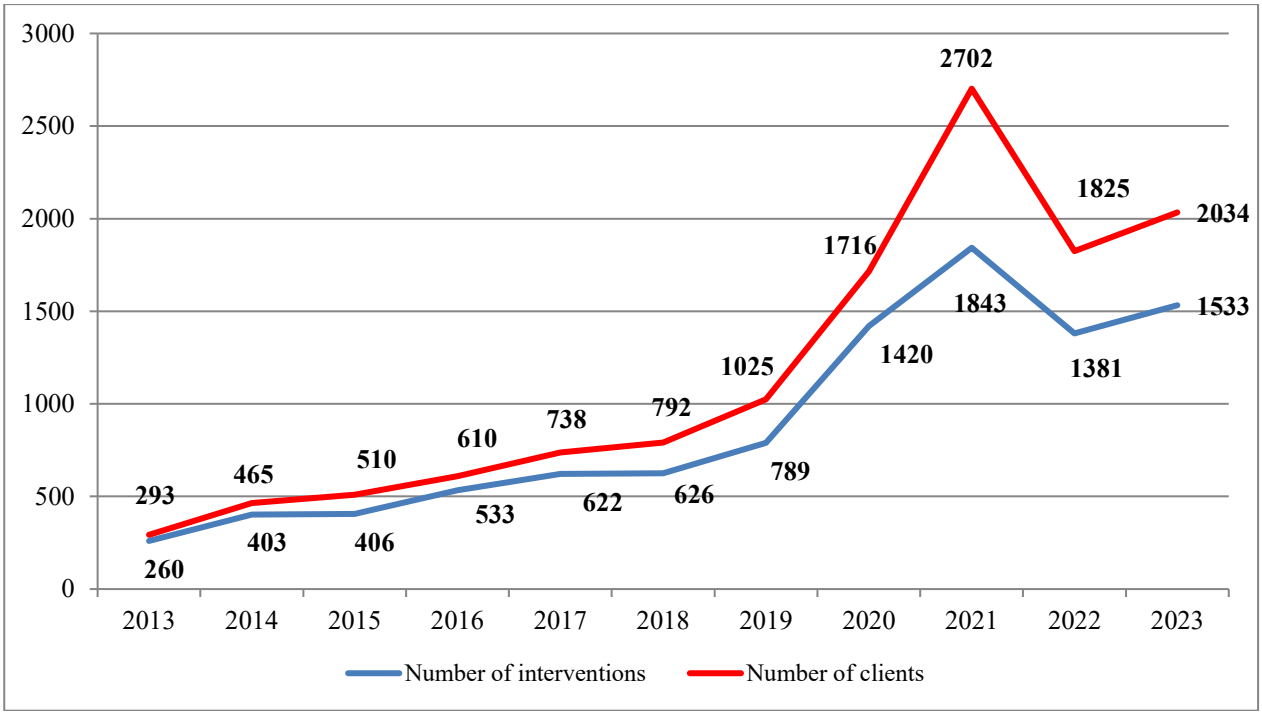

Fig. 3 Overview of PEER support provided within the Psychosocial Intervention Service System in the period 2013 – 2023 (source: data provided by system guarantor PhDr. Lukáš Humpl)

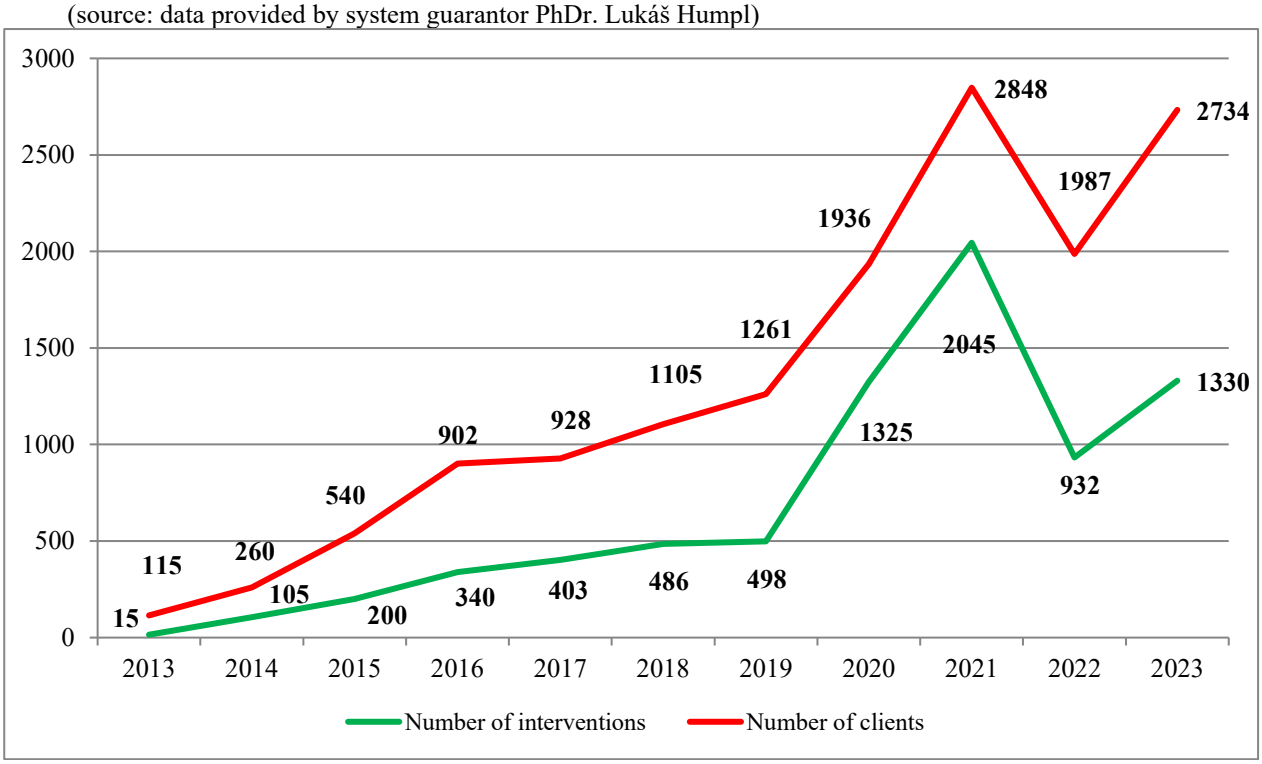

Fig. 4 Graph4 Overview of first psychological help provided to loved ones and survivors within the Psychosocial Intervention Service System in the period 2013 – 2023 (source: data provided by system guarantor PhDr. Lukáš Humpl)

Within the activities of this professional service, attention is paid to the training of its individual members. These are the interveners who provide PEER support to their colleagues within the organisation. As well as health interveners who provide psychosocial intervention care to those affected at the scene of an emergency or crisis. The National Centre for Nursing and Non-Medical Health Professions in Brno is involved in the training of these professionals [7].

2.3. Police of the Czech Republic

Within the Police of the CR there are psychological workplaces where police psychologists are assigned. These psychologists provide a range of activities such as assessing the personality of applicants for admission to the Police of the CR, assessing the suitability of officers for the performance of leadership and other special functions, as well as providing psychological care to police officers and police employees (e.g. The provision of psychological assistance to police officers and police staff in the performance of police activities (e.g. communicationally demanding situations with members of the public, carrying out acts within the framework of preparatory proceedings under the Criminal Procedure Code).

In 2023, police psychologists provided psychological care to a total of 4,910 contacts.4,724 clients received individual care and 186 clients received group care [10]. Since 2010, police psychologists have also provided psychological assistance to victims of crime and emergencies.

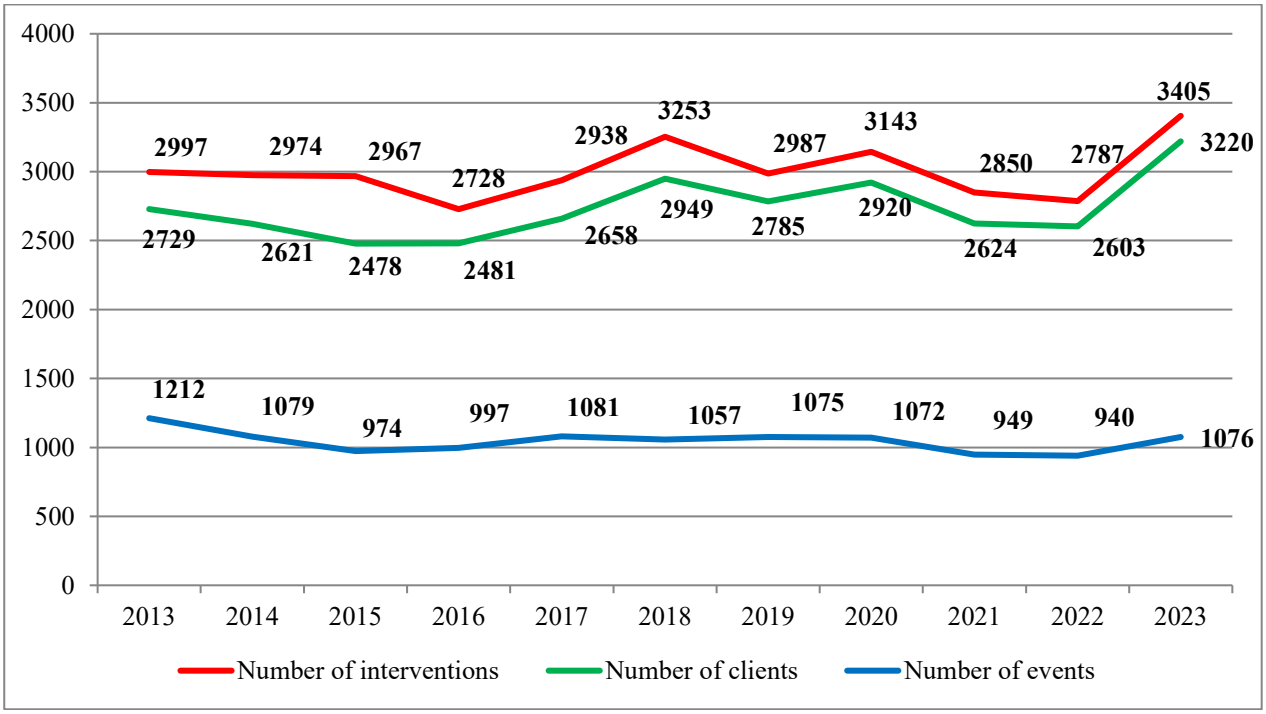

Fig. 5 Overview of crisis intervention provided within the Police of the Czech Republic in the period 2013-2023 [10]

With the issuance of the Police President's Instruction No. 231/2016 on psychological services, a system of collegial support was established to expand the provision of psychological support to police officers and employees to prevent the development of psychological difficulties. This system is often referred to as peer support and the peer is the provider of the peer support. Peer support consists of offering to talk to a colleague, sharing feelings and problems, offering specific help or information, and referring to professional help where appropriate. Peers will often reduce a colleague's fear of receiving professional help by their actions. There are currently 382 peers and 43 trainers/psychologists in the system [10].

Another option for professional help is the anonymous Crisis Helpline (telephone number +420 974 834 688). This is a round-the-clock service that provides expert psychological help and support to members and employees of individual components of the IRS. Professional assistance is also provided to their relatives and loved ones. The staff of this hotline provides continuous post-traumatic care in connection with the performance of service or work tasks, telephone assistance in acute and long-term states of mental distress, psychological support and prevention of harmful and damaging actions directed towards oneself or the environment as a result of difficult psychological situations [9].

The following graph shows the use of the anonymous Crisis Helpline in the period 2013-2023.

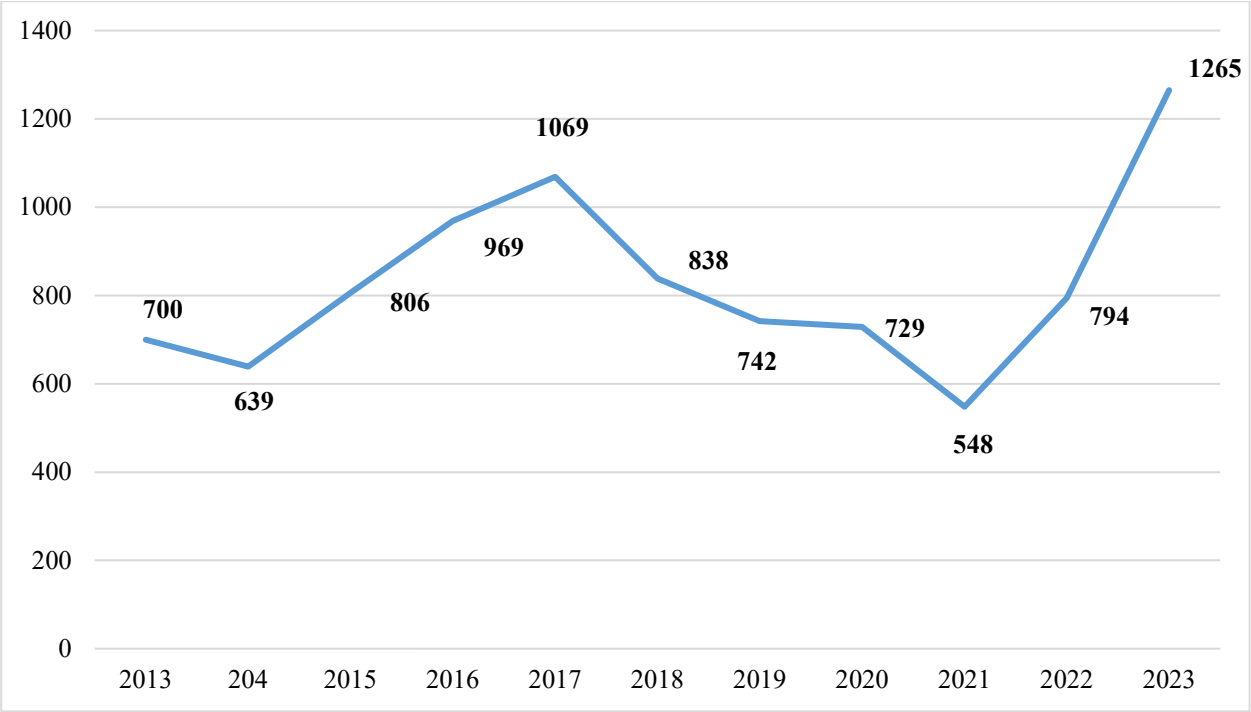

Fig. 6 Number of crisis calls made to the anonymous Crisis Helpline in the period 2013-2023 [10]

In 2023, Crisis Helpline staff received a total of 1,955 contacts. Of these, 1,265 were crisis phone calls. Within crisis calls and emails, clients contacted helpline staff most often with personal problems. Problems with oneself occurred in 46.4% of calls, feelings related to loneliness accounted for 17.3% of calls, and suicidal ideation was the third most common problem at 11.2% of calls [10].

3. Method of investigation

The criteria for the selection of the respondents were the performance of the profession in the basic components of the integrated rescue system and active participation in solving extraordinary events and crisis situations. A total of 819 members and employees of the integrated rescue system filled out an anonymous, non-standardized questionnaire.

For the purpose of finding and analyzing data within the research, a non-standardized questionnaire was used, which, in addition to demographic data, also investigated: the frequency of respondents' encounters with traumatic events; the impact of traumatic events on the psychological state of respondents; motivational factors related to the performance of the respondents' profession; the ability to strengthen resilience; the use of offered post-traumatic care and crisis intervention by respondents and competencies in the field of providing first psychological assistance, etc. The questionnaire included open and closed questions.

A Likert rating scale (measuring respondents' attitudes) was used, with a rating scale of 1 = not important - very important = 5.

For the selected items, the median was calculated, that is, the value that is exactly in the middle of the group of ranked values. Data obtained through some selected questions are evaluated through numerical or percentage values.

4. Investigation results

The research involved 819 employees and members of the basic components of the IRS. Specifically, Police of the Czech Republic: 197 respondents, FRS of the CZ: 305 respondents and EMS: 317 respondents. The analysis of demographic data shows that: the average age of respondents was: 42 years and the average length of employment or service was: 19 years.

Regarding the frequency with which respondents encounter an incident or crisis situation that they rate as traumatic, it was found that more than 47% of respondents encounter such an incident or situation once a month. This was followed by responses of once a week for 11% of respondents and once a year for 23% of respondents. 19% never encountered such an event or situation.

The subjects were also investigated on the extent of the negative impact of factors related to their occupation. For each item, respondents completed a rating on a scale of 1 to 5, where each digit had an ascending value (level of traumatic impact). The median was then calculated.

Table 1 Degree of impact of the traumatic event

Traumatic event	Police of the CR - median	FRS of the CR - median	EMS - median
High level of responsibility	5	4	4
Decision-making under the influence of time constraints	3	3	4
Excessive administration Overload	4	3	3
Overload	4	3	4
Workplace conflicts	3	2	4
Lack of information at the scene of the intervention	3	3	4
Endangering your own health	4	3	3
Injury	4	4	4
Injuring a colleague	3	4	3
Intervention in a person under the influence of an addictive substance	3	2	4
Intervention associated with brachial aggression	4	3	4
Intervention with a person threatening to use a weapon (stabbing, cutting, firearm)	4	4	4
Intervention to demonstrate intent to commit suicide	3	3	3
Response to an emergency with a large number of injured persons	4	3	4
Adult death	3	3	3
Death of a child	4	4	5
Crisis communication with the victim of an emergency or crisis situation	3	3	4
The influence of occupation on personal life	4	3	4
The necessity of involvement in the lifelong learning process	2	1	2

* Scale: 1 = not traumatic – very traumatic = 5

The survey also included a subjective evaluation, where respondents gave a subjective evaluation of the following statement:

- I usually feel in good mental condition.
- I usually feel in good physical condition.
- I have a high level of resilience.
- I use individual coping strategies to cope with traumatic events.
- I am experiencing Post-Traumatic Growth.
- I am prone to depression and anxiety.
- I tend to revisit the traumatic event in my memories.
- I am experiencing symptoms of Post-Traumatic Stress Disorder.
- I am experiencing symptoms of Burnout Syndrome.
- I am provided with sufficient information within my employment regarding Critical Incident Stress Management techniques which can be used to reduce the impact of traumatic events on the psyche of the person affected.
- As part of my employment, I am provided with sufficient information regarding the provision of post-traumatic care.
- I use the post-traumatic care offered to manage traumatic events and situations: psychological help, crisis intervention, post-traumatic intervention care or PEER support.
- I am competent in providing psychological first aid to affected persons.
- At the intervention site, I am frequently encountered providing post-traumatic intervention care, crisis intervention or psychosocial intervention services to affected persons.

- I consider the provision of post-traumatic care to affected persons to be an important part of the overall assistance provided.

The evaluation was again carried out using a Likert scale ranging from 1 - strongly disagree, to strongly agree - 5.

Table 2 Average subjective assessment respondents

Average subjective assessment	**Police of the CR - median**	**FRS of the CR - median**	**EMS - median**
Mental condition	3	4	4
Physical condition	4	4	4
Resilience	4	4	4
Use of individual coping strategies	5	5	5
Post-Traumatic Growth	4	5	4
Tendencies to depression and anxiety	2	1	2
Occurrence of memories of a traumatic event	2	1	3
Incidence of symptoms of Post-traumatic stress disorders	1	1	2
Incidence of symptoms of Burnout Syndrome	3	2	3
Providing information on Critical Incident stress management methods	3	4	4
Providing information on the provision of post-traumatic care	4	4	5
Use of post-trauma care by respondents	1	2	2
Competence in providing first psychological aid to affected persons	3	4	4
Meeting at the intervention site to provide post-traumatic care to affected persons	2	3	4
The importance of providing post-traumatic care to affected persons	4	5	5

* Scale: 1 = strongly disagree - strongly agree = 5

The reasons why respondents do not take advantage of the post-traumatic care offered by their employer were also investigated. The most common reasons for not using the post-traumatic care and crisis intervention offered include: lack of trust in the anonymity of the help provided (38% of respondents) and fear that the use of professional help could be used to their disadvantage (49% of respondents). A large majority, 72% of respondents, said that they had not yet used professional help.

With regard to the possibility of using motivational factors support in the process of undergraduate or lifelong education of these professionals, we were interested in what motivational factors our respondents consider important for the performance of their profession in individual components of the IRS. Respondents assigned scores to each predefined factor using a rating scale. The results are shown in the table below.

Table 3 Factors motivating to perform the profession

Average subjective assessment	**Police of the CR - median**	**FRS of the CR - median**	**EMS - median**
Wanting to help people	3	4	5

Exciting career	4	4	4
Attending emergencies	4	5	4
Saving lives	4	4	5
Giving back to the community	4	5	4
An admired and trusted profession	3	5	5
Wearing a uniform	4	5	5
Employment prospects	4	5	5
Pay rate	4	4	4
Job security	3	4	3
Shift work	2	3	3
Working environment	3	4	4
Recognition/appreciation by superiors	3	3	4

* Scale: 1 = not important – very important = 5

5. Result discussion

In view of the above, we believe it is important to offer intervening professionals professional assistance (psychological help, post-traumatic intervention care, crisis intervention, peer support or psychosocial intervention services). This is in view of the prevalence of risk and traumatic factors that occur in connection with the exercise of their profession. Particularly when dealing with crisis situations and emergencies, including their consequences. Also with regard to the concept of vicarious traumatisation, introduced into the literature by McCann and Pearlman. With the help of their theory, they tried to explain the cause of traumatic symptoms appearing in emergency professionals who did not experience primary traumatization themselves, but by virtue of their profession worked with victims of emergencies and crisis situations. As a consequence of secondary traumatization, these individuals experience long-term changes in cognitive schemas, but also intrusive memories (flashbacks) of traumatic events, which are typical of posttraumatic stress disorder [11]. The analysis of the data shows that the respondents reported the occurrence of memories of a traumatic event (FRS of the CR median 2, Police of the Czech Republic median 1 and EMS median 3). The affected person may also develop Post Traumatic Stress Disorder. The term post-traumatic stress disorder refers to a set of various behavioural and experiential disturbances, including somatic reactions (sleep disturbances, sweating, tremors, nausea, etc.) that arise as a result of an extreme stress experience beyond the normal human experience. The tricky thing about post-traumatic stress disorder is that the varied symptoms may not erupt until a prolonged period of time has elapsed since the crisis [12]. One can agree with the authors Shiromani, Ledoux, Keane that members and employees of the emergency services are a more vulnerable group at risk of developing PTSD. This is because, by the nature of their employment, they encounter more cases that can seriously shake the human psyche [13]. Traumatisation also leads to different reactions to severe stress and maladjustment. Reactions include a tendency to anxiety and depression. As a result, depressive and anxiety disorders can begin to develop. Depressive symptoms can severely limit trauma victims in their daily lives. They often affect functions such as sleep, food intake, self-esteem, and suicidal thoughts may occur. As a result, withdrawal occurs, the affected person feels shame and finds it difficult to confide in another person [14]. During the implementation of the research, it was found that the respondents did not have symptoms of PTSD (FRS of the CR median 1, Police of the Czech Republic median 1 and EMS median 2) and did not have a significant tendency to depression and anxiety (FRS of the CR median 2, Police of the Czech CR median 1 and EMS median 2).

Repetitive and intrusive thoughts can be handled by using Critical Incident Stress Management methods such as: demobilization, defusing and debriefing. Critical Incident Stress Management can be defined as a comprehensive, integrated, multi-component, systematic crisis intervention program. It aims to provide education, support, assessment, and intervention for emergency responders who are frequently exposed to and affected by critical incidents [15]. On the positive side, we consider that responders are provided with information regarding this issue by their employer. We also consider it important to build the resilience of these professionals. As can be seen from the results of our research, subjectively respondents rated their resilience capacity positively (median 4), as well as their Posttraumatic Growth capacity (median 4/5). Our statement collides with the opinion of the authors Lepore, Rovenson, who point out the following forms of resilience to traumatic events: Healing (after the negative impact of the trauma is over, the individual is able to eliminate and completely remove the negative consequences of the experienced event), Resistance (the individual processes the negative impact of the traumatic event in a specific way, in which the impact of the event on the individual's behaviour cannot be observed) or Reconfiguration (as a result of the negative impact of the traumatic event, the personality of the affected individual is altered, either in a positive direction: on the basis of the traumatic event experienced and its subsequent processing, he/she will be prepared to cope successfully with other traumatic events in the future, or in a negative direction, when a temporary or

permanent undesirable personality change occurs). Attention needs to be paid to preventing and monitoring symptoms of adverse personality change, which may subsequently take the form of feelings of hopelessness, a sense of threat and alienation [16].

We agree with author Berger's assertion that post-trauma care is not a one-session affair. If a person develops PTSD, it takes a very long time for the affected person's defense mechanisms to be properly reactivated. It is important, if post-traumatic care is already being provided, that the person affected knows that there are options that can help them. That he or she does not have to worry about coping on his or her own, but that it is necessary to seek out a specialist in the field. This care already requires someone who has some experience in providing it, because the affected person needs to be approached with great caution so that his or her symptoms do not get worse [8].

It follows from the above that considerable attention needs to be paid to preventing the development of undesirable negative consequences of the impact of emergencies and crisis situations. In particular, to focus on building psychological resilience and the ability to use coping strategies and individual methods of Critical Incident Stress Management. We also consider it important to develop the competences of intervention professionals in the field of psychological first aid and post-traumatic care. A positive finding was that respondents positively assessed their competencies in providing first psychological aid to affected persons. Similarly, respondents consider the provision of post-traumatic care to affected persons to be very important (FRS if the CR median 5, Police of the CR median 4 and EMS median 5).

Our findings on the most important motivating factors: job prospects, belonging to a community that wears the uniform, and wanting to help people conflict with the results of research by Ross and van Huizen. They investigated students' motivation to pursue a career as a paramedic. They cited the following as the most important motivating factors: wanting to help people, saving lives, an exciting career, belonging to a community that wears the uniform, perspective and job security. The findings suggest that, like other medical students, those studying paramedicine do so for intrinsic motives such as wanting to help people, saving lives and an exciting career" [17].

We are actively involved in the process of undergraduate and lifelong education of members and employees of individual IRS units. Therefore, we were interested in the level of psychological resilience of our respondents (ability to use coping strategies, resilience skills, tendencies to anxiety and depression, occurrence of symptoms of burnout syndrome, etc.). All these findings, including data on motivational factors, will be incorporated into the training content [18].

6. Conclusions

On the basis of the analysis of professional literature dealing with the issue at hand, as well as practical experience, we conclude that the provision of post-traumatic care, crisis intervention and psychosocial assistance at the scene of an emergency or crisis situation to the affected persons, as well as to the interveners, is of considerable importance. It helps to cushion the impact of the negative effects of the experienced event and at the same time has a preventive character. Firstly, it prevents the onset of an acute stress reaction and, if it has already developed, it moderates its course. It also has an indispensable place in preventing the onset of rumination, the development of depression, anxiety, PTSD and other undesirable consequences of unprocessed traumatization. As can be seen from the analysis of the annual reports, the number of interventions provided has been on an upward trend over the last 10 years, and the number of calls to the anonymous Crisis Helpline has also been increasing. On the one hand, intervention professionals are actively offering this professional help to the affected persons and, on the other hand, they are also using it themselves. It is noticeable (and positive) that the stigma attached to the use of this professional help is disappearing.

Since we are actively involved in the process of undergraduate and lifelong education of members and employees of individual units of the IRS, the information obtained through the implementation of research will be incorporated into the content of education. Problems of psychological resilience, resilience, coping strategies, anxiety, depression, burnout syndrome to the content of the course psychology of crisis and psychology of disasters. The information found regarding motivational factors will be used in the subjects of public protection, management and crisis management. We believe that the issues and data will inspire other researchers working on traumatization and the provision of post-traumatic care. But also researchers dealing with the issue of preparation of future professionals in the process of undergraduate education as well as in the context of lifelong learning.

References

1. **Lilly, M., Calhoun, R., Painter, I., Beaton, R., Stangenes, S., Revere, D., Meischke, H.** Destress 9-1-1 an online mindfulness-based intervention in reducing stress among emergency medical dispatchers: a randomised controlled trial. *Occupational and environmental medicine.* 2019. 76(10), 705-711. doi: 10.1136/oemed-2018-105598.
2. **Klimley, K. E., Henderson, S., Masias, E., Black, R., & Van Hasselt, V. B.** (2017, August). The firefighter assessment of stress test. Chairperson In V. B. Van Hasselt (Ed.). *Mental health and fire rescue: Current strategies in assessment, prevention, and intervention*. Symposium presented at the American Psychological Association Annual Convention, Washington, D.C.
3. **Ralbovská, D. R.; Otřísal, P.** Analysis of the Use of Post-Trauma Care and Crisis Intervention Among the Emergency Services with Regard to Job-Related Psychological Strain. In: *Challenges to National Defence in Contemporary Geopolitical Situation*. Vilnus: General Jonas Zemaitis Military Academy of Lithuania, 2022. p. 103-112. ISSN 2538-8959.

4. **Everly, G. S.; Lating J. M.** *The Johns Hopkins guide to psychological first aid.* Baltimore (USA): Johns Hopkins University, 2017. ISBN 978-14-2142-271-8.
5. Mareš, J. *Posttraumatický rozvoj člověka*. Praha: Grada. 2012. ISBN 978-80-247-3007-3.
6. **Vodáčková, D.** a kol., *Krizová intervence*. Praha: Portál. 2020. ISBN 978-80-262-1704-6.
7. **Ralbovská, D. R.** Psychologické aspekty mimořádných událostí. In Šín R. et al. *Medicína Katastrof*. Praha: Galén, 2017. ISBN 978-80-7492-295-4.
8. **Berger, R.** *Stress, trauma, and posttraumatic growth: social context, environment, and identities*. New York City: Routledge. 2015. ISBN 978-0-415-52780-4.
9. **Ralbovská, D. R; Otřísal, P.** The Posttraumatic Care and a Crisis Intervention System for Parts of the Integrated Rescue System in the Czech Republic In: *Trends and Future Directions in Security and Emergency management*. Basel: Springer, 2022. p. 357-368. ISSN 2367-3370. ISBN 978-3-030-88906-7.
10. *Výroční zpráva 2023*. Oddělení vedoucího psychologa. Praha: Policejní prezidium České republiky. 2024
11. **McCann, I. L., Pearlman, L. A.,** Vicarious traumatization: A framework for understanding the psychological effects of working with victims. In *Journal of traumatic Stress.* 1990, vol. 3, no. 1, pp. 131-144. ISSN 0894-9867.
12. **Čírtková, L., Vitoušová, P.** *Pomoc obětem (a svědkům) trestných činů: příručka pro pomáhající profese*. Praha: Grada, 2007. ISBN 978-80-247-2014-2
13. **Shiromani, P. J., Keane, M., Le Doux, J. E.** *Post- traumatic stress disorder: basic science and clinical practice*. New York: Humana Press. 2009. ISBN 978-16-0327-329-9.
14. **Schellong, J., Epple, F., Weidner, K.** *Psychotraumatologie.* Překlad: Hoskovcová, S. Praha: Triton, 2021. ISBN 978-80-7553-950-2.
15. **Jones & Barlett** Learning Staff. *Florida Regional Common EMS Protocols*. 2nd ed. Sudbury: Jones and Barlett Publishers, 2009. ISBN 978-0-7637-7748-7.
16. **Lepore, S. J.; Revenson, T. A.** Resilience and Posttraumatic Growth: Recovery, Resistance, and Reconfiguration. In Calhoun, L. G.; Tedeshi, R. G. (Eds.). *Handbook of Posttraumatic Growth. Research and Practice*. Mahwah: Erlbaum 2006. ISBN 978-0-80-58-5767-2.
17. **Ross L.; van Huizen J., H., P.** What Motivates Students to Pursue a Career in Paramedicine*? Australasian Journal of Paramedicina.* 2016. 13 (1), 1-7.
18. **TUŠER I.; JÁNSKÝ, J.** Security Management in the Emergency Medical Services of the Czech Republic—Pre-case Study In: Soitu, D., Hošková-Mayerová, Š. A Maturo, F. Decisions and Trends in Social Systems. (2021). CHAM: Springer, p. 409–423. DOI: 10.1007/978-3-030-69094-6_32.